
Interpersonal Process Recall – A Method for Reflecting on Co-Design Experiences

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Co-Abstract

Our method uses video recording as a stimulus for recall and reflection, based on Interpersonal Process Recall (IPR) which is borrowed from humanistic psychotherapy research. This Methods Story accompanies other media (videos, audio and transcript) which presents and demonstrates the method. We video recorded part of a workshop design session run at Oak Field School, Nottingham (UK), by the interdisciplinary 'An Internet Of Soft Things' project (<http://aninternetofsoftthings.com>), filming two co-designers: a member of the research team and a participant with a cognitive impairment.

Using the IPR method, we played back the video and invited the co-designers to pause it and recall any thoughts and feelings which did not show up in the original co-design interaction. This made it possible to capture data that represents subjective experience more fully, giving a voice to participants, particularly those who may find it hard to express themselves in the moment, owing to a cognitive impairment. In a subsequent reflection, our participant describes the importance to him of researchers speaking slowly and with short words, listening, using Makaton if appropriate, and above all, being 'nice and friendly'.

Author Keywords

Video recording; Interpersonal Process Recall; co-design; cognitive impairment; method stories.

Introduction

We have long been interested in the co-design of technologies working alongside people with a cognitive impairment. Examples include the Virtual City designed to teach everyday living skills, and the Wireless Switch project, where ideas and storyboards were generated collaboratively with co-researchers with a cognitive impairment working with a facilitator (Brown et al, 1999; 1999; 2005).

Noting the recent shift from user-centred to human-centred design practices, we have extrapolated this trend to ask what would happen if design engaged with the term 'person-centred', originating in Carl Rogers' theory and practice of the 1960s (Rogers, 1961), and which is now used extensively in healthcare communities. A Person-Centred Approach to Design is now proposed in response to calls for increased reflection in participatory practices (Kettley et al, in press). In response our method uses video recording as a stimulus for recall and reflection, based on Interpersonal Process Recall (IPR) (Kettley et al, 2015a), which is borrowed from humanistic psychotherapy research (Angus et al, 2014).

An Internet of Soft Things

An Internet of Soft Things⁴ (<http://aninternetofsoftthings.com>) brings together person-centred psychotherapists with textile designers and computer scientists to ask how networks of textile things can benefit networks of people to support improved perceptions of mental wellbeing. The research team is multidisciplinary involving computer science, textile design, interaction design, and psychotherapy practice, and is led by Nottingham Trent University

(NTU) in collaboration with Nottinghamshire Mind Network in the UK (Kettley et al, 2015b).

Three sets of design workshops have already been held to co-design meaningful networks of things, and to develop and to further advance human centred design methodologies using relational approaches to mental wellbeing. These include those held with staff and students at NTU with lived experience of mental wellbeing issues, and with the Nottinghamshire Mind Network (Notts Mind Network. <http://nottsmindnetwork.co.uk/>). A further set of workshops was held in conjunction with pupils and adults with a cognitive impairment from a local special school (Oak Field school, Nottingham, UK) and it's the experiences and reflections of participants on the co-design activities within these workshops that will be reported here.

Researchers have reported how people with cognitive impairments receive less support in tackling and addressing their mental health problems. "If a mental health problem presents, for whatever reason, it is more likely to be attributed to their learning disability (diagnostic overshadowing) or classed as challenging behavior" (Giraud-Sanders, 2011).

In response to these challenges the workshops enabled co-designers with a cognitive impairment to participate and create objects of support individual to their needs, and focus on experiences of living alone and with other people, and the networks of support and meaning making that are made possible through smart textiles. The context used was a smart flat within the Oak Field School used to teach concepts of independent living, and augmented with networked smart textile interfaces

created in these workshops. Such interfaces created in earlier workshops were first reviewed, and followed by mapping circles of support and networks of care since we are very interested in how networks of things can support networks of people. Further sessions involved designing and building smart textile objects with inputs and outputs, to facilitate keeping in touch, managing personal domestic spaces, and being heard or seen by others.

Interpersonal Process Recall (IPR) – the method

In order to increase our reflection on our participatory design processes we have used IPR together with a blend of Rennie (2005) and Saldana's (2009) discussions of Grounded Theory. Applying this method to co-design interactions in the Oak Field School workshops gives the following steps:

1. Acquire fresh material through field research (Rennie 2005:64)/data collection (Saldana 2009:43):
 - a. Participation of researcher in co-design process
 - b. Conduct an IPR interview using the video of the co-design session or interaction; this is replayed to the participants, who are encouraged to reflect verbally on what they were feeling, thinking and experiencing at any given moment. IPR consists of two roles: an 'Inquirer' and a 'Recaller' (or Recallers). (Kettley et al, 2015b)
 - c. Produce a transcript of the IPR session
2. Proceed to In Vivo Coding of text of words or short phrases used by the participants (Saldana 2009:74-77/Rennie 2005:64) alongside Analytic Memo

Writing (Saldana 2009:41)/Theoretical Memos (Rennie 2005:65).

3. Produce Categories from In Vivo Coding
4. Produce Higher Order Categories from Categories (which become their 'properties')
5. Constant Comparative Analysis by reviewing/repeating 2-4
6. Eventually a Core Category is conceptualized that subsumes all other categories

Our Methods Story – the method in practice

We video recorded part of a workshop design session run at Oak Field School, filming two co-designers: a member of the research team and a participant with a cognitive impairment (see attached video: Oak Field Co-Design Interaction.MTS).

Using the IPR method, we played back the video and invited the co-designers to pause it and recall any thoughts and feelings which were not apparent in the original video (see attached Audio_IPR.M4a, starts at circa 27 seconds). This made it possible to capture data that represents subjective experience more fully, giving a voice particularly to participants who may find it hard to express themselves in the moment, owing to a cognitive impairment. A Grounded Theory approach is now being applied to the transcript of this IPR session (see attached IPR_Transcript.doc) to reveal how reflection can contribute to co-design with people with a cognitive impairment.

The in vivo codes that emerge from the analysis of words and short phrases used in the co-design interaction by the inquirer are shown in green in the transcript (IPR_Transcript.doc). A couple of the potential categories that emerge from this seem to be

the pre-existing relationship, knowledge and 'relational depth' of the co-designers, who have worked together on technology projects since 1997, and the importance of achieving a state of 'flow' in the design interaction. Novel to our approach is that we are also striving to enable the recallers to participate in steps 2-6 of our method. Some initial categories produced by the recaller who is a member of the IoST research team (via reflection on the process of producing the transcript, rather than as of yet proceeding to steps 2-6) echo those produced by the inquirer and include: 'prior Knowledge of co-designer'; 'awareness of co-designer's reactions'; and 'relational depth'. In other categories this co-researcher appears to be striving to achieve a state of flow in the design interaction, to be released from formal design methods, and to become increasingly empathic and flexible as the design interaction unfolds.

Our next challenges are to support the recaller with a cognitive impairment in generating categories, and to investigate which media and methods are best used to facilitate such inclusion. Our first attempt at this has been to review (conversationally) experiences of co-designing technology in a range of historical projects, and then to ask the recaller with a cognitive impairment to give any 'tips' on how co-design interactions could be improved. In this reflection (see attached video: Advice on co-design.mp4), our participant describes the importance to him of researchers speaking slowly and with short words, listening, using Makaton Symbols if appropriate, and above all, being 'nice and friendly'.

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