

# Introduction to the quantitative methodology of the social sciences

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## Deductive and inductive theory

In the case of the deductive theory, the researcher based on theoretical considerations constructs

The process of deduction would be like:

1. Theory
2. Hypothesis
3. Data collection
4. Findings
5. Hypothesis confirmed or rejected
6. Revision of theory

Deductive approach, which is usually associated with quantitative research, does not often follow this order.

This deductive logic is not always so pure. Theory is often knowledge based on literature.

More researchers prefer an approach to the relationship between theory and research that is primarily inductive:

The next figure showing the difference between inductivism and deductivism , relationship between theory and research would be like:

**Deductive Approach: Theory → Observations/ Findings**

**Inductive Approach: Observations/ Findings → Theory**

## 1. Introduction: Theory and Research

### **Deductive and inductive theory**

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**Deductive Approach: Theory → Observations/ Findings**

**Inductive Approach: Observations/ Findings → Theory**

Elements of induction are included in deduction. An alternative way of linking theory and research. The relationship between inductive strategy and qualitative research is not entirely clear; many qualitative research often uses theory as a framework.

## **Epistemological considerations**

The fundamental question of epistemology is what is acceptable knowledge in a discipline.

### Positivism:

A natural science epistemology

Positivism prefers natural science methods to the study of social reality.

### Realism

Two common features with positivism: Social science and science interpret data collection and explanation in the same way. There is a reality that is separate from cognition.

### Interpretivism

The aim of social research is to understand the subjective meaning of social action. The subject of the social sciences, people and their institutions is fundamentally different from that of the natural sciences. This includes Weber's view, the hermeneutic-phenomenological tradition, and symbolic interactionism.

### Hermeneutics

Hermeneutics is a term drawn from theology that deals with the theory and method of social science interpretation of human action.

### Phenomenology

Is one of the main anti-positivist traditions and it is a philosophy concerned with the question of how individuals make sense of the world around them and how the philosopher should bracket out perceptions in his or her grasp of the world.

### Symbolic interactionism

Symbolic interactionism interprets interaction in such a way that the individual continuously interprets the symbolic meaning of his or her environment and acts accordingly on the basis of meaning

## Ontological considerations

- They are uncertain about the nature of the social sciences: whether social entities can and should be considered objective entities.
- Hermeneutics is a term drawn from theology and that, when imported to social sciences, is concerned with the theory and method of the interpretation of human action.
- Phenomenology is one of the main anti-positivist traditions and it is a philosophy concerned with the question of how individuals make sense of the world around them and how the philosopher should bracket out perceptions in his or her grasp of the world.
- Symbolic interactionism argues that interaction takes place in such a way that the individual is continually interpreting the symbolic meaning of his or her environment and acts on the basis of this imputed meaning

### **Quantitative and Qualitative research as a research strategy**

Qualitative and quantitative social research is fundamentally different in that quantitative researchers use measurements and qualitative researchers do not. However, there are several other differences between the two.

Characteristics of quantitative research:

numericality in data collection and analysis.

deductive approach to theory and research

the practice of positivism

an objective view of social reality.

Characteristics of qualitative research:

emphasizes words instead of numbers

rejects the positivist model

in focus: how the individual interprets the social world

inductive approach to theory and research

**The mixed method** combines methods related to quantitative and qualitative research and can be very effective.

-In addition to theory, ontology and epistemology, values and practical aspects are also influential factors in social research.

-Values reflect either the personal beliefs or the feelings of the researcher.

-For example the choices of research strategy, design or method

## Research Designs

A research method is simply a technique for gathering data. It may involve a specific instrument, such as self-completion questionnaire or a structured interview schedule, or participant observation

## Criteria in social research

In social research three of the most criteria are reliability, replication and validity.

The essence of reliability is whether the results of the study are repeatable. (The term usually reflects the question of whether the concepts of the social sciences are consistent or not.)

Replication means repeating the results of others.

Validity is concerned with the integrity of the conclusions generated from a piece of research.

