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The ADBB Phase Two Study:

A mixed-methods evaluation within health visiting teams across the UK

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Executive Summary

Background

Early childhood, from pregnancy to age five, is a key sensitive period for brain development, when the foundations for future health and wellbeing are established. Babies' brains develop and grow at an astounding rate in response to their environment and their early relationships and experiences. They are born ready to learn about the world around them and have amazing capacity to communicate through their behaviours. When parents understand their babies' behavioural cues and respond to them in a timely and predictable way, babies feel safe, loved and ready to explore. Some factors can make it more difficult for a baby's needs to be met consistently, resulting in them using coping strategies such as crying or withdrawing socially. Chronic, sustained withdrawal behaviours mean that babies engage less with their social-emotional and learning environments and may experience poorer long-term emotional, behavioural, cognitive and language outcomes. Spotting signs early on can prevent more serious problems developing later.

Health visitors are uniquely placed to identify emerging needs and offer this early support because they see all families during the first years of life and have been specifically trained in observing babies' cues and behaviours. However, while practitioners are confident in observing babies, many lack structured tools to measure and record what they see. The Alarm Distress Baby Scale (ADBB) and the modified ADBB (m-ADBB) are structured, validated observation tools that help identify babies who may be showing signs of sustained social withdrawal behaviour (SSWB) and may need further support.

Aims

Building on the findings of our previous research, this Phase Two study implemented ADBB and m-ADBB training across eight sites in England, Scotland, Wales and Northern Ireland. The study aimed to:

- Assess the impact of ADBB and m-ADBB training on practitioners' knowledge, confidence and practice.

- Examine changes in identification, referrals and support at the health visitor 6–8-week postnatal review.

- Explore parents' experience and the acceptability of the approach.

Methods

The study used a mix of surveys, audit data, focus groups and parent interviews. Health visitors completed questionnaires before training, immediately after, and 3-6 months later.

In the ADBB group, all 17 practitioners (100%) completed the pre-training questionnaire; 14 (82%) completed the immediate post-training questionnaire; and 11 (69%) the 3–6-month follow-up. In the m-ADBB group, 268 of 336 (80%) practitioners completed the pre-training questionnaire; 238 of 290 (82%) completed the immediate post-training questionnaire; and 60 of 240 (25%) completed the 3–6-month follow-up, reflecting changes in numbers trained and in post over time.

Clinical audit data were collected before and after training to see what changed in practice. Pre-training audit reports covered 1,281 baby reviews conducted across eight study sites by 242 different health visitors. Following training, 922 baby reviews were reported, carried out by 151 health visitors across the same eight sites.

In addition, two focus groups were conducted with a total of 22 practitioners. Twelve parents were interviewed about their experience of the 6–8-week review where the m-ADBB was used.

Key Findings

Training strengthened practice

After Training:

- Knowledge and understanding of the concept of infant social withdrawal improved.
- Confidence in observing and discussing babies' behaviour increased.
- Practitioners reported being better able to 'give the baby a voice'.
- The tools were perceived to have strengthened existing relational practice by supporting health visitors to have more confident, strengths-based conversations with parents, to focus on babies' cues, and to communicate observations in clearer, more detailed, and accessible language.

However, embedding the approach depended on organisational support, time to practise, clear referral pathways, and integration into recording systems.

Changes in identification and support

After Training:

- The m-ADBB was used in 93% of all the 6–8-week reviews reported in the audit.
- The proportion of babies identified with concerns increased from 7% to 12%.
- There was more accurate interpretation of behavioural concerns.
- Health visitors were more likely to provide follow-up visits and information, when concerns were identified.
- Referrals to medical or specialist services reduced.

Many concerns had resolved at follow-up, although data were incomplete and results should be interpreted with caution. These findings suggest that the m-ADBB enables earlier identification and more proportionate responses within universal services, demonstrating its value both for assessment and early intervention.

Parents' experience

Parents described the 6–8-week review as reassuring and supportive. They valued:

- Warm, non-judgemental communication.
- Clear explanations of their babies' cues and behaviours.
- Feeling listened to.
- Emotional support and validation.

ADBB-informed observation was experienced as collaborative and confidence-building when clearly explained. Parents appreciated having their baby's behaviours interpreted in real time. Some parents found the name "Alarm Distress Baby Scale" initially worrying, but careful explanation reduced anxiety. How the tool is introduced is therefore important. Overall, the m-ADBB was acceptable to parents when delivered within a trusting relationship.

Conclusion

ADBB/m-ADBB training addresses a clear gap in health visitor training and practice by building on the concept of infant social withdrawal, strengthening structured observation of babies' social and emotional communication, and providing an opportunity for brief intervention. It supports earlier, strengths-based and proportionate responses within universal services. However, training alone is insufficient. Sustainable implementation requires organisational readiness, protected learning time, ongoing supervision, peer support, and clear governance and referral pathways.

Investment in early relational practice offers potential long-term benefits for babies, families and services, but requires system-level support.

Chapter 1. Introduction and background

1.1 Introduction

There is a growing international body of research that identifies the earliest years of a baby's life as a key opportunity to lay the foundations for their future health and wellbeing[1,2]. The quality of relationships and environment during early childhood shapes the developing brain at a significant rate[3]. Any opportunity to promote positive relationships between babies and their caregivers should be seized, with timely offers of support suggested when early concerns are identified. Health visitors, with their unique reach to all families[4], are skilled and trained to help parents and caregivers make sense of their babies' behaviours and discover their innate capacity to relate to others in the world around them[5]. By being curious with parents and caregivers about their baby's facial expressions, eye contact, sounds and movements, health visitors can help to interpret the subtle cues that might indicate interest, delight and a readiness to engage in the back-and-forth interactions that are so important for developing a range of social, emotional and cognitive skills. And, just as importantly, health visitors can help parents and caregivers recognise when their baby is signalling distress through instinctive behaviours such as crying, or less obvious behaviours such as closing their eyes or turning away. Helping parents and caregivers to tune into their baby's feelings and experiences, notice their cues, and respond appropriately builds a sense of expectation for the baby that their needs will be met. These repeated patterns over time help babies to feel loved, safe and confident to explore the world around them[6].

But it's not always as easy as that. There are many factors that can make it hard for a parent or caregiver to notice and respond to their baby consistently. These include environmental factors such as poverty, insecure housing or employment, or parental factors such as mental health difficulties, alcohol or substance misuse and domestic abuse. There may also be factors unique to the baby such as temperament, a chronic organic illness, prematurity or autistic spectrum disorder that might cause a mismatch in the dyadic relationship or make interpreting cues and behaviours more difficult[7]. Therefore, it is even more important that a health visitor, trained and skilled to observe and undertake the comprehensive biopsychosocial assessment that will not only identify emerging difficulties, but often the underlying cause, is on hand. Through establishing a trusted, therapeutic relationship, the health visitor can guide the parent or caregiver to find solutions for support to address the identified need, according to local pathways. This could include direct health visitor-led interventions such as Emotional Wellbeing Visits (EWV) or Video Interaction Guidance (VIG). Referrals may be offered, including to the GP or paediatrician, Specialised Parent-Infant Relationship Services where available, Specialist Perinatal Mental Health Teams, or Maternal Mental Health Services. Additional support may include introductions to local group-based activities at children's or family centres/hubs such as baby massage or baby sensory groups, or services run by third -sector organisations. When adequately resourced and appropriately trained, health visitors have a clinically and cost-effective role in whole family wellbeing[8].

National guidance encourages discussion with parents and caregivers about the importance of bonding and emotional attachment and the approaches that can help them bond with their baby[9]. The child health programmes in each UK nation give health visitors clear mandates to support the emotional wellbeing of infants and young children through attuned and responsive relationships[10,11,12,13]. For example, the refreshed Healthy Child Programme for England[10] highlights the importance of supporting parent-infant interaction, including the use of parent-infant observation to explore relational patterns and reflective functioning techniques to strengthen bonding and reduce the impact of emotional difficulties on the child's development. However, although the programmes refer to resources and frameworks such as Togetherness (previously known as the Solihull Approach) to support practitioners, they do not recommend any specific assessment tools or measures as an adjunct to clinical decision-making. Research suggests that most health visitors are confident in observing the parent-infant relationship, but many report lower confidence in how to measure, record, and communicate their observations on their own data systems, or to other agencies[14].

Variation in practice is further influenced by workforce realities. In some areas, other members of the health visiting team (e.g. staff or nursery nurse), deliver early reviews, which can limit the consistency of baby observations and the use of assessment tools. This combination of no standardised approach or tool, differing levels of staff confidence, and skill mix involvement leads to variation in how baby observations are carried out and recorded. This highlights the need for practical and feasible approaches to support the early identification of babies who may require additional specialist support.

1.2 The Alarm Distress Baby Scale

Until 2023, the Alarm Distress Baby Scale (ADBB), originally developed by French psychiatrist Prof. Antoine Guedeney, and its modified version (m-ADBB), were not routinely used within UK services, and certainly not within health visiting. It has subsequently been included in the recent Healthy Child, Healthy Future programme in Northern Ireland[11] as a tool to inform parent-infant observation, for those who have been trained in its use.

The ADBB[15] is an 8-item observation aid with good validity and reliability across a variety of cultures, populations and contexts[16], which can be used to identify social withdrawal in babies from birth up to 24 months of age (Appendix 1). The 5-item modified version (m-ADBB)[17], developed for use by frontline practitioners (including health visitors) in Australia, enables an initial assessment of babies who may require additional support, including further assessment using the ADBB (Appendix 2).

Following a visit to Denmark in 2022, HRH The Princess of Wales initiated discussions with the Institute of Health Visiting (iHV) to explore the possibility of health visitors in England using the ADBB in routine care, in the way she had observed health visitors doing as part of the Copenhagen Infant Mental Health project. The Royal Foundation Centre for Early Childhood subsequently commissioned the iHV in 2023, in partnership with the University of Oxford, to undertake a small-scale study involving two NHS health visiting services.

1.3 Initial study findings

This initial mixed-methods study was published in April 2024[18]. We asked the following research questions:

1. How acceptable and feasible were the ADBB and m-ADBB training programmes?

2. How acceptable and feasible was the use of the ADBB and m-ADBB as part of routine care within the health visiting provision in England?

3. What were the facilitators and barriers affecting the implementation of the ADBB and m-ADBB in health visiting practice?

Five specialist health visitors in perinatal and infant mental health were trained in the ADBB, and 20 health visitors in the m-ADBB. Training was provided by Humagogie, the training provider for ADBB based in France. The m-ADBB was used by the trained health visitors during each 6-8-week health visitor review with families. This was considered to be an ideal contact, allowing time for the parents and baby to adjust to each other, but early enough to identify where issues of concern may be emerging and support could be offered and where brief interventions could be particularly effective. Where concerns were identified, health visitors could refer to the specialist health visitors for assessment with the full ADBB or for consultation and advice. Quantitative and qualitative data were collected over a four-month period and were analysed using the Normalisation Process Theory framework to explain the implementation process.

Full findings can be found here. In summary, the ADBB approach was regarded as 'hugely beneficial' and 'of great importance' to practice by health visitors. Both training programmes (m-ADBB and ADBB) were rated highly, introducing the concept of social withdrawal (a coping mechanism that babies may use if they are experiencing some sort of stress in the environment around them) to the health visitor 'toolkit', alongside new knowledge, skills and vocabulary to interpret a baby's behaviour. The use of the m-ADBB was found to require minimal additional time and was considered easy to embed into routine health visiting practice. Health visitors reported that using the m-ADBB enabled them to:

- Have more meaningful conversations with parents and carers about the emotional wellbeing of their baby;

- Promote positive parent-infant interactions, attachment, and bonding; and

- Identify those babies and families in need of greater support during this critical period of development.

A number of research, policy and practice recommendations were made following this study including:

1. The need to establish a UK-based training provider to align the training to the UK context, incorporating the training improvement recommendations from the study.

2. Further research to evaluate the training and its impact in a diverse range of sites, broadening it to other UK nations.

These recommendations helped shape a second proposal to The Royal Foundation Centre for Early Childhood, for a second phase of research. This phase, which began in October 2024, aimed at gaining a better understanding of how the m-ADBB and ADBB was being used in different health visiting settings across the UK, including its acceptability to parents.

Chapter 2. Study overview

2.1 Research aims and objectives

1. Expand the m-ADBB and ADBB training programme within health visiting teams across the UK.

2. Evaluate the impact of the above expansion on practice, outcomes of referrals, and acceptability to parents.

The objectives were to:

- Consider the findings of the initial feasibility study to inform the expansion of the m-ADBB and ADBB training, including any additional resources needed to align to UK health visiting practice
- Deliver and evaluate the revised training programme across a range of UK health visiting sites
- Evaluate the impact on health visitor practice and outcomes of referrals made
- Compare the rate of concerns identified in babies at 6-8 weeks by health visitors
- Follow-up of the outcomes for babies when such concerns were identified at 6-8 weeks by health visitors trained in m-ADBB/ADBB compared with those who were not
- Explore the acceptability of the scale to parents
- Make recommendations for the implementation of the m-ADBB and ADBB in practice and future sustainability of the UK-based training offer and learning opportunities through a Community of Practice.

2.2 Research methods

This study involved delivering ADBB and m-ADBB training to health visitors and collecting data at different stages, using a mixed-methods approach. By combining numerical data with information about people's views and experiences, the study provided a fuller picture of the impact of the training and how it was used in practice. The study was carried out through three linked work packages, focusing on the impact of training, outcomes from practice, and acceptability to parents and carers.

The study took place in eight participating sites across England, Scotland, Wales and Northern Ireland (Table 1). Participants included health visitors who completed either ADBB or m-ADBB training, service leads or managers involved in implementing the training, and parents or carers whose babies received the m-ADBB assessment during the statutory 6–8-week health and development review by a health visitor.

Ethical approval was obtained from both the Health Research Authority (HRA) and Health and Care Research Wales (HCRW) (REC reference: 25/WA/0049). An expert advisory group was set up to provide guidance and challenge where needed, to help follow the agreed protocol and maintain the required ethical standards.

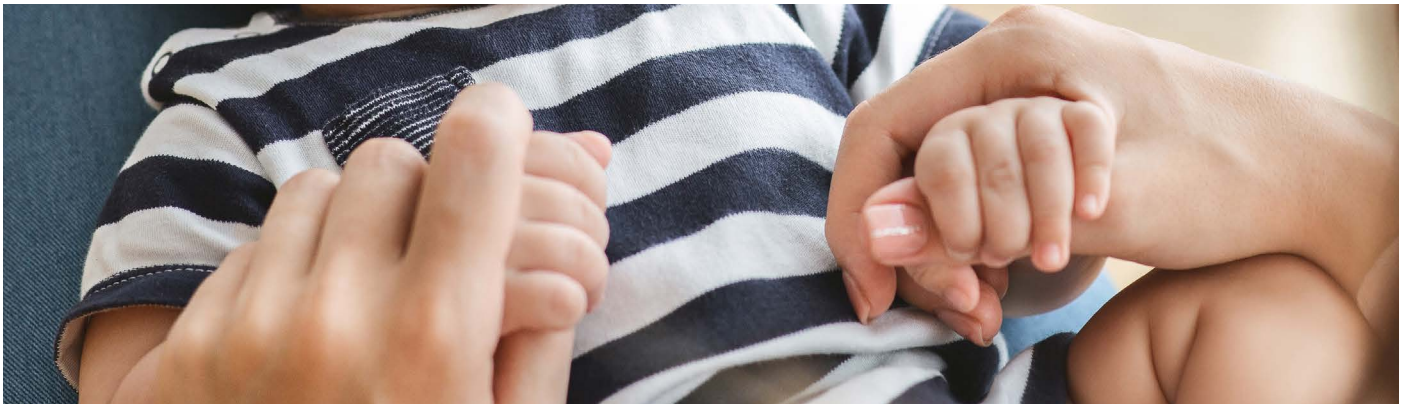
Participation was voluntary for all groups. Health visitors provided informed consent at the start of the online questionnaires and written consent before taking part in focus groups. Parents and carers received written information about the study and provided informed consent before interviews were carried out. All participants were advised that they could withdraw from the study at any time before their data were anonymised, without needing to give a reason. The audio recordings of the focus groups and parent interviews were transcribed by an external company under a confidentiality agreement. Any quotations used to illustrate key themes were anonymised to protect participants' identities.

