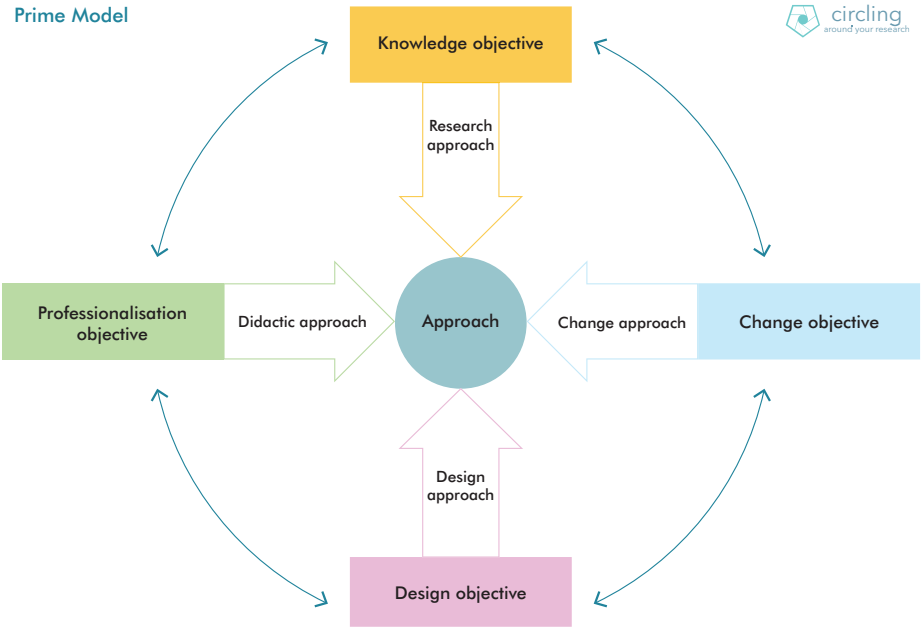
Objectives circumplex

In short

In CAYR, we distinguish between 1) a knowledge objective, 2) a development objective, 3) a professionalisation objective, and 4) a change objective. We use the objective circumplex to identify which objectives we want to pursue in the research project.

- A research project always has the objective of developing new knowledge. This is what we call the 'knowledge objective' of the research project.
- A research project also had a 'development objective' when it aims at developing a concrete product over the course of the project, e.g. a protocol, manual, tool, training course, checklist, diagnostics instrument, or treatment method.
- A research project has a 'professionalisation objective' if it is aimed at having stakeholders learn something during the project, to have them view reality differently, or to influence their attitude. This can involve healthcare professionals, clients, family members, researchers, or other stakeholders.
- A research project has a 'change objective' if it aims to stimulate changes in the way of working, culture or organisation of healthcare over the course of the project.

These four research objectives can be placed along two axes, creating an objective circumplex. The vertical axis connects the two objectives that you could term the research output, i.e. knowledge and products. The horizontal axis connect the two targets that can be seen as the research outcome, what the research project should cause, i.e. professionalisation and change.



Output

The output is focus in terms of the objectives to be worked on during the research project. This may serve as input for the research approach.

Approach

Working with the objective circumplex takes place in four steps:

Step 1: Thinking of objectives (10 minutes)

In step one, the process manager asks the participants to individually think about the following four questions:

1. What do we want to discover through the research project? Formulate the answer by starting with 'Insight into …'.
2. What do we want to have developed in the end, concretely? Formulate the answer by starting with 'A (tool, training course, checklist, procedure, instrument, method, etc.) … to …'.
3. What should we and other have learned by the end of the research project? Formulate the answer by starting with '… [names of delineated target groups] have learned to … / have changed their attitude towards …/etc.'.
4. What do we want to improve or change in the organisation/culture/system? Formulate the answer by starting with 'Within [organisation], there is more attention to …/a method for …/ room for…/etc.'.

Participants can write down their answers on post-it notes in the case of a physical meeting, one answer for each post-it note. Four different colours of post-it notes can be used in this. Participants write down their answers individually in online meetings.

Step 2: Identifying objectives (20 minutes)

In step two, the facilitator asks each individual about his answer to the first question. The post-it notes are gathered and put on an objective circumplex, under 'knowledge objective'. Once these have been gathered from all participants, the facilitator moves on to question two. These answers are put above 'design objective'. The answers to question three are put to the right of 'professionalisation objective', and the answers to question four to the left of 'change objective'.

