



# Manual for the Methodological Best-Practices in Research Dedicated to Rural NEETs

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This manual is one of the most difficult tasks to be completed under this action. Our objective was stated as to build a manual for evaluating research about the rural NEETs and for presenting best practices. We also targeted to form a guideline to be used in designing our research studies. As the research about the NEETs and especially rural NEETs has a multidisciplinary characteristic, the practice of the research is methodology heterodox. Hence, our task was to construct a guideline to compare “apples and oranges”, we hope we succeeded on it. The task is a product of the collective effort of many members of the Action. Pinar Uyan-Semerci, Francisco Simoes and Claudia Petrescu contributed to the composition of this manual. Paul Flynn, Stefan Bojnec, Maria Fernandes-Jesus, Frida Jonsson, Selman Gültekin helped us to form the final version with their comments. This manual is an unfinished task, it will be enriched when it will be used in the craftsmanship of research in the field.

Emre Erdoğan

February 2022

# PREFACE

The following manual is intended to establish best research practices in the field of rural young people Not in Employment, nor in Education or Training (NEET). The effort made by the editors of this manual, in the framework of the COST Action Rural NEET Youth Network, is both important and original. Indeed, rural NEETs are still pretty much invisible in the literature. More importantly, the limited number of scientific works focusing entirely or in part on this sub-group of NEETs are not supported by a guide which identifies the main strengths and shortcomings of the existing literature. This manual proposes a systematic approach, serving as both a training material for Young Researchers (as defined by COST), as well as a source to motivate new research efforts.

The manual is essentially divided in four main sections. The first brings forward the main issues regarding the comparison of research as well as the key definitions that must be taken into consideration when aiming at developing research focused on rural NEETs. The second section establishes the different dimensions for analysing the quality of research reports, based on recommendations usually found in the literature. The third section offers a schematic and very practical overview of how to apply these guidelines. This section offers, therefore, a guide on how to analyse the quality of a given study, or on how to develop a sound research protocol. The final section encompasses the application of the identified research quality criteria, by dimension, to three different types of reports focusing on rural NEETs which have already been published internationally. Furthermore, some conclusions stemming from the analysis of these reports are drawn about the strengths, caveats, and recommendations for providing sound research about rural NEETs in the near future.

In sum, this is a much-needed manual for all social scientists interested in commencing or improving their research about rural NEETs or other vulnerable groups of rural young people. The sharp contextualisation and definition of analytical criteria for conducting research efforts (as well as the very practical side of this document) offers a clear pathway for improving research efforts in a near future. This may well be especially useful for Young Researchers and in line with COST's vision for the European scientific ecosystem.

Francisco Simões

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# WHAT AND HOW TO COMPARE IN RESEARCH



## Developing an Inclusion/Exclusion Criterion

The selection of research studies to be evaluated is an important decision. Every systematic study begins with selection criteria, meaning that the evaluator has to answer a simple question: Which studies will be included, and which excluded?

Methodologies developed for meta-analyses and systematic literature reviews present the roadmap for exclusion. For example, PICO (Population, Intervention, Comparison, and Outcomes) focuses on generally quantitative articles in order to identify components of clinical evidence for systematic reviews in evidence-based medicine. Researchers using this methodology define an “inclusion criteria” by establishing which research articles will be included in the study and, of course, which other ones are excluded. Types of studies, the type of intervention, the outcome, the population, the publication language, and the time frame are amongst these criteria for inclusion (Stern et. al, 2014).

Another methodology for identifying and selecting studies is SPIDER (sample, phenomenon of interest, design, evaluation, research type), namely qualitative and mixed-method studies. This approach seems superior to PICO since it provides better results in qualitative studies (Methley et. al, 2014), with inclusion criteria being applied mandatorily in the five key dimensions of the SPIDER system.

In our *“Manual for the Classification of Intervention Best-Practices with Rural NEETs,”* we developed inclusion/exclusion criteria in order to identify relevant interventions. This set of criteria may be useful when considering methodological best practices. The criteria were:

- Area: rural
- Age: 15 – 29
- Time: 2010 – 2020
- Focus of research: education, employment, entrepreneurship, mobility, social inclusion, and sustainability.

These criteria are used in this manual because there are differences in definitions as noted in the Glossary of the Manual for the Classification of Intervention.



## Rural:

According to Eurostat, a rural area is one where more than 50% of its population lives in rural grid cells, as used in the degree of urbanisation. According to the World Bank and the UN, the Degree of Urbanisation identifies three types of settlements (Eurostat, 2020). These are:

- Cities, which have a population of at least 50,000 inhabitants in contiguous dense grid cells (>1,500 inhabitants per km<sup>2</sup>);
- Towns and semi-dense areas, which have a population of at least 5,000 inhabitants in contiguous grid cells with a density of at least 300 inhabitants per km<sup>2</sup>;
- Rural areas which consist mostly of low-density grid cells.

Given that there is no consensus on the definition of rural, we also suggest that the definition of the locality (in which this research study has been conducted) is also acceptable. However, some studies focusing on NEETs may include analyses regarding the rural segment, and this may also be included in the analyses.

## Youth:

For statistical purposes, the United Nations, defines 'youth' as those persons between the ages of 15 and 24 years, without prejudice to other definitions by the Member States. The UN also recognises that this varies without prejudice in relation to other age groups listed by member states such as 18–30. EUROSTAT defines the age range as 15–34.

## NEETs:

This indicator indicates the share of young people who are not in employment, education, or training (NEET). It corresponds to the percentage of a given age group and sex not employed and not involved in further education or training. The numerator of the indicator refers to persons meeting these two conditions:

1. They are not employed (i.e., unemployed or inactive according to the International Labour Organisation definition) (ILO, 2020);



2. They have not received formal or non-formal education or training in the four weeks preceding the survey.

The denominator in the formulae is the total population of the same age group and sex, excluding the respondents who have not answered the question “participation in regular (formal) education and training” (Eurostat, 2020a).

## Comparing Different Methodologies

Our task requires comparing different methods utilised in analysing the situation of rural NEETs, meaning that the reviewer must compare “apples to oranges” many times. A quick survey of methods used in academic papers focusing on NEETs shows that the topic is the subject of different methodological inquiries such as surveys, secondary data analyses, focus groups, ethnographic studies, and clinical interviews. Another study shows that academic production focusing on NEETs are from different disciplines such as psychology, psychiatry, econometrics, and sociology which deploy different methodologies (Simoes et. al, 2021). Each of these different methods have different ontological and epistemological assumptions, and every broad category used to classify research methods includes an extraordinary level of variation. This manual must consider the difficulty of proposing a minimum agreement on criteria for evaluating different research studies without losing the crucial differences.

Although there are some objections to describing research methods under two broad and conflicting traditions, the quantitative–qualitative divide distinction is still generally accepted. Quantitative methods generally focus on nomothetic research, and seek to discover the universal laws in order “to explain and govern every observed phenomenon and to determine a universal knowledge” (Delmar, 2010). This tradition is related to the positivist interpretation of social sciences, and “generalisability” concerns the external validity of the research findings.

