

Research Proposal Outline: Data Collection – Research Methods and Professional Practice – Michael Geiger

For a suitable data collection of the planned project proposal, some aspects should be considered. Since I have not decided on the final topic of the project proposal at the moment, both topics will be examined below in relation to a suitable data collection in order to train the skills of data collection. Possible topics for the project proposal are on the one hand "What is the gender pay gap in the technology sector in Germany?" and on the other hand "App Development to support the physically disabled."

Since a potentially large survey group is available for the gender pay gap in the technology sector in Germany, a survey is a good option for this topic. The standardized questions allow statistically validated data to be collected. For example, questions about employment times can confirm the thesis that the disproportionate wage gap in the technology sector is a decisive factor for the unadjusted gender pay gap in Germany. But also questions related to gender-specific negotiation strategies, which are currently insufficiently examined, can possibly be adequately evaluated by a large survey group. On the one hand, this could confirm (or refute) the existing level of knowledge and, on the other hand, contribute to the existing knowledge gap in relation to the adjusted gender pay gap. The questionnaire, standardized by the format of the survey, makes it possible to address different sectors of the technology sector and, if necessary, to make comparisons. In this way, further findings and theses can be developed, which can help to shed more light on the topic or to show further gaps in the state of research. A major part of the survey should consist of closed questions to enable an effective evaluation, but open-ended questions should

also be included if necessary, as these can provide further information about arguments that have not been taken into account.

For the topic "App development to support the physically disabled.", on the other hand, a questionnaire is appropriate, since it is to be expected that the group of software developers who explicitly create apps for the physically disabled is to be expected to be smaller. On the other hand, it might also be difficult to find a larger number of willing physically disabled people who are willing to share their experiences. Since the experiences of both survey groups are of central importance in order to find out improvements in app development for the physically disabled, two questionnaires should be created for each survey group in this case. It should be noted that both groups are experts in their fields, as the app developers already have some prior experience in relation to the claims of the physically disabled and the users of these apps have practical experience of using them, which is comparable to that of people without a physical disability such an impairment cannot be anticipated or can only be anticipated with difficulty. Closed questions can help to determine the extent to which the existing literature can be validated by one's own results with regard to user preferences, difficulties of use and handicap-friendliness, and to what extent developers take such factors into account. However, better and particularly informative conclusions can be expected from open-ended questions. If necessary, it should be considered whether the data should be collected through interviews, ideally face to face, since non-verbal information can also be obtained in this way. It should also be noted in this regard that this is an issue that respondents may perceive as uncomfortable or discriminatory. This can be reduced by personal contact with the interviewee.

The present reflection on a suitable data collection method shows that it should be individually tailored to the respective topic and question. Various aspects such as the

expected survey size, data sets to be collected and potentially negative perceptions of the respondents must be taken into account and a suitable method selected accordingly in order to achieve meaningful results but also to respect the respondents personally and to deal with them appropriately.