2.3 Participating sites and training

Health visiting services across the UK were invited to express an interest in participating in Phase Two during October 2024. Sixteen sites expressed an interest, including the two sites who had participated in the initial study. Following discussion with The Centre for Early Childhood, eight sites were selected, ensuring representation across a range of demographics and within each UK nation. Three sites were offered training for their whole service to ascertain how well the ADBB approach would be embedded when offered more widely, rather than to self-selected health visitors with a particular interest in infant mental health, as was the case in our initial study. Table 1 shows the participating sites and the number of health visitors/student health visitors who were initially offered training in either the ADBB or m-ADBB, the number who completed the training, and the number who remain active in practice. The total number of ADBB-trained practitioners who were still active in service at the final data collection point (January 2026) remained relatively stable (reducing slightly from 18 to 16 across all sites). In contrast, the number of m-ADBB-trained practitioners in active practice decreased more substantially, from 336 to 240 across the sites. This reduction reflects high levels of workforce turnover during the study period, including retirement, resignation, moves to other services, long-term sickness and maternity leave.

Table 1: Participating sites and numbers offered, completing, and remaining active following training

Site	M-ADBB	ADBB	Comments
Ayrshire & Arran Health Board	32	3	3 teams
Cwm Taf Morgannwg University Health Board	8	2	1 team
Hampshire & Isle of Wight Healthcare	30	2	3 teams
Humber Teaching NHS Foundation Trust	50	3	Phase 1 site: training offered to whole service in Phase 2
Northern Health & Social Care Trust	57	3	3 teams
RDaSH – North Lincs	26	1	Training offered to whole service
RDaSH – Doncaster	57	2	Training offered to whole service
South Warwickshire University NHS Foundation Trust	84	2	Phase 1 site: training offered to whole service in Phase 2
Total offered training	344	18	
Total trained	336	18	
Total active in service (August 2025)	290	17	
Total active in service (January 2026)	240	16	



Each site identified a local project lead who was invited, along with all participating health visitors and student health visitors, and any supporting managerial staff, to an introductory online meeting at the beginning of January 2025. Here, we gave an overview of the ADBB and m-ADBB scales, the findings and recommendations from our initial study, and the aims, objectives and research expectations of the participating sites.

Those identified for the full ADBB training, along with two iHV staff members, participated in training between January and May 2025. This comprised 20 hours of synchronous online training and 45 hours of self-directed learning, with a final certification test. Eighteen participants successfully achieved high certification. Two participants were supported to re-certify, resulting in the whole cohort being successfully certified in ADBB.

Those identified for the modified ADBB (m-ADBB) training attended a three-hour online webinar during May or June 2024. No certification was associated with this training.

Both training options were delivered by Dr Alexandra Deprez and Jocelyne Guillon via Humagogie.

In addition to this, and in response to findings and recommendations from our initial study, the iHV offered pre- and post-training workshops to supplement the training offered by Humagogie. Both workshops allowed time to update participants on the progress of the study, how to complete the research activity, and offered an opportunity to complete the relevant pre- or post-training questionnaires.

The pre-training workshop also included information and discussion focused on:

- the importance of the early years of life in laying the foundation for a baby's social, emotional and cognitive development
- the early attachment relationship
- promoting sensitive parental behaviour (reflective functioning and mind-mindedness)
- how an m-ADBB observation can help to promote sensitive parenting
- what typical social and emotional behaviour in newborns looks like.

The post-training workshops also included information and discussion about:

- how to access and use the co-developed resources (discussed further in section 2.3)
- how to use the m-ADBB and ADBB in practice
- how to discuss concerns
- what to do if concerns persist

and included a further opportunity to observe a video of a parent-baby interaction and discuss the m-ADBB observations as a group.

As part of this study, the five specialist health visitors plus an iHV staff member, who had originally trained in the ADBB, undertook a 3-hour refresher training facilitated by Dr Deprez and were all successfully re-certified in ADBB.

Sustainability and scalability of the m-ADBB/ADBB training model has been a primary concern for The Centre for Early Childhood and a recurring theme with commissioners and service providers, keen to understand how the scales can continue to be introduced, implemented and embedded within health visiting services following conclusion of the study. For this reason, training a selected number of highly-certified ADBB health visitors in additional 'ADBB Referent Training' was included as part of our Phase Two Study proposal. This was aligned to the then-current model suggested by Dr Deprez as a pre-requisite for becoming a future trainer. Twelve health visitors, with at least one from each participating site, plus one iHV staff member, were offered a place on the Referent Training comprising 12 hours synchronous online teaching and 13 hours asynchronous self-directed learning with an end-of-course assignment to produce a presentation on a research-based aspect of the ADBB. The training was offered between September 2025 and December 2025.

2.4 Co-development of resources through parent engagement and consultation

We developed resources to address a gap identified in the first study, whereby practitioners said they needed more support and guidance to feel confident talking to parents about their babies' social and emotional development. To do this, we first reviewed existing research and resources on how to have conversations with parents about their babies' behaviour, communication, and early relationships.

We then invited parents to take part in an engagement and consultation workshop to help us:

- understand how parents would like health visitors to talk to them about their babies' behaviour and communication, especially if there are any possible concerns
- make sure that we could recruit and interview a range of parents from different backgrounds, cultures and experiences
- ensure that the information included in the Parent Information Sheet and Consent Form (also translated in Welsh) for Work Package 3, and what we asked in the interviews, were relevant and clear.

We engaged with 14 parents in total: 13 mothers (two of whom did not speak English as their first language) and one father.

We held two online workshops to explore their experiences to inform the development of resources for health visitors to use when talking to parents and carers about their babies' behaviour and communication. For those unable to attend a workshop, we offered one-to-one Zoom calls. We undertook two Zoom calls, one with an interpreter.

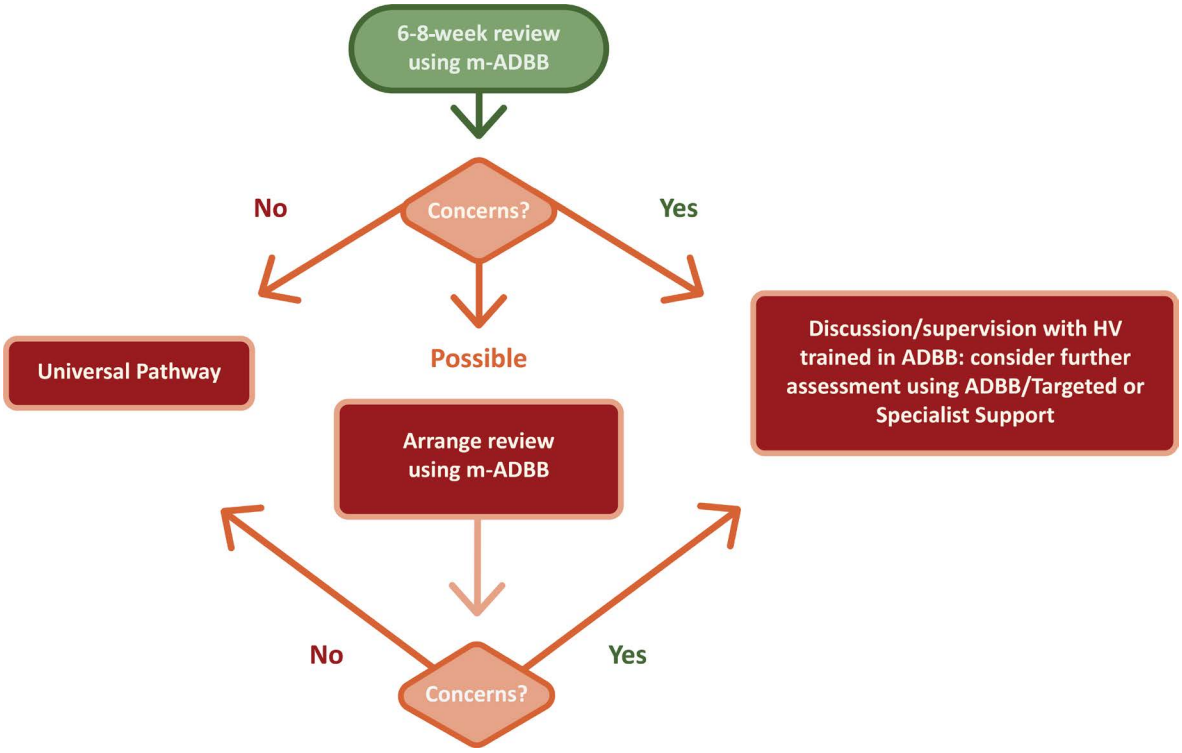
One of the recommendations from our initial study was to engage in further discussion with the Copenhagen Infant Mental Health Project team to share updates and learning between the UK and Danish ADBB work. An online meeting was held in December 2024, where the Danish team kindly agreed to share their 'Understanding your baby' manual and the visual aid they had developed to supplement the ADBB training offered to health visitors.

Consent was given for the iHV to adapt and develop these resources as part of our co-development work, resulting in the ADBB Conversation Guide and Conversation Card (available in English and Welsh, Appendix 3). This included guidance for health visitors on how to set the scene with parents, how to think together with them about the uniqueness of their baby, how to introduce the Conversation Card highlighting the specific aspects of social development that might be observed, and how to frame the discussion following the observation of the baby. The observation was recommended to be undertaken during a structured interaction of 10-15 minutes between the baby and parent or carer, or between the baby and the health visitor or another practitioner, observing how the baby reacted to stress such as being undressed for weighing and measuring, or having a nappy change, rather than in a free play session. Guidance was also included in relation to any possible concerns observed and any follow-up or review required.

2.5 Pathway and process development through practitioner engagement and consultation

We held an online workshop and a shared learning event with health visitors and service leads in all sites to review the pathway and process that had been agreed in Phase One and to incorporate the use of the co-developed ADBB Conversation Guide and Card as described above. The agreed pathway (Figure 1) was that if the m-ADBB-trained health visitor identified possible concerns about the baby's behaviour in terms of social withdrawal at the 6-8-week review, they were encouraged to review the baby again. Where a definite concern was identified by the health visitor, either at the initial 6-8-week review, or confirmed at a follow-up, they were encouraged to offer sensitive exploration and assessment of factors that might be impacting on the baby and agree with the family what extra support would be suitable and acceptable, as per their usual enhanced pathway offer. The health visitors trained in the m-ADBB were encouraged to seek consultation and further guidance from the health visitors trained in the full ADBB and could arrange further assessment or a joint visit at any point.

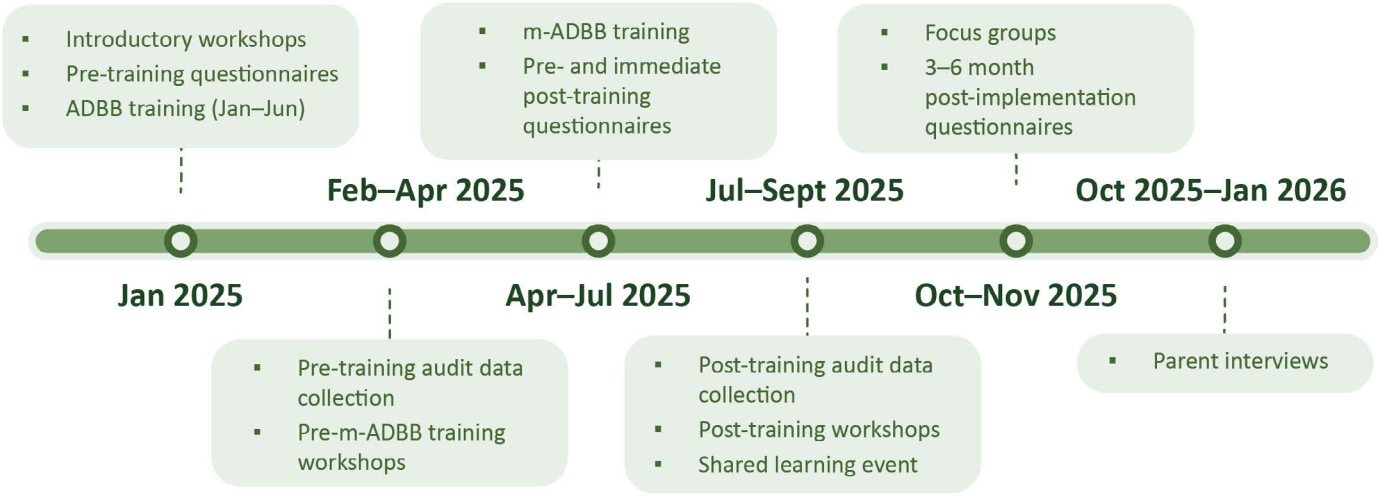
Figure 1: m-ADBB pathway for 6-8-week review



2.6 Data collection and analysis

An overview of the main stages of the study and their corresponding timeline is shown in Figure 2 below.

Figure 2: overview of study



Work Package 1: Impact of ADBB and m-ADBB training

We asked health visitors who took part in either the ADBB or m-ADBB training to complete online questionnaires at three points: before the training (January 2025 for ADBB, April – May 2025 for m-ADBB); right after the final workshops (between June and July 2025); and again three to six months later (between November 2025 – January 2026). Questionnaires were completed using SurveyMonkey and the responses were summarised using descriptive statistics.

We invited a set number of health visitors from each site who completed the questionnaires, along with relevant service leads or managers, to take part in online focus groups. We conducted two focus groups via Zoom, each lasting up to 90 minutes and including 11 participants in each. Discussions followed a topic guide informed by findings from the post-training questionnaires, the audit data from Work Package 2, and input from the expert advisory group. Focus groups were audio recorded, transcribed and anonymised before analysis. Focus group data were analysed using Framework Analysis[19], a structured method for identifying and comparing key themes across participants.

Work Package 2: Outcomes of using the m-ADBB at the 6–8-week contact

To assess changes in practice following the introduction of the m-ADBB, we collected anonymised audit data before and after the training. All data were collected online using Jotform, a secure web-based platform.

Each site completed a 10-week clinical audit before training (3 March to 12 May 2025) to establish a baseline picture of how infant behaviour concerns were identified in routine practice. These audits were registered with local clinical audit teams.

Following the training, health visitors submitted anonymised data for a further 10-week period (14 July to 22 September 2025). This included the number and type of concerns identified, any referrals made, and outcomes of those referrals.

During both the pre- and post-training periods, if a concern was identified, health visitors were asked to complete an additional online form 90 days after the initial check. This follow-up form recorded what had happened after any referral or intervention.

We compared the data from before and after the training using percentages and descriptive summaries.

Work Package 3: Acceptability of the m-ADBB to parents and carers

We carried out semi-structured interviews with parents and carers between November 2025 and January 2026 to explore their experiences of the m-ADBB during the routine 6–8-week health visitor review. Health visitors gave eligible parents information about the study and, if they agreed, passed their contact details to the research team. We obtained written consent before each interview took place.

Interviews were carried out online using Zoom at a time that suited the parent or carer. We developed a topic guide with input from the expert advisory group to help structure the conversations. We completed 12 interviews and each interview lasted up to 30 minutes. The interviews were audio recorded, transcribed, anonymised and analysed using Framework Analysis[19]. While we cannot say for certain, it is likely that we reached data saturation, as no new themes were emerging in the later interviews.