In the qualitative tradition, generalisability is not the major objective. Meanwhile, the philosophical background of the qualitative approach is interpretivist and idiographic. It targets “understanding of how individuals, through their narratives, perceive and experience their lives, constructing meanings within their social and cultural contexts” (Carminati, 2018). The researcher has an active role in data collection and giving meaning to it; hence, this research tradition has been criticised for being “soft”, subjective, and most importantly, not generalisable.

However, recent studies presented opportunities for making generalisations, especially when



trying to shape the policy-making processes. Firestone (1993) proposed a new typology of generalisations and showed that the limitations about the generalisability of findings of qualitative research are valid only in one of three different types of generalisations. These types are:

- Statistical generalisation: the most common definition, researchers want to make generalisations about a population, based on the findings from a sample.
- Analytical Generalisation: researchers try to contribute to theory based on their particular observations. They focus on developing concepts and processes by closely analysing their cases.
- Transferability–Reader Generalisability: the findings of the qualitative research have been transferred to other settings, individuals, and contexts. The researcher contributes to this process by describing the cases, contexts, and research process. However, the agency in the transferring process is left to the “reader”, namely other actors, researchers, policymakers, etc.

As an alternative to the problem of generalisation, researchers use mixed-method research studies, and these employ more than one method. The researcher collects and uses quantitative and qualitative data in the same study. It is defined by Creswell et al. (2007, p. 5) as follows:

“Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone.”

These ontological differences between different methods lead us to evaluate each method with its premises and use different criteria in the classification process.

# DIMENSIONS FOR EVALUATING BEST PRACTICES



## Identification of a Research Problem

The research question/problem is the key element of the research process. It defines the research design, and the methods preferred by the researcher will be justified by their capabilities to answer this research question. In other words, “a research project is built on the foundation of research questions.” (Blaikie, 2000).

## Source of A Research Question:

Although the ideal representation of scientific craft draws a research cycle starting with a theoretical discussion, it is known that there is no logical way of asking research questions. As Karl Popper says, “there is no such thing as a logical method of having new ideas. ... Discovery contains ‘an irrational element,’ or a ‘creative intuition.’” (1968, p. 32).

Almost every research question is idiosyncratic, meaning that it is the outcome of the researcher’s personal preferences, characteristics, and experiences. Overestimation of objectivity and the supposed value-neutral position of the researcher is not more than a wrong assumption.

## Characteristics of A Good Research Question:

A good research question must have certain characteristics. According to King et. al. (1994), the characteristics of a good research question are:

1. A research study should pose a question that is “important” in the real world;
2. A research study should make a specific contribution to identifiable scholarly literature by increasing our collective ability to construct verified scientific explanations of some aspect of the world (p.15).

There are also some structural characteristics of a good research question. (Monash University, 2022) These are:

1. It shouldn’t be normative;
2. It should be researchable i.e., you must have access to a suitable amount of quality re-



search materials, such as academic books and refereed journal articles.

3. **It must be clear:** namely, it provides enough specifics that one's audience can easily understand its purpose without needing additional explanation.
4. It must be **focused:** it is narrow enough to be answered thoroughly in the space the writing task allows.
5. It must be **concise:** it is expressed in the fewest possible words.

## Indicators of a Good Research Question:

In evaluating research studies, the reviewer must consider the following characteristics of a good research question.

A good research study must have these indicators:

- The research question or the research objectives are clearly stated.
- The researcher must present their contribution to the wider body of scientific knowledge.
- The research question needs to have structural characteristics:
  - ◊ Non-normative;
  - ◊ Researchable;
  - ◊ Focused.





## Ethics & Research Integrity

Any scientific research must be conducted within the boundaries of research ethics. Research ethics are more than simple written rules, they are a codification of research morality, and research ethics specify the basic norms and values of the research community. These norms and values are not only related to the ethics of scientific practice, they are also reflections of the norms and values of society (Brall et. al., 2017).

There are different lists and typologies of ethical principles. We can summarise some of them below. Sourced from <https://www.city.ac.uk/research/support/integrity-and-ethics/ethics/principles>:

- **Respect for persons:** All research participants must participate voluntarily, free from any coercion or undue influence, and their rights, dignity, and autonomy should be respected and appropriately protected.
- **Beneficence:** Research should be worthwhile and provide value that outweighs any risk or harm. Researchers should aim to maximise the research's benefit and minimise the potential risk of harm to participants and researchers. All potential risks and harm should be mitigated by robust precautions.
- **Justice:** Research should be just as between different members or groups in society. A core principle of justice in relation to research is equal treatment. An injustice occurs when some benefit to which a person is entitled is denied to them without good reason or when some burden is imposed unduly on them. Researchers need to give careful consideration to the overall societal impact of their research both in the selection of participants and the benefits and burdens arising from it.
- **Informed Consent:** Informed consent requires that research staff and participants should be given appropriate information about the research, in a comprehensible manner, and without duress or inappropriate inducement. The information should include: the research procedure; the purposes; risks and anticipated benefits; alternative procedures (where therapy is involved); and, a statement offering the participant the opportunity to ask questions and to withdraw at any time from the research.



- Credit author statement or contributors' roles taxonomy: the corresponding author and if more co-authors who have contributed to its different parts.
- Confidentiality and data protection: individual research participant and group preferences regarding anonymity should be respected and participant requirements concerning the confidential nature of information and personal data should be respected.
- Integrity: research should be designed, reviewed, and undertaken to ensure recognised standards of integrity are met, and quality and transparency are assured.
- Conflict of Interest: The independence of research should be clear, and any conflicts of interest or partiality should be explicit. A conflict of interest arises where a researcher's obligation to the institution, or a funder to conduct research independently, is likely to be compromised or may appear to be compromised.

In the evaluation of research studies, the reviewer must consider these ethical/moral dimensions.

## Indicators of A Good Ethical Practice:

A good research project needs to have these indicators:

- Researchers must clearly state any ethical concerns regarding their research process.
- Researchers must present their Ethical Board approval if they work with human subjects.
- Researchers must clearly state the source of finance for their research projects.
- Researchers must clearly state the non-existence of conflict(s) of interest.
- Researchers must declare rights regarding confidentiality and personal data protection.



## Representativeness/Generalisability

Scientific research aims to make generalisations about the world we are living in. Generalisability is “the degree to which the results of a research study reflect what the results would be in the real world, with another sample of participants or with the variables operationalised in other ways.” (Frey, 2018) In other words, research results are generalisable when the findings are true in most contexts with most people most of the time. It is also possible to define it as the extension of findings and conclusions of the research from a sample to the population.

Quantitative and qualitative studies have different concerns in terms of representativeness/generalisability. As stated above, we use generalisability not only referring to statistical generalisation but also considering the typology of Firestone (1993).

## Survey Research:

The survey research is the classical example of statistical generalisation, and the process is well documented. Basic concepts are:

### Target Population

The target population is “the set of elements about which information is wanted, and estimates are required (OECD, 2001). Practical considerations may dictate that some units are excluded (e.g., institutionalised individuals, the homeless, or those that are not possible to access without incurring excessive cost).” In other words, the target population refers to the population about which we wish to make generalisations. In our case, this target population may be NEETs, rural NEETs, youth at risk, or just the youth themselves in wider terms.

### Sampling Method

In survey research, generalisability depends on the sampling methods used in the research undertaken. There are two different types of sampling: Probabilistic and Non-probabilistic.

