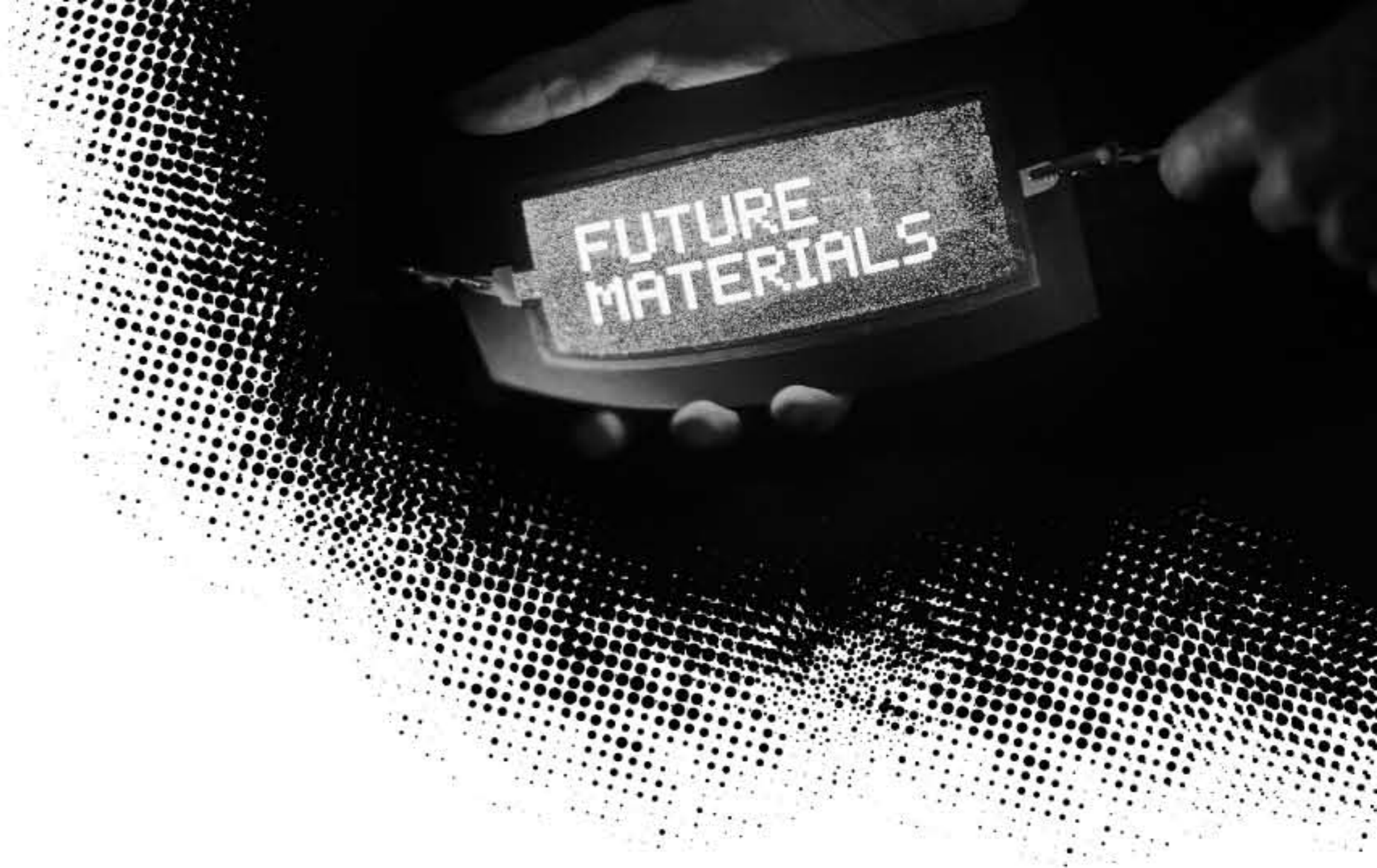


LIGHT.TOUCH.MATTERS

SUPPORT LEARNING FOR THE AGEING POPULATION



HOW TO SUPPORT LEARNING PROCESSES FOR THE AGEING POPULATION THROUGH EMBEDDED SMART MATERIALS INTO SMART PRODUCTS?