Chapter 3. Key findings

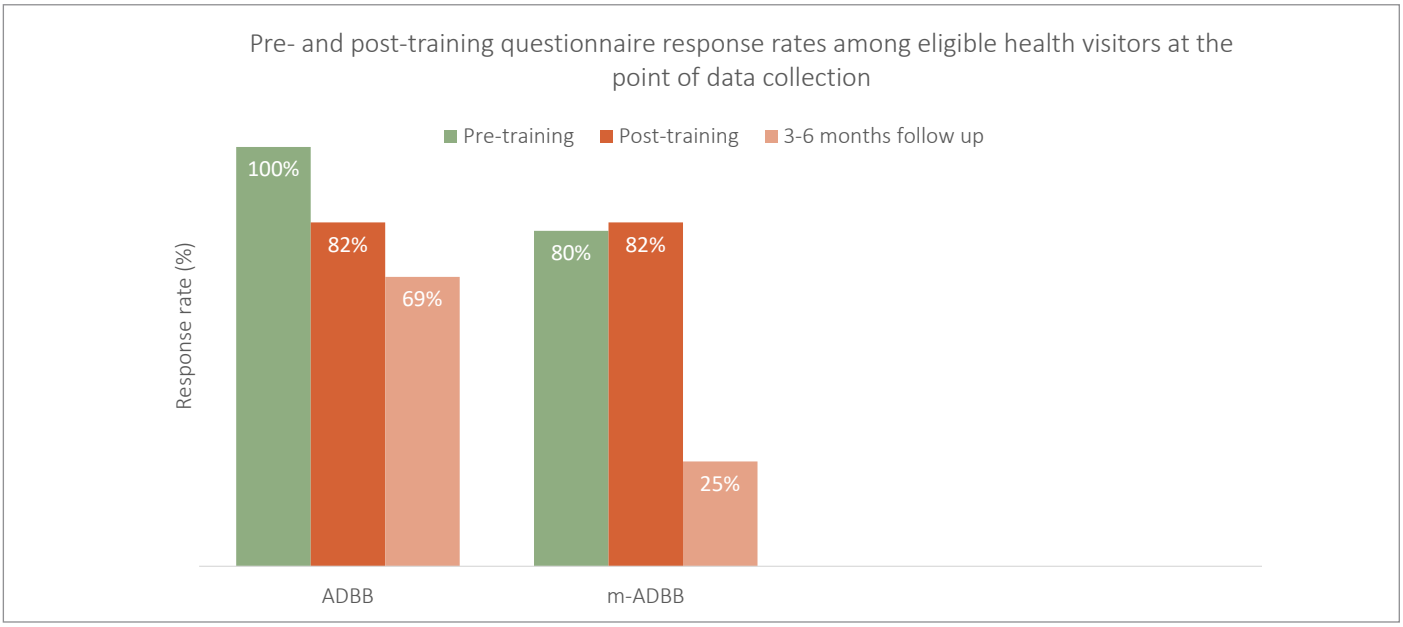
The study findings are presented in this chapter. Further discussion and possible explanations are explored in chapter 4.

3.1 Work Package 1: Impact of ADBB and m-ADBB training

3.1.1 Findings from pre- and post-training questionnaires

The number of practitioners trained in ADBB or m-ADBB, and those still in practice, changed over the course of the study (Figure 3). The questionnaire completion rate was calculated based on the number of practitioners who were trained and in post at each point of data collection. In the ADBB group, all 17 eligible participants completed the questionnaire before training. Fourteen (82%) completed it immediately after training, and 11 (69%) completed the 3–6-month follow-up. In the m-ADBB group, 268 of eligible 336 (80%) participants completed the questionnaire before training. After training, 238 of 290 (82%) completed the immediate post-training questionnaire, and 60 of 240 (25%) completed the 3–6-month follow-up.

Figure 3: Pre-and post-training questionnaire response rates among eligible health visitors at the point of data



Most participants in both groups were health visitors working directly with families and holding an active clinical caseload. In the ADBB group, 12% held leadership or specialist roles, while in the m-ADBB group, 7% were in leadership or specialist roles and a further 7% were student health visitors. Participants across both groups were drawn from all four UK nations and represented seven NHS Trusts. To ensure a breadth of professional experience, participants ranged from newly qualified health visitors to those with over ten years' experience, reflecting a mix of early-career and highly experienced practitioners.

Participants' prior experience of infant mental health related training varied. All participants in both groups had received some form of previous training (see Table 2), and some were already using structured tools to observe or assess parent–infant interaction, parenting self-efficacy, or infant behaviour (see Table 3). However, a substantial proportion were not using formal tools before the training — 41% in the ADBB-trained group and 67% in the m-ADBB-trained group.

Table 2: Participants' prior experience of infant mental health related training

Prior training	ADBB-trained health visitors	m-ADBB-trained health visitors
Solihull Approach[20]	76%	80%
iHV Perinatal and Infant Mental Health Awareness or Champions training[21]	65%	17%
iHV Emotional Wellbeing Visits training (42%)	47%	25%
Video Interaction Guidance[22]	24%	3%
Neonatal Behavioural Observation (NBO)[23]	29%	24%
Star Babies training[24]	18%	16%
Other (including GroBrain[25], Promotional Guides[26], in-house/local training in perinatal and infant mental health)	41%	9%
None	5%	9%

Table 3: Structured approaches and tools used by participants to observe or assess parent–infant interaction, parenting self-efficacy, or infant behaviour prior to training

Approaches and tools used	ADBB-trained health visitors	m-ADBB-trained health visitors
Karitane Parenting Confidence Scale[27]	18%	9%
ADBB/m-ADBB[15,17]	2%	6%
Mothers Object Relations Scales short form (MORS-SF)[28]	12%	0%
Lanarkshire Infant Mental Health Observation Indicator Set[29]	6%	1%
Leeds Early Attachment Observation (LEAO)[30]	6%	1%
Postpartum Bonding Questionnaire[31]	0%	3%
Other (including Ages and Stages Questionnaire-Social-Emotional (ASQ-SE)[32], Promotional Guides[26], My Baby and Me)	6%	18%
None	41%	67%

Knowledge and understanding

The ADBB training led to a marked increase in the proportion of health visitors reporting good understanding across all areas (Figure 4). Before training, understanding was moderate for sources of babies' stress (52%) and the impact of stress on development (62%), but low for understanding how a baby's behaviour might indicate they are experiencing stress (23%) and understanding the concept of social or relational withdrawal (13%). Immediately after training, understanding rose sharply to over 90% for sources of stress, impact on development, and behaviour-indicating stress, and to 79% for the concept of social or relational withdrawal. At 3–6-month follow-up, understanding remained high for sources of stress, impact on development, and behaviour-indicating stress (all 82%), but declined for understanding the concept of social or relational withdrawal (55%).

Figure 4: Health visitors' reported understanding before ADBB training, immediately after, and at 3–6-month follow-up.

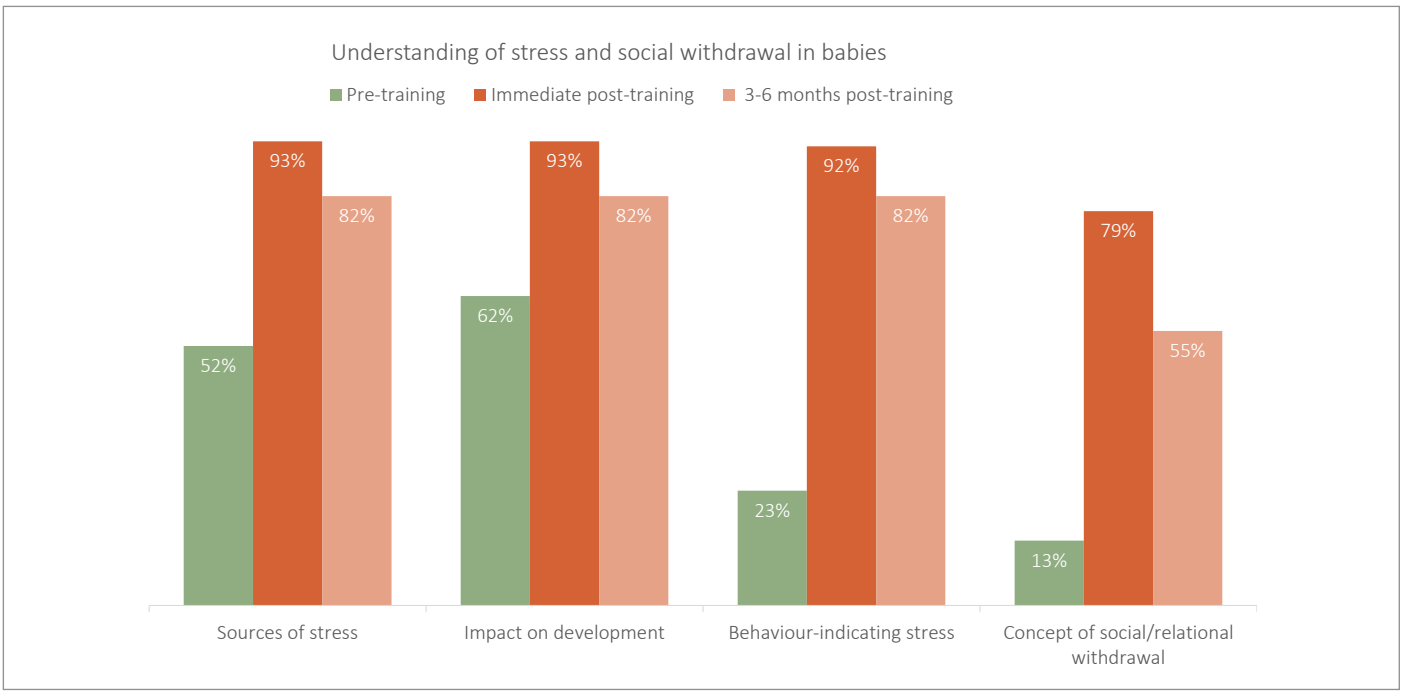
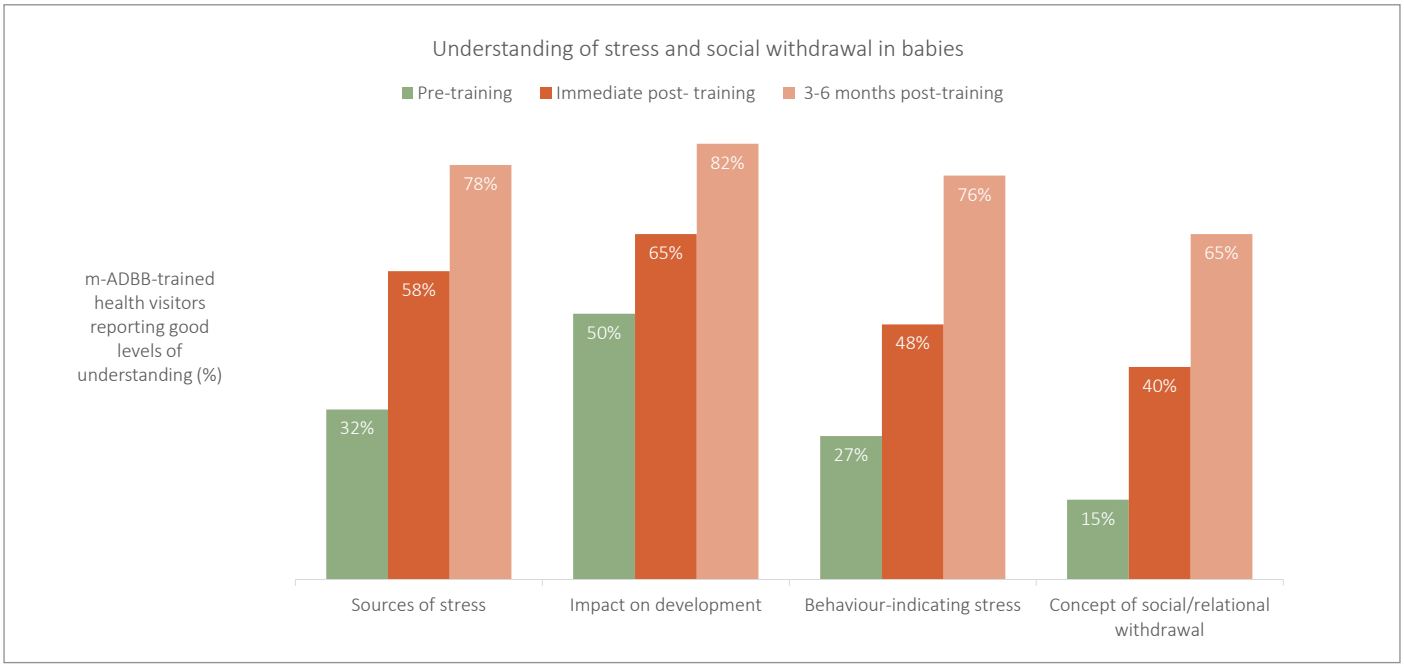


Figure 5 shows a steady increase in understanding across the three timepoints following m-ADBB training but starting from lower baseline levels. Before training, understanding ranged from 15% for the concept of social/relational withdrawal to 50% for the impact of stress on babies' development. Immediately after training, understanding improved across all areas, reaching 40–65%. By 3–6-month follow-up, understanding was further improved, rising to 65–82%, with the concept of social and relational withdrawal remaining the area with the lowest, but improved, understanding (65%).

Figure 5: Health visitors' reported understanding before m-ADBB training, immediately after, and at 3–6-month follow-up.



Together, these results show that both ADBB and m-ADBB training improved health visitors' knowledge of the sources of stress affecting babies, how stress can impact development, how babies' behaviour may indicate stress, and the important concept of social and relational withdrawal in babies.

Confidence in observing and interpreting babies' behaviour

The ADBB training also had a strong impact on health visitors' confidence in observing, interpreting, and discussing babies' behaviour (Figure 6). Before the training, confidence was already fairly high in observing babies' behaviour (87%) and talking to parents about it (81%). Confidence was slightly lower in interpreting babies' behaviour (74%). However, it was much lower for identifying social or relational withdrawal (45%) and particularly low for assessing the severity of withdrawal (29%).

Immediately after the training, participants' confidence increased to 100% in most areas, showing a substantial boost across all domains. At the 3–6-month follow-up, confidence levels remained high. Confidence in observing babies' behaviour and talking to parents about it stayed at 100%. Confidence in identifying withdrawal and assessing its severity was slightly lower than immediately after training but still strong, at 91% for both.

Overall, this suggests that the ADBB training had both an immediate and sustained impact on health visitors' confidence in recognising and responding to babies' behavioural cues.

Figure 6: Health visitors' confidence in observing, interpreting and communicating babies' behaviour before ADBB training, immediately after training, and at 3–6-month follow-up.