Probabilistic sampling methods are defined as follows: “A probability sample is a sample selected by a method based on the theory of probability (random process), that is, by a method



involving knowledge of the likelihood of any unit being selected” (OECD, 2001).

Whereas non-probabilistic sampling is “a sample in which the selection of units is based on factors other than random chance, e.g., convenience, prior experience or the judgment of a researcher.” (OECD, 2001).

In practice, many research studies are conducted with both (Probabilistic and Non-probabilistic) in order to improve the representativeness of data collected.

It is not easy to rely on this principle in our field of study, namely Rural NEETs. The sampling frame is not generally available, and the researcher must use alternative methods to compensate.

## Sample Size

Sample size means the number of sampling units to be included in the sample. In the case of a multi-stage sample, this number refers to the number of units in the final stage in the sampling.

The sample size is the most important determinant of the margin of error, which shows “the amount of random sampling error in the results of a survey”. If the sampling method is not probabilistic, using margin of error may be misleading (Taherdoost, 2016).

## Indicators of Generalisability / Representativeness in Quantitative Studies:

Findings of a quantitative study are generalisable if:

- The target population of the research is clearly stated;
- Sampling methods/strategies is clearly stated;
- Sampling method is probabilistic;
- Sample size and the margin of error are declared.



## Qualitative Methods:

Qualitative methods are a large family of different tools, but the most important common characteristic is their emphasis on understanding. As noted above, generalisation in the qualitative method is a matter of discussion. However, there are ways to improve these methods in terms of external validity (e.g., proximal similarity). Generalisation in qualitative methods is generalisation toward a theory rather than toward the population (Carminati, 2018). The researcher must be aware of this limitation of these methods and clearly state this.

## Sampling in Qualitative Methods:

Researchers dealing with qualitative methods prefer non-probabilistic sampling methods. These include:

- Purposeful sampling: the researcher seeks out participants based on characteristics – age, gender, place of residence, etc.– relevant to the research question.
- Quota sampling: the researcher defines the composition of participants based on some relevant characteristics. Quotas are defined at the beginning of the research process.
- Snowball sampling: the researcher relies on participant referrals to recruit new participants.
- Convenience sampling: the researcher conducts the research with available participants such as students, club members, etc.

Patton (2015) says every sampling strategy in qualitative methods is purposeful and lists 40 different ways of purposeful sampling.

## Indicators of Generalisability in Qualitative Studies:

- Researchers must show the limitation of their sampling strategy;
- The researcher must justify their sampling method;
- The recruitment method must be presented.



## Instruments

Instruments are tools used by the researcher during the research process. Structured and unstructured questionnaires, moderation guides, codebooks, and data dictionaries are amongst these instruments. Researchers and interviewers are also accepted as instruments since they are directly engaged in data collection procedures. Two important criteria, namely validity and reliability, are used in order to evaluate the quality of research instruments.

## Validity:

Validity is defined as “the extent to which an instrument measures what it is supposed to measure and performs as it is designed to perform.” (Research Rundowns, 2018) External validity is the extent to which the results of a study can be generalised from a sample to a population, namely generalisation. Although there are many different classifications, content validity and construct validity form two broad categories:

- Content validity refers to “the appropriateness of the content of an instrument”. Content validity of an instrument may be evaluated by taking expert opinions and conducting statistical analyses such as factor analysis.” (Research Rundowns, 2018)
- Construct validity is concerned with the degree to which the instrument measures the concept, behaviour, idea, or quality– i.e., a theoretical construct– which it purports to measure. Statistical techniques such as Cronbach’s Alpha may be useful to measure the construct validity of an instrument (Hays & Reeve, 2008).

Validity tests for quantitative instruments are listed as below:

- Homogeneity—meaning that the instrument measures one construct;
- Convergence occurs when the instrument measures concepts like that of other instruments;
- Theory evidence is evident when behaviour is similar to theoretical propositions of the construct measured in the instrument.

Whittemore et al. (2001) define four primary criteria for validity in qualitative research. They are:

- Credibility: the conscious effort to establish confidence in an accurate interpretation



of the meaning of data. Do the results of the research reflect the experience of participants or the context in a believable way?

- **Authenticity:** the portrayal of research that reflects the meanings and experiences that are lived and perceived by the participants. Does a representation of the emic perspective exhibit awareness of the subtle differences in the voices of all participants?
- **Criticality:** reflexivity, open inquiry and critical analysis of all aspects of inquiry contribute to validity in qualitative research. Does the research process demonstrate evidence of critical appraisal?
- **Integrity:** the process to assure that the interpretation is valid and grounded within the data. Does the research reflect recursive and repetitive checks of validity as well as a humble presentation of findings?

## Reliability:

Reliability is the instrument's consistency when it measures what it intends to measure, and reliability has two different meanings in quantitative and qualitative methods (Golafshani, 2003).

In quantitative research, it shows the consistency, stability, and repeatability of results, meaning that the researcher gets similar results in identical situations, but in different settings. There are well-defined strategies to evaluate the reliability of an instrument, such as internal consistency reliability, and inter-coder reliability (Trochim, n. d.).

In qualitative research, reliability means that the researcher's approach is consistent across different researchers and projects. In this context, reliability is interchangeably used with "dependability". This refers to "the stability of findings over time" (Korstjens & Moser, 2018).

Possible solutions to the reliability problem are:

- Test-retest;
- Split sample;
- Using standardised batteries;
- Training of research workers.

To measure the reliability of research workers, it is possible to conduct reliability tests and calculate statistical scores such as Cohen's Kappa (Lombard et. al, 2010).



## Testing Instruments

A common practice in social research is testing instruments developed by researchers. This practice is generally called a 'pilot study', and it can have different formats:

- Simple pilot test: the instrument is tested in the field by conducting interviews with potential participants.
- Expert opinion: experts evaluate the instruments in terms of validity, reliability, and relevance to the subject.
- Focus groups: researchers organise focus groups with a diverse range of participants and discuss each question.
- Cognitive interviewing: a method to evaluate sources of response error in questionnaires by specifically focusing on the cognitive response processes (Willis, 2004).

## Indicators of the Quality of Instruments:

- Researchers must use standardised instruments/measures, and these standardised instruments should be adapted to the national/local context and to the research objectives/requests.
- If researchers use their instruments, they must show the validity and reliability of these instruments.
- Researchers must be self-reflexive in qualitative studies.
- Researchers (or the research agency) must train interviewers and other data collectors.
- Instruments used in the research must be tested with pilot studies.
- Materials (e.g., interview guides, questionnaires) must be available.





## Quality of Data

Data collection is a key element of empirical research. The quality of data collected by the researcher defines the accuracy of the research findings. However, the data collection procedure is highly dependent on other components of the research. The research question, the ethical commitments and limitations, the sampling strategy, and the quality of instruments almost predetermine the data collection procedure. Hence, the researcher must consider the interlinked nature of this situation. Nevertheless, some criteria may serve to improve the quality of data collection.

Most et al. (2003) describe 'quality assurance' and 'quality control' as two interrelated procedures to improve the quality of collected data.

1. **Quality Assurance.** Quality assurance is defined as activities which occur before data collection begins, and it aims to prevent possible errors. According to Most et al. (2003), standardisation of data collection procedures, documented in a comprehensive and detailed procedure manual for data collection, may solve many problems.