Technological products are progressively providing solutions that are widely expected to cope with the new challenges posed by the ageing population. However, the digital divide between younger and older generations is proved to be still an unsolved issue.

Recent studies demonstrate how analogies and metaphors can be physically embedded into products to improve the communication of their functions and activate in the user successful learning processes.

This study proposes that Smart Materials (SMs) with their rich and versatile properties may be more successful at embedding multi-sensorial metaphors into novel Smart Products, increasing the chance of adoption among ageing users. With this intention, a novel device has been designed using 4 different SMs families so as to evaluate which design would be better understood by the users. Findings reveal how age impacts on the selection of the preferred interaction and how SMs can embed metaphors to support the users re-establishing their own subjective awareness of the world.



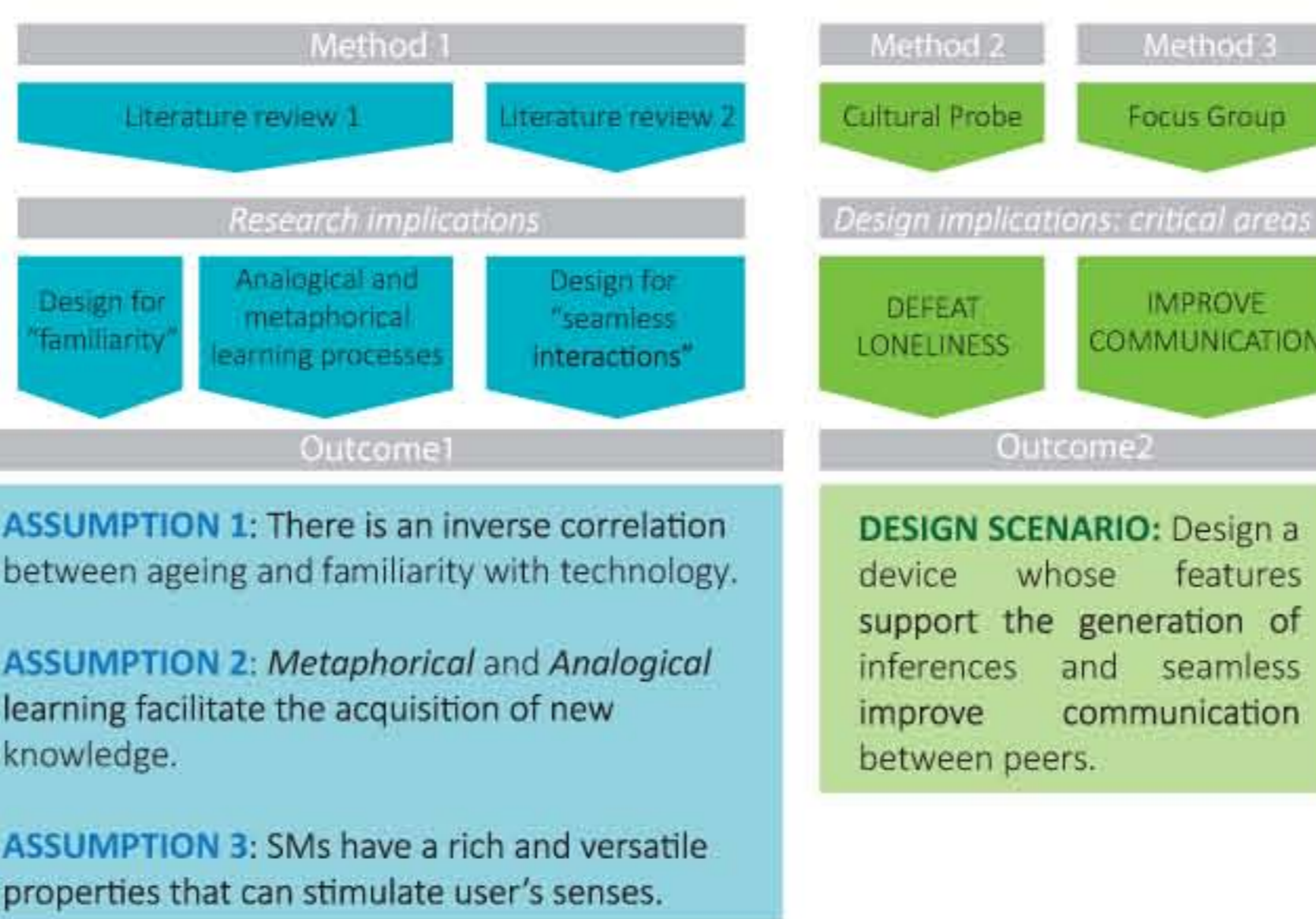
Fig. 1: Workshop on Smart Products and Smart Materials for the ageing population - Brunel University - May 2015

