

ESPA Research – The a2 milk Company

Introduction

ESPA Research undertook a double-blind randomised controlled trial on the effects of milk free from a certain type of protein (A1 beta-casein) for children (aged 5-9) diagnosed with an autism spectrum condition. The study, sponsored by “The a2 milk Company”, and conducted by ESPA Research, required data gathering from participants and or parent/caregiver (their personal experience with the milk) and medical professionals (various biological and psychometric tests) as documented in the study protocol. [see:detail](#) provided the technical support and expertise to help gather and analyse the data for this project.

ESPA Research provided tablet computers to students free of charge to help them enter the data which was needed by the study. Students could enter the data themselves or be helped by their parents, carers or the ESPA research psychologists.

The data was entered by using a website called Survey Any Place, now Pointer Pro, which allowed the participants to enter their data in an enjoyable and straightforward way.

Email addresses were setup on our own system and installed on the tablets for each participant. Each week the participant would receive a new email on their tablet, which we sent out using a mail merge, and load up a unique Survey Any Place link in their web browser.

There were three surveys which the participants [and Health Professionals](#) had to fill out:

- Participant Data – basic participant information
- Caars – ADHD ratings scales
- Connors – ADHD assessment

Every week the three surveys would be the same, but the effects on the participant’s health from drinking a2 milk might be different.

Survey Any Place provided the ability to export the data for further analysis later.

Problem Statement

Various behavioural/psychometric schedules were to be included in the proposed study. Traditionally, these would have been delivered either by a parent/guardian or second party (professional) with data captured via pen and paper and results subsequently transferred to an electronic database for interrogation and analysis.

Each week a psychologist would visit the participant to do data gathering for the study. They would gather information on paper or use the tablet provided.

ESPA Research were seeking to simplify this method of data capture via the use of tablets linked to a dynamic website to provide real-time data linked directly to an online database, thus cutting down on time and resources needed to complete the study.

There was a requirement to provide the facility for quick and simple data entry for the participants (considering the young age group) and for health professionals to complete the psychometric tests on regular basis. In addition, analysis and reporting of results should be quick and simple and require no intervention.

Methodology

see:detail worked with ESPA Research to develop the terms of reference and document requirements in detail.

A structured selection methodology was developed to identify preferred choice of webapp.

What we did

see:detail undertook the following:

1. Assume responsibility for the management of the technical workstream
2. Business requirements analysis and documentation of terms of reference
3. Development of a Functional Specification
4. Selection of Survey Environment – a structured comparison of commercially available toolsets to identify preferred option from eleven overall comparison measures for twenty-eight identified providers.
5. Make recommendations on technologies following market research.
6. Creation of Prototype for:
 - Participant Environment
 - Psychologist Environment
7. Creation of Test Strategy/Plan/Cases/Execution
8. Creation of Surveys for participants and health professionals
9. Tablet configuration prior to despatch
10. Provision of technical support to Participants
11. Monitoring usage and outcome Reporting

Conclusion

see:detail identified the survey environment (Survey Any Place) and developed the questionnaires and business processes for distribution, recording and reporting.

see:detail successfully delivered a mobile app questionnaire for participants and health professionals which was graphical and simple to use on a tablet. The technology was rigorously tested prior to release to the project.

All data handling conformed with data protection and study protocol requirements.

see:detail is the trading name of Autism Works Limited, a Social Enterprise that offers the opportunity of sustainable employment to people with an autism spectrum condition or Asperger's Syndrome in the field of software testing. More information can be found at:

- www.seedetail.co.uk
- www.autismworks.co.uk