This manual can include instructions for:

- Sampling strategies;
- Asking questions;
- Training of interviewers;
- Data entry.

Since qualitative research projects cover a large spectrum of different methods, it may be difficult to set up such a manual to cover all possibilities. Meanwhile, this flexibility can lead to failures in the data collection process. Hence, these items are also important for qualitative projects.

2. **Quality Control.** These activities (detection/monitoring and action) occur after data collection. However, it would be good to document quality control procedures beforehand. Detection/monitoring activities "can take the form of direct staff observation during site visits, conference calls, or regular and frequent reviews of data reports to identify incon-



sistencies, extreme values or invalid codes.” (The Responsible Conduct of Research, n.d.)

Detection of errors requires the actions necessary to disseminate them. Researchers must be aware of possible problems during the data collection phase and develop reasonable intervention strategies.

In quantitative studies, researchers generally prepare the dataset for analysis by dealing with missing values and outliers, as well as transforming the data for further calculations. These interventions must be documented and included in the research report.

In qualitative studies, having a research journal may help to improve the quality of data collection. Such a research journal will help the researcher be reflective and mitigate against possible problems. (Brown, 2021).

## Replicability of Data Collection:

Replicability is becoming a new indicator of good science. It means that the findings of research projects have to be replicated by another researcher (Diener, & Biswas-Diener, 2022). It has two dimensions, namely direct and conceptual. If a researcher exactly replicates research procedures, it is direct replication. Conceptual replication means “confirming the same results with a different methodology or a different experimental system” (Tokalić, & Perković Paloš, 2020).

In social sciences, there is a replication crisis. A joint project’s attempt to replicate findings of major psychological experiments showed that only one-third of these experiments had been replicated in different contexts. A good research study produces replicable and reproducible findings. Given this standard, the data collection process(es) must be replicable (Price et. al, 2015).

## Indicators of the Quality of Data Collection Procedures:

- Researchers must develop and use standardised data collection documents;
- Researchers must use develop and use standardised quality control document;
- Training of interviewers/enumerators/researchers is important;
- Researchers must record and report their data collection process;
- The data collection process must be well-documented to allow other researchers to replicate findings.



## Analysis & Reporting

Quantitative analysis relies on different sources of data. Surveys, secondary data such as official statistics, and other quantified data can be used in quantitative analysis. Quantitative analysis is generally variable-oriented and aims to make generalisations. Quantitative analyses may be either descriptive or inferential.

Descriptive analyses summarise the data using measures of central tendency, measures of variation, frequency tables, or graphics. The objective is to give a summary of existing distributions.

Inferential statistics uses data collected from a sample and aims to estimate a population's parameters. These estimations may be point or interval estimations. In other words, it can include a measurement which is based on the confidence level and standard error of the sample's statistics (Qualtrics, 2022). This procedure requires a probabilistic sample, whereas the basic formulae are based on simple random sampling. Other probabilistic sampling methods have different calculations of the margin of error, and each different method can increase or decrease the variance. (National Centre for Research Methods, 2006) Hence the standard error, and the ratio of complex sample's standard error to the simple random sample's standard error, is a Design Effect and thus demonstrates that the sample design inflates the standard error. It is not possible to calculate the margin of error in non-probabilistic samples.

Quantitative analyses also include hypothesis testing, namely a hypothesis that is testable, and based on observed data modelled as the realised values taken by a collection of random variables. It also has statistical significance, that is the result has statistical significance when it is very unlikely to have occurred given the null hypothesis (generally 0). Both analyses rely on the correct calculation of the standard error margin (Siegel, 2016).

Analyses in quantitative research must be replicable, meaning that the structure of analyses and the syntax must be available.

Data in qualitative research may take different forms, for instance: interviews; journals; video or audio recordings; or, other types of communication. These communications are generally transcribed for the purpose of conducting analyses. Although some researchers are satisfied with their notes, a full transcript may eliminate the validity problem and thereby permit a more reliable re-interpretation of the dataset. Transcripts may be detailed to include every pause of the interviewees, and the researcher can use them if desired, but this decision belongs to the researcher.



Qualitative data analysis is composed of a large spectrum of methodologies, but it is possible to group them into five broad categories (Dudovski, 2022). These are:

1. Content analysis. This refers to the process of categorising verbal or behavioural data to classify, summarise and tabulate the data.
2. Narrative analysis. This method involves the reformulation of stories presented by respondents, considering the context of each case and the different experiences of each respondent. In other words, narrative analysis is the revision of primary qualitative data by the researcher.
3. Discourse analysis. A method of analysis of naturally occurring talk and all types of written text.
4. Framework analysis. This is a more advanced method that consists of several stages such as familiarisation, identifying a thematic framework, coding, charting, mapping, and interpretation.
5. Grounded theory. This qualitative data analysis method starts with an analysis of a single case to formulate a theory. Following this, additional cases are examined to see if they contribute to the theory (Saunders et. al, 2012).

The choice of the analytical method is highly related to the research question and the researcher's data collection effort. However, the researcher must clearly state and justify this methodological choice.

Reporting refers to the communication of the research findings to the research audience, and the researcher has the responsibility to report the findings to maximise their impact. Different research methods have different reporting standards, but the traditional quantitative-qualitative distinction may be useful to present basic standards.

According to Norris et. al, 2015, in a quantitative study the report has to include information about:

- The target population(s) of the study;
- The sampling strategy;
- Measurement of critical variables;



- Design and procedures of data collection.

Results of the quantitative analyses must include the following components:

- Descriptive statistics of variables of interest;
- Effect sizes and confidence intervals;
- Statistical tests.

Qualitative research covers a large body of different data collection methods, and it is more flexible than quantitative research. Hence, it is not easy to define a clearly structured framework for reporting the qualitative research findings. However, there is some attempt to develop some standards. COREQ (Consolidated Criteria for Reporting Qualitative Studies) and SRQR (Standards for Reporting Qualitative Research) are two such recent efforts (Norris et. al, 2015). Both efforts provide a detailed checklist for reporting qualitative research findings, but we can focus on commonalities.

According to these studies, the reporting of qualitative research must include information regarding:

- The researcher and the research team have their characteristics and their reflexivity;
- The relationship between the researcher and participants;
- Theoretical framework;
- The sampling procedure;
- The context;
- Interview guide and data availability;
- The number and the reliability of coders;
- Main findings and evidence;
- Direct quotations;



- Integration with the previous works;
- Limitations.

## Indicators of the Quality of Analyses and Reporting:

- The researchers must justify their methodological choices.
- The researchers have to give information about their research team and the context of data collection.

### Quantitative:

- The researchers must report the sampling error of their analyses if their analysis is based on a sample.
- If the researchers report the sampling error or test their hypotheses, they must consider the correct sampling error.
- If analyses are based on data collected using a non-probabilistic sample, the researchers cannot use a margin of errors.
- Statistical analyses and the final dataset must be open and accessible

### Qualitative:

- The full transcripts of communications and coding must be available and accessible.
- The report has to include direct quotations as evidence.