Thus, it is also considered the most important criterion of research.

Indicates the validity of a construct: whether or not a concept denotes the concept it is intended to denote.

## Variables

A variable is the set of attributes (properties). A variable is an attribute on which cases vary. If an attribute does not vary, it is a constant. For social researchers, the constant variable is not interesting but the dependent and independent variables are essential: the relationship between the two variable types is causal: the independent variable explains dependent variable.

The causal relationship is characterized by three validity criteria

Internal validity: the causal relationship is not true, another independent variable is the explanatory.

External validity: the results can be generalized or not valid within a particular context

Ecological validity: social science results can be applied to people's everyday, natural social environments.

## Research Designs

Experimental design

Evaluation of non-experimental research based on a real experiment

Classical experimental design

Laboratory experiment

Quasi-experiments

## Logic of comparison

Each experiment is characterized by a comparison: a comparison of the results of the experimental and control groups.

### Cross sectional design

The cross-sectional design is also called survey design. A cross-sectional research design entails the collection of data on more than one case, which are examined to detect patterns of association.

“Survey” is a term used to denote research that employs a cross-sectional design and in which data are collected by questionnaire or by structured interview

Reliability and measurement validity are related to the quality of the measures that are employed to tap the concepts in which the researcher is interested, rather than to research design matters.

A cross-sectional design comprises the collection of data on a series of variables (observations made in relation to the variables) at a single point in time..

Mostly, cross-sectional designs are placed in the context of quantitative research. Also, quantitative research entails a form of cross-sectional design,

### Longitudinal designs

There are two types of longitudinal research. In panel research, a sample is examined at least twice a sample. In a cohort study, samples corresponding to the same cohort are tested at least twice



## Case study design

The case study is a detailed and intensive analysis of a single case.

The five different types of case:

the critical case: the researcher has a well-developed theory.

the extreme or unique case: unique.

the representative or typical case: exemplifying case

the revelatory case: This case study is based on the fact that the investigator

the longitudinal case:

## Comparative design

The comparative design may be realized in the context of either quantitative or qualitative research

## **Planning research project and formulating research questions**

Commonly, the institution or department will have specific requirements concerning a wide variety of different features that your dissertation should compromise and a range of other matters relating to it. There are: the form of binding, the presentation, whether an abstract is required, how big the page margins should be, the format for referencing, the number of words, the structure.

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My advice: follow the requirements, instructions and information you receive.

Further advice: If possible, follow and use the supervisor's instructions as much as possible.

## Managing time and resources

### Formulating suitable research questions

- you must provide clear research questions because
- guide the search for literature, help decide what data to collect, guide data analysis,
- your research questions should include a clear social science text

### Steps in selecting research questions

Research area: concerns about risk

Select aspect of research area: variations in concerns about risk

Research questions: what areas of risk are of greatest concern among people? For instance, does concern about risk vary by age, gender, social class, education and so on?

Select research questions: What areas of risk are of greatest concern among people? At this point, the student has to select and specify his/her research question.

In general, research questions may derive from personal interest/experience, theory, the research literature, puzzles, new developments in society, social problem.

## Tips for evaluating research questions

Research questions have to be clear

Research questions should be researchable

Research questions should have some connections with established theory and research. There should be a literature on which you can draw to help.

Research questions should be linked to each other..

Research questions should be neither too broad nor too narrow.

### Preparing for your research

Start collecting data after you have reasonably clearly defined your research questions. Next, develop your data collection tools with research questions.

## 4. Literature Review

All in all, when reviewing the existing literature the aim is to demonstrate:

What is already known about this area?

What concepts and theories are relevant to this area?

What research methods and research strategies have been employed in studying this area?

Are there any significant controversies?

Are there any inconsistencies in findings relating to this area?

Are there any unanswered research questions in this area?