METHODOLOGY



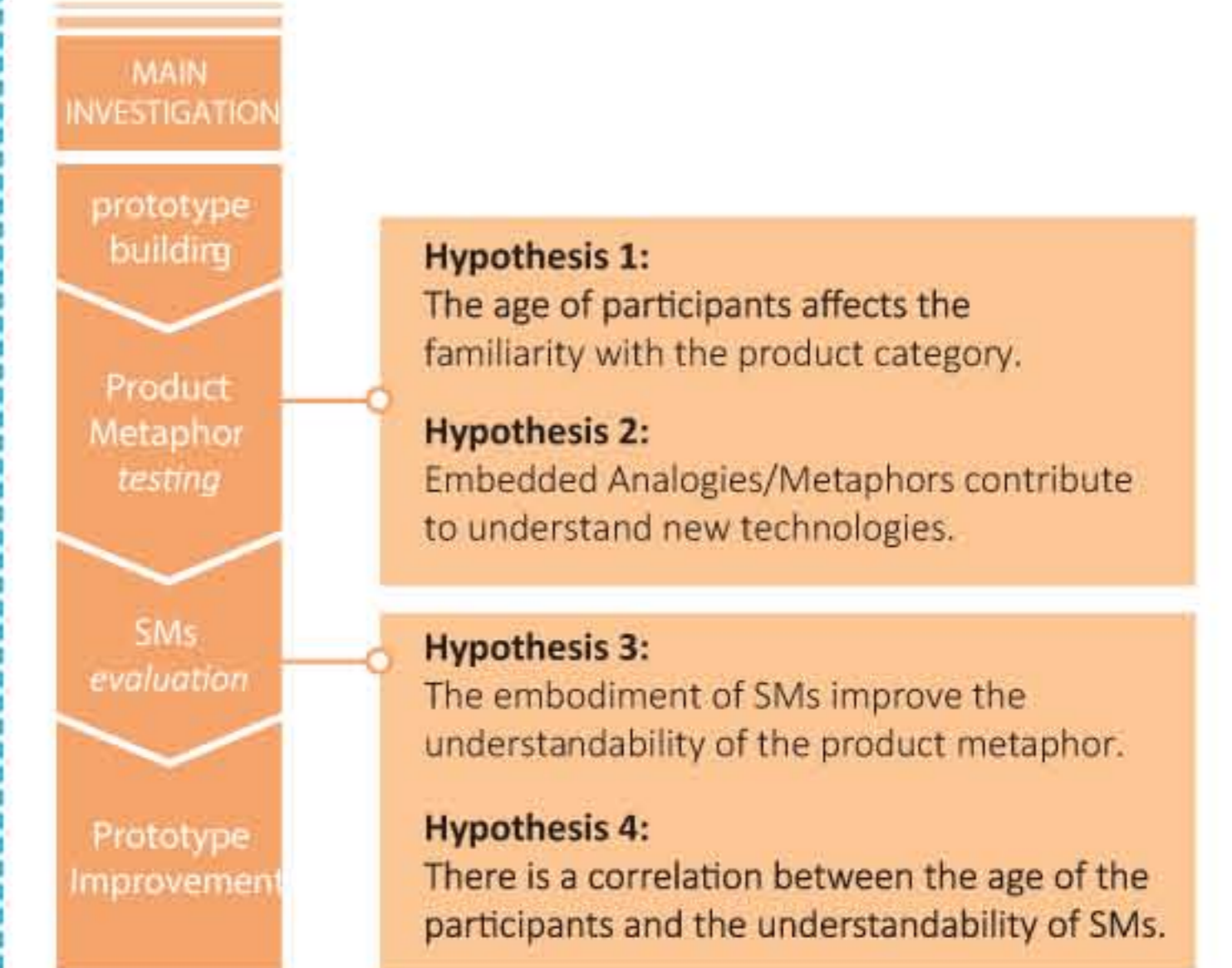
Exploratory study

Aim: Explore in line with the literature, the challenges encountered by ageing users in the use of technology.



