Chapter 7
An Expert-Validated Social Communication Toolkit

This chapter discussed the process of identifying the components for the proposed social communication framework to develop a gamified communication toolkit. The components of the toolkit were derived from a series of workshops based on experience-based co-design (EBCD). The objective of the toolkit is to facilitate health behaviour change towards reproductive health and well-being of adolescents, designed by young adults. The chapter highlights the need for EBCD and as a method used to build the toolkit, further details the process of conducting it, along with the outcomes. The later section focuses on the expert reviews that were conducted to validate the framework and the toolkit components.

1.1 Relevance of EBCD in the Context of the Present Research

Experience-based co-design is a participatory design methodology initially developed and primarily employed as a tool for enhancing the quality of healthcare (Donetto et al., 2015). It entails collaboration with groups of individuals who possess pertinent life experiences to enhance existing services and jointly devise innovative ones. Within the research context, co-design is firmly rooted in the principles of participatory action research, exemplifying a 'bottom-up' approach. A pivotal characteristic of participatory action research, or co-design, is the synergistic partnership between researchers, end-users, essential stakeholders, policymakers, and program developers, aimed at producing outcomes that are highly attuned to the specific needs of the community (Santana et al., 2018). In the present context, the use of EBCD involves engaging with groups of individuals whose life experiences closely mirror those of adolescents. This cooperative endeavour encompasses the integration of narratives to formulate more refined inquiries, the validation of decisions through rigorous deliberation encompassing diverse behavioural models, and the amalgamation of findings with experiential insights to facilitate the implementation of innovative concepts (Locock et al., 2014).

This chapter explores the applicability of EBCD for psychoeducating adolescent regarding their reproductive health and well-being. It converges the qualitative data discussed

in Chapter 4 with the experiential insights shared by the workshop participants. The principal objective of the workshop was to construct a guiding tool tailored for adolescents that facilitates a comprehensive comprehension of reproductive health and overall well-being.

1.1.1 Co-Designing With Young Adults for Female Adolescents

A series of workshops was conducted to build the components of the guiding tool. The primary objectives of the workshop included identifying behavioural archetypes to create a specialised communication framework for specific groups, finding suitable metaphors to depict a woman's bodily journey, and constructing a conceptual framework based on qualitative data and the participants' personal experiences.

1.2 Methods

1.2.1 Participants

The workshop participants comprised seven young adults, aged 20–24 years, consisting of six women and one man, alongside one female facilitator. All participants were design students with prior experience in projects related to women's health, and the workshop facilitator was the researcher.

1.2.2 Tools

In adherence to COVID-19 protocols, ten of twelve sessions were conducted virtually using Microsoft Teams (https://www.microsoft.com/en-in/microsoft-teams/free). A Miro board (https://miro.com) was used for brainstorming, communicating, ideating, and collaborating in real time.

1.2.3 Data Source

The source of the data for the workshop was the qualitative study, which included in-depth interviews of 30 participants transcribed by the facilitator. The qualitative participants were recruited using purposive sampling to carefully select individuals aged 26–60 years. The qualitative participants resided in cities with diverse sociodemographic settings in India. During the sampling process, particular attention was placed on the location where each qualitative participant had spent their adolescence. This emphasis was driven by the aim of understanding the influence of sociodemographic factors that affect learning in the formative

years of life. These sociodemographic factors were further compared with the transformation in perception that the qualitative participants had undergone due to changes in location.

1.2.4 Study Design

The workshop was structured into twelve sessions, with ten of them being conducted online over a span of three months, depending on the availability of the participants. The duration of the workshops varied from 5 minutes to 3 hours, and attendance was not mandatory. All workshop participants were in attendance on most days, besides a few instances where only three to four were present. The offline workshops consisted of 5-hour sessions that spanned 2 consecutive days and were attended by three participants and the facilitator. The daily agenda for the overall workshop is shown in Table 10.