# GUIDELINES FOR EVALUATING RESEARCH STUDIES:



## SURVEYS

Identification of the Research Problem	<ul style="list-style-type: none"> <li>The research question or the research objectives are clearly stated.</li> <li>The researcher must present his/her contribution to the scientific knowledge.</li> <li>The research question needs to have structural characteristics: <ul style="list-style-type: none"> <li>Non-normative;</li> <li>Researchable;</li> <li>Focused.</li> </ul> </li> </ul>
Ethics & Research Integrity	<ul style="list-style-type: none"> <li>Researchers must clearly state their ethical concerns regarding their research process.</li> <li>Researchers must present their work for Ethical Board approval if they work with human subjects.</li> <li>Researchers must clearly state the source of finance of their research projects.</li> <li>Researchers must clearly state the non-existence of conflict(s) of interest.</li> <li>Researchers must declare rights pertaining to confidentiality and personal data protection.</li> </ul>
Representativeness/Generalisability	<ul style="list-style-type: none"> <li>The target population of the research must be clearly stated.</li> <li>Sampling methods/strategies must be clearly stated.</li> <li>Statistical findings are generalisable if their sampling method is probabilistic.</li> <li>Sample size and the margin of error must be declared.</li> </ul>
Instruments	<ul style="list-style-type: none"> <li>Researchers must use standardised instruments and adopt these instruments.</li> <li>If researchers use their own instruments, they must show the validity and reliability of these instruments.</li> <li>Interviewers and other data collectors must be trained by researchers, or the research agency.</li> <li>Instruments used in the research must be tested with pilot studies.</li> <li>Materials (e.g., interview guides, questionnaires) must be available.</li> </ul>
Quality of Data	<ul style="list-style-type: none"> <li>Researchers must develop and use standardised data collection documents.</li> <li>Training of interviewers/enumerators/researchers is important.</li> <li>Researchers must record and report their data collection processes.</li> <li>Data collection process must be well-documented to allow other researchers to replicate findings.</li> </ul>
Analysis & Reporting	<ul style="list-style-type: none"> <li>The researchers must justify their methodological choices.</li> <li>The researchers have to give information about their research team and the context of data collection.</li> <li>The researchers must report the sampling error of their analyses, if they are based on a sample.</li> <li>If the researchers report the sampling error, or they are testing their hypotheses, they must consider the correct sampling error.</li> <li>If analyses are based on data collected by using a non-probabilistic sample, the researchers cannot use a margin of errors.</li> <li>Statistical analyses and the final dataset must open and accessible.</li> </ul>





## INDEPTH INTERVIEWS

Identification of the Research Problem	<ul style="list-style-type: none"> <li>• The research question or the research objectives are clearly stated.</li> <li>• The researcher must present his/her contribution to the scientific knowledge.</li> <li>• The research question needs to have structural characteristics: <ul style="list-style-type: none"> <li>◊ Non-normative;</li> <li>◊ Researchable;</li> <li>◊ Focused.</li> </ul> </li> </ul>
Ethics & Research Integrity	<ul style="list-style-type: none"> <li>• Researchers must clearly state their ethical concerns regarding their research process.</li> <li>• Researchers must present their work for Ethical Board approval if they work with human subjects.</li> <li>• Researchers must clearly state the source of finance of their research projects.</li> <li>• Researchers must clearly state the non-existence of conflict(s) of interest.</li> <li>• Researchers must declare rights pertaining to confidentiality and personal data protection.</li> </ul>
Representativeness/Generalisability	<ul style="list-style-type: none"> <li>• Researchers must show the limitation(s) of their sampling strategy.</li> <li>• Researcher must justify their sampling method.</li> <li>• Recruitment methods must also be presented.</li> </ul>
Instruments	<ul style="list-style-type: none"> <li>• Researchers must be self-reflexive in qualitative studies.</li> <li>• Interviewers and other data collectors must be trained by researchers, or the research agency.</li> <li>• Instruments used in the research must be tested with pilot studies.</li> <li>• Materials (e.g., interview guides, questionnaires) must be available.</li> </ul>
Quality of Data	<ul style="list-style-type: none"> <li>• Researchers must develop and use standardised data collection documents.</li> <li>• Researchers must develop and use standardised quality control documents.</li> <li>• Training of interviewers/enumerators/researchers is important.</li> <li>• Researchers must record and report their data collection processes.</li> <li>• Data collection processes must be well-documented to allow other researchers to replicate findings.</li> </ul>
Analysis & Reporting	<ul style="list-style-type: none"> <li>• The researchers must justify their methodological choices.</li> <li>• The researchers have to give information about their research team, and the context of data collection.</li> <li>• The full transcripts of communications and coding must be available and accessible.</li> <li>• The report has to include direct quotations as evidence.</li> </ul>



## FOCUS GROUPS

Identification of the Research Problem	<ul style="list-style-type: none"> <li>• The research question or the research objectives are clearly stated.</li> <li>• The researcher must present his/her contribution to the scientific knowledge.</li> <li>• The research question needs to have structural characteristics: <ul style="list-style-type: none"> <li>◊ Non-normative;</li> <li>◊ Researchable;</li> <li>◊ Focused.</li> </ul> </li> </ul>
Ethics & Research Integrity	<ul style="list-style-type: none"> <li>• Researchers must clearly state their ethical concerns regarding their research process.</li> <li>• Researchers must present their work for Ethical Board approval if they work with human subjects.</li> <li>• Researchers must clearly state the source of finance of their research projects.</li> <li>• Researchers must clearly state the non-existence of conflict(s) of interest.</li> <li>• Researchers must declare rights pertaining to confidentiality and personal data protection.</li> </ul>
Representativeness/Generalisability	<ul style="list-style-type: none"> <li>• Researchers must show the limitation(s) of their sampling strategy.</li> <li>• Researcher must justify their sampling method.</li> <li>• Recruitment methods must also be presented.</li> </ul>
Instruments	<ul style="list-style-type: none"> <li>• Researchers must be self-reflexive in qualitative studies.</li> <li>• Interviewers and other data collectors must be trained by researchers, or the research agency.</li> <li>• Instruments used in the research must be tested with pilot studies.</li> <li>• Materials (e.g., interview guides, questionnaires) must be available.</li> </ul>
Quality of Data	<ul style="list-style-type: none"> <li>• Researchers must develop and use standardised data collection documents.</li> <li>• Researchers must develop and use standardised quality control documents.</li> <li>• Training of interviewers/enumerators/researchers is important.</li> <li>• Researchers must record and report their data collection processes.</li> <li>• Data collection processes must be well-documented to allow other researchers to replicate findings.</li> </ul>
Analysis & Reporting	<ul style="list-style-type: none"> <li>• The researchers must justify their methodological choices.</li> <li>• The researchers have to give information about their research team, and the context of data collection.</li> <li>• The full transcripts of communications and coding must be available and accessible.</li> <li>• The report has to include direct quotations as evidence.</li> </ul>