Descriptive study

Aim: Define how SMs can embed analogical/metaphorical languages to augment the familiarity with Smart Products.



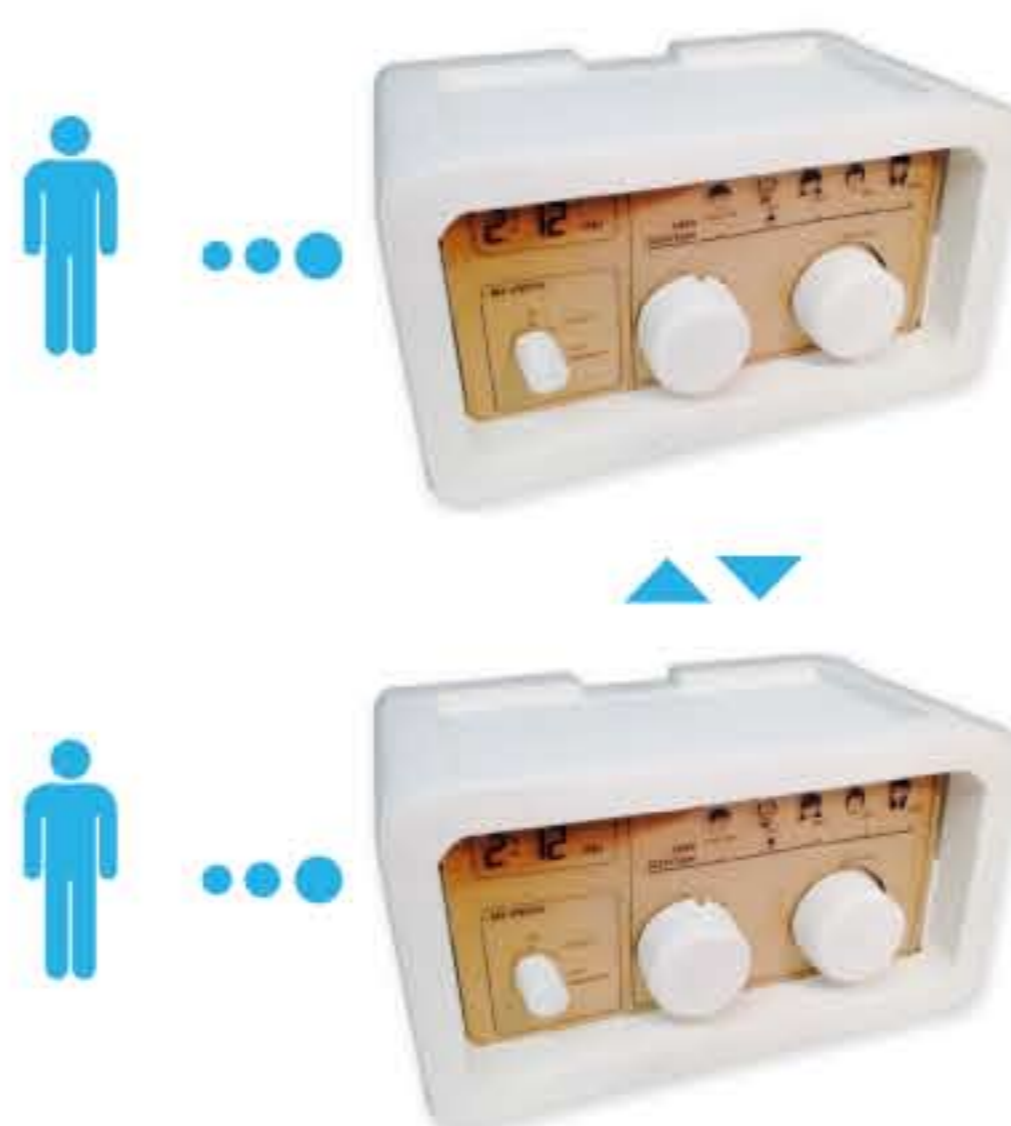
MAIN STUDY



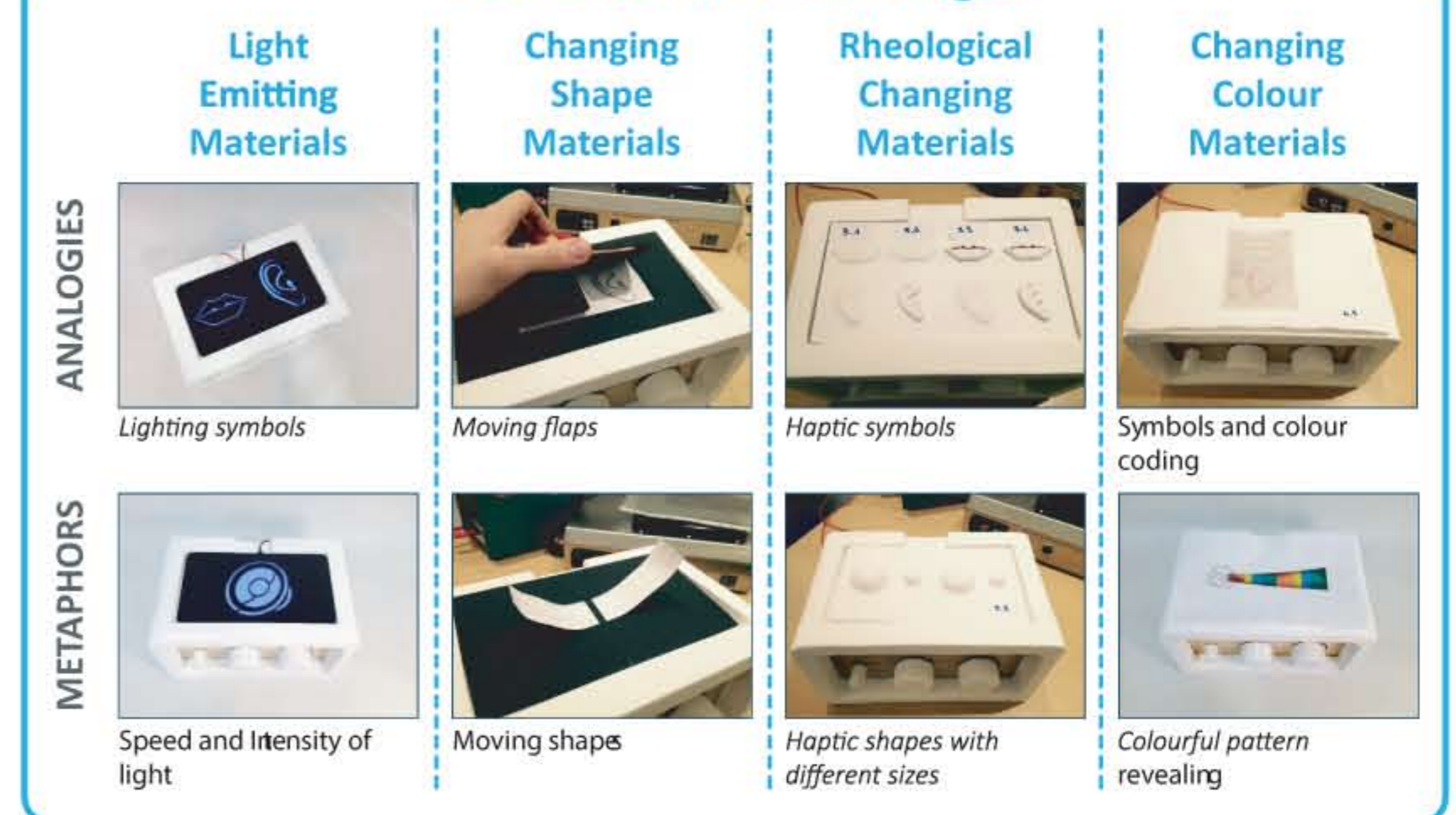
Fig. 2: Older adult taking part in the main study



Fig. 3: The prototype of the Digital Radio



Framework of messages



LIGHT.TOUCH.MATTERS
METAPHORICAL AND ANALOGICAL MESSAGES THROUGH EMBEDDED SMART MATERIALS

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the product is the interface

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