Why to write a literature review?

you need to know what is already known in connection with your research area

you can learn from other researchers' mistakes and avoid making the same ones

you can learn about different theoretical and methodological approaches to your research area

it may help you to develop an analytic framework

it may suggest further research questions for you

it will help with the interpretation of your findings

it gives you some pegs on which to hang your findings

## **Tips and skills: conceptualizing a literature review**

list: make a list of items representing the literature of the subject

search: identify relevant information and focus on finding which may involve going through sources to identify information

survey: literature review may be also seen as an investigation of past and present writing and research on the subject

vehicle: the review also has an impact on the researcher because it is a vehicle for learning that leads to an increase in his knowledge and understanding

facilitator: the literature review can be understood as directly related to the research that is about to be or being undertaken

report: the focus is on framing a written discourse about the literature which may be established as a component part of a thesis or other research report

## Systematic review

Systematic review is an approach to reviewing the literature that adopts explicit procedures. Because it is suggested that many reviews of the literature tend to lack thoroughness and reflect the biases of the researcher.

Also, systematic reviews of the literature are also seen as an accompaniment to evidence-based approaches.

The five steps of the systematic review:

The purpose of the review must be defined

Establish criteria to guide the selection of studies,

The reviewer should seek out and incorporate within the review all studies that meet the criteria spelled out in the previous step

Start collecting data after you have reasonably clearly defined your research questions. Next, develop your data collection tools with research questions.

Key features of each study should be identified, such as the date when the research was conducted, the location, the sample size, data collection methods and the main findings.

Synthesis of the result must be produced quantitative and qualitative methods.

## Quantitative research

Quantitative research :

research strategy entailing the collection of numeric data,  
as exhibiting a view of the relationship between theory and research.

it involves a deductive approach and an objectivist conception of social reality (in particular positivism).

The main steps in quantitative research (ideal-typical)

1. Theory
2. Hypothesis
3. Research design
4. Devise measures of concepts
5. Select research sites
6. Select research subjects/ respondents
7. Administer research instruments/ collect data
8. Process data
9. Analyse data
10. Findings/ conclusions
11. Write up findings/ conclusions

## Concepts and their measurement

Concepts are the building elements of theory and represent the points around which social research is conducted.

## **Why measure?**

**Finally, the measurement provides a basis for a more accurate estimate of the degree of relationship between the concepts, such as correlation analysis.**

## **Indicators**

To develop an operational definition of a concept, we need an indicator that fits the concept. In the case where the concepts cannot be quantified.

The operational definition of the concept is based on indicators.



## 7. Sampling

Sampling is one of the most important parts of a survey.

### **Steps in conducting a social survey:**

Issues to be researched

Review literature/ theories related to topic/area

Formulate research question (s)

Consider whether a social survey is appropriate (if not, consider an alternative research design)

Consider what kind of population will be appropriate

Consider what kind of sample design will be employed

Decide on sample size

Decide on mode of administration (face-to-face; telephone; postal; email; web)

Develop questions (and devise answer alternatives for closed questions)

Review questions and assess face validity

Pilot questions

Revise questions

Finalize questionnaire/ schedule

Sample for the population

Administer questionnaire/ schedule to sample

Follow up non-respondents at least once

Transform completed questionnaires/ schedules into computer readable data (coding)

Enter data into statistical analysis program like SPSS

Analyse data

Interpret findings

Consider implications of findings for research questions

The need to sample in almost all cases in quantitative research. There are some basic concepts and term in sampling.

Population in almost all cases from which the sample is to be selected.

Sampling frame

Representative sample : if the sample is similar to the population based on some aspect (s) / variable (s).

Probability sample is a sample that has been selected using random selection

Sampling error is the difference between a sample and the population.

Non-probability sample is a sample that has not been selected using a random selection method.

Non-sampling error is the error means other errors in the research inadequate sampling frame or non-response, or from problems, such as poor question wording, poor interviewing.

Sampling error

Very important: probability sampling does not abort the sampling error. But it reduces the occurrence (magnitude) of the error.

### **Probability sample**

Probabilistic sampling is such an important procedure in social survey research because conclusions can be drawn from the information on a random sample for a population

Types of probability sampling

The simple random sample equal probability of inclusion in the sample.