Table 1

Daily Itinerary of the Workshop

Days	Agenda	Duration
Day 1	Discussion over the protocol Introduction to the theoretical models	1 hr
Day 2	Discussion on the theoretical models	2 hr 5 min
Day 3	Discussion on the theoretical models	2 hr 55 min
Day 4	Introduction to the qualitative data	2 hr 11 min
Day 5	Identifying statements related to information seeking Information clustering	2 hr 15 min
Day 6	Behaviour analysis of the participants Categorising participants into different personality types to build archetypes	47 min
Day 7	Needs analysis: identifying the what, how, and when	1 hr
Day 8	Identifying different categories of information	2 hr 49 min
Day 9	Identifying metaphors depicting the journey of a woman's body	55 min
Day 10	Ideating different design concepts to build the conceptual model	36 min
Day 11	Ideating and brainstorming over the concepts	6 hr
Day 12	Developing the concepts and building the conceptual framework	6 hr

For the offline sessions, Day 1 involved revisiting and synthesising the information obtained from the online sessions (the offline workshop occurred after a 2-month gap due to participant unavailability). On Day 2, the focus shifted to the development of the social communication framework.

1.2.5 Procedure

The workshop was divided into three parts: immersion, ideation, and creation.

1.2.5.1 Immersion (Five Days). To familiarise the workshop participants with the context of the workshop and ensure the same level of understanding, the following steps were taken:

1. Introduction to the existing literature – The present condition of adolescent reproductive health and well-being was deliberated upon in accordance with the criteria set forth by the WHO (Chandra-Mouli et al., 2017; Liang et al., 2019), followed by an introduction to speculative and critical design thinking and an exercise using a cone of uncertainty (Mitrovic, 2015; Dunne & Raby, 2013). The theoretical frameworks of health psychology (Marks et al., 2018)), stages of change (DiClemente & Prochaska, 1998), risk perception (Rimal & Real, 2003), and nudge (Thaler & Sunstein, 2020) were also discussed. To make the sessions interactive, each participant selected a topic to read, for which the facilitator provided reference material. Subsequently, each participant presented their selected topic, followed by discussions and clarifications. This step was essential for comprehending the deficiencies within existing programmes and for pinpointing the psychological and design theories and concepts necessary for crafting an alternative framework.

2. Introduction to the qualitative data – The participants were furnished with transcripts of the qualitative data, which comprised 30 in-depth interviews of women between the ages of 26 and 60 hailing from various Indian cities. To acquaint themselves with the data, each participant reviewed the transcripts of two or three interviews, depending on feasibility and time constraints. The interviews revealed the qualitative participants' understanding of reproductive health and well-being. The qualitative participants' statements were subsequently categorised based on indicators of knowledge, information-seeking behaviour, cultural influences, education, 'ideal situations', and 'not-so-ideal situations'. This approach facilitated the identification of gaps in the understanding of reproductive health and well-being as well as recurring emergent patterns. Behaviour analysis was conducted for each qualitative participant by identifying and contextualising the factors influencing their behaviour patterns, such as media exposure, education, and sociocultural norms.

1.2.5.2 Ideation (Five Days). Once the participants had developed an understanding of the overall scenario and its relevance in the Indian context through the qualitative study data, they were able to identify the gaps in the current health communication system. This knowledge

was converged through a series of brainstorming sessions (see Figure 41), where the data generated from the research were synthesised and analysed. The purpose of the brainstorming sessions was to identify how to communicate messages to have them work at a metacognitive level; devise a mechanism to cater to different personality types; and identify ways to help individuals speculate about their health. During the concluding brainstorming session, potential techniques for delivering the content in an interactive and gamified fashion were explored. This encompassed considerations such as game-based interactions, strategies for cultivating habits, and the incorporation of self-journaling.

