Amsterdam University of Applied Sciences

Research checklist

Kanis, Marije

[Link to publication](#)

Citation for published version (APA):
Kanis, M. (2018). Research checklist. Hogeschool van Amsterdam.

Research Checklist

When conducting research, for example when motivating your design and evaluating this in a user study, there are a number of things to consider. That is why we made this extensive research checklist, so to simply guide you in checking whether all the steps in this process are in order and that important points are not overlooked. One item might be more relevant or difficult to attain than the other (that is why there are also Bonus checks included), but important is that this checklist will enable you in describing and conducting your research in a more consistent and complete manner.

Research introduction & motivation

Defining the main research question: What is the aim of your research / design?

What are the sub research questions?

What do you want to study with your prototype/design?

Why do you want to study this?

With whom are you studying this? (what is your research target group?)

Literature study

Enough investigation whether other people have studied this (including competitors)

What is lacking in other research / products / designs?

What is the research gap?

Why is your (design) research different/ better?

Which secondary research data (background information) of others are useful for your research?

Are the sources valid, recent and reliable?

Is all research objective and referenced correctly?

Thus: no assumptions, 'fake news' and statements without proper citing

All sources are cited and placed correctly, with name, year, source in text and reference list in one style

(e.g. APA, Harvard style). Tip: It is handy to use referencing software, e.g. Endnote or Refworks

Research plan: Practical steps needed prior to conducting the study

A research plan / study protocol has been made, with practical thoughts on:

When and where the study is going to take place.

The duration of the study.

What the procedure is (e.g. 15 minutes Introduction | 15 +15 minutes Interaction with X, Y | Discussion).

Who are the participants? What are the participant criteria? What is the sample strategy?

Method of how participants & other parties are informed and engaged (e.g. by letter).

Arrange necessary equipment, (recording) devices, thank yous and other necessities.
(e.g. Internet, parking space, room reservations, refreshments, post its)
Prepare test material (screenshots, your design, prototypes), do a test-run, pilot study.
Determined whether there are any ethical and legal issues and whether ethics review is required.
(e.g. can participants opt out?, intellectual property)
Considered consent for use of photos, audio- and video-recordings.

Method: Accurate description of study approach, how the research question is addressed

Which qualitative and/or quantitative method is used to collect data?
E.g. Interviews, Questionnaires, Focus group, Observations, Think-a-Loud method
Why was this research method used?
Bonus: What are the (dis)advantages of this method?
Description of why and what of participation reward.
Noted precisely of how many participants were engaged in the study.
What are the characteristics of the study participants?
E.g. Gender, age, experience with technology, physical and cognitive abilities
How have the participants been selected?
Bonus: Describe sampling strategy/ criteria.
How many participants quit with the study or did not answer all questions?
Bonus: What was the response rate? (% of persons asked to answer a survey who actually answered)
What were the participants precisely asked? What were the exact questions?
(questionnaires can be added as appendix)
Where was the study executed? What was the context?
E.g. In a lab environment, their own environment (at home or central location, etcetera)?
What was the procedure?
E.g. How were the questions posed? Were participants asked a task, what kind of task?
The study has been registered and archived (Think of storage, permission and consent!).
E.g. Via audio/video- recordings, logging, filled in questionnaires
Considered how the data de data is processed, analysed and used (data analysis).
Bonus: In the case of a questionnaire, type of scale was used consistently (e.g. Likert-scale)
Are you following the best practice for the collection, storage and management of data?
Considered consistency of research
E.g. Did you ask all participants the same questions?
Was there a potential bias in the study?
What have you done to minimalize this? (E.g. no leading questions)
In the case of multiple studies, with different methods, these were written individually per study.
In the case of multiple studies: Described whether with each study, different, unique participants were recruited.

Report & Analysis

Details of participants were anonymized.

The answers of participants were transcribed individually (you could use appendix).

What people said and done has been noted in detail.

Precisely noted how many people shared opinions.

What people said has been quoted correctly.

What were the most remarkable findings?

What are the lessons learned and take aways from the study?

What are the most important conclusions (based on results study)?

To what extent were the main questions and sub questions answered?

Bonus: Are the results statistically significant?

Are the results also found in other research? (literature check)

Bonus: What is the reason why other studies do/not support the findings?

Has enough solid and valid data been collected of enough participants, so valid and reliable conclusions can be drawn?

What are the limitations of the study? What are points for improvement?

Think of: Is the collected data really reliable, relevant, valid and generalizable?

Future work: Which further questions and other issues came out of the study that deserve further research?

What are the recommendations/design guidelines coming from the study? For your own study, design, but also for others, the community?

E.g. next study will use a different method, in which aspects x of the design will be further evaluated.

When using images, tables and graphs: Are these clear for the reader?

Think of: title, description x- and y axis.

Are the study details written down completely, but also concisely?

You can add questionnaires, etcetera in the appendix.

Proofread for mistakes in spelling, punctuation and grammar. Have you used the correct headlines?

References, sources and citing have been checked.

There is no plagiarism.