## SECONDARY DATA ANALYSIS

<b>Identification of the Research Problem</b>	<ul style="list-style-type: none"> <li>• The research question or the research objectives are clearly stated.</li> <li>• The researcher must present his/her contribution to the scientific knowledge.</li> <li>• The research question needs to have structural characteristics: <ul style="list-style-type: none"> <li>◊ Non-normative;</li> <li>◊ Researchable;</li> <li>◊ Focused.</li> </ul> </li> </ul>
<b>Ethics &amp; Research Integrity</b>	<ul style="list-style-type: none"> <li>• Researchers must clearly state their ethical concerns regarding their research process.</li> <li>• Researchers must clearly state the source of finance of their research projects.</li> <li>• Researchers must clearly state the non-existence of conflicts of interest.</li> </ul>
<b>Representativeness/Generalisability</b>	<ul style="list-style-type: none"> <li>• Researchers must show the limitation(s) of the sampling strategy of data.</li> <li>• Researchers must give information about the sampling method of data.</li> </ul>
<b>Instruments</b>	<ul style="list-style-type: none"> <li>• The target population of the research must be clearly stated.</li> <li>• Sampling methods/strategies must be clearly stated.</li> <li>• Statistical findings are generalisable if their sampling method is probabilistic.</li> <li>• Sample size and the margin of error must be declared.</li> </ul>
<b>Quality of Data</b>	<ul style="list-style-type: none"> <li>• Researchers must develop and use standardised quality control documents.</li> <li>• Researchers must report the data collection processes used.</li> </ul>
<b>Analysis &amp; Reporting</b>	<ul style="list-style-type: none"> <li>• The researchers must justify their methodological choices.</li> <li>• The researchers have to give information about their research team and the context of data collection.</li> <li>• The researchers must report the sampling error of their analyses, if their analysis is based on a sample.</li> <li>• If the researchers report the sampling error, or they are testing their hypotheses, they must consider the correct sampling error.</li> <li>• If analyses are based on data collected by using a non-probabilistic sample, the researchers cannot use a margin of errors.</li> <li>• Statistical analyses and the final dataset must open and accessible.</li> </ul>



## DOCUMENT ANALYSIS

Identification of the Research Problem	<ul style="list-style-type: none"> <li>The research question or the research objectives are clearly stated.</li> <li>The researcher must present his/her contribution to scientific knowledge.</li> <li>The research question needs to have structural characteristics: <ul style="list-style-type: none"> <li>No proper names in the research question;</li> <li>Non-normative;</li> <li>Researchable;</li> <li>Clear and concise;</li> <li>Focused.</li> </ul> </li> </ul>
Ethics & Research Integrity	<ul style="list-style-type: none"> <li>Researchers must clearly state their ethical concerns regarding their research process.</li> <li>Researchers must clearly state the source of finance of their research projects.</li> <li>Researchers must clearly state the non-existence of conflicts of interest.</li> </ul>
Representativeness/Generalisability	<ul style="list-style-type: none"> <li>Researchers must show the limitation (s) of their sampling strategy of documents.</li> <li>Researchers must justify their sampling method of documents.</li> </ul>
Instruments	<ul style="list-style-type: none"> <li>Materials (e.g., interview guides, questionnaires coding guides) must be available.</li> </ul>
Quality of Data	<ul style="list-style-type: none"> <li>Researchers must develop and use standardised data collection documents such as coding schemes.</li> <li>Researchers must develop and use standardised quality control documents.</li> <li>Training of coders is important.</li> <li>Researchers must record and report their data collection process.</li> <li>Data collection processes must be well-documented to allow other researchers to replicate findings.</li> </ul>
Analysis & Reporting	<ul style="list-style-type: none"> <li>The researchers must justify their methodological choices.</li> <li>The researchers must give information about their research team and the context of data collection.</li> <li>The researchers must report the sampling error of their analyses, if their analysis is based on a sample.</li> <li>If the researchers report the sampling error, or they are testing their hypotheses, they must consider the correct sampling error.</li> <li>If analyses are based on data collected by using a non-probabilistic sample, the researchers cannot use a margin of errors.</li> <li>Statistical analyses and the final dataset must open and accessible.</li> <li>The full transcripts of communications and coding must be available and accessible.</li> <li>The report has to include direct quotations as evidence.</li> </ul>

# EXAMPLES of GOOD RESEARCH PRACTICES:



Our manual's objectives are to develop successful guidelines for evaluating different research studies related with NEETs in general, and rural NEETs in particular. The methodological problem of "comparing apples and oranges" constitutes the most important obstacle in this regard, especially since the studies focusing on NEETs come from many different disciplines, and also use different methodologies. Hence, our guidelines have to be as comprehensive and exhaustive as possible. Moreover, they must have the highest possible validity across different methods. Given that satisfying all these criteria is almost impossible, our manual strives to form a basis for minimal agreement.

In order to test the validity of our approach, we analysed three different studies using different methodological tools. Two of these studies belong to one of our members, Francisco Simoes, and the other is conducted by Zudina, namely a study analysed the Russian Labour Force Surveys, and which can be considered as a good example of secondary data analysis. It is possible to add other examples from different contexts, and such an effort will form a challenge to the validity of our guidelines. However, we believe that these three studies present sufficient diversity and variation as test studies.

Each of these studies have been analysed and coded by our team according to our guidelines. As many of our indicators are not binary, this left ample space for our team when accounting for subjectivity. On the other hand, we believe that our coding procedure sufficiently covers and clearly presents the situation as it really is.

We believe that these guidelines may be useful for conducting further analyses by including new studies and new methodologies. Additionally, it will also reflect the methodological diversity found in the field.



COST Action CA18213  
Rural NEET Youth Network:  
Modeling the risks underlying rural  
NEETs social exclusion

## STUDY 1: SECONDARY STATISTICS

Zudina, A. (2017).

What makes youth become NEET?

The evidence from Russian LFS.

Higher School of Economics Research Paper No. WP BRP, 177.

### Abstract:

This article addresses the issue of socio-demographic factors of becoming NEET, i.e. dropping out of employment, education or training for individuals aged 15–24. Empirical analysis was based on the micro-data of Russian Labour Force Survey (LFS) by Federal State Statistics Service for 1995–2015. The paper introduces the results of the analysis of the impact of education on NEET status, which were conducted for Russia on the basis of regression estimations for the first time. Contrary to previous studies, higher education doesn't provide a universal "safety net" from NEET status for all young people. NEET-unemployed youth in Russia mainly have tertiary education of one level or another, whilst NEET inactivity is concentrated amongst those who have only primary education and the size of the effect becomes even more pronounced for rural residents and females.