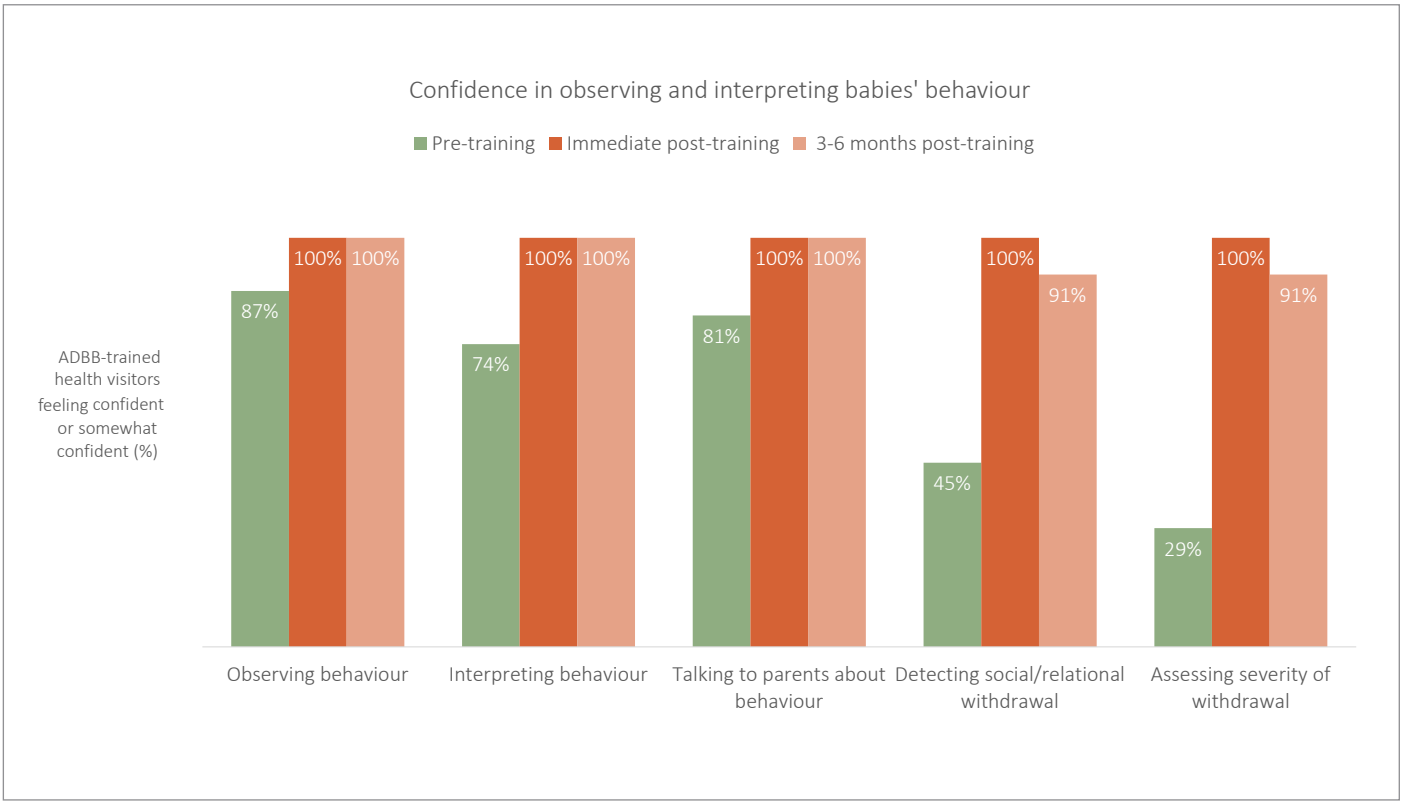
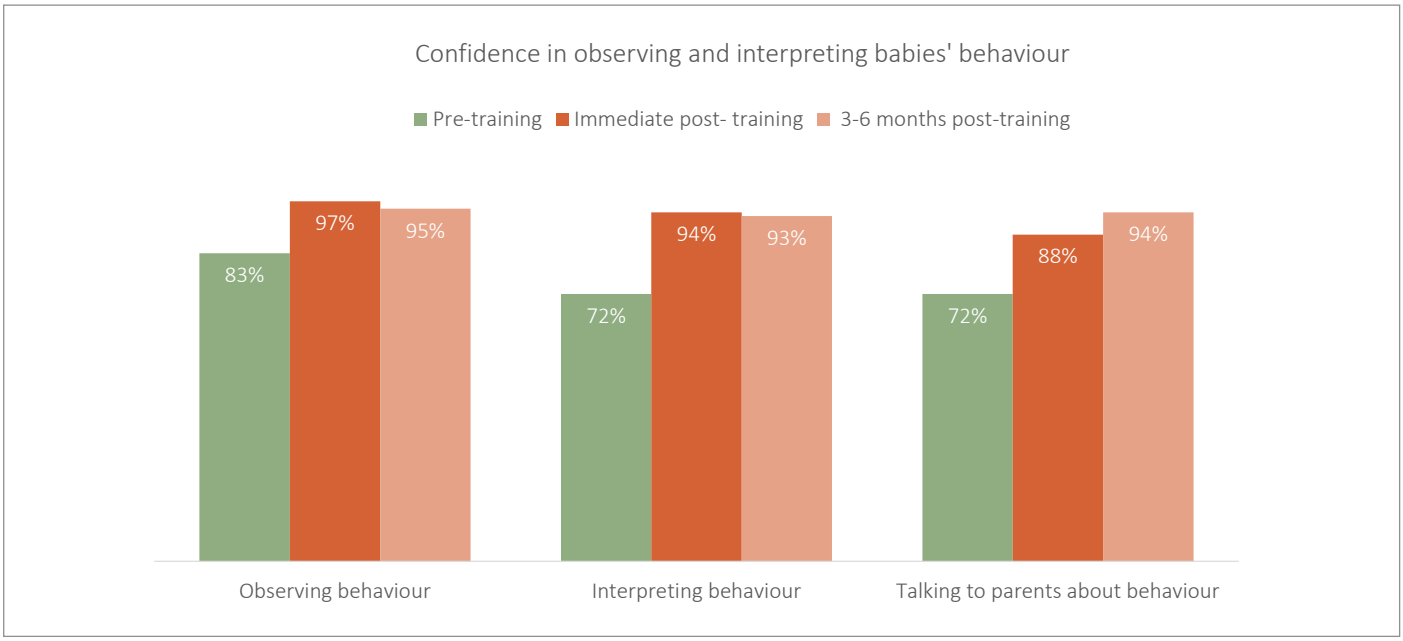


Figure 7 shows a similar pattern after the m-ADBB training, with improvements across key areas of confidence. Before training, confidence among m-ADBB trained health visitors ranged from 72% to 83% for observing, interpreting, and discussing babies' behaviour. Immediately post-training, confidence rose to between 88% and 97%. At 3–6-month follow-up, confidence levels were largely maintained, ranging from 93% to 95%, indicating sustained gains across the three domains.

Figure 7: Health visitors' confidence in observing, interpreting and communicating babies' behaviour before m-ADBB training, immediately after training, and at 3–6 month follow-up.



Together, these results demonstrate that both ADBB and m-ADBB training boosted health visitors' confidence in recognising and communicating about babies' behaviour, with most improvements maintained over time.

Training Experience	
Introductory workshop (for all participants):	This was attended by 93% of ADBB and 97% of m-ADBB participants who completed the immediate post-training questionnaires. Overall, 99% of attendees found it helpful. Participants valued the clarity provided and the opportunity to discuss concerns. Suggestions for improvement included smaller group or face-to-face delivery.
Pre-training refresher workshop (for all participants):	This was attended by 57% of ADBB and 96% of m-ADBB participants who completed the immediate post-training questionnaires, with 98% reporting it was helpful. Participants valued the confidence it gave them and the practical focus of the session, although some said they would have liked more time to review the data collection forms.
ADBB training (for ADBB health visitors only):	Participants generally found the training delivered by Humagogie engaging and valuable. Most felt the synchronous online sessions were the right length (79%), though 29% found some elements difficult to understand. Self-directed learning was challenging for some, with 71% reporting it took longer than expected, 29% finding it achievable, and a small minority needing extra support or finding it unachievable (7% each). Overall, 86% felt prepared to use the ADBB in practice. Participants praised the trainer's knowledge and enthusiasm, enjoyed the content and discussion, and reported increased confidence, though some noted technical issues, occasional language confusion, difficulty accessing materials, and a desire for longer refresher sessions.
m-ADBB training (for m-ADBB health visitors only):	Participants generally found the webinar useful. Most felt the length was appropriate (72%), though 20% found it too brief and 8% too long. In terms of preparedness for practice, 72% felt ready to use the m-ADBB, while 28% did not. Suggestions for improvement included more practical examples and role modelling, additional videos, follow-up sessions, and further support for applying the tool in practice.
Post-training workshop (for all participants):	This was attended by 71% of the ADBB and 96% of the m-ADBB group, with 99% finding it helpful. Participants particularly valued the practical focus of the session, including discussion of observations, use of video examples, and guidance on having difficult conversations with parents. Many reported that it increased their confidence. Suggestions for improvement included shorter, more condensed sessions, additional structured practice and observation videos, easier access to materials, and further local support for implementation.

Implementation

Use of the m-ADBB and ADBB during routine reviews was variable. At the 3-6-month follow-up, 45% of m-ADBB trained practitioners who completed the questionnaire reported always using it at the 6–8-week review and 30% often using it, with lower use during other family contacts. For the full ADBB, 36% reported always or often using it at the 6–8-week review, and 45% reported always or often using it during other contacts with families. The reasons that influenced decisions to use the ADBB/m-ADBB were explored further in the focus groups.

Confidence in using both tools was high 3-6 months post training. For the m-ADBB, 90% felt confident or somewhat confident, and for the ADBB, 91% reported the same. In both cases, parents were reported to respond positively.

Nearly half of practitioners (45%) felt the m-ADBB had helped identify concerns earlier, with a further 37% stating that it possibly did, mainly by providing structured evidence of observations they were already making. A larger proportion (82%) felt that use of the full ADBB helped identify concerns earlier.

Feedback from practitioners included:

"This approach is incredibly valuable because it goes beyond what m-ADBB offers and delivers a more significant impact on outcomes. By enabling truly personalised care planning, it ensures that interventions are tailored to the unique needs of each family."

"I feel that the ADBB scale has helped me to approach the assessment more systematically whilst keeping the focus on the baby rather than the parents."

"It has definitely supported and given me greater skills in identifying difficulties earlier on."

"The tool brings the focus with the baby at the centre which is essential for all professionals working with infant and parent mental health."

However, fully embedding the tools into practice at this stage was reported to be challenging. Only 40% reported the m-ADBB and 27% the ADBB were fully integrated into local pathways. Reported barriers included high caseloads, staffing pressures, limited follow-up services, and uncertainty about the tools' effectiveness. Factors that supported implementation included managerial support, practitioner confidence, additional iHV resources such as the conversation guide, and the use of videos to support observation.

Qualitative feedback highlighted mixed experiences. While many practitioners valued the tools and felt they supported earlier identification of concerns, others described challenges linked to service pressures, limited opportunities to practise, and training that felt insufficient or unclear. Some felt the tools did not significantly change their existing practice, while others raised concerns about confidence, particularly when identifying more subtle signs of social withdrawal.

The participants identified a number of factors that were linked to the scales being fully embedded and sustained in practice, as outlined in Table 4.

Table 4: Perceived requirements for the full embedding and sustainability of the ADBB and m-ADBB in practice

Key factors	ADBB trained	m-ADBB trained
Regular updates	91%	88%
New health visitors to be trained in the scale	82%	75%
Ongoing managerial support	82%	57%
Access to regular supervision	73%	55%
Clear recording templates	82%	70%
Inclusion in local policies and pathways	82%	65%
Access to local library of resources and videos	64%	48%
Access to ADBB 'Champions' for advice, peer support and supervision	55%	67%
Communities of Practice to share learning and continued development	82%	53%

3.1.2 Findings from practitioner focus groups

Twenty-two practitioners took part in the focus groups, representing all eight study sites. Ten participants were trained in the full ADBB, and twelve were trained in the m-ADBB. Participants included fourteen health visitors, four specialist health visitors, and four who were either team leaders, service managers or professional leads.

Participants' experience ranged from those relatively new to practice to those with over ten years' experience. There was also variation in participants' prior training in infant mental health. Some had not undertaken any additional training, while others had completed a range of relevant courses, including the Solihull Approach, iHV Perinatal and Infant Mental Health Awareness or Champions training, iHV Emotional Wellbeing Visits training, Video Interaction Guidance (VIG), NBO, Star Babies, and trauma-focused cognitive behavioural therapy.

The focus group data were analysed using Framework Analysis[19]. Transcripts were read to become familiar with the data, and a framework based on the study aims and topic guide was used to organise the findings. This framework included six key areas: Training Experience and Learning; Impact on Practice and Professional Judgement; Implementation in Practice; Resources, Peer and Organisational Support; Parents' Engagement and Acceptability; and Sustainability and Future Rollout. Data were then compared across participants to identify common patterns and differences. In the final stage, findings were brought together across these areas to develop broader themes that explain practitioners' experiences of the ADBB and m-ADBB. The themes reflect changes in how practitioners observed babies, integrated the tools into their everyday practice, identified and responded to need, and navigated organisational and relational constraints.

1. Capability development and professional sense-making

Both the ADBB and m-ADBB training influenced how participants noticed, understood, and talked about babies' behaviour. Rather than providing new skills, participants described the training as building on existing health visiting expertise, helping them focus more clearly on the baby and pay closer attention to specific behaviours.

"We felt that an awful lot of it is basic foundation skills of what we are doing as health visitors. It's part of our backbone of what we're doing already, but ….it made us focus on more certain aspects of it." (FG18, m-ADBB trained)

"I think overall the training…… just added an extra layer, enhanced kind of what we're already doing as well." (FG14, m-ADBB trained)

Several participants described a shift in attention away from mainly focusing on parents or the wider situation, towards closer observation of the baby.

"I think traditionally we're very much trained to look at that parental-child relationship and looking at what [the parent is] telling us and looking at that interaction, whereas this really focused on looking at what the child is telling us." (FG12, ADBB trained)

Participants became more aware of specific aspects of babies' behaviour, for example how a baby might initiate and sustain eye contact with their caregiver, and described how this became a routine part of their observations.

"I found that really helpful and I find myself doing that in every single visit now where I'm looking at the eye contact, not only with the caregiver, but with me or like other practitioners that might be in there." (FG05, m-ADBB trained)

These changes were often described as lasting and difficult to switch off.

> *"You can never unsee now…… the skills that it's given us and absolutely enhances the importance of being in tune with that baby and really, really understanding what that baby's saying and what that baby's feeling and how that baby's regulating emotions." (FG13, ADBB trained)*

Participants also valued having clearer language to represent the baby's perspective in professional and safeguarding contexts.

"In child protection or safeguarding areas, it's that language to articulate the child's voice, which really we aren't always that great at if the child's under two…..so it gives you just areas to look at and be able to articulate concerns in a very professional way." (FG12, ADBB trained)

While participants valued both the m-ADBB and ADBB training, the ADBB training was often described as intensive and demanding alongside usual workloads. At the same time, many felt the additional time was necessary to develop a deeper understanding of babies' behaviour. Video-based learning was particularly valued for supporting close observation, and some participants felt that videos in French helped keep the focus on the baby rather than speech.

"I was thinking, 'these are all in French, I don't know what's being said and I want to hear that,' but actually what it's done in the end was beneficial because it really made you just home in on the infant and really look at the infant and ignore speech and actually use what you're looking for in the scale." (FG17, ADBB trained)

Additional iHV workshops were described as important in consolidating learning and clarifying the research process, with several participants describing moments of improved understanding.

"Without the iHV training, lots of our staff were very confused. And because it required quite a lot of concentration, I think that they'd missed some chunks of information so that when we came to the iHV information, catch-up sessions, it was really kind of clear to people and there was opportunity to discuss with others." (FG15, ADBB trained)

"I think with the iHV sessions, there were many light-bulb moments." (FG16, m-ADBB trained)

Overall, this theme shows that ADBB and m-ADBB training supported practitioners to develop and make sense of their existing skills by changing how they observe, interpret, and talk about babies' behaviour.

2. Relational and communicative work with parents

Participants described using the ADBB/m-ADBB mainly to support conversations with parents, rather than as a formal assessment that needed to be named or scored. Many introduced observations in simple, everyday language and encouraged parents to notice their baby's behaviour alongside them.

"Let's just have a watch of your baby and see what happens. And then asking, what did you notice?" (FG15, ADBB trained)

Many participants explained that they did not explicitly tell parents they were using the m-ADBB or refer to scores. Instead, they used the training to guide what they noticed and how they shared observations with parents. The tool was described as giving practitioners greater clarity of language and greater confidence to have more detailed conversations. While discussions about babies' behaviour were not new, participants felt better able to move beyond surface-level comments and explore observations in greater depth.

> *"We've always had these conversations, but we can use the language and the new skills and have more detailed conversations with the parents." (FG04, m-ADBB trained)*

Participants frequently described using the tool in a strengths-based way, focusing on what babies and parents were already doing well, while gently supporting areas for development.

"You can really pull on those strengths… and use it in a strengths-based conversation." (FG06, m-ADBB trained)

Parents were generally described as welcoming observation and feedback, particularly when explanations were kept simple and linked to typical development. Participants reported that parents found it helpful to learn what to look for in very young babies and to better understand their baby's cues.

"They find it quite useful to know what they're looking for… how do I know my baby's wanting that interaction? Why is it important that I have that interaction with my baby? And using your observations to give them like positive affirmations, I think is, they love it." (FG19, m-ADBB trained)

Some participants identified relational and communicative barriers. Having difficult conversations was described as more challenging when concerns were identified alongside wider family stress, mental health difficulties, or financial pressures.

"It's great when you can use it in a strengths-based way, but when you are noticing concerns… it's not easy to then have that conversation and say, 'actually, your easy baby might not be easy.'" (FG05, m-ADBB trained)

However, participants recognised that opportunities to open up a conversation and unpick factors impacting on the baby were also created by using the tool.