Figure 1

*Online Workshop to Ideate and Brainstorm Using a Collaborative Tool*
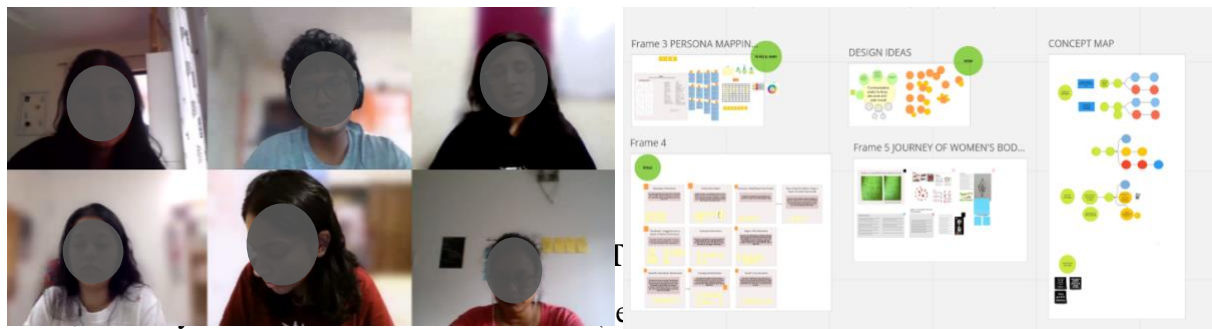
interdisciplinary marathon which accelerates innovative ideas into physical and digital prototypes' (Wikifactory, 2023). It is an intensive and time-limited event where teams or individuals collaboratively create and design new and innovative products, projects, or solutions.

The aim of the Make-a-thon was to expand the ideas that were formulated in the online workshops and converge them to build a gamified toolkit for increasing adolescents' awareness of their reproductive health and well-being. The Make-a-thon commenced with a review of the preceding sessions and the consolidation of the gathered information. Subsequently, the flow of the content and the concept was elucidated. This included the types of messages to be delivered and the organisation of the sequence of actions that would lead to speculating about one's journey towards well-being.

Figure 2

Offline Workshop Sessions
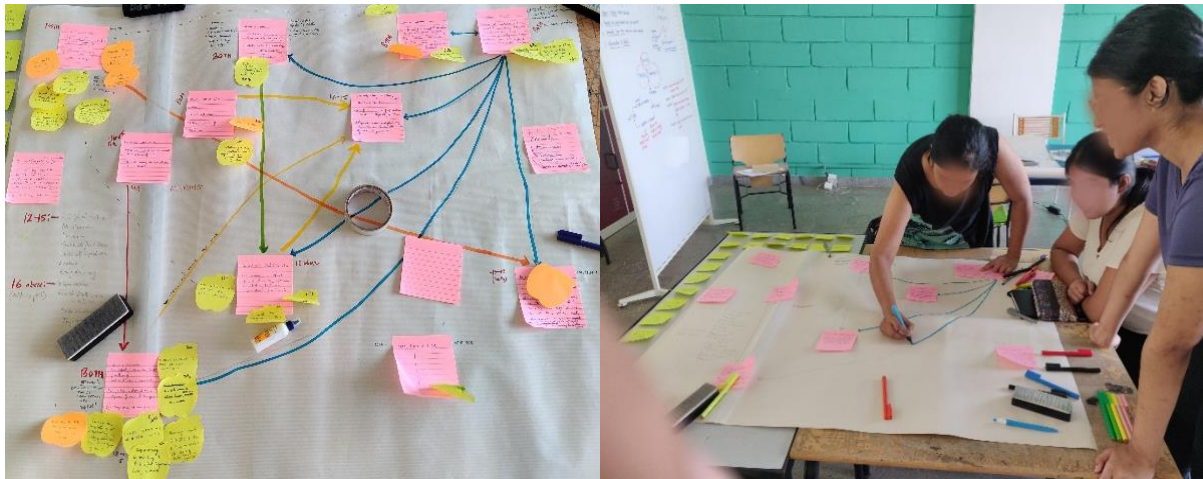
1.3 Identifying the Components for Building the Social Communication Framework

The primary objective of the workshop was to devise strategies for developing an adolescent-oriented communication framework that would facilitate the creation of learning environments that are engaging and promotive of reflection, speculation, and critical thinking. Such a framework would facilitate knowledge building in a manner that encourages adolescents to not only conceive information but also scaffold upon existing information.

The three major outcomes of the workshop were: (a) the identification of archetypes based on behavioural analysis; (b) the identification of metaphors representing the journey of a woman's life; and (c) categorising sections of information to facilitate the development of a conceptual framework.