
Designing for Anxiety Therapy Bridging Clinical and Non-Clinical

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Abstract

In this position paper we discuss, in terms of the concept of boundary objects, how a mobile application, the MIKAT.app, bridge between clinical intervention in anxiety therapy, and life and coping strategies outside the clinic and across phases of being a person suffering from, or having suffered from anxiety. Thereby, we hope to provide a counterpoint in the discussion on illness trajectories.

Author Keywords

Anxiety; Participatory Design; boundary objects; Clinical and non-clinical.

ACM Classification Keywords

H.5.m. Information interfaces and presentation.

Introduction

An increasing number of people suffer from some kind of anxiety that reduces quality of life, and possibly precludes them from normal activities, such as having a job. Only few of these people are diagnosed and receive treatment. Often it does not make sense to diagnose because of shortage of treatment resources. Therefore, a therapeutic approach requiring less therapist hours would be attractive.



In the MIKAT project we experimented with a mobile application (for the iPhone/iPod) to be used in conjunction with a 3 month long therapeutic program. The program was based on cognitive behavioral therapy (CBT) and aimed to help sufferers from anxiety disorders, primarily social anxiety and panic anxiety [2]. The motivation was that we hoped to be able to increase and sustain the therapeutic effect by extending therapy into life outside the clinic.

The application, the MIKAT.app, embedded several existing therapeutic elements such as variations over the 5-column CBT scheme, reassuring sentences, diary writing, exposure challenges, etc. We also experimented with new means based on biosensors and inspired by biofeedback. Inspired by the active surfaces project [6], we envisioned a toolbox that would enable therapists, together with clients, to configure a personal tool consisting of the elements that would work in the individual case.

Our approach was to develop research prototypes through an adapted form of participatory design, together with a therapist and anxiety clients in the final part of the program at Jysk Psylogcenter. In the program, clients learn to know their own anxiety and assess their anxiety level, and by exposure to gradually worse situations their anxiety is reduced or overcome.

Bridging the clinical and the non-clinical

In the rest of the paper we discuss our approach in the MIKAT project, and we relate it to bridging the clinical and the non-clinical, as well as to the relation between anxiety, therapy and life. In general, anxiety attacks occur in places or situations outside the clinic. Therapy therefore, by definition, has to bridge out into life out-

side the clinic. Thus, therapeutic intervention can only be administered and assessed in strong relation to life outside the clinic.

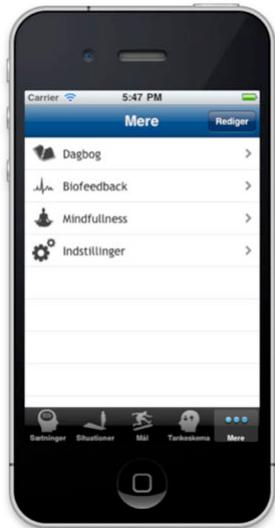
Most people living with anxiety develop safety behaviors as part of their coping strategy. By avoiding the exposure to anxiety provoking situations, however, they most often exclude themselves from large parts of life. E.g. a person suffering from social anxiety may avoid going into super markets to be sure not to get into a situation where they drop a tray of eggs on the floor. Or they may depend on bringing particular things, like a piece of paper with a particular phone number with them in case they get into a situation they cannot handle. This is an inherent problem in the project that the mobile tool is at risk of becoming part of a new safety behavior. This is, however, also a problem that has to be addressed with any other means for therapy that is brought outside the strictly clinical setting.

When clients enter the anxiety program they most often have build an identity as being someone suffering from anxiety. Through the program, they change that identity. The program, when successful, is a turning point in their lives, but the program is still just an intermezzo. Before and after, they will depend on their own strategies for coping with the world as possibly anxiety provoking. They will need to integrate themselves and their new strategies as not suffering from anxiety into their world.

Therapy with a mundane devise

Our pragmatic choice to implement the MIKAT application as an app in a wide spread device that many people carry with them all day, proved to be good. It turned out to be important for the anxiety clients to be





able to appear “normal” when accessing the application. With the iPhone app it is possible to attend to anxiety related activities in public places, such as public transportation, school, workplace, etc. without disclosing what you are doing. The use of therapeutic audio, and to some extent video, appears to the surroundings as ordinary media consumption. The clients appreciated this with surprising emphasis. Being a person suffering from anxiety is stigmatizing and often the social isolation is a self-reinforcing barrier to recovery.