''But actually, when I got down to discussing things with her, it helped her to open up a bit. So she was able to tell me, well, actually, there's some days I really don't interact with them much, I literally pick them up, feed them and put them back down. And we were able to then talk about that…it also encouraged her to seek help for her mental health.'' (FG19, m-ADBB-trained)

Language and communication barriers, particularly when interpreters were involved, were also described as making it harder to have natural conversations and discuss observations. In addition, some participants spoke about professional uncertainty, including worry about how to introduce the tool, fear of causing parental anxiety, or overthinking explanations, even when parents themselves were generally receptive.

"The challenges were perhaps not for the parents… it's more about professionals worrying about how they're going to introduce it." (FG17, ADBB trained)

Overall, this theme shows that the ADBB/m-ADBB supported more confident, detailed, and strengths-based relational work with parents, while also highlighting the communicative challenges that arise when concerns are present, families are under stress, or conversations are more complex.

3. Integration of m-ADBB/ADBB into practice

The m-ADBB was mainly used within the 6-8-week review. Practitioners consistently described it not as a standalone assessment, but as a way of working that shaped how they observed babies across all contacts. While formal scoring usually took place at the 6-8-week review, the observational approach was applied more informally throughout routine practice.

"I've sort of been doing little bits from very early on ..... but then actually scoring them at six to eight weeks.....For those slightly older babies, I would again do it, but not do the scoring, just look at those signs that we're looking for really." (FG01, m-ADBB trained)

"It's been routinely at six to eight weeks. .... But the conversations I've probably been incorporating into all visits. Having those discussions with parents, talking about baby's interactions, about the communication, about baby's communication style, and how they're all different." (FG06, m-ADBB trained).

This flexible use reflected everyday constraints such as time pressures, competing tasks, or babies being asleep during visits. Even when scoring was not completed, participants described the approach as continuing to shape what they noticed and how they thought about babies' behaviour, allowing it to be fitted into existing practice.

Participants trained in the ADBB described a similar pattern, using the tool to inform all their observations which became embedded over time.

"I'm using the ADBB in practice in all of my contacts. I'm looking at all through the eight points." (FG02, ADBB trained)

"Once you start using it and it becomes part of your practice, it's really hard not to do it." (FG03, ADBB trained)

Home visits were seen as particularly supportive for observing babies, although participants described adapting their approach across different settings. Some reported making observations during visits and completing scoring later, in line with local guidance.

Participants also described using the ADBB/m-ADBB alongside other tools already used in practice, such as Solihull Approach or Video Interaction Guidance (VIG). Rather than replacing existing approaches, the scale was seen as supporting conversations with parents and helping guide next steps.

In relation to referrals and decision-making, participants reported that they had not made referrals for a full ADBB assessment during the study period. This was often linked to using the tool to monitor concerns over time, support early conversations, and work through issues within the health visiting team.

"We didn't [receive any referrals for full ADBB assessment], but we've had this conversation and I think it's just that because the health visitors have been able to sort of problem solve that themselves and refer on appropriately." (FG03, ADBB trained)

"There's been ones where I think well, I'm not sure, but I've always gone back and things have sort of resolved, I haven't had any concerns." (FG04, m-ADBB trained)

Decisions about referral were described as cautious and reflective. Participants emphasised the importance of repeating observations, particularly when signs were subtle, before deciding whether further assessment was needed.

> *"If I just picked up concerns on one observation, I would want to go back again, maybe in a couple of weeks, just to repeat that observation, just to be sure of what I'm seeing." (FG18, m-ADBB trained)*

Confidence was a key factor shaping referral decisions. Some participants described hesitation linked to uncertainty about their judgement and concern about the impact of referral on families.

"You don't really know if you're doing it right ……I always doubt myself, like what if I make the wrong decision, etc.." (FG09, m-ADBB trained)

Some participants questioned whether the non-prescriptive nature of the tool influenced referral patterns. While a more formal requirement to score and record might increase referrals, but there were mixed feelings about making the process more rigid.

Overall, participants described integrating the ADBB/m-ADBB as a gradual and flexible process, shaped by professional judgement, confidence, and the realities of everyday practice. Decisions about referral were rarely based on a single observation but developed over time through repeated contact with babies and families.

4. Organisational and contextual enablers

Participants described the effective use of the ADBB/m-ADBB as being strongly shaped by wider organisational and contextual factors, particularly access to peer and managerial support, practical resources, and supporting materials such as conversation cards and guides. Individual motivation was important, but participants repeatedly emphasised that sustained use depended on having the right support around them.

Peer and managerial support were described as key enablers. Where managers were engaged and proactive, participants felt more confident in continuing to use the tool and embedding it into everyday practice. Some described planned follow-up sessions, opportunities to revisit video material, and space to ask questions as important in keeping learning alive and preventing it from being lost over time.

"We've got a really proactive leader… she's going to put on some sessions every two months, just so we can look at some videos and ask any questions. …….that's really important moving forward, so we don't forget what we've learnt." (FG04, m-ADBB trained)

In contrast, where managerial support was limited or inconsistent, participants described this as a barrier. Some felt that a lack of shared understanding or buy-in from managers and senior leadership made it harder to prioritise the tool within already stretched services.

"I think more than anything else that we need buy-in from our managers - we need everybody to be on the same page here because it's like trying to push water uphill otherwise." (FG12, ADBB trained)

"It feels like the support of managers is crucial in this….. there was a little resistance there." (FG15, ADBB trained)

Participants also described mixed experiences of peer support. In some teams, the tool was actively discussed and shared, helping to normalise its use. In others, participants experienced scepticism or fatigue from colleagues, particularly where the training was seen as an additional demand alongside existing pressures.

The conversation cards and guides developed as part of this study were widely described as helpful in supporting practice, particularly in structuring conversations with parents. Participants valued these resources both as visual tools for parents and as prompts for practitioners themselves, even when not used directly in visits.

> *"It gives examples of conversations, conversation starters… it's been really good even just to open up the conversation on how parents feel towards the baby, because that can be a really taboo subject and it can be hard to approach with the parent." (FG06, m-ADBB trained)*

Some described using the cards visually during visits, especially at the 6-8-week review, while others drew on the language and structure of the guides without showing them explicitly. The visual nature of the cards was seen as particularly helpful for some parents, helping them understand what to look for in their baby's behaviour.

"Some parents need that visual thing… what are we looking for?" (FG20, m-ADBB trained)

However, access to these materials was inconsistent. Several participants described difficulties accessing resources, uncertainty about whether they were allowed to continue using them after the study period, or restrictions on printing due to budgets.

"I couldn't get onto the website… I couldn't find the password." (FG05, m-ADBB trained)

"We didn't get any printed out for us… we were told not to print anything just for budgets." (FG19, m-ADBB trained)

In some areas, teams had taken steps to address this by printing and distributing cards or creating small, postcard-sized versions for staff use.

Some participants felt their learning and confidence would have been better had the practical materials been available at the outset of the project, although they were ready for use at the point at which health visitors were using the m-ADBB in practice.

Overall, participants described organisational and contextual enablers as central to whether the ADBB/m-ADBB could be embedded and sustained in practice.

Consistent managerial support, opportunities for peer discussion, and easy access to practical resources helped maintain momentum, while uncertainty, resource constraints, and lack of shared buy-in made ongoing use more difficult.

5. Sustainability and system readiness

Participants described sustainability of the ADBB/m-ADBB as depending on whether supportive systems were in place to embed the tool into everyday practice. Without clear structures, ongoing support, and agreed pathways, participants felt there was a risk that learning from the training would fade over time.

Many emphasised the need for the tool to be built into routine systems, particularly electronic recording templates and everyday ways of working. This was seen as important for future consistency and normalising its use.

"I think having it on our recording systems would be brilliant and that would really help….. because obviously each time we're doing it, we're doing it on our own back after a session." (FG06, m-ADBB trained)

"I suppose the thing about that though, is the recording of the information, because there's no standardisation across our systems. It's not embedded in our systems yet." (FG10, ADBB trained)

Others described local efforts to integrate the scale more formally, for example by developing assessment forms or adapting electronic records to capture observations alongside professional judgement.

Time and repeated use were consistently described as essential for confidence and sustainability. Participants stressed that using the tool regularly, across multiple families, helped it become easier and more natural, while short-term or one-off use made it harder to embed.

Workforce configuration and skill mix were also seen as important for sustainability, particularly where 6–8-week checks were delivered by a mix of health visitors and staff nurses. One participant described how restricting training to health visitors created practical difficulties and disrupted usual ways of working.

"Staff nurses in our team, they really would have liked to have done the training… we had to change it so that all of the health visitors did the postnatal, the six to eight week contacts, because a decent amount of those contacts would be taken by the staff nurses… That definitely presented a difficulty for the team." (FG05, m-ADBB trained)

Participants felt that offering training to all staff involved in early contacts for babies would improve continuity and make the tool easier to embed in routine practice. To support long-term use, they highlighted the importance of refresher training, supervision, shared national resources such as video libraries, and designated lead or champion roles.

Protected time to practise together was seen as particularly valuable. Reviewing videos, discussing scoring, and reflecting on practice, both within teams and across organisations, helped build confidence and consistency.

"We're meeting every two months ….. just so we can have discussions and watch some videos and truly practise it out of the clinical setting, just so that we get that confidence that we do know what we're talking about and we are doing the scaling right. I think that's really vital moving forward." (FG04, m-ADBB trained)

"We've just really valued that time together to explore videos and talk about them. And we all learn from each other and that is like a community of practice really." (FG21, ADBB trained)

Clear referral pathways and access to services were described as essential for system readiness. Participants expressed concern that identifying concerns without clear options for escalation undermined confidence and motivation to use the tool.

"They do not know what to do, once they have this scale and this score, and they do not know what to do with it after that, because we have nobody to refer on to..." (FG01, ADBB trained)

"It's all well and good identifying concerns, but if you haven't got anywhere to go with that and anywhere to escalate it..." (FG05, m-ADBB trained)

Overall, participants viewed sustainability of the ADBB/m-ADBB as reliant on systems that support repetition, shared learning, and clear action following identification of concern. While the training was valued, participants were clear that without embedded systems, ongoing supervision, and accessible referral pathways, confidence and use of the tool could diminish over time rather than becoming part of routine practice.

3.1.3 Work Package 1 Summary

The ADBB and m-ADBB training significantly increased health visitors' knowledge and understanding of the impact of stress on a baby and the concept of sustained social withdrawal behaviour. Confidence in noticing, understanding, and talking about babies' behaviour was also improved. The training mainly strengthened existing practice by helping practitioners focus more clearly on the baby, observe behaviour more systematically, and use clearer language with parents and other professionals. Improvements in practice were seen immediately after training and were mostly maintained over time, particularly for observing and discussing behaviour. The 3–6-month follow-up had a low response rate among practitioners trained in m-ADBB, with only 25% of eligible practitioners completing the questionnaire, so longer-term findings for this group should be interpreted with caution.

The focus group findings suggested that the tools were valued for supporting earlier identification of areas of concern and more confident conversations with parents. However, the findings also show that training alone is not enough. Ongoing use depended on wider system support, including time to practise, access to resources, managerial and peer support, integration into recording systems, and clear referral pathways. Where these were missing, confidence reduced and the tools were less likely to become part of routine practice.

3.2 Work Package 2: Outcomes of using the m-ADBB at the 6–8-week review

Before the training, a total of 1,281 6-8-week reviews were reported across the eight study sites by 242 different health visitors. Concerns were identified in 89 babies (7%).

After the training, a total of 922 6-8-week reviews were reported, carried out by 151 health visitors across the same eight sites. Of these, 860 reviews (93%) included use of the m-ADBB. Concerns were identified in 113 babies (12%), representing an increase compared with the pre-training period.

When the m-ADBB was not used, the most common reason was that the baby was asleep (68%). Other reasons included the baby being unsettled or crying (32%), and factors such as maternal anxiety, an unsuitable environment, or the baby feeding during the visit (8%). In some cases, more than one reason was reported.

Before training, health visitors identified concerns during the 6–8-week review based on routine observation and discussion, without using the m-ADBB. After training, the m-ADBB was used to help identify possible or definite concerns.

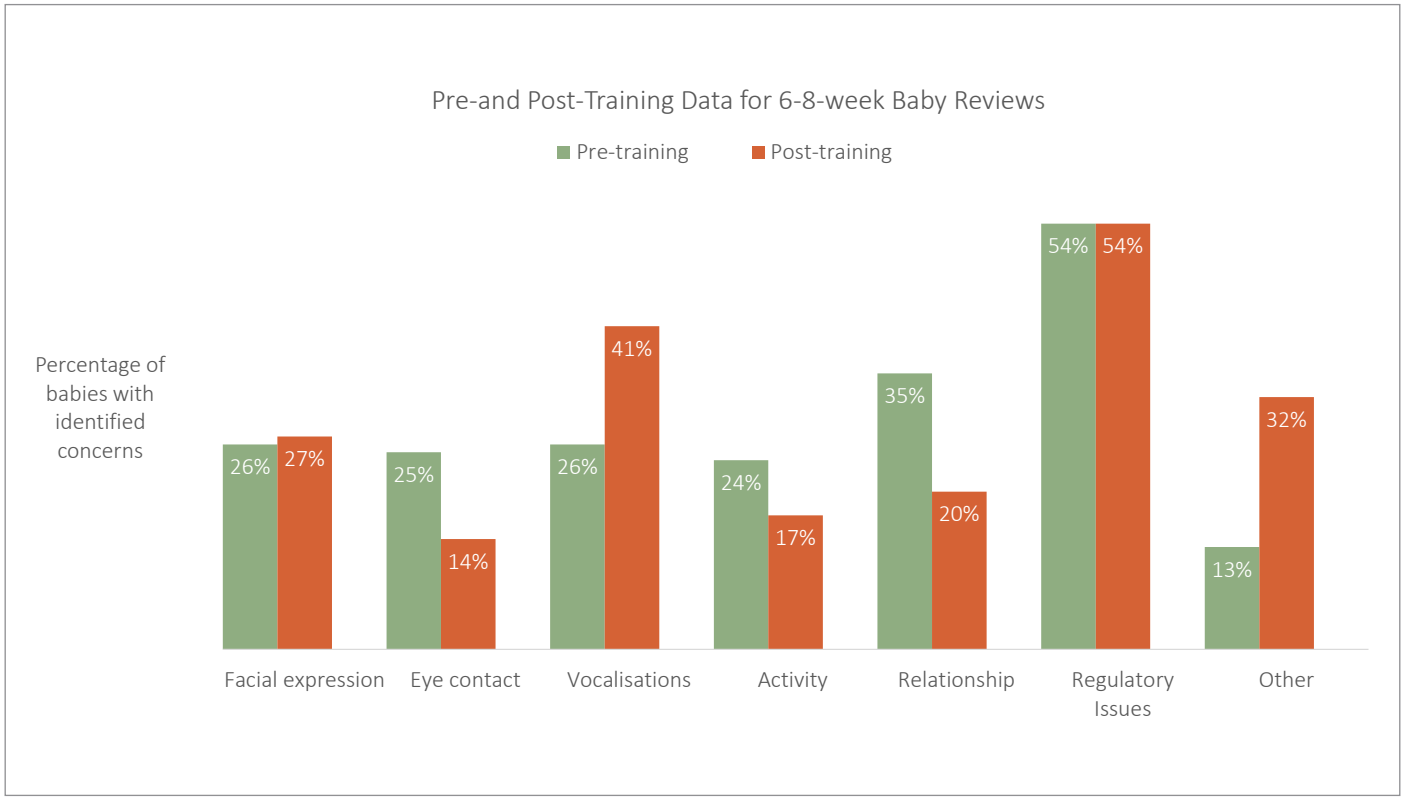
As shown in Figure 8, the proportion of babies with concerns about facial expression was similar before and after training (26% and 27%), as were concerns relating to regulatory issues (54% in both periods).

In contrast, the proportion of babies with concerns about eye contact decreased from 25% before training to 14% after training. Concerns relating to activity also decreased (24% to 17%), as did concerns about the parent–infant relationship (35% to 20%).

Concerns relating to vocalisations increased from 26% before training to 41% after training. The proportion recorded in the 'other' category also increased, from 13% to 32%. This category included a wide range of issues, such as physical health concerns, maternal mental health, and aspects of the home environment.