The systematic sample is a variation of the simple random sample.

## Types of non-probability sample

convenience sampling is a sample that is available to the researcher by virtue of its accessibility.  
select units directly from the sampling frame

stratified sampling distributed in the same way as the population in terms of the stratifying criterion.

cluster sampling, the primary sampling unit is not the units of the population to be sampled but groupings of those units.

## Sample size

It depends on how much time and money you have for the research. But: large sample reduces sampling error (population heterogeneity even more)  
Time and cost, Problem of non-response, Heterogeneity of the population

## Types of non-probability sample

Convenience sampling is a sample that is available to the researcher by virtue of its accessibility.

Snowball sampling is a form of convenience sample, but it is worth distinguishing because it has attracted quite a lot of attention over the years.

Quota sampling is rarely employed in academic social research, but is used intensively in commercial research and political opinion polling.

## Limits to generalization and error in survey research

Even when a sample has been selected using probability sampling, any findings can be generalized only to the population from which that sample was taken

## Structured interviewing

Structured interview is commonly employed in survey research

The aim is for all the interviewees to be given exactly the same context of questioning.

Structured interview is preferred because it promotes both standardization of asking the questions and recording the answers.

The aim is to keep the error component to a minimum, since error has an effect on the validity of a measure.

## Variability: two ways

Intra-interviewer variability occurs when an interviewer is not consistent in the ways he/she asks the questions and/ or records the answers

Inter-interviewer variability occurs when there is more than one interviewer and interviewers are not consistent with each other in the ways they ask the questions and /or record answers.

Most structured interviews contain mainly questions that are variously referred to as closed, closed ended, pre-coded, or fixed choice.

With the closed question, the respondent is given a limited choice of possible answers

In other words, the interviewer provides respondents with two or more possible answers and asks them to select which one or ones apply.

There are no predefined answers to open-ended questions, the respondent answers in his or her own words. These will need to be coded later.

## Major types of interview

Semi-structured interview refers to a context in which the interviewer has a series of questions that are in the general form of an interview schedule but is able to vary the sequence of questions.

Unstructured interview has only a list of topics or issues, often called an interview guide or aide-mémoire, which are to be covered, while the style of questioning is usually informal.

Intensive interview is an alternative term to the unstructured interview.

Qualitative interview is a term to denote an unstructured interview but more frequently it embraces interviews of both the semi-structured and unstructured kind.

In-depth interview refers to an unstructured interview but more often refers to both semi-structured and unstructured interviewing.

Focused interview refers to an interview using predominantly open questions to ask interviewees questions about a specific situation or event that is relevant to them and of interest to the researcher.

Focus group is the same as the focused interview but the interviewees discuss the specific issue in groups.

Group interview refers to a situation in which members of a group discuss a variety of matters that may be only partially related.

Oral history interview is an unstructured or semi-structured interview in which the respondent is asked to recall events from his or her past and to reflect on them;

Life history interview is similar to oral history interview but the aim of this type of unstructured interview is to glean information on the entire biography of each respondent

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Questions: how to ask questions?

One consideration of researchers is whether to ask a question in an open or closed format. The issue of whether to ask a question in an open or closed format is relevant to the design of both structured interview and self-completion questionnaire research.

Open questions

The advantages of open questions are:

respondents can answer in their own terms

open questions allow unusual responses to be derived, replies that the survey researcher may not have contemplated

the questions do not suggest certain kinds of answer to respondents, so that respondents' levels of knowledge and understanding of issues can be tapped and the salience of issues for respondents can also be explored

open questions are useful for exploring new areas or ones in which the researcher has limited knowledge

open questions are useful for generating fixed-choice format answers



The advantages of closed questions are:

it is easy to process answers

closed questions enhance the comparability of answers

closed questions may clarify the meaning of a question for respondents

closed questions are easy for interviewers and/ or respondents to complete

in interviews, closed questions reduce the possibility of variability in the recording of answers in structured interviewing