Identification of the Research Problem	<ul style="list-style-type: none"> <li>The research question or the research objectives are clearly stated.</li> <li>The researcher must present his/her contribution to scientific knowledge.</li> <li>The research question needs to have structural characteristics: <ul style="list-style-type: none"> <li>No proper names in the research question;</li> <li>Non-normative;</li> <li>Researchable;</li> <li>Clear and concise;</li> <li>Focused.</li> </ul> </li> </ul>	<p>* Research problem has been identified as follows:</p> <p>"It introduces the human capital point of view to the analysis of Russian NEET using the most comprehensive data set of the Russian LFS for the period of 1995-2015" (p.4)</p> <ul style="list-style-type: none"> <li>The study has a geo-graphical focus.</li> </ul>
Ethics & Research Integrity	<ul style="list-style-type: none"> <li>Researchers must clearly state their ethical concerns regarding their research process.</li> <li>Researchers must present their Ethical Board approval if they work with human subjects.</li> <li>Researchers must clearly state the source of finance of their research projects.</li> <li>Researchers must clearly state the non-existence of conflict of interest.</li> <li>Researchers must declare rights regarding confidentiality and personal data protection.</li> </ul>	<p>Researcher doesn't declare any ethical issue.</p>
Representativeness/Generalisability	<ul style="list-style-type: none"> <li>Researchers must show the limitation(s) of the sampling strategy of data.</li> <li>Researchers must give information about the sampling method of data.</li> </ul>	<p>Researcher uses the Russian Labour Force Survey (LFS) for 1995-2015. Sampling strategy of this survey is well documented. Limitations of the sampling have been discussed.</p>
Instruments	<ul style="list-style-type: none"> <li>Researchers must use standardised instruments.</li> <li>If researchers use their own instruments, they must show the validity and reliability of these instruments.</li> <li>Interviewers and other data collectors must be trained by researchers, or the research agency.</li> <li>Instruments used in the research must be tested with pilot studies.</li> <li>Materials (e.g., interview guides, questionnaires) must be available.</li> </ul>	<p>Researcher used standardised statistical models. Descriptive statistics are given in the appendix.</p>
Quality of Data	<ul style="list-style-type: none"> <li>Researchers must develop and use standardised quality control documents.</li> <li>Researchers report data collection process of data they use.</li> </ul>	<p>NOT APPLICABLE.</p>





<b>Analysis &amp; Re- porting</b>	<ul style="list-style-type: none"> <li>• The researchers must justify their methodological choices.</li> <li>• The researchers have to give information about their research team and the context of data collection.</li> <li>• The researchers must report the sampling error of their analyses, if their analysis is based on a sample.</li> <li>• If the researchers report the sampling error or they are testing their hypotheses, they must consider the correct sampling error.</li> <li>• If analyses are based on data collected by using a non-probabilistic sample, the researchers cannot use a margin of errors.</li> <li>• Statistical analyses and the final dataset must open and accessible.</li> </ul>	<p>Sampling errors and standard errors are reported. We assume that the survey has been conducted by using a probabilistic sampling method. Statistical analyses and the final dataset are not available.</p>
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COST Action CA18213  
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## STUDY 2: SURVEY

de Almeida, A. N., & Simões, F. (2020).

Professional development perspectives across gender  
and age groups of under-qualified rural NEETs.

Journal of community psychology, 48(5), 1620-1636.

### Abstract:

“Our study explored how self-efficacy perceptions are associated with Perceived Barriers (PB), meaning beliefs about constraints on current/future vocational development, and Professional Expectations (PE) amongst rural, under-qualified youths Not in Employment, nor in Education or Training (NEET). We also analysed how the connections between these factors varied across gender and age groups. One hundred and eighty-eight NEETs participated in this study (58.20% female;  $M = 23.05$ ; standard deviation = 1.96). Through linear regression analysis using PROCESS macros, we found that higher self-efficacy was associated with stronger PB, after accounting for the effects of training offers and income. Moreover, men showing stronger self-efficacy also displayed stronger PB, whilst men depicting weaker self-efficacy presented weaker PB, compared with women in similar conditions. Being offered more training opportunities resulted in stronger perceptions of professional barriers for these NEETs. Thus, rural, under-qualified NEETs require person-centered approaches from employment services, to support their transition to employment/training.”



Identification of the Research Problem	<ul style="list-style-type: none"> <li>The research question or the research objectives are clearly stated.</li> <li>The researcher must present his/her contribution to scientific knowledge.</li> <li>The research question needs to have structural characteristics: <ul style="list-style-type: none"> <li>No proper names in the research question;</li> <li>Non-normative;</li> <li>Researchable;</li> <li>Clear and concise;</li> <li>Focused.</li> </ul> </li> </ul>	The research question is clearly stated as "our study aims at understanding rural, under-qualified NEETs professional development perspectives. Specifically, we intend to understand how these NEETs' self-efficacy perceptions are associated with their Perceived Barriers (PB) and Professional Expectations (PE), accounting for the influence of socio-economic factors."
Ethics & Research Integrity	<ul style="list-style-type: none"> <li>Researchers must clearly state their ethical concerns on their research process.</li> <li>Researchers must present their Ethical Board approval if they work with human subjects.</li> <li>Researchers must clearly state the source of finance of their research projects.</li> <li>Researchers must clearly state the non-existence of conflict(s) of interest.</li> <li>Researchers must declare rights regarding confidentiality and personal data protection.</li> </ul>	<p>Study doesn't include any information about ethical approval procedures.</p> <ul style="list-style-type: none"> <li>Researchers have given information about their funding agency.</li> </ul>
Representativeness/Generalisability	<ul style="list-style-type: none"> <li>Researchers must show the limitation of their sampling strategy.</li> <li>Researchers must justify their sampling method.</li> <li>Recruitment methods must be presented.</li> </ul>	Target population and sampling strategy have been discussed in details.
Instruments	<ul style="list-style-type: none"> <li>Researchers must use standardised instruments.</li> <li>If researchers use their own instruments, they must show the validity and reliability of these instruments.</li> <li>Interviewers and other data collectors must be trained by researchers, or the research agency.</li> <li>Instruments used in the research must be tested with pilot studies.</li> <li>Materials (e.g., interview guides, questionnaires) must be available.</li> </ul>	<ul style="list-style-type: none"> <li>Researchers use standardised instruments.</li> <li>Materials are not available.</li> </ul>
Quality of Data	<ul style="list-style-type: none"> <li>Researchers must develop and use standardised data collection documents.</li> <li>Researchers must use develop and use standardised quality control documents.</li> <li>Training of interviewers/enumerators/researchers is important.</li> <li>Researchers must record and report their data collection process.</li> <li>Data collection process must be well-documented to allow other researchers to replicate findings.</li> </ul>	Researchers reported their data process.



<b>Analysis &amp; Re- porting</b>	<ul style="list-style-type: none"> <li>• The researchers must justify their methodological choices.</li> <li>• The researchers have to give information about their research team and the context of data collection.</li> <li>• The researchers must report the sampling error of their analyses, if their analysis is based on a sample.</li> <li>• If the researchers report the sampling error or they are testing their hypotheses, they must consider the correct sampling error.</li> <li>• If analyses are based on data collected by using a non-probabilistic sample, the researchers cannot use a margin of errors.</li> <li>• Statistical analyses and the final dataset must open and accessible.</li> </ul>	<p>Sampling errors and standard errors are reported. We assume that the survey has been conducted by using a probabilistic sampling method. Statistical analyses and the final dataset are not available.</p>
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## STUDY 3: FOCUS GROUPS

Simões, F., & do Rio, N. B. (2020).

How to increase rural NEETs professional involvement in agriculture?  
The roles of youth representations and vocational training packages improvement.

Journal of Rural Studies, 75, 9-19.