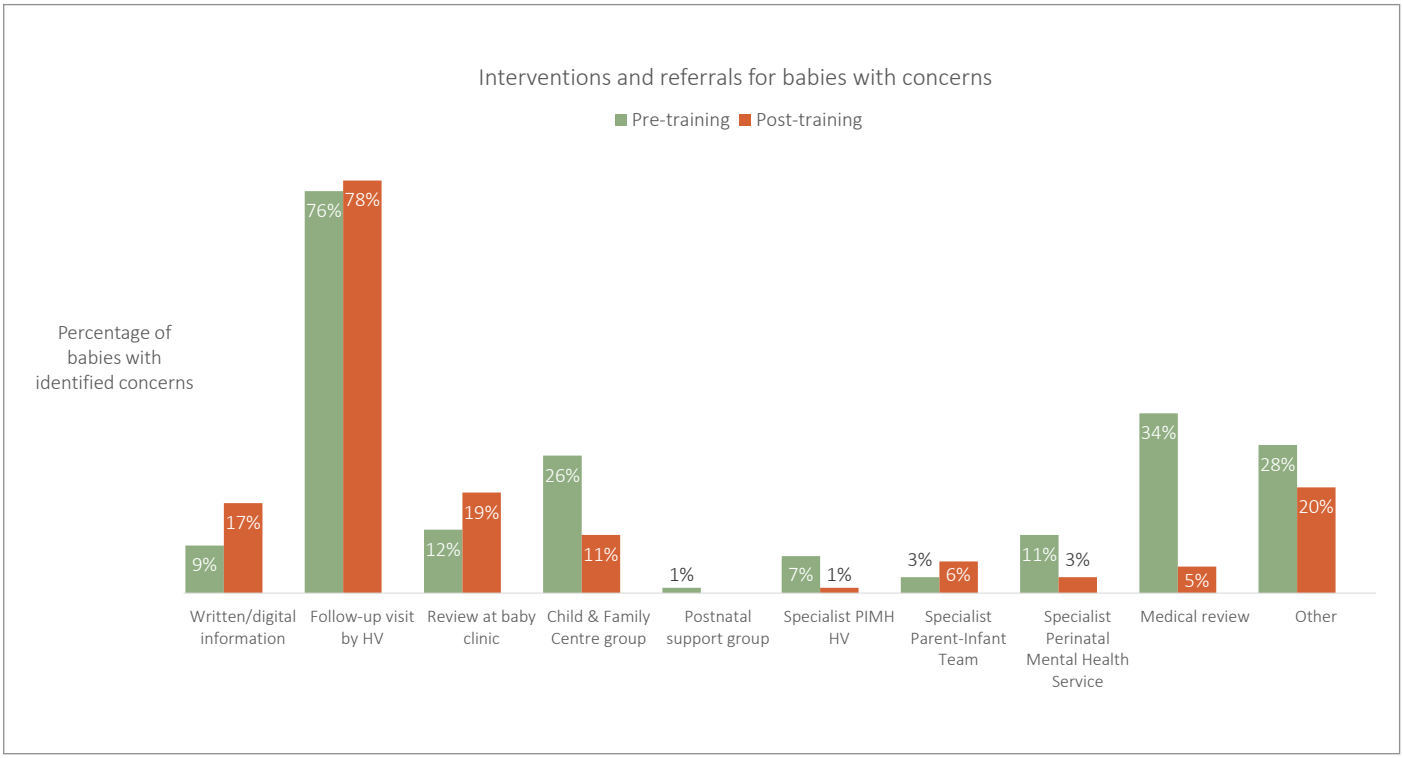
Some babies had more than one type of concern and were therefore included in more than one category.

Figure 8: Concerns identified in babies at the 6-8-week review before and after m-ADBB training.



When concerns were identified, health visitors provided a range of support to babies and families, as shown in Figure 9. In both the pre- and post-training periods, the most common action was a follow-up visit by the health visitor (76–78%). After the training, health visitors were more likely to share written or digital information with families (increasing from 9% to 17%) and arrange reviews at baby clinics (rising from 12% to 19%). In contrast, the proportion of babies referred for medical review by a general practitioner, paediatrician, or audiologist fell sharply, from 34% before training to 5% after training. Referrals to child and family centre groups, postnatal support groups, and other services (including hospital care, infant feeding or dietetic support, and baby massage or play groups) also reduced following the training.

Figure 9: Interventions and referrals for babies before and after m-ADBB training.



For both the pre- and post-training data collection periods, when concerns were identified, health visitors were asked to complete an additional online form 90 days after the initial check to record what had happened following any referral or intervention. Of the 89 concerns identified before training, follow-up forms were completed for 63 cases (71%).

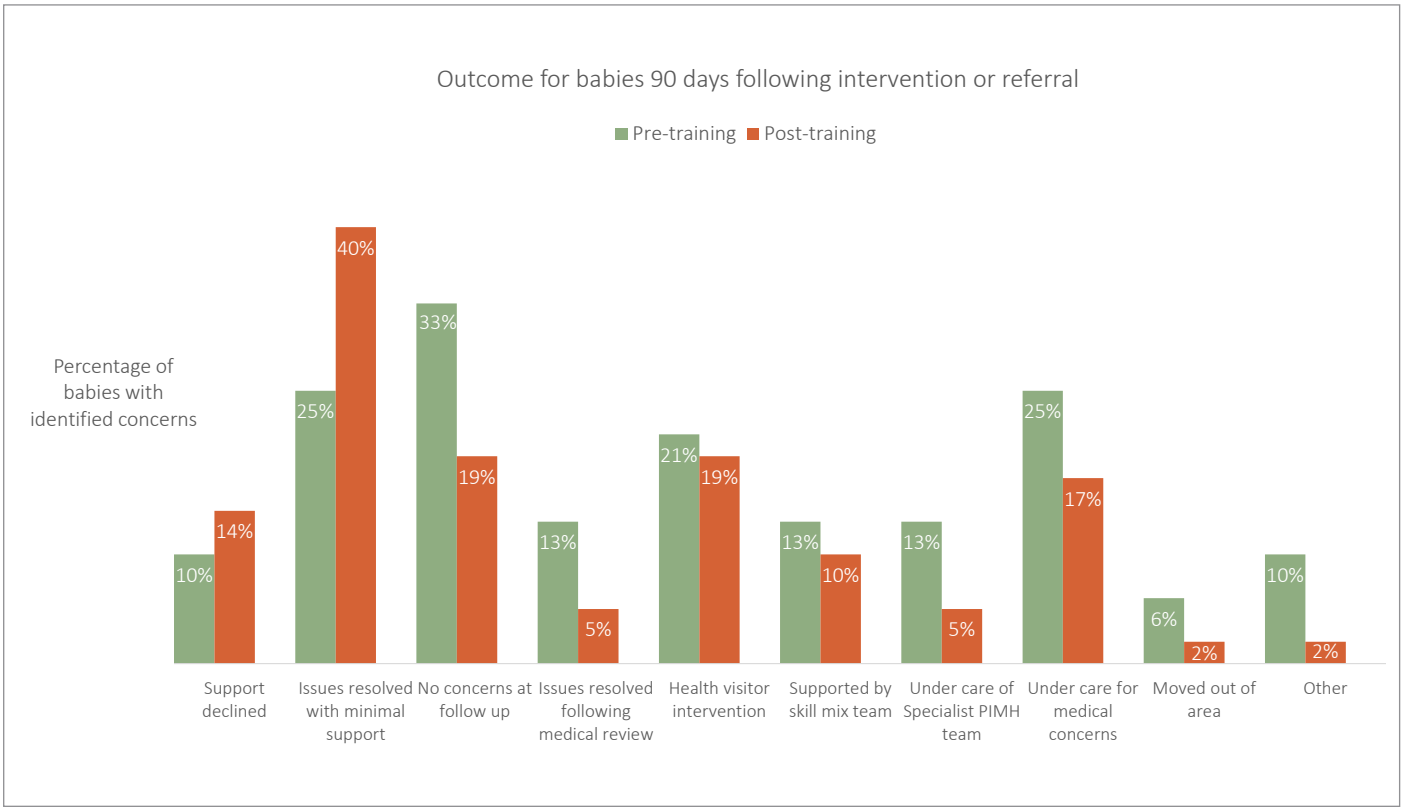
After training, follow-up forms were completed for 42 of the 113 concerns identified (37%), despite reminders being sent to individual participants and encouragement through local site leads.

Figure 10 shows outcome data from before and after the training, including what happened 90 days after an intervention or referral, based completed on follow-up forms.

Before training, many concerns had improved or resolved by the time of follow-up. In 25% of cases, issues were resolved with minimal or no ongoing support, and in 33% of cases no concerns were noted at follow-up. After training, a higher proportion of cases were reported as resolved with minimal support (40%), while fewer babies were recorded as having no concerns at follow-up (19%). Similar proportions of babies were supported directly by health visitors in both periods (21% before and 19% after). After the training, fewer babies had their concerns resolved after medical review (25% before and 17% after), and fewer were reported to be under specialist services (13% before and 5% after). In both periods, small numbers of families declined support, moved out of the area, or were recorded in the 'other' category. This category included support such as baby massage, talking therapies, or referral to paediatric services.

These findings should be interpreted with caution, as follow-up information was missing for many babies, particularly in the post-training period.

Figure 10: Outcomes for babies 90 days after referral or intervention before and after m-ADBB training.



3.2.1 Work Package 2 Summary

After the m-ADBB training, health visitors used the tool in most 6–8-week reviews and identified concerns in more babies than before. The types of concerns recorded also changed, with more concerns noted about babies' vocalisations. After training, health visitors were more likely to offer written or digital information, follow-up visits and clinic reviews and less likely to refer babies to medical or specialist services. Many concerns improved or resolved over time, but these results should be treated cautiously because follow-up information was missing for many babies, especially after training.

3.3 Work Package 3: Acceptability of the m-ADBB to parents and carers

We carried out semi-structured interviews with 12 parents from six of the study sites. Participants lived in England, Wales and Scotland. All were women, aged between 16 and 39 years, with half aged 25–29 years. Most participants self-described their ethnic background as White (English, Welsh, Scottish, Northern Irish or British) (n=10). One parent identified as Black African and one as from a Mixed or Multiple ethnic background (White and Asian).

Interview transcripts were analysed using Framework Analysis[19]. Eight themes were identified, organised into two overarching categories as discussed below:

1. Reassurance through relationship: How the 6–8-week review supports parents

Parents' expectations of the 6–8-week postnatal review

Parents had very different expectations of the 6–8-week review with the health visitor. Some expectations were based on previous experience with health visiting, while others were based on assumptions that the visit would focus mainly on physical health checks. Many parents hoped the contact would provide reassurance, and some, especially first-time parents, had no clear idea of what to expect.

"I think I mostly just wanted to check that things were going right with looking after him… there was a lot of mixed advice around safe sleeping… it's very much like confirmation that you're doing what you're supposed to be doing, especially if it's your first… you feel like you're just blind, fumbling around in the dark." (P05)

Holistic experience of the 6-8-week postnatal review

Although most parents could only describe specific parts of the 6–8-week review, almost all described the visit as a positive and reassuring experience. Parents spoke warmly about health visitors, describing them as kind, knowledgeable, and supportive. One parent described their health visitor as *"really lovely,"* explaining that *"every time she comes, she's always asking us questions and how we are" (P03).* Another parent said, *"my health visitor is fantastic… she was so reassuring and honestly brilliant. Ten out of ten" (P08).*

The visit often helped reduce parents' anxiety, particularly about their baby's growth and development. Parents valued being reassured that their baby was doing well and appreciated when health visitors engaged with siblings and provided clear information about available services. This reassurance was especially important for first-time parents, who described the contact as helping them feel more confident that everything was *"on the right track" (P03).*

Parents' feelings in the 6-8-week postnatal review

Parents described how comfortable they felt being open during the 6–8-week review, and how this gave them space to talk about their situation without being interrupted. They valued health visitors who listened carefully, asked thoughtful questions and responded in a supportive, personal way.

One parent explained, *"she really does sit there and listen, and she asks questions about things… she's really good at listening." (P03)*

Another parent described feeling supported even when discussing difficulties, saying, *"I felt really listened to, really supported… she wasn't patronising in any way… she kept saying, 'You're the mum, you know what you feel.'" (P10)*

Parents also described a clear link between how comfortable they felt and the health visitor's non-judgemental approach. When parents felt they were not being criticised or told what they 'should' be doing, they felt more able to open up. One parent explained, *"she's not judgemental… she doesn't demand me and say, 'You must be doing this'… she says, 'You just do it in your own time.'" (P04)*

Some parents compared their experiences with health visitors to other healthcare professionals, such as GPs or midwives. They described feeling less judged and more supported to trust their own instincts when speaking with health visitors. One parent reflected, *"she didn't make me feel judged in any way… it makes you doubt your mother's instinct when you feel judged… she was just so open, so kind, so positive." (P10)*

The importance of the parent-health visitor relationship

Parents described the relationship with their health visitor as a core strength of the 6–8-week review. Rapport, trust, and continuity of care were seen as key features that strengthened this relationship and supported meaningful engagement.

Parents also valued feeling remembered and listened to over time. Being recognised and having previous conversations recalled helped parents feel heard and respected. One parent explained, *"you actually feel like she's listened… she knows the conversations that we've had from the last time… she really is good at her job." (P01)*

Most parents highly valued seeing the same health visitor over time. Continuity of care helped parents feel known as individuals and supported in the context of their wider family situation. One parent explained, *"it's nice that we've got the same one… if I've ever had any questions… she's always been there to get answers." (P07)*

However, some parents felt that seeing the same health visitor was less important as long as the approach remained consistent. One parent described how seeing different health visitors could even be helpful, particularly if a previous relationship had not felt like a good fit: *"it's not been consistent, which is fine… it's quite a positive in some ways… because it can be a bit of a personal thing, can't it?" (P10)*

Health visitor communication

Health visitor communication was central to how parents experienced the 6–8-week review. Parents valued health visitors explaining what they were doing and why, as this helped them feel informed and at ease throughout the visit.

"…… explained everything really well… I didn't feel like I didn't know what was happening at any point. She did explain things really well." (P02)

"[the health visitor]… just told me everything that she was doing, really, saying why she was doing it. But yeah, that was it, really." (P07)

Parents also spoke positively about the use of everyday language and a relaxed, conversational style. This made the visit feel inclusive and supportive, rather than clinical or judgemental.

One parent described how their health visitor:

> *"... sort of explained everything really in layman's terms and kind of just made me feel like we'll get there. Even if we're not there yet, we'll get there." (P05)*

Another parent described the contact as *"just like a flowing conversation... not feeling like I was getting lectured or anything. It was just nice." (P02)*

2. Building parental confidence through ADBB-informed observation and communication

Focused observation of the baby through the use of the ADBB Scale

Parents gave rich accounts of how health visitors observed and talked about their baby's social behaviour during the 6–8-week review. These observations, informed by the ADBB/m-ADBB, were experienced as attentive, relational, and reassuring rather than clinical. Health visitors focused on how babies communicated and engaged, such as eye contact, vocalisations, movement, and responsiveness, which parents experienced as seeing their baby as a social being, not just measuring physical growth.

Parents described health visitors closely watching and interacting with their babies, often explaining what they were noticing in real time. One parent described how the health visitor was talking with their baby: *"she'd say something to him, he would sort of coo back, and then explain that, 'oh, he's really good at communicating.'" (P06)*

Another parent recalled being told how alert their baby was, *"cooing and trying to communicate... trying to grasp at things and that's really early" (P11).* This attention felt natural and genuine, rather than like completing a checklist.

Although parents did not usually recall the name of the ADBB, they clearly recognised its elements based on the health visitor's explanations. Parents valued being told what the health visitor was looking for and why.

"She said, 'I can see him trying to talk to us. His hands are moving, his legs were moving.'" (P07)

This suggests the m-ADBB was integrated into practice in a way that felt invisible but meaningful.

Parents also described being actively included in the observation process. Health visitors pointed out behaviours as they happened, helping parents learn how to read their baby's cues.