Embedding support for therapy in an iPhone, not only made it possible to include new means, such as audio, but it also made the use of existing means much easier. A client explained, that he had been worried that his laminated piece of cardboard, with a reassuring sentence, he carried in his wallet, would fall out and thereby generate questions that he did not want to answer, because almost nobody knew that he was suffering from anxiety. Embedding the reassuring sentence in the iPhone app eliminated this problem; or rather it reduced the problem to the general one of protecting access to the app, by password mechanisms and by design of the icon. This relates to the general issue of bringing therapeutic equipment into the home setting. Several studies at the Center for Pervasive Health Care and elsewhere show that the medical appearance of medication, training equipment etc, is a hindrance to adherence [7]. People just hide things away and forget about them to avoid the stigmatization associated with living in a home marked by illness.

Design along the anxiety trajectory

In the process of doing participatory design with therapists and clients, it was apparent that therapists and clients had much different perspectives on how to deal

with anxiety. While the therapist was talking from the point of view of the therapeutic regime, the clients’ perspectives were more pragmatic, and to some extent also influenced by their wish to maintain a connection to therapy. It is a recurring challenge in doing design in therapeutic contexts, that users may not be able to participate at the level of power relations, and that an alternative frame of understanding, based on care rationality is needed [3, 4].

In planning and re-planning the project, we discussed which clients to involve, and in particular when it could be harmful for them to be exposed in that way. The safe decision, was to involve clients almost at the end of the 3-month program, when they were expected to have almost recovered from anxiety. It was clear from our discussions with the therapist that the clients at various stages would contribute differently to design, as their life situations would differ. Before the program clients would emphasize early warning and improved safety behavior, while at the end of the program asked for support for staying in contact, and for effective encouragements to keep up with exposure exercises.

This process of changed perspective for the clients, points to how awareness of self changes across the trajectory from possibly non-anxious, over anxious though the therapeutic program as someone working full time to recover from anxiety, to the after treatment situation of being (hopefully) a post anxiety recoverer. In relation to design strategies, it is important to take into account the complex heterogeneity across actors and across time. Practically, the concept of care community [4] is helpful as a handle to the activation of care rationality in the obtained solutions and in the design process. From a conceptual point of view, the no-

tion of boundary objects [1, 5] captures this heterogeneity. The concept of anxiety itself is stable enough to maintain identity across involved perspectives, yet it is plastic enough to adapt to the specifics of those perspectives. The same goes for being someone suffering from anxiety, and for anxiety treatment as such. Understanding the boundary objectness of anxiety treatment is key to understanding the clinical to non-clinical anchoring of technological support for therapy. While the therapeutic regime is based firmly in CBT, the praxis of coping, or recovering outside the clinic may be based more loosely in the CBT regime, and may also include, e.g. maintaining elements of safety behavior at a non-detrimental level. The MIKAT.app itself can be understood better in terms of its' boundary objectness. From the point of view of the therapeutic regime, the app should disappear when clients finish the 3-month program, after that point carrying the app could be considered unsound safety behavior. From the point of view of interaction design the biosensor-based elements of the app were the most interesting, but that initially clashed with the therapeutic dogma that clients should learn to assess their own anxiety level. From the point of view of clients, it seemed as a possibility to transfer insights and new practice from the therapeutic program further into life outside therapy that was the most important aspect.

Conclusion

We introduced the MIKAT project, and the complex heterogeneity that emerged in our effort to design for anxiety therapy. We hope to inspire the illness trajectory based discussion though our remarks on boundary objects bridging across phases of life as anxiety sufferer, as well as across the various praxes involved in therapy and design.

Acknowledgements

Thanks to Ulla Høybye and the clients at Jysk Psykologcenter for their participation, and to collaborators at the Alexandra Institute, S. Thielsen, R. Dobers, J. Andersen, M. Presser, K. Nielsen. The MIKAT project was funded by Region Midtjylland and the European Union via Caretech Innovation.

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