SQP CODING INSTRUCTIONS

2015



Preface

SQP was developed to predict the <u>quality</u> (i.e. reliability times validity) of survey questions. The quality of survey questions is relevant information because it can be used to make decisions about the formulation of questions before the data have been collected. Furthermore, it can also be used to correct for measurement errors in the study of relationships between variables. Finally, SQP quality predictions can be used in order to see if one can compare results of cross-national research.

In order to be able to make predictions of the quality of questions, SQP has to have information regarding the characteristics of the formulation of those questions and the data collection method. In addition to that, one has to know the relationship between these characteristics and the quality of survey questions. Saris and Gallhofer (2007) highlighted the fact that many decisions regarding the formulation of a question are taken when designing a survey question.

These decisions determine the characteristics of the requests for answers. Since 1980 data concerning the <u>reliability and validity</u> have been collected by many Multitrait-Multimethod (MTMM) experiments (Andrews, <u>1984</u> and Saris and Gallhofer, <u>2014</u>). The questions included in these experiments have been coded and the relationships between the question characteristics and the data quality have been studied. Although many experiments have been conducted since then, they would never be enough to provide information regarding the quality of all questions. Therefore, the software Survey Quality Predictor (SQP) was developed in order to predict the quality of new survey questions on the basis of the meta-analysis of the relationships between the characteristics and qualities of questions in MTMM studies.

Sequentially, several programs have been developed: In 2001 the first SQP was developed in Dos (Saris, 2001), based on the information from 87 MTMM experiments conducted in three languages: English, German and Dutch. This software was transformed in 2005 into a Windows version: SQP 1.0 (Saris, Oberski and Kuipers, 2004). Since the foundation of the European Social Survey (ESS) in 2001, in each round MTMM experiments were conducted. On the basis of these new experiments in many different languages, a new version of SQP was developed in 2011 (Saris et al., 2011). This is the software that is currently available online for everybody free of charge. SQP currently allows predictions of the quality of questions to be made in over 20 European languages.

Users of SQP can obtain a prediction of the quality of nearly all survey questions by introducing the question into the database and coding the formal and linguistic characteristics of the question and its data collection method.

Table of contents

INTRODUCTION TO SQP CODING	5
THE SQP CHARACTERISTICS	7
1. DOMAIN 1.1. Domain: National Politics 1.2. Domain: European Union Politics 1.3. Domain: International Politics 1.4. Domain: Family 1.5. Domain: Personal relations 1.6. Domain: Work 1.7. Domain: Consumer Behaviour 1.8. Domain: Leisure activities 1.9. Domain: Health 1.10. Domain: Living Conditions and Background Variables 1.11. Domain: Other Beliefs	8 9 10 10 11 12
2. CONCEPT	15
3. SOCIAL DESIRABILITY	17
4. CENTRALITY	17
5. Reference period	18
6. FORMULATION OF THE REQUEST FOR AN ANSWER: BASIC CHOICE	18
7. WH word used in the request	
8. REQUEST FOR AN ANSWER TYPE	20
9. USE OF GRADATION	21
10. BALANCE OF THE REQUEST	21
11. Presence of encouragement to answer	22
12. EMPHASIS ON SUBJECTIVE OPINION IN REQUEST	23
13. INFORMATION ABOUT THE OPINION OF OTHER PEOPLE	23
14. USE OF STIMULUS OR STATEMENT IN THE REQUEST	23
15. ABSOLUTE OR COMPARATIVE JUDGEMENT	24
16. RESPONSE SCALE: BASIC CHOICE	26
16.2 Maximum possible value	
16.3 Maximum possible value	
16.5 Labels with short text or complete sentences	27
16.6 Order of the labels	
16.8 Theoretical range of concept bipolar/ unipolar	
16.9 Range of the used scale bipolar/ unipolar	30
16.10 Symmetry of response scale	
16.12 Number of fixed reference points	
17. Don't know option	33
18. Interviewer instruction	34
19. RESPONDENT INSTRUCTION	34
20. EXTRA INFORMATION OR DEFINITION AVAILABLE	34

	20.1 Knowledge provided	. 34
21	INTRODUCTION AVAILABLE?	. 35 . 36 . 36
22	NUMBER OF SENTENCES IN THE REQUEST	. 36
23	NUMBER OF WORDS IN THE REQUEST	. 36
24	. TOTAL NUMBER OF NOUNS IN THE REQUEST FOR AN ANSWER	. 37
25	. TOTAL NUMBER OF ABSTRACT NOUNS IN THE REQUEST FOR AN ANSWER	. 37
26	. TOTAL NUMBER OF SYLLABLES IN REQUEST	. 37
27	. NUMBER OF SUBORDINATE CLAUSES IN REQUEST	. 38
28	. NUMBER OF SYLLABLES IN ANSWER SCALE	. 38
29	. TOTAL NUMBER OF NOUNS IN ANSWER SCALE	. 39
30	. TOTAL NUMBER OF ABSTRACT NOUNS IN ANSWER SCALE	. 39
31	SHOWCARD OR OTHER VISUAL AIDS USED 31.1 Horizontal or vertical scale	. 40 . 41 . 41 . 42 . 42
32	. COMPUTER ASSISTED	. 43
33	. Interviewer	. 43
	. VISUAL OR ORAL PRESENTATION	
35	POSITION	. 43
ΑР	PENDIX 1: DEFINITION OF RELIABILITY, VALIDITY AND QUALITY	. 44
ΑP	PENDIX 2: PRESENTATION OF BATTERIES OF QUESTIONS IN SQP	. 45
АР	PENDIX 3: DEFINITION OF BIPOLARITY AND UNIPOLARITY	. 47 . 48
ΑP	PENDIX 4: CODING A QUESTION WITH SEVERAL STEPS	. 49
Dr	FEDENCES	51

Introduction to SQP coding

The Survey Quality Predictor allows predictions to be obtained regarding the measurement quality of survey questions. In order to obtain the quality prediction of a survey question, users have to code its characteristics using the SQP coding procedure. A survey item in SQP may consist at least of a request for an answer¹. As well as this, an introduction and answer options can be used.