"...And when she was explaining she was pointing out when it was happening, like when the eye contact was happening, when she was smiling and when she was like moving away. She was like giving examples, 'Oh look, she's doing it now.' That definitely helped." (P02)

"...He sort of has the eye contact, and she explained when he looked away that sort of means he sort of like needs a bit of space from the talking or he's thinking, and then he comes back. And she was really explaining that communication, and I just thought oh he's really good at that interaction." (P06)

These observations were experienced as reassuring rather than judgemental. Health visitors normalised variation in babies' development and emphasised positives, which reduced anxiety.

> *" ...But yeah, I do remember her really talking about our interaction a lot and really coming away from it feeling quite boosted at a time when I needed it that actually, you know, your baby is fine and she's happy and I can see that." (P10)*

Parents described how these observations strengthened their confidence in their relationship with their baby. Health visitors linked babies' behaviour to the quality of parent–baby interaction, reinforcing attachment and bonding. One parent said it was reassuring to hear that even their baby's shouting was *"a really positive sign and it shows that she's getting that love and support in the family home." (P01)*

Another recalled, *"I think that the health visitor kind of looked at [the baby] like social abilities and like that she was interacting with me and she was very positive about how she was interacting with me and she's smiling as she's looking around and like you've got a lovely bond and those kinds of things. She didn't mention the name of a tool or anything that I can remember." (P10)*

Overall, ADBB-informed observation was experienced as collaborative, reassuring, and relationship-focused, helping parents better understand their baby and feel more confident in their parenting.

Parents' reactions to the name and framing of the ADBB Scale

During interviews parents were asked about their views on the scale's name. Across accounts, the words "alarm" and "distress" were commonly described as sounding strong, negative, or worrying, particularly for new or anxious parents. Several parents said the name would initially make them think that something was wrong with their baby, or that the observation was looking for 'bad' outcomes rather than typical behaviour.

"Alarm, distress… they're very powerful words" and immediately made them think about "how sad it is that at six weeks old a baby could actually withdraw." (P01)

Many parents reported this initial reaction would ease once the health visitor explained what the scale involved and what they were observing. Clear explanations would help parents understand that the observation focused on everyday social behaviours and development, rather than signalling a problem. Parents repeatedly emphasised that explanation and conversational framing were key to preventing unnecessary worry.

One parent reflected that *"just the mention of that name is very serious"*, but that once it was explained, *"it kind of settled me more." (P09)*

Others noted that without explanation, the name alone could cause anxiety: *"The word 'alarm' and the word 'distress'… might bring negative connotations, particularly if you have parents who are quite anxious anyway." (P11)*

Parents also highlighted the importance of timing and relationship when introducing the scale. Many felt that health visitors who had already built rapport were better placed to introduce or discuss the ADBB, particularly if the observation raised concerns.

One parent described how trust and familiarity would make difficult feedback easier to hear: *"Because she built a relationship with me… if she gave me feedback which wasn't exactly 'you're doing the right thing', I feel I would be more receptive to it because it wouldn't feel like an attack." (P01)*

Several parents suggested that health visitors either explain the observation before naming the scale or avoid using the formal name altogether. Some questioned whether parents needed to know the name at all, as long as the purpose and process were clearly communicated.

As one parent said, *"Either explain it before they say what the name is or change the name of it." (P12)*

Others felt that focusing on what the scale achieves, rather than its title, was more helpful for parents: *"It's more about what the scale is achieving… not necessarily naming it." (P10)*

Overall, parents did not object to the ADBB itself, but they were very sensitive to how it was described and introduced. Their accounts suggest that clear explanations, reassurance, and a warm, relational approach are key to ensuring the observation feels supportive and helpful, rather than worrying or alarming.

Ensuring the emotional support and validation of parents

Feeling emotionally supported and validated was a key part of the visit, particularly when health visitors paid attention to parents' own wellbeing and affirmed their caregiving instincts. Parents appreciated being asked how they were doing, both physically and emotionally, especially at a time when attention often shifts almost entirely to the baby. Having someone "checking in" on them, as a person, helped parents feel seen and cared for as part of the family, not overlooked. One parent described how the visit covered their baby's care before turning to them:

"She checks on [baby]… we spoke about feeding… her behaviours… crying, safe sleeping… and then like I say, she also checked up on me. She made sure she looked at my scar, because I had a C-section, and she checked on my mental wellbeing… It felt like somebody was actually coming and saying, 'How are you?' Because everyone comes and says, 'Let me see the baby.' It was nice to feel cared for as well." (P01)

Parents also described how health visitors validated their caregiving instincts in a way that felt different from other healthcare professionals. This non-judgemental approach helped parents trust their own judgement and build confidence in their parenting. One parent reflected on how important this was for them:

> *"To learn that actually no, my mother's instinct is right and I need to follow that… the health visitor was really kind in confirming my mother's instinct for me and allowing me to trust it. So that made it easier." (P10)*

Overall, emotional reassurance and validation were seen as central to the 6–8-week contact, helping parents feel supported, confident, and recognised alongside their baby.

3.3.1 Work Package 3 Summary

Interviews with 12 parents identified eight themes, grouped into two main areas: 1) Reassurance Through Relationship, and 2) Building Parental Confidence through ADBB-Informed Observation and Communication.

Parents described the 6–8-week review as a positive and supportive experience. They valued health visitors who were warm, non-judgemental, and easy to talk to. Clear explanations, continuity of care, and feeling listened to and emotionally supported were especially important.

When the ADBB-informed observation was clearly explained, parents experienced it as reassuring and helpful. Highlighting babies' social behaviours helped parents better understand their baby and strengthened confidence in their parenting. Although the name 'Alarm Distress Baby Scale' could initially sound worrying, careful explanation and sensitive framing would ensure the observation felt supportive rather than alarming. Overall, the m-ADBB was highly acceptable to parents when delivered within a trusting, non-judgmental, relational approach with a health visitor who had good conversation skills and integrated the scale into the overall baby review.

Chapter 4. Discussion

In this study, we delivered training on the m-ADBB and ADBB across eight health visiting sites in the UK. Using a mixed-methods approach across three work packages, we examined the impact of this training on health visitors' knowledge and confidence, changes to routine 6–8-week reviews and referral patterns, and the acceptability of the m-ADBB to parents. This is the first study to formally certify ADBB-trained practitioners and evaluate the rollout of the m-ADBB/ADBB using a structured research programme. As such, it addresses a knowledge gap relating to implementation by providing a robust methodological framework and will be valuable for future comparative studies.

Across the three work packages, the findings suggest that ADBB and m-ADBB training strengthened health visitors' observational practice, supported earlier identification of potential concerns, and was acceptable to parents when delivered within a relational approach. These findings are discussed in more detail in the sections that follow, which look at the service context, the international context, training, the impact on practice, parents' experiences, and the sustainability and system readiness influencing implementation and longer-term embedding of the approach.

4.1 Service context

Understanding the service context in which this study took place is vital. Although there are significant differences in the level of health visiting provision among the different UK nations, the demand for support exceeds what most health visiting services are commissioned and able to provide[33]. In England, for example, there has been a 42% reduction in numbers of health visitors over the past decade[4]. In some areas, this has resulted in unsafe caseloads of 700-1000 families per health visitor, alongside increasing use of skill mix staff, who do not have equivalent training and skill. Despite a clear, repeated ask from families for continuity of carer, only 45% of health visitors in England report being able to offer this 'all or most of the time' compared to 90% in Scotland, 86% in Northern Ireland and 85% in Wales[33].

To reduce the risks posed by these service pressures, we selected participating sites carefully: they were required to provide signed agreements from a service lead and commissioner, confirming their commitment to engage with the research and development processes, support recruitment, and, in principle, sustain the ADBB/m-ADBB model beyond the study period. We included at least one site from each UK nation and selected sites with varying demographics to reflect a variety of delivery contexts.

Despite this planning, several factors beyond the control of the research team and the local project leads affected the implementation of the study's intervention, i.e. ADBB/m-ADBB observation. These included the re-tendering of services, industrial action, competition from other training or research programmes, and high workforce turnover due to retirement, resignation, movement to other services, long-term sickness and maternity leave. These pressures likely contributed to lower questionnaire response rates at the 3-6-month follow-up period, challenges in recruiting parents, and reduced overall research activity. Additionally, although some sites did make service adjustments to enable health visitors to complete the 6-8-week postnatal review, the reality of covering the holiday periods, impact of business continuity plans, and skill mix staff feeling displaced, meant that these contacts were sometimes covered by staff not trained in the m-ADBB, thus impacting overall data collection.

4.2 International context

Interest in the ADBB scale and approach continues to grow both nationally and internationally. Emerging research and learning from practice has influenced and shaped the language, model of training and recommendations for future implementation. For example, there has been a move to use more consistent language, including the term 'sustained social withdrawal behaviour' (SSWB) instead of 'relational withdrawal', which removes any implied cause. This change in terminology is reflected in the language used in our report. Health visitors in our study valued having clearer language to represent the baby's perspective in professional and safeguarding contexts.

It should also be noted that, whilst the m-ADBB may be a necessary assessment indicator of risk for a baby's socio-emotional development and add complementary information in an ongoing assessment, an m-ADBB score alone cannot inform child protection decisions.

4.3 Training

The ADBB and m-ADBB training enhanced practitioners' understanding of babies' stress and SSWB, increasing confidence in noticing, interpreting and discussing babies' behaviour. Rather than introducing entirely new practice, the tools appeared to add, refine and structure existing skills, encouraging more systematic observation and clearer language when communicating with parents and professionals. These findings are consistent with our previous Phase One study[18,34].

The questionnaire data suggest that health visitors' understanding increased sharply immediately after the training, especially in recognising behavioural signs of babies' stress and its impact on development. Although knowledge remained fairly high at 3–6 months, there was some decline over time within the ADBB-trained group, especially in understanding social or relational withdrawal. Similarly, over time, there was a slight drop in confidence in detecting and assessing the severity of withdrawal for the ADBB-trained health visitors. This may reflect limited opportunities to consolidate their learning in practice. It may also indicate that as they continued to deepen their learning, particularly for those who progressed to be referents, the complexity around accurately interpreting babies' behaviours became more apparent. The referent trainees were encouraged to position themselves as 'unknowing', rather than as one who has the answer, with a greater focus on reaching consensus about whether a baby was considered to be 'clinical' or 'non-clinical' rather than a particular score. In this context, reduced confidence may indicate increased awareness of the complexity involved in interpreting babies' behaviour, rather than a decline in skill.

This drop-off at 3-6 months post-training was not seen within the m-ADBB-trained group, whose understanding of babies' behaviour and the concept of social withdrawal was further improved. The questionnaire response rate at this timepoint was lower than at previous timepoints (25%). It is therefore possible that the improved scores reflect the views of those health visitors who remained engaged and were actively embedding the training and scale into practice, rather than representing the cohort as a whole.

Feedback relating to the ADBB and m-ADBB training reflects findings from our Phase One study, with largely positive support for the additional iHV-led workshops to set the context for use of the tools and create opportunities to consolidate learning. It is important to note that the iHV-led sessions also included information and guidance about the study process and research activities. This is likely to have contributed to some comments relating to participants' sense of confusion and overload at times, rather than being specifically related to training in the ADBB and m-ADBB tools. There is broader evidence that engaging with infant emotional behaviours can evoke discomfort and defensive responses in practitioners. Training in infant distress and relational cues, including prolonged crying or withdrawal, often triggers emotional arousal and avoidance in trainees[35]. This supports Dr Deprez's observation that sitting with the distress of a baby may feel intolerable for some health visitors, and acknowledging this emotional response may help explain any resistance to the training expressed by health visitors.

Health visitors, who undertook the ADBB training, raised some challenges around time involved for its successful completion. Interestingly, Humagogie, our training provider, recently completed a comprehensive audit of a new format of the ADBB training with a group of 120 professionals in Departement de l'Hérault in France and found that self-directed e-learning, with support from a community of learners, was more effective than an online hybrid model (as was offered to our study participants). The new format led to a higher ADBB-certification rate and better training completion rates. These findings, along with our study findings, are being considered in shaping future models of training, offering different levels of training and optional certification. We hope the revised model will respond to several issues raised during the study, including the time taken to complete the ADBB training, concerns about the potential inappropriate use of the m-ADBB, and feedback from m-ADBB participants who felt that the 3-hour webinar did not provide enough time to practise and build confidence in their skills.

Our findings strongly support the unique position of the ADBB/m-ADBB within the range of other training, tools and measures available to health visitors. It not only brings the notion of social withdrawal into sharper focus alongside more familiar constructs such as attachment but offers an approach that can be applied clinically from birth to 24 months, encompassing assessment and intervention. The ability to use a single tool across this full age range enhances its appeal to services and positions the ADBB/m-ADBB robustly within the range of other measures and approaches currently in use within the UK. Moreover, having a tool that both enables assessment and intervention is likely to be a clinically and cost-effective investment, allowing emerging concerns to be identified in a timely way and reducing the need for more specialised support later down the line[36].

4.4 Impact on practice

After training, the m-ADBB was used in most 6–8-week reviews, suggesting that it can be easily integrated into routine health visiting practice. When it was not used, this was usually because the baby was asleep or unsettled, rather than because health visitors chose not to use it. This supports earlier findings that the m-ADBB does not add a significant time burden to visits[18,34].

There were notable shifts in the number and types of concerns identified between the pre-and post-training audits. More concerns were identified about babies after training (7% before training and 12% after) suggesting that this additional training allows for earlier identification of emerging need. The post-training rate of 12% is consistent with both our previous findings (10%)[34] and estimates reported in the international literature for social withdrawal in babies[15,37].

Concerns related to babies' regulatory issues (feeding, sleeping and crying) were consistently identified before and after the training, likely reflecting health visitors' confidence, skill and experience in addressing these common issues. Items relating to the m-ADBB scale, with the exception of facial expression, were more varied, perhaps reflecting a greater confidence and objectivity in reaching a clinical judgement using the m-ADBB to aid and guide observation and interpretation. Of particular note were the concerns relating to vocalisations, which were more readily identified following training. This may be related to increased practitioner curiosity about babies who might previously have been seen as 'easy' or 'quiet', but who may have been showing signs of SSWB. Additionally, it could be related to the ADBB providing a framework that more accurately guided health visitors to assess the quality, quantity and evolution of vocalisations to inform their decisions. The decrease in concerns identified around eye contact post-training are likely to be related to the similar decrease in concerns around relationship. Both could be explained by the practitioner being more confident in assessing how the baby might be interacting both with the parent and with the practitioner, rather than only observing the interaction between the baby and parent pre-training. Similarly, increased understanding around activity as a channel of communication, rather than as an indicator of motor development, may have helped practitioners to observe the baby's movements as a different construct post-training, leading to the identification of fewer, but perhaps more accurate, concerns being identified.

Health visitors in our study described weaving in ADBB-informed observations in their conversations with parents, offering real-time interactive guidance about their babies' behaviours. This may be important because there is emerging literature suggesting that brief behaviourally-focused interventions, such as those described by health visitors in this study, could be a clinically and cost-effective approach to helping parents and babies in challenging situations[38].

Qualitative feedback related to the use of the tool in shaping referral decisions was encouraging and, although the m-ADBB-trained health visitors made no referrals to ADBB-trained health visitors during the research period, this correlates well with the 'ADBB Rule' which is to re-assess prior to referral. Participants strongly expressed the view that decisions about referral were rarely based on a single observation but developed over time through repeated contact with babies and families. This is particularly important given the concerns raised by Prof. Guedeney and colleagues about the misuse of the m-ADBB as a screening or safeguarding tool used in isolation. The findings suggest that health visitors used the m-ADBB as part of a wider, relational and clinical assessment, alongside professional judgement and ongoing contact with families. These findings also serve as a reminder that SSWB can be a springboard to a strengths-based conversation that is the basis for change.

