

# Sharing Experiences through Interactive Media: new ways of studying social concepts

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"To have joy one must share it, happiness was born a twin"  
[Lord Byron]

Sharing of experiences is a way for people to satisfy their need for social interaction. Social interaction is essential for needs of belonging, love and esteem [4]. However, measuring social experiences is hard due to the internal and moment-dependent nature of emotions. This paper outlines different possibilities to measure social experiences when using interactive media. The goal of current research is to design and evaluate a tool that measures certain social concepts related to sharing experiences in a non-intrusive manner.

## Measuring social experiences

Questionnaires are often used for measuring social concepts present in social experiences; see for example questionnaires that measure social presence, connectedness and awareness [4]. Questionnaires are usually used for measurement *after* the experience, which can cause cognitive biases [9]. The same problem occurs when using interviews and focus groups. Another method for gathering social user experience data is observation [9]. Although, in comparison to questionnaires, observation is not relying on self-reports from users, it can be highly obtrusive. Also, without any form of self-report from the user conclusions are purely based on behavior which may not be enough to obtain a reliable representation of the user experience. A diary study is a form of indirect observation (and therefore less obtrusive) where users can be asked to write down behavior as well as experiences. Psychophysiological measurements (e.g., measure pupil size, heart rate, and facial expressions) can measure experiences without asking users any questions, which are difficult to establish in the field [7]. Moreover, a realistic social network for measuring social user experiences is hard to establish in a lab.

Alternatively, the experience sampling method (ESM) has been developed to collect *in-situ* subjective feedback from users [1]. Using this method, users fill out several brief questionnaires during the day by responding to alerts. Because ESM is not relying on recall of experiences, but on current feelings and activities, this reduces cognitive biases. ESM can be quite interruptive in the lives of users, and users need to have the motivation to keep answering the questions [8].

Getting around problems of intrusiveness, self-report, and measuring in the field, three context-aware measurement tools are developed for measuring the user experience. The Context-Aware Experience Sample tool asks users only questions on moments and during activities of interest [5], whereas MyExperience [2] and SocioXensor [6] use mobile devices to collect both objective and subjective data. Although these tools aim at minimizing problems with recall self-report and obtrusiveness, these problems are to a lesser extent still existing. Ideally, researchers would like to measure subjective data *during* an experience without disturbing the experience. Measuring experiences in a social context, makes these measurement issues even more complex because of the influence of social feelings people have in various relationships. Therefore, designing a tool for in-situ measurement of social concepts during moments of sharing experiences in a non-intrusive manner is quite challenging.

## Measurement tool

To accept this challenge, requirements have to be considered concerning *which* social concepts to measure and concerning *how* to measure these concepts. Which concepts to measure exactly depends on which social feelings play a role when people are sharing experiences. Hereto, an explorative and inspirational probing diary study (inspired on cultural probes [3]) was conducted to get insight in how users reflect on their sharing experiences: when, how, with whom, and what experiences people share or would like to share, and what emotions people have [10]. Existing literature on measuring experiences (as briefly outlined above) shows that to measure social concepts when sharing experiences, the tool requires to measure **continuously** (to catch the dynamic nature of experiences) which implies **measuring during the experience** (to avoid recall problems), to take **little effort and time**, to be **fun to use** (to keep users motivated), to be able to **measure information about the users social context automatically and unobtrusively**, and to be **mobile or wearable** (it can stay and go wherever users are). The current version of the tool will be validated in the upcoming months in a study on sharing experiences while watching social interactive TV. Results from the iterative design and evaluation are to be presented and reflected upon.

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