### Abstract:

“Our general aim is to explore how training experiences in agriculture can be tailored to improve the prospects of low-qualified, rural youths who are neither in employment, nor in education or training (NEET) being involved in the sector. We conducted two sequential qualitative studies in The Azores Islands, a remote and mostly rural Portuguese region, using a Participatory Action Research (PAR) approach. Study 1 involved 16 youths aged 18–23 years old (M age = 20.51; SD = 1.75; eight female) and consisted of four focus group discussions, which underwent a content analysis. Study 2 consisted of three world-café sessions with, respectively, five youths, seven representatives of private and public stakeholders and six representatives of the agriculture sector. Study 1 showed that low-qualified rural NEETs depict negative perceptions about agriculture. These negative perceptions are similar, in content, to those reported in other studies by youths originating in (sub)urban areas. Study 2 highlighted that a strong participatory stand to design and run training for agriculture has the potential to tailor packages that improve outreaching these youths. Furthermore, it prevents their negative representations and tackles the mismatch between training offer and local economy opportunities. These conclusions are relevant across Southern European countries, which are struggling with higher numbers of rural NEETs, as well as with weak institutional support to uphold the transition from school to work.”



Identification of the Research Problem	<ul style="list-style-type: none"> <li>The research question or the research objectives are clearly stated.</li> <li>The researcher must present his/her contribution to scientific knowledge.</li> <li>The research question needs to have structural characteristics: <ul style="list-style-type: none"> <li>No proper names in the research question;</li> <li>Non-normative;</li> <li>Researchable;</li> <li>Clear and concise;</li> <li>Focused.</li> </ul> </li> </ul>	<p>The study has one major research question: "Our work has an overarching purpose: to explore how training experiences in agriculture can be tailored to improve rural NEETs' prospects of being involved in the sector."</p> <p>Two RQs complete this major RQ:</p> <ol style="list-style-type: none"> <li>What are rural NEETs' representations regarding agriculture?</li> <li>What are the improvements that eco-agriculture training packages need to make, to account for NEETs' representations regarding the farming sector?</li> </ol>
Ethics & Research Integrity	<ul style="list-style-type: none"> <li>Researchers must clearly state their ethical concerns on their research process.</li> <li>Researchers must present their ethical board approval if they work with human subjects.</li> <li>Researchers must clearly state the source of finance of their research projects.</li> <li>Researchers must clearly state the non-existence of conflict(s) of interest.</li> <li>Researchers must declare rights regarding confidentiality and personal data protection.</li> </ul>	<p>Study doesn't include any information about ethical approval procedures.</p> <ul style="list-style-type: none"> <li>Researchers have given information about their funding agency.</li> </ul>
Representativeness/Generalisability	<ul style="list-style-type: none"> <li>Researchers must show the limitation of their sampling strategy.</li> <li>Researchers must justify their sampling method.</li> <li>Recruitment methods must be presented.</li> </ul>	<p>Target population and sampling strategy have been discussed in details.</p>
Instruments	<ul style="list-style-type: none"> <li>Researchers must use standardised instruments.</li> <li>If researchers use their own instruments, they must show the validity and reliability of these instruments.</li> <li>Interviewers and other data collectors must be trained by researchers, or the research agency.</li> <li>Instruments used in the research must be tested with pilot studies.</li> <li>Materials (e.g., interview guides, questionnaires) must be available.</li> </ul>	<ul style="list-style-type: none"> <li>Researchers use standardised instruments.</li> <li>Materials are not available.</li> </ul>



<b>Quality of Data</b>	<ul style="list-style-type: none"> <li>• Researchers must develop and use standardised data collection documents.</li> <li>• Researchers must use develop and use standardised quality control documents.</li> <li>• Training of interviewers/enumerators/researchers is important.</li> <li>• Researchers must record and report their data collection process.</li> <li>• Data collection process must be well-documented to allow other researchers to replicate findings.</li> </ul>	Researchers reported their data process.
<b>Analysis &amp; Re-reporting</b>	<ul style="list-style-type: none"> <li>• The researchers must justify their methodological choices.</li> <li>• The researchers have to give information about their research team and the context of data collection.</li> <li>• The full transcripts of communications and coding must be available and accessible.</li> <li>• The report has to include direct quotations as evidence.</li> </ul>	<ul style="list-style-type: none"> <li>• Researchers give sufficient information about themselves and the context. Researchers give information about their analytical strategy.               <ul style="list-style-type: none"> <li>◊ Direct quotations are included to the report.</li> <li>◊ Full-transcripts are not available.</li> </ul> </li> </ul>



## CONCLUSIONS

The above comparison of methodologies of selected papers focusing on rural NEETs presents us with some important commonalities, but also differences. We analyse them, going through each of the dimensions set in order to analyse scholarship aimed at describing the situation of NEETs in the countryside.

### Identification of the Research Problem

The research questions of these three papers aim at describing different key features of rural NEETs and are clearly stated and discussed by the authors. This clarity may be due to increased standards of academic publishing and reviews, pushing authors to have a well-defined research question. This academic practice may not be visible in more empirical studies. Study 1 has a geographical focus, such as understanding the situation in Russia, whereas Study 2 and Study 3 tackle more general questions. This geographical limitation may raise some questions about the validity of these findings in other countries, and the authors are aware of this limitation. This aspect may be accepted as a weakness.

### Ethics & Research Integrity

Study 3 offers full information concerning the ethical practice – funding agency, ethical approval etc. – whereas Study 2 focuses upon the information collected by human subjects and provides information about the funding agency. When we compare these two papers, we can say that Study 3 has more awareness regarding ethical problems, whereas Study 2 doesn't give sufficient information. Study 1 (which uses secondary data) did not provide any information about this domain. When researchers are working with secondary data, they delegate ethical responsibility to the (other) data collectors. **However, our discussion above showed that the ethical responsibility of the researcher(s) does not end with data collection, and that even in unobtrusive data collection methods, ethical concerns still matter.** This is something that future research on rural NEETs must take into account. In that group of methods, researchers must give information in order to appropriately respond to ethical concerns.

### Representativeness/Generalisability

**All three studies gave sufficient and satisfactory information concerning their sampling strategy.** Study 1 used information provided by the research agency which collected the original dataset. These studies present good practices in relation to generalisability and repre-





sentativeness. Study 3 which is based on focus groups gave detailed information about their recruitment strategy. Thus, exemplary studies on rural NEETs offer good examples on how to proceed in this regard.

### Instruments and quality of data

The above-mentioned studies show that **opening data and instruments is not yet a common practice on studies focusing on rural NEETs**. As the replicability crisis in psychology spreads out to other disciplines (and the demand for open science continues) this dimension will play an important part of best research practices in this field in the future. Amongst the studies we analysed, only Study 3 opens the instruments they used, but **none of the studies we discussed open their data and analyses so as to be replicable**. However, these studies do use standardised instruments and analyses, which in turn contributes to the quality of their data collection.

### Analysis and reporting

When we focus on analysis and reporting practices, all studies satisfied our expectations. **Quantitative studies reported correct statistics and Study 3 included direct quotations and also adopted a reflexive stance by discussing their roles as researchers**. These are good practices to be followed in the future by rural NEETs scholarship. As we discussed above, the lack of data sharing practice may be accepted as a minor problem.

### In sum

This short analysis of selected studies focusing on rural NEETs shows that our guidelines for best practices have external validity as a type of research instrument, and are also successful in comparing “oranges and apples”. These guidelines are not only useful for evaluating different studies, but they also work as a guideline for designing good research studies. Not surprisingly, **some criteria we put forward (such as generalisability of qualitative studies or openness of data and instruments) may be premature and not widely accepted**. However, we believe that these criteria are not only compatible with the direction of social sciences in general, but that they will become more important in the near future.



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