After training, health visitors were more likely to offer follow-up visits, share information, and review babies in clinics. They were less likely to make immediate referrals for medical or specialist assessment. At 90-day follow up, fewer babies had their concerns resolved after medical review and fewer were reported to be under specialist services after training, while similar numbers were supported directly by health visitors. One possible explanation is that the m-ADBB may have acted both as an observational assessment and an early intervention tool, helping health visitors feel more confident in understanding and managing concerns within their own role. Where referrals were made, they were more likely to be truly necessary, whereas other concerns were being effectively managed within health visiting teams and more readily available services. This contrasts with suggestions from our previous study[34], where integrating the scale into routine assessments was thought to potentially increase referrals to other services for social withdrawal in babies. In this study, however, the pattern suggests that the m-ADBB may support earlier, proportionate responses without unnecessary referral. Follow-up data were incomplete, so it is not possible to determine whether changes in referral patterns reflect improved outcomes, increased confidence, or wider service pressures.

4.5 Parents' experience

Parents who were interviewed appeared to have experienced the 6–8-week review as positive, reassuring, and supportive. The relationship with the health visitor was central to this experience, with parents valuing kindness, clear communication, continuity, and a non-judgemental approach. The visit was seen as both a check on the baby's development and an important source of emotional support and validation for parents.

ADBB-informed observation was generally experienced as natural, collaborative, and reassuring. Parents appreciated health visitors explaining what they were observing and linking babies' behaviours to interaction and bonding. This helped build parents' confidence and understanding of their baby's social development. However, some parents felt that the name 'Alarm Distress Baby Scale' sounded worrying, particularly without explanation. Clear, sensitive communication and a trusting relationship were key to ensuring that the use of the tool felt supportive rather than alarming.

It is possible that organisational factors also affected the number of parents recruited to the study. For example, the iHV-led workshops explored how health visitors could have conversations with parents about how they had undertaken additional training in baby observations, and to use the co-developed conversation card and guide to structure their discussions. This had been in response to guidance from parents in the workshops who advised against health visitors implying they were 'scoring' a baby, or that a baby needed to pass a test. In some sites, this was interpreted as meaning that health visitors should not tell parents they were using the m-ADBB, and this limited the opportunities to invite parents to interview. This highlights the importance of transparency and governance issues that should be addressed in future studies.

4.6 Sustainability and system readiness

Our previous study reported that collective engagement across practitioners, managers, and organisations was a key factor in normalising the use of the ADBB/m-ADBB, aligning with other evidence that acceptability is enhanced when the tool is embedded in service development plans, supported by training, and accompanied by clear referral pathways[18,34,39]. In this study, participants similarly described successful implementation of the ADBB/m-ADBB as depending less on individual enthusiasm and more on whether supportive systems were in place to embed the tool into everyday practice. Managerial support, supervision, peer discussion, and access to practical resources such as conversation cards and guides were key enablers. Where managers were engaged and follow-up sessions were planned, participants felt more confident embedding the tool into routine work. In contrast, limited buy-in, lack of shared understanding, and difficulty accessing materials acted as barriers.

Sustainability was also seen as being dependent on integration of the ADBB into electronic records, protected time for supervision and shared learning, and clear referral pathways. Participants emphasised that repeated use, training across the wider workforce (including skill mix staff), and opportunities to practise together and share learning through Communities of Practice (CoP) were essential for maintaining confidence. This mirrors learning from other health visiting training models, such as the Solihull Approach[20] and iHV PIMH Champions training programme[5], where ongoing learning opportunities are essential to embed new ways of working. As we expected that ongoing support would be needed to maintain confidence and encourage continued learning, we held discussions with Prof. Guedeney and Dr Deprez throughout this study in order to understand how CoPs are organised and run in Europe, with the aim of developing a similar model in the UK to support the ongoing practice of trained practitioners. The proposed UK-based CoP would give all existing trained staff (in m-ADBB and ADBB) the opportunity to continue to develop their skills.

Overall, the findings suggest that the ADBB/m-ADBB model has a unique place and good fit within routine health visiting practice. It can strengthen early identification of possible problems with regard to the baby's socio-emotional development, and can function as a brief intervention, when delivered within a relational model of care. Health visitors play a crucial role in supporting families in the early years, and the effectiveness of this approach depends on the trust, continuity, and therapeutic relationships that underpin their work. These findings suggest that structured observation tools are most effective when embedded within ongoing, trusted relationships with families, and when supported by wider organisational capacity and system readiness. Strengthening these relational and systemic foundations will be essential for equitable implementation that can be sustained over time.

4.7 Strengths and limitations

This study has several strengths. It used a mix of research methods and included multiple sites across the UK, which makes the findings more relevant to real-world practice. It also included the views of both practitioners and parents, giving a fuller picture of how the m-ADBB works in everyday health visiting services.

Another important strength is that this was the first study to formally certify practitioners trained in the ADBB and to evaluate the rollout of the m-ADBB/ADBB through a structured research programme. This helps fill an important gap in knowledge about how these tools can be introduced into practice. It also provides a clear and practical framework that can support future research.

The study also used triangulation, in which findings from questionnaires, a focus group with practitioners, and interviews with parents were compared and contrasted. Examination of information from these different sources helped increase the validity of the findings and gave a more complete understanding of how the tools were implemented.

It is important to note that different data sources showed different percentage use of m-ADBB. The audit data showed that 93% of health visitors who submitted audit information reported using the m-ADBB. This finding comes from 242 health visitors who returned audit data and may reflect that those who completed the audit were more engaged with the tool. In the questionnaire data, which was completed by 60 respondents at the 3–6-month follow-up, 75% of m-ADBB–trained practitioners reported that they either always or often used the tool at the 6–8-week review. The 3–6-month questionnaire follow-up had a relatively small number of respondents, which means the longer-term findings should be interpreted with caution. It is also possible that those who completed the audit and questionnaires were more likely to be practitioners who were engaged with or confident in using the m-ADBB, which may affect the generalisability of the findings. This low follow-up rate also limits conclusions about the longer-term impact, sustainability of the approach, and its relevance to national ambitions.

Organisational challenges, such as heavy workloads, service changes, and changes in provider organisations, also likely affected recruitment and led to incomplete data. These factors show how difficult it can be to introduce and evaluate new approaches within already stretched services. The scope of this study did not allow for any economic evaluation and further work would be required to fully understand the potential economic return on investment in the ADBB model for health visiting, particularly in the context of the wider workforce and capacity issues currently faced by services.

Chapter 5. Conclusion and recommendations

5.1 Conclusion

This study found that training in the use of the ADBB tools addresses a gap in health visiting practice in terms of increasing knowledge and understanding about the concept of social withdrawal and increasing practitioner confidence to observe and interpret babies' behaviour. Health visitors felt equipped to more clearly articulate the baby's voice, feeling that other complementary trainings often focus on the parental offer to the baby, rather than what the baby is communicating to the adults around them. Findings suggest this supports earlier and more proportionate responses by health visitors, adding to the evidence that, when adequately resourced and appropriately trained, they have a clinically and cost-effective role in family wellbeing. The findings strongly support the view of health visitors as being highly skilled in establishing trusted, therapeutic relationships and in sensitively guiding open conversations with parents, with their new knowledge increasing their strengths-based relational work.

This study shows that the modes of training were largely acceptable to health visitors. Suggestions to improve the experience and further embed the use of the tool in practice have already been implemented within a new training model and a proposed CoP.

However, the findings also show that training alone is not enough. Learning to observe and interpret babies' behaviour is complex and requires practice consolidation and ongoing support for practitioners to become competent. Organisational readiness and ongoing support, locally and nationally, is needed to ensure this new learning is fully embedded and will be needed to facilitate the successful wider rollout of the ADBB within health visiting. Learning from the implementation of ADBB in other countries has highlighted some of the risks associated with misapplication of the tool and lack of governance with regard to its use, so care must be taken to ensure that UK systems can support this new approach.

5.2 Recommendations for practice

5.2.1 National recommendations

- Health visiting services across the UK should consider commissioning the m-ADBB training for all health visitors, with ADBB training offered to specialist health visitors in infant mental health (or similar) to support ongoing workforce learning and supervision.
- A UK-based CoP should be rolled out to support implementation of the ADBB and m-ADBB in the UK health visiting context, based on the learning from the iHV pre- and post-training workshops. The CoP should be led by existing ADBB referent health visitors to enable research and practice updates, skill refreshers, and offer a reflective space to manage the emotional impact of observing SSWB.
- Managers and commissioners should assess service readiness before implementation.
- Guidance should be developed to support managers and commissioners to assess service readiness and develop implementation plans. This should include consideration of managerial buy-in, caseload size, continuity of care, workforce stability, protected time, supervision, recording systems and clear referral pathways.
- The UK library of ADBB practice videos and resources should continue to be built.
- Consideration should be given to building research capacity within certified ADBB health visitors, equipping them to become ADBB trainers of the future.

5.2.2 Local recommendations

- ADBB policies, pathways and recording templates should be developed and integrated into local systems.
- Practitioners should use clear communication (supported by the conversation guide and cards) when introducing and discussing their observation with parents.
- Consideration should also be given to reviewing the language used with parents, including how (or whether) the formal name of the scale is introduced.
- Where continuity of carer is limited, services should consider how relational practice can still be maintained when using the tool.
- Annual audit of ADBB use and support structures within local services to inform training and practice needs.

5.3 Recommendations for future evaluation and research

- Larger-scale implementation studies to assess how workforce pressures and organisational instability influence sustainability of the ADBB model.
- Longitudinal research to explore the onward referral and treatment pathways for babies identified with SSWB, alongside their longer-term developmental outcomes.
- Investigation into whether ADBB-informed conversations may function as brief early interventions.
- Evaluation of the cost-effectiveness and potential return on investment through implementation of ADBB.
- Exploration of the experiences of skill mix staff using the ADBB.
- Greater understanding of parents' perspectives of SSWB and how best to communicate about babies' emotional wellbeing without causing anxiety.
- Review of research governance processes to ensure transparency with parents when tools are used within research contexts.

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Appendix – 1: Alarm Distress Baby Scale (ADBB)

Each item is rated on a scale from 0 to 4.

GUEDENEY (2012) ©

(First validation : Guedeney A, Fermanian J. A validity and reliability study of assessment and screening for sustained withdrawal reaction in infancy the alarm distress baby scale (ADBB). Infant Ment Health J. 2001; 22:559–75. doi:10.1002/imhj.1018)

Practitioners using this scale should have completed training in ADBB from an approved training provider. See adbb-scale.com for further information.

0 = No unusual behaviour, or doubt
1 = Slightly unusual behaviour, but sure about it
2 = Clear unusual behaviour
3 = Very obvious unusual behaviour
4 = Massive unusual behaviour at all times

This scale is best rated by the observer on the basis of her/his observations, immediately following the clinical interview. Initially, spontaneous behaviour is assessed, then following stimulation (smile, voice, gesture, touch, etc.), with emphasis on the evolution along time. The rating is what seems more significant during the whole examination procedure.
In case of doubt, use the lowest rating.

1 Facial expression

Observer assesses any reduction of facial expressiveness, through changes in facial expression, rather than intensity of expression:

0: ☐ **1:** ☐ **2:** ☐ **3:** ☐ **4:** ☐

2 Eye contact

Observer assesses the reduction of eye contact - usually the child locks eyes with the observer and maintains eye contact; observer assesses if eye contact is difficult to get and to sustain:

0: ☐ **1:** ☐ **2:** ☐ **3:** ☐ **4:** ☐

3 General level of activity

Observer assesses any failure of motion of the head, torso and limbs without taking into account hands and fingers activity:

0: ☐ **1:** ☐ **2:** ☐ **3:** ☐ **4:** ☐

4 Self-stimulating gestures

Observer assesses the frequency with which the child is engrossed with his/her own body activity: fingers, hand, hair, thumb sucking, repetitive rubbing etc., in a sort of mechanical, non pleasurable way that seems odd and detached from the rest of the activity and does look like self comfort. One clear odd gesture is enough to score for a 1:

0: ☐ **1:** ☐ **2:** ☐ **3:** ☐ **4:** ☐

5 Vocalisations

Decrease in vocalisations, whether they express pleasure (chirping, laughing, babbling, lallations, highpitched cries of pleasure), or displeasure, anxiety, or pain (screaming, whining, and crying):

0: ☐ **1:** ☐ **2:** ☐ **3:** ☐ **4:** ☐

6 Vividness of response to stimulation

Decrease in the vividness of response to stimulation during the examination (smile, voice, touch). Note: it is not the magnitude of the response that is evaluated here, but the delay of the response; the absence of a response does not allow to rate:

0: ☐ **1:** ☐ **2:** ☐ **3:** ☐ **4:** ☐

7 Relationship

A decrease in the child's ability to relate to the observer, examiner, or anyone else in the room except the child's usual caregiver. Relationship is assessed by behaviour, eye contact, response to stimuli:

0: ☐ **1:** ☐ **2:** ☐ **3:** ☐ **4:** ☐

8 Attractiveness

The effort of attention required to maintain contact with the child, and the sense of enjoyment or concern that contact with the child brings, and the subjective sense of duration of the examination:

0: ☐ **1:** ☐ **2:** ☐ **3:** ☐ **4:** ☐

Name: **Age:** **Examiner:** **Total:**

Appendix – 2: Modified Alarm Distress Baby Scale (m-ADBB)

MATTHEY, ČRNČEC, & GUEDENEY (2005) ©
(Derived from the Full ADBB Scale: Guedeney & Fermanian, 2001) Reference as: Matthey S, Črnčec R, Hales A, et al. A description of the modified alarm distress baby scale (M-ADBB): an instrument to assess for infant social withdrawal. Infant Ment Health J. 2013; 34:602–9. doi:10.1002/imhj.21407

Practitioners using this scale should have completed training in m-ADBB from an approved training provider. See adbb-scale.com for further information.

Date: _____ **Infant's age:** _____ **Infant's name:** _____

Examiner: _____

Each item is rated according to the following categories:

0 = Satisfying

1 = Possible problem

2 = Definite problem

This scale is best completed by the observer based on what he or she observes during the examination or test. The clinician should seek to engage the child, through smiles, talking and touching.

1. FACIAL EXPRESSION

Observer assesses any reduction of facial expressiveness, through changes in facial expression, rather than intensity of expression:

☐	**Satisfying:**	Clear positive or negative facial expressiveness, with frequent changes in expression.
☐	**Possible problem:**	Limited facial expressiveness, few changes in expression.
☐	**Definite problem:**	Absence of facial expressivity; the face appears frozen during most of the observation.

2. EYE CONTACT

The observer assesses the quality and frequency of the child's eye contact with him or her:

☐	**Satisfying:**	At least one episode of moderate eye contact with several episodes of brief contact in expression.
☐	**Possible problem:**	Only two episodes of brief contact, or up to one moderately prolonged one.
☐	**Definite problem:**	A single brief contact, or vague, elusive, or absent contact.

3. VOCALISATIONS

The observer assesses the frequency of spontaneous pleasure vocalisations, but also the absence of displeasure or protest vocalisations, during the observation:

☐ **Satisfying:**	At least a few short vocalisations (not crying), or one or two longer vocalisations, without crying.
☐ **Possible problem:**	Only very rare vocalisations, without crying, or in their absence, cries in response to stimulation, or repeated whining.
☐ **Definite problem:**	Occasional whining in response to stimulation, or no vocalisations at all, most of the observation.

4. GENERAL LEVEL OF ACTIVITY

The frequency of head, torso and limb movements is assessed without taking into account the frequency of finger and hand movements, both spontaneously and in response to stimuli:

☐ **Satisfying:**	At least moderate spontaneous activity, with some movement of the head, trunk and limbs.
☐ **Possible problem:**	Very low level of spontaneous activity, very little movement of the head and limbs, but response to stimulation.
☐ **Definite problem:**	No spontaneous activity, or very low response to stimulation.

5. RELATIONSHIP

The child's ability to engage in and sustain the relationship with the observer is assessed. The relationship is assessed by attitude towards the other, eye contact, response to stimuli and interaction:

☐ **Satisfying:**	At least a moderate relationship is evident, whether positive or negative, and sustained.
☐ **Possible problem:**	The relationship seems tenuous or even questionable, or only clear when the child screams or objects.
☐ **Definite problem:**	No visible relationship, positive or negative.

TOTAL

Satisfying:

Possible problem:

Definite problem:

Appendix – 3: Conversation guide and card

ADBB Conversation guide:

ADBB Conversation card: