Designing Wellbeing

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ABSTRACT

This two-day workshop will bring together an interdisciplinary group of researchers, designers and practitioners who are interested in the topic of wellbeing in the field of interaction design. Wellbeing is defined as positive mental health, and not only the absence of mental illness, but also the presence of positive psychological functioning. The workshop will provide a platform to share resources, create new ideas for design and build valuable future collaborations. During the first day participants will present their work and exchange their knowledge and experiences in the field. The workshop will utilize a series of interactive activities to support participants in collaboratively constructing a shared understanding of the concept of wellbeing and its challenges in terms of design. On the second day participants will be invited to create low-fidelity prototypes that support an aspect of wellbeing using Microsoft .NET Gadgeteer and other prototyping materials. These practical activities will stimulate discussion so as to contribute to a better understanding of how wellbeing can be facilitated through design, how to address evaluation challenges as well as illustrate related ethical questions.

Author Keywords

Design, wellbeing, mental health, interaction design.

ACM Classification Keywords

H.5.m. [Information interfaces and presentation (e.g., HCI)]: Miscellaneous;

INTRODUCTION

The World Health Organization [12] defines positive mental health or wellbeing as a state *"which allows individuals to realize their abilities, cope with the normal stresses of life, work productively and fruitfully, and make a contribution to their community"*. Together with a reorientation of health care and psychology towards understanding how to nurture human strength and contribute to positive aspects of human life [9], there is an increased interest in exploring the potential of technology to support wellbeing.

HCI is beginning to respond to the wellbeing agenda [e.g., 1,3,4], but the community doing so is still in its infancy. Previous workshops include (i) Ubihealth (Ubicomp 2003-2006, 2010), focusing on the use of computing systems to support peoples' health including somatic diseases and, more recently, mental disorders; (ii) the HCI4WELL workshops on wellness (2010, 2011), investigating the potential of assisted living technologies, computer games and robots to improve peoples' quality of life; and (iii) the CHI 2012 workshop on 'Interaction Design and Emotional Wellbeing', exploring the scope of interactive technologies to support peoples' emotional wellbeing within and beyond mental health settings. This workshop will build on these previous workshops by focusing on wellbeing as a concept for interaction design. To this end, the workshop will bring together participants from a variety of backgrounds including design, health care and HCI. It will facilitate the exchange of knowledge and experience in the field and actively invite engagement in collaborative design and prototyping activities.

DESIGN THEMES

Possibilities for digital technologies to enhance wellbeing will be explored in the context of five design themes.

Wellbeing as Pleasure, Happiness and Satisfaction

Pleasure can result from engaging in enjoyable activities such as play, entertainment or eating good food, from the aesthetics and beauty of things, or their novelty [3]. The joy people experience for instance from playing computer games can be ascribed to a sense of control, mastery and achievement that these allow for. Games are also activities that enable the experience of flow, defined by Csikszentmihalyi as an optimal feeling of genuine satisfaction or happiness, where the individual feels strong, alert, in effortless control, unselfconscious, and at the peak of her abilities [2]. Yet, flow is not a passive experience. It needs to be cultivated through an activity that is within the control of the person and that sets challenges which are neither too simple nor too demanding to achieve. Associated developments of skills, feelings of personal growth and mastery that characterise flow distinguish it from the simple attainment of pleasures.

Towards Wellbeing: Therapy and Self Management

In recent years, there has been an increase in research exploring the role of technology and interaction design in supporting mental health and therapy. Systems employed in

psychotherapy are often designed to facilitate communication between therapist and client, to provide specific therapy relevant contents (e.g. anxiety exposures in virtual realities) or to support patient's self-monitoring activities and homework compliance (i.e., [7]). Outside therapy or hospital environments, we find that patients increasingly become co-creators of their care, with health professionals assisting and coaching patients to help themselves [4]. Moreover, patients often have greater access to information than ever before. They can use online services for self-assessment, health advice or counseling. Whilst access to information is fast, easy and less stigmatized, their quality is restricted in accuracy, actuality or evidence base [5].