# MYPLACE

**The MYPLACE Case Study Approach: A discussion paper**

**21st February, 2012**

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The central research question of MYPLACE is: “How is young people’s social participation shaped by the shadows (past, present and future) of totalitarianism and populism in Europe?” Finding out the answers to this question involves the combined efforts of each of the WPs using historical, ethnographic, interview and survey based methods. Survey methodology is, perhaps, the best developed in terms of the extent to which a given sample can be taken to represent a wider population given that it can deploy estimates of precision which are mathematically informed. There exists a vast literature on sampling theory and, assuming that accepted procedures are followed it can be said with a known level of precision, how representative one’s results are and therefore how far they can be generalised. It is not that other methodologies are unconcerned with representativeness and generalisation but that they don’t look to mathematical justifications. **Often there is a divide which separates sample survey methodology and those techniques** which are not able to use ‘confidence intervals’ to assess the likelihood of a ‘type 1 error’ and instead focus on the meanings and understandings of those being studied. It is, therefore, easy to see that the language used within each method becomes so different that the tendency for them not to come together is understandable.

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MYPLACE is a multi-method project precisely because we believe that the phenomena that we are interested in can only be adequately studied using historico-culturally contextualised empirical tools. The geographical focus is deliberately narrow to ensure that the different techniques employed truly complement each other and allow for local context to be fully articulated in the analysis. National and international context will also be taken into account (particularly in WPs 2 and 6) but the closer the correspondence between the data sources for WPs 4, 5 (and to a lesser extent 7) the better they will be able to provide fully rounded and in-depth accounts of young people's political engagement in the research locations.

### **The case study approach: the quantitative perspective**

A national sample survey is not required in order to fulfil the objectives of the project. Moreover, national samples would in many countries actually undermine these objectives given that we are interested in micro issues relating to the motivations for activism and in particular the factors which associate with radical and populist forms of participation. With national samples the data is dispersed over a wide and diverse area, particularly in the larger countries and while there would be claims of national representativeness, this would be at the expense of deep local context. Even in the smaller countries there is often geographically related diversity which is better captured in tightly defined locations. A careful selection of research locations is better able to represent specific intra-national experiences than to represent each country in an averaged way. MYPLACE, therefore, provides a detailed and methodologically complementary collection of case studies which document nationally important phenomena. This will be the best representation to date of how young people engage in political activities across Europe where 'political' is articulated in its broadest sense to include a range of practices from formal political activity to leisure pursuits with a political angle.

## **Narrowing the Focus**

While a local study may not be nationally representative, this need not be a drawback, and indeed offers some distinct advantages. A number of landmark sociological studies have been community based: *Small Town Politics* (Birch 1959) and *The Affluent Worker* (Goldthorpe *et al* 1969), *Marienthal* in Austria (Jahoda *et al* 1972), and *Middletown* in the US (Lynd and Lynd 1929 and 1937) to name four of the best known. These studies have arguably contributed as much (and possibly more) to the development of sociological understandings of societal change and the effects on individuals than much larger national.

## **Case Study Methodology**

Representative surveys in the social sciences have, therefore, often been local. This partly relates to the 'community study' methodology noted above which was popular in the early days of sociology. All involved multiple methods, including a survey, and each location was chosen for its ability to exemplify a particular phenomenon. Moreover, later projects seeking to gauge differences between locations, used purposively selected locations with the intention that the contrasts would be analytically productive. Hence the '16-19 Year Olds Initiative' (Banks *et al* 1991) and the 'Social Change and Economic Lifestyle Initiative' (Gallie *et al* 1994) were multi method projects with a survey element, focused on purposively selected towns and cities principally seeking to identify contrasts in employment experiences and prospects within radically different local labour markets. Each of these studies engaged with central questions of their time about social change in various forms. While each of these studies focused on particular problematic, it can be argued that there was no single hypothesis which drove them.



