

# Feeling good

## A case study of empathic design methods

**Tuuli Mattelmäki**                      **Katja Battarbee**

Department of Product and Strategic Design  
University of Art and Design Helsinki  
Hämeentie 135 C  
00560 Helsinki  
Finland

+358 9 7563 0438  
tuuli@uiah.fi, kbattar@uiah.fi

### 1. INTRODUCTION

The study is a collaboration between eDesign research project at the University of Art and Design Helsinki, and Polar Electro Oy, a heart rate monitor manufacturer. The qualitative user study aims at understanding the life and values of people to find opportunities for product concept design by making a deep but narrow cut into the life of ten regularly exercising people of different ages and health conditions. The rich and visual data collected will be used to create empathy in the designers for the users in the aim to create new and better products for people (Black 1998, Dandavate et al. 1996).

eDesign project focuses on understanding the meaning of emotional experiences in human-product interaction and through design cases study user experience in general and develop user study and design methods to support development of richer product experiences.

Polar Electro Oy has a quality image in the heart rate monitor business. This user study is one exploration to the field of non-athletes who exercise for their well being or health care.

### 2. THE USER STUDY

Several methods were used in the user study to collect a rich and inspiring data: a focus group, diaries, open questions, self-photographing, interviews and collage-making. The open questions were to understand verbally expressable attitudes and values and the projective methods – photography and collage – to gain understanding and visual material about more latent feelings (Sanders et al. 1999).

#### 2.1. The focus group

A focus group was first organized to achieve a basic understanding of the area and to ensure the research material was appropriate. The focus group gave a general picture of who the people were, and of their lifestyles and exercise habits. (Hackos et al. 1998).

#### 2.2. The research material

The users were given or sent a package containing a diary, a disposable camera and open questions. The idea for the package was inspired by the Cultural Probes-research (Gaver et al. 1999, Wensveen 1999) We wanted to design the material to make the users feel positive about the research and willing to be involved. Designing the material prepared us for an empathic approach.

For one week the users filled in a diary about their everyday well-being, health and exercising and other thoughts that these issues raised. There were also optional little stickers for illustrating moods.

The disposable camera came with a list of themes for self photography e.g. my fridge, a favourite place, something tempting. The open questions, e.g. what causes stress and how do you handle it, were on separate cards illustrated with thought-provoking images.

To get an overview of each user a user profile was created according to the material.

#### 2.3. The interview

Each user was then invited to an interview to discuss the received material and further issues like the user profile. The photographs were also explained by the user.

Finally the users made a quick collage describing their ideal well-being and exercise assistant. The material consisted of preselected images and words of feelings, activities, environments and products.

### 3. EXPERIENCES

By organising the focus group we were able to get an idea of the users and clear some preconceptions. Also, the face to face meeting with the researchers and other users as well as the discussion made the users feel more involved and interested about the study.

Designing the research material was fun and getting the material back was exciting. It was easy to be empathic.

Reading the diaries about people's everyday life and values was like reading a story. The users were willing to discuss even very personal and intimate issues. The diaries revealed also e.g. the importance of nature and social activities in the everyday life, which was not so obvious from the focus group discussion.

Discussing the issues and the photographs in the interview created a feeling of understanding. The users told e.g. about their health crises and about their relationships with objects and places. The photographs can be used as projective material as well as for presenting the physical environment of the user.

In the collages the users produced a visual and emotional description of the elements that belong to their feeling of well-being. The value of the collage is mostly in the explanation of the ideas behind the chosen pictures. When explaining their ideas they were able to verbalise some new issues that were not mentioned before.

The raw material was presented to a multidisciplinary team at Polar Electro Oy. A first conclusion is that these methods of studying people can reveal their values, lifestyle, how they take care of their health and well being, as well as what makes them feel good and how.

### 4. NEXT STEPS

The material will be analysed and the results will be communicated e.g. with selected diaries and photos at a design workshop to find out opportunities for future concept designs. The study will be completed in October 2000.

### 5. ACKNOWLEDGEMENTS

Many thanks to Polar Electro Oy for the collaboration, The Academy of Finland for funding eDesign and Anu Mäkelä, Simo Säde and Turkka Keinonen for good advice.

### 6. REFERENCES

- Black, A. (1998) Empathic Design – User focused strategies for innovation. *Proceedings of New Product Development*, IBC Conferences.
- Dandavate, U., Sanders, E.B.-N., Stuart, S. (1996) Emotions Matter: User Empathy in the Product Development Process. *Proceedings of the Human Factors and Ergonomics Society 40<sup>th</sup> Annual Meeting* 1996, pp. 415-418.
- Gaver, W., Dunne, T., and Pacenti, E. (1999) Cultural probes. *interactions*, 4(1), January+February, pp.21-29
- Hackos, J.A.T., and Redish, J.C. (1998). *User and Task Analysis for Interface Design*. Wiley Computer Publishing.
- Sanders, E.B.-N., Dandavate, U. (1999) Design for experiencing: New tools. *Proceedings of the first international conference on Design & Emotion*, Delft University of Technology, 87-92
- Wensveen, S. A.G. (1999). Probing Experience. *Proceedings of the first international conference on Design and Emotion*, Delft University of Technology, 23-29.