Expressions of Emotion and Wellbeing

The communication of emotion is inherently social. In sharing our feelings we invite empathic responses, allowing others to better meet our needs and enable the building or maintenance of relationships, an element that is of fundamental importance to maintaining wellbeing [8]. Thus, a considerable amount of work in HCI is dedicated to the exploration of different means of assessing or expressing emotions or affect. Prominent designs include eMoto or the Affective Diary. In these, emotion is expressed creatively using mixtures of color, texture or movement to encouraging flexible and rich individual expressions and interpretations of a person's mood or feelings. This openness and ambiguity, however, carries the risk of misunderstandings. In contrast, recent tools like Healthii [1] allow a person to express their wellbeing on Facebook or Twitter through a four digit code (e.g. #healthii{1231}) representing the dimensions: busyness, enjoyment, stress, health with finite values between 1 and 3.

Wellbeing and our Need for Interpersonal Relationships

A powerful determinant of health and wellbeing are interpersonal relationships [8] including aspects of social exchange, support, closeness and intimacy. A significant body of research and development has sought to support, augment and extend intimate experiences [e.g., 11]. Many of these designs address the sensual character of intimacy (touch, hugging, warmth, etc.) and sought to mediate simple intimate acts, or to make the presence of a beloved person apparent. Even though they are aiming for the expression or evocation of emotions [6], the set of possible communication acts is often small (e.g. pressing a button) and clearly prescribed through design. The Lovers' box [10] presents a design that invites individuals to be more active co-creators of their experience. The artifact resembles an old fashioned jewelry box, yet its incorporated technology allows for the reciprocal exchange of personal videos. The display of embedded highly personal, gift-like videos enables reflection on meaningful shared experiences and stimulates laughter, closeness and intimacy.

Measuring Wellbeing

Felt experiences such as intimacy, happiness or pleasure are challenging to measure, yet crucial to evaluate the impact of our design interventions. Many research methods have been developed for the *hedonic* conceptualization of wellbeing, focusing on the subjective experience of happiness and life satisfaction [8]. Prominent tools are: the Affect Balance Scale, PANAS, Affectometer or the Satisfaction with Life Scale. They commonly encompass measures for positive and negative affect, and an individual's satisfaction with life. The *eudaimonic* formulation, conceptualizing wellbeing as finding meaning in life and realizing oneself and one's true potential, has received less research attention so far [8]. Existing measures include: Ryff's Scales of Psychological Well-Being (SPWB), the Social Well-Being Scale as well as scales to measure spirituality or mindfulness. Despite a large amount of existing tools to measure global well-being and happiness, there is still a need for methods that are sensitive to small changes in the multi-facets of this concept, or that measure the wellbeing process.

For more information on the workshop please visit its website: http://di.ncl.ac.uk/designwellbeing/

REFERENCES

1. André, P., Schraefel, M.C., Dix, A., and White, R.W. Expressing wellbeing online: towards self-reflection and social awareness. *iConference 2011*, 114-121.
2. Csikszentmihalyi, M. *Flow: The Psychology of Optimal Experience* (1st ed.). Harper Perennial, 1991.
3. Desmet, P.M.A. and Hassenzahl, M. Towards happiness: Possibility driven design. In M., Sacarias & J.V. de Oliviera (eds.), *Human Computer Interaction: The Agency Perspective.* Springer, 2011.
4. Dubberly, H., Mehta, R., Evenson, S., and Pangaro, P. Reframing health to embrace design of our own wellbeing. *Interactions (May + June) 2010*, 56-63.
5. Ferguson, T. From patients to end users. *British Medical Journal*, *324*, 2002, 555-6.
6. Gaver, B. Provocative awareness. *Computer Supported Cooperative Work, 11*, 2002, 475-493.
7. Matthews, M., and Doherty, G. In the mood: engaging teenagers in psychotherapy using mobile phones. *Proc. CHI 2011*, 2947-2956.
8. Ryan, R.M., and Deci, E.L. On happiness and human potential: a review of research on hedonic and eudaimonic wellbeing. *Annual Review of Psychology*, *52*, 2001, 141–166.
9. Seligman, M.E.P., and Csikszentmihalyi, M. Positive psychology: an introduction. *American Psychologist, 55*(1), 2000, 5-14.
10. Thieme, A., et al. Lover's box: Designing for reflection within romantic relationships. *International Journal of Human Computer Studies, 69*(5), 2011, 283-297.
11. Vetere, F., et al. Mediating intimacy: designing technologies to support strong-tie relationships. *Proc. CHI 2005*, 471–480.
12. World Health Organisation Promoting Mental Health (2004). *Concepts emerging evidence and practice. Summary report*. Geneva: World Health Organisation.