1. A common feature of these studies was an interest in the extent to which changes in the socio-economic structure led to cultural changes. 'Testing' such emergent hypotheses is possible within narrow confines of operationalized variables. On the other hand, how important is it for sociological projects to be solely hypothesis driven? Is the formal hypothesis test (ie a statistical test on robust survey data) really the gold standard for sociology? Savage (2010) makes the point that sociological methodology has been evolving since the inception of the discipline and should not be fixated on the primacy of one method over another. **Moreover, a case study approach, deeply rooted in the understanding of the historic-cultural context of the research arguably is better equipped to address 'respondent' and 'field' effects in survey research since the likely differences in interpretation of standardised questions and the significance of particular political, social and economic contexts can be better anticipated and minimized (see Burawoy 1998: 13).**
2. as practitioner of the relevant skills) allows greater mastery of those skills than rule-based knowledge, which is useful at the early stages of learning but should not be thought of as the highest form of knowledge
3. The social sciences have to date not generated general, context-independent theory. Given, therefore, that, as social scientists, the knowledge we produce is concrete and context-dependent, the case study is especially well suited to produce such knowledge (ibid.).
4. In practice formal generalization either on the basis of large samples or single cases is talked about much more than it is actually adhered to. In any case, formal generalization is only one of many ways by which people gain and accumulate knowledge and the fact that knowledge cannot be formally generalized does not exclude it from incremental knowledge accumulation in a given field. (226-7)
5. The case study method is particularly suited to theory testing through 'falsification' tests (228).

## The Nation as a case?

Although, increasingly, questions are raised about the efficacy of using the nation as a unit of analysis (Urry 2000), it appears to have face validity. Countries lend themselves well to being a unit of analysis due to their apparent: established geographical boundaries, common heritage, linguistic and ethnic homogeneity. However, this face validity begins to break down once such entities are enumerated, making all but the most generic, high level, macro analyses problematic. The MYPLACE consortium countries are indicative of the weaknesses inherent in assumptions embedded in the national approach: borders are openly contested (Georgia) or have been only recently established (Croatia, Slovakia, Germany, Hungary); countries do not always have a single state language (Finland, UK); countries are characterised by ethnic heterogeneity (Russia, UK) or contain large minorities of different nationalities (Latvia, Estonia); and there is significant regional economic variation (all countries).

It is, therefore, **by no means clear that 'country' or 'nation' is the best unit of analysis.** They may provide administrative conveniences such as the ways in which a sampling frame is established at a national level but these are artefacts of a legal process rather than necessarily reflecting social reality. Borders change, communities migrate, local economies rise and fall. Using a country as a case study becomes interesting for the ways in which an attempt to provide a single unifying narrative involves coping with complexity in terms of its social and political history. Coping with countrywide complexity may be possible where the population and/or the area is relatively small but in countries as large as Russia and Germany there are simply too many different factors to take into account. National narratives are possible but with an increasing number of caveats to account for historical disjunctures, the experiences of different ethnic groups, regional cultural and economic variations and so forth.

This is not to argue that national comparative projects are doomed to fail as their unit of analysis is flawed, but rather to suggest that for such an enterprise to succeed the resources required are considerable and the extent to which the data can be subjected to a detailed analysis is limited by the sample size. The ESS is the most rigorous national comparative survey which has set high data collection standards for each participating country yet the target achieved sample size is 1500 per country which means that while each data set is representative of the population as a whole it is not possible to undertake sub-national (regional) analyses as there are insufficient numbers of respondents to be able to adequately represent these geographical units. This is one reason why the Understanding Society survey (the UK longitudinal survey) has substantially increased its sample size to around 40,000 households.

There is, then, a tendency in national surveys to average out difference: national typicality masks local difference. It is a point of debate to consider the extent to which the national average is more important than sub-national clusters. When comparing nations we use their average tendencies and this presents complexity and diversity in a massively simplified way. This may be plausible and have the ability to summarise for a macro analysis (for example Esping Andersen's characterisation of European welfare regimes) but it is worth asking just how comparable such aggregates are? In terms of, say, social cohesion, what does it mean to say that Italy has more of it than Sweden? Or that on average Portugal is more left wing than Germany? On the other hand, if one is interested in processes operating at the level of individual actors, and (organic) groups of individuals then it is homogeneity of belief/experience/behaviour that counts. It is, therefore, more useful to analyse and ultimately to compare when there has been greater thought put into the specific parameters which inform the selection of the cases rather than relying on the artefact that is the 'nation'.