Step 3: Clustering objectives (20 minutes)

After the break, the participants attempt to collectively cluster the answers for all four objectives in step three, by grouping the post-it notes dealing with the same issue.

Step 4: Organising objectives (20 minutes)

Following this, in step four the facilitator goes through the clusters for each objective type and tries to identify together with the participants whether a timeline can be identified in the objectives. Objectives that could be realised early on in the research project are placed closer to the centre.

Step 5: Prioritising objectives (20 minutes)

Finally, participants can be asked to indicate which of the four (clusters of) objectives should be given priority according to them. These can be objectives of the same objective type, or of different types. The facilitator hands four stickers to each participant for this purpose, which they can stick on the objectives. In an online meeting, the participants communicate their priorities to the minutes secretary who sticks virtual stickers on the objective circumplex. In setting priorities, it is best to remind participants of the preconditions of the research project in development.

The lead time and the available resources will primarily determine which objectives are realistic and which are not. By organising the objectives according to time, there is a major likelihood of objectives located far from the centre not being as feasible as objectives close to the centre of the circumplex.

Example

When developing a research proposal for the introduction of a new technology ('X') in healthcare, a project group considered the objectives of the research project. This resulted in 47 possible objectives. These objectives were then placed on the axes of the objective circumplex, clustered, and ordered. Finally, checkmarks indicate which objectives participants deemed most important. The result is shown in the image below:

As this figure is not legible, we provide a short explanation. Under 'knowledge objective', four clusters of questions have been placed and organised: 1) questions about the process of applying the technology, 2) questions about impeding and promoting factors for the introduction of the technology, 3) questions about the value the technology adds, and 4) questions about other target groups for implementation of the technology.
Above 'development goal', five clusters of possible products are given: 1) promotional materials, 2) healthcare tools, 3) advice on the further development of the technology, 4) advice to other healthcare organisations, and 5) advice on the development of a quality mark.

Three objective clusters are shown to the right of 'professionalisation objective', placed in a specific order. Firstly, the research projects aims to achieve more awareness of the technology among clients, informal caregivers, and healthcare professionals. Subsequently, the aim is to have them get to know this technology. Finally, the research project strives for the actual application by healthcare professionals in their day-to-day work.

Finally, five clusters of objectives are shown to the left of 'change objective', logically organised. First, there is the aim of 1) the technology being accepted in the organisation, followed by 2) the technology being embedded in the working process. This is followed by 3) financing being arranged. This must in turn lead to the 4) unburdening of informal caregivers and 5) ultimately improving healthcare.

This example shows that a theory emerges along the horizontal axis about the way in which the research project will contribute to practice. This is also termed the 'theory of change' of a research project (De Silva et al., 2014).

Tips for the manager

- To speed up the process during the working method, the facilitator and the minutes secretary can cluster all the post-it notes during the break between step two and three.
- While clustering, also verify whether all participants agree with the clustering and the labels assigned to the clusters. The aim of clustering is to direct the process and to reach a consensus in this. This means that it is important that the group agrees with the choices made.
- Giving a hypothetical deadline may help in step four: 'say we're done in two years, what are the answers to the questions then?'.
- To make step four concrete, you could have each participant say which three priorities they would set in the objectives. This helps in focussing.
- When discussing all objectives, it may help to verify whether the group really does find them useful and whether the overview is complete. This also contributes to focussing. Here, we can specify to which target group the objectives relate, to further concretise the objectives.

Bases

Working with the objective circumplex is based on the principle that practice-based research can be a powerful tool to realise changes in healthcare and to develop knowledge on these at the same time. Research, design, change and development strengthen each other (Vermaak, 2009). By asking the participants these four questions (step one), we invite participants to broaden their view instead of focusing on just the knowledge objective of the research project, and to state their ideas on improvements around the practice issue. Because we distinguish between four types of objectives, we get an overview of four types of activities that need to take place in the research project: 1) research activities that contribute to answering the research questions; 2) design activities that lead to the desired products and training courses; 3) training activities that contribute to the professionalisation of stakeholders; and 4) change activities that bring about change and embedding in the organisation. Finally, the working method helps in gaining insight into the interests of stakeholders. The working method output may include that it is important for a participant-PhD candidate that the research project results in a peer-reviewed article or that the healthcare professionals learn something about a new way of working during the research project. Clearly stating these interests promotes successful collaboration within the consortium.