National aggregates mask variations and give a distorted view which, while accurate in terms of the overall mean, is not representative of the difference which lies underneath it.

## Questions of sample selection

Flyvbjerg (2006) contrasts 'random selection' with 'information oriented selection' where the former delivers representativeness and generalizability and the latter allows small samples to be theoretically productive through the careful selection of contrasting cases or 'critical cases'. MYPLACE uses both strategies. Firstly, the purposive selection of two contrasting locations in each country (four in Germany) is undertaken on the basis of a prior analysis of literature and socio-demographic indicators. The single biggest gain in case study sampling is delivered by having two rather than one (Sudman 1976). This strategy allows each team to focus on an area where there are grounds to suspect that young people will be have a greater propensity to be radicalised than elsewhere. The selection of the contrasting region is not to have a 'control' group in the formal, statistical, sense but enables a comparative contextual analysis where there are no a priori reasons to suspect a high propensity for radicalisation. This dual location 'theoretical sampling' approach avoids the national partiality of single case studies and represents significant added value in allowing contrasts both within and between countries. MYPLACE articulates 'case' at various levels: country (an artefact of the FP7 funding process), research locations, and individuals within locations. These 'empirical units' are the inputs from which further 'cases' of findings will be generated through conceptual development (Ragin 1992).

## **Integration of populist/radical groups with other youth 'subcultures'**

The factors which contribute to the propensity for young people to become radicalised are likely to be nationally sensitive, locally sensitive as well as contingent upon different forms of radicalisation. We are, therefore, not able to specify a common set of criteria that each partner must take into account. The primary consideration when selecting locations is the importance of local factors and the extent to which there are grounds to suspect that particular factors may be associated with young people's receptivity to radicalisation. Location selection should be systematic at the local level but free from a centrally provided instruction on exactly which criteria to use or the weight that should be given to different criteria. Arising from WP1 the following criteria were suggested as *potentially* important:

### Substantive criteria for selection of locations

1. Community segregation and perception of minority groups
2. Underlying socio-economic inequalities
3. Civic engagement
4. Political heritage: continuity and discontinuity
5. 'Supply' side: organisation and strategy of radical/populist parties and social movements
6. 'Demand' side: Ideological resonance and local democracy
7. Individual motivations: gender family and community
8. Extent of political engagement/alienation
9. Integration of populist/radical groups with other youth 'subcultures'

The size of the population of the selected sample location is not fixed. Given that we are working with target achieved samples of 600 per location we do not need to set a narrow range between minimum and maximum figures. As above, the local context and population distribution should be taken into account when selecting a geographically bounded area. As a guideline we have suggested that the locations chosen should have a minimum population figure of 15,000 and a maximum of 30,000. This allows adequate flexibility in selecting locations and means that partner teams can make informed decisions on the basis of local factors in order to maximize the coherence of the location and the quality of the sampling strategy. There may be local factors, for example to do with densely populated homogeneous locations, which result in a chosen location with a population higher than 30,000. This does not represent a problem as long as it can be demonstrated that the criteria for selecting the location are not compromised.

The ability of the randomly sampled survey to represent a specific population and provide the groundwork for generalisation underpins its importance. Avoiding sources of bias is instrumental in achieving this: stratification of a population prior to selection, weighting of results and data imputation as a result of non-response are routinely used to improve the match between an achieved sample and the population it is taken to represent. In other words the flaws in the ability of a sample to represent a population can only be dealt with through means which factor in the characteristics of those being studied. MYPLACE uses random sample survey techniques in order to be able to generalise for the location chosen and data will be subject to measures of quality in order to maximise its representativeness.