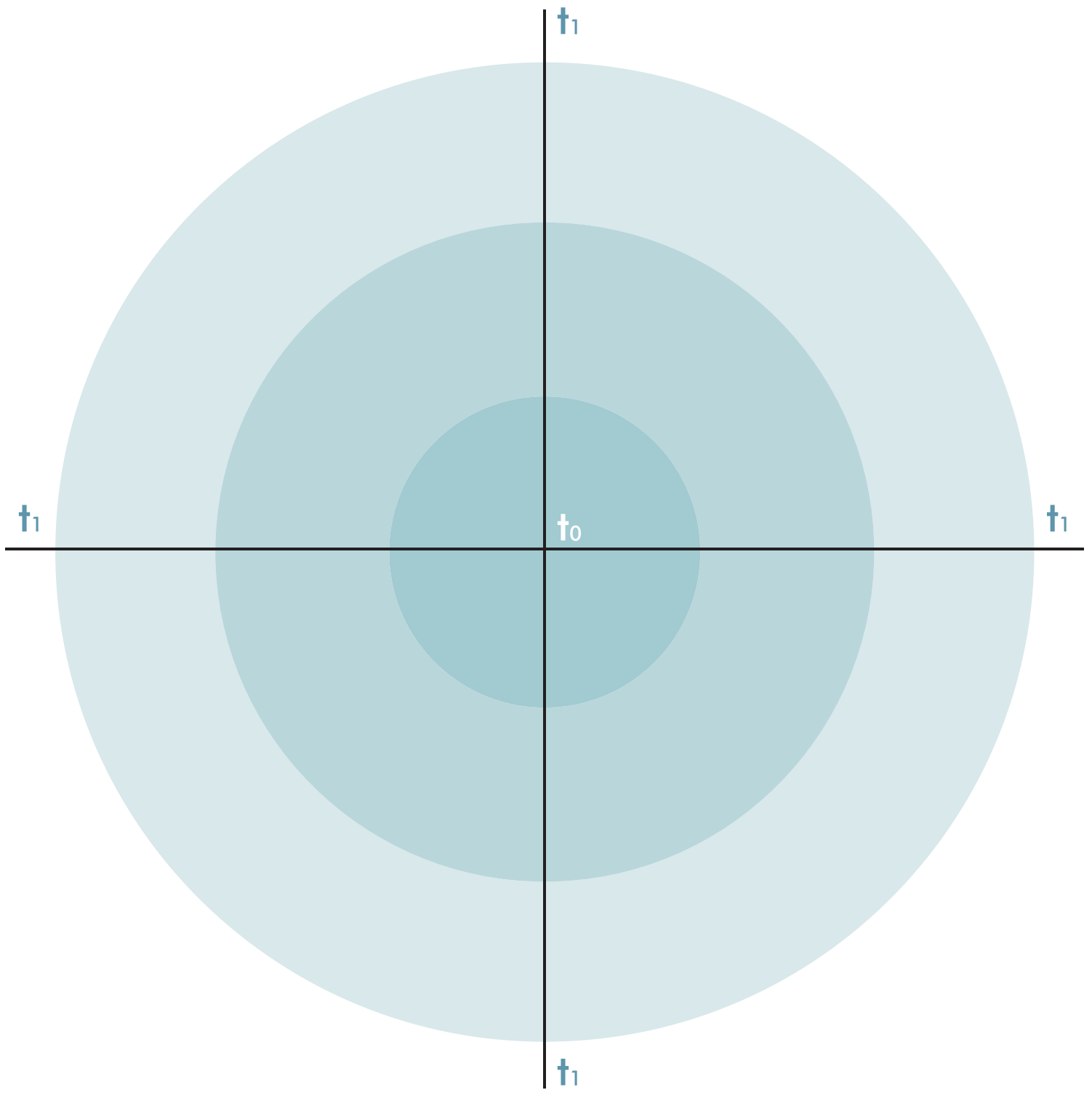
Materials

- Four different colours of post-it notes
- A whiteboard or wall on which post-it notes can be put, and on which the objective circumplex can be put or drawn
- For online meetings: a virtual whiteboard (e.g. Mural)

Objective circumplex

circling
around your research

Knowledge objective



Professionalisation objective

Change objective

Design objective