Introductions are mainly meant to indicate to the respondent the topic of the request for an answer. The requests for an answer present a text that implies that the respondent is expected to give an answer. Thus, the main feature of the formulation is not that a request is made but that an answer is expected. Furthermore, the answer options, whatever the form, present the respondent with a set of possible answers. For example:

[Request for an answer]: Do you think that honesty is important?

[Answer options]: 1. Yes

2. No

[Introduction]: Next, I am going to ask you about politics.

[Request for an answer]: What party are you going to vote for?

[Answer options]: 1. Social democrats

2. Republicans

[Request for an answer]: Please, indicate to what extent you agree or

disagree with the following: a) Homosexuals should

be given the same rights as heterosexuals

[Answer options]: 1. Agree completely

2. Agree

3. Disagree

4. Disagree completely

The main aim of a request for an answer is that we want to know something (a 'Concept') about an object (a 'Domain'). For example:

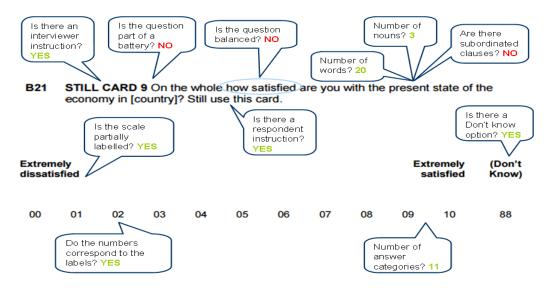
"How satisfied are you with the government"

Concept Domain

However, there are so many domains and concepts that they have been classified in more basic domains and concepts (Saris and Gallhofer, 2007). Moreover, a survey question can be formulated in many different ways. Thus, these Coding Instructions will guide users through all the formal and linguistic characteristics that will be coded regarding each part of the survey question. For example, Figure 1 illustrates some of the decisions one has to make when designing a survey question.

¹ A sentence is defined as a group of words that, when written down, begins with a capital letter and ends with a full stop, a question mark, or an exclamation mark. [...] a sentence can also be classified according to its linguistic meaning where a distinction is made between declarative sentences or assertions, interrogative sentences or requests, imperative sentences or orders, and exclamations. [...] the first three linguistic forms of sentences are used to elicit answers from a respondent, and not only in the interrogative form. Therefore, we speak of "requests for answers" and not of questions. The fourth form is not used in survey research (Saris and Gallhofer, 2007).

Figure 1: Set of decisions taken when designing a survey question



This document follows the SQP routing path of the characteristics when coding a survey question. Next the characteristics are presented and explained.

The SQP characteristics

1. DOMAIN

The first characteristic SQP asks users to code is the 'Domain' (Saris and Gallhofer, <u>2014</u>). It refers to the general subject of the question, the topic of what is being asked. After selecting a general category for the domain, a more specific domain should be specified. Even if an option seems reasonable for the domain of the question, there may be a better one under another heading. The domains proposed are:

- o <u>National Politics</u>: e.g. Political interest, Willingness to join in political actions, Left-right placement, Support of democracy, etc. → Continue in 1.1 National politics
- o <u>European Union politics</u>: e.g. European institutions, European laws, European norms, European prominent persons, etc. → Continue in 1.2 European Union politics
- o <u>International politics</u>: e.g. International institutions, International laws, International norms, International conflicts/ wars, etc. → Continue in 1.3 International politics
- o <u>Family</u>: e.g. Marriage, Children, Unconditional love, Role of women, Transmission of values, etc. → Continue in 1.4 Family
- o <u>Personal relations</u>: e.g. Social networks, Confidence in others, Solidarity, Tolerance, Permissiveness, etc. → Continue in 1.5 Personal relations
- o <u>Work</u>: e.g. Importance, Work qualities, Job satisfaction, Work ethos, Obedience to one's superiors, etc.→ Continue in <u>1.6 Work</u>
- o <u>Consumer behaviour</u>: e.g. Consumer habits, Household expenses, Brand satisfaction, etc. → Continue in 1.7 Consumer behaviour
- o <u>Leisure activities</u>: e.g. Hobbies, Relaxation time, Cultural activities, Holidays, etc. → Continue in 1.8 Leisure activities
- o <u>Health</u>: e.g. Doctor's treatment, Health condition, Use of medicines/ drugs, etc. → Continue in 1.9 Health
- o <u>Living conditions and background variables</u>: e.g. Age, Marital status, Nationality, Income, Gender, Education, etc. → Continue in <u>1.10 Living conditions and background variables</u>
- o <u>Other beliefs</u>: e.g. Happiness, Religion, Philosophy, Norms, etc. \rightarrow Continue in <u>1.11</u> Other beliefs

1.1. Domain: National Politics

Indicate the specific subject concerning National politics of the question being coded.

- o <u>National government</u>
- o <u>Local government</u>
- o <u>National institutions (ministries, parliament, etc.)</u>
- o <u>Local institutions</u>
- o Political parties
- o <u>Elections</u>
- o <u>Trade unions and employee organizations</u>
- o <u>Employer's organisations</u>
- o <u>Pressure groups</u>
- o <u>National issues</u>
- o <u>Legal matters</u>
- o <u>Economic/ financial matters</u>
- Defence matters
- o <u>Environmental matters</u>
- o <u>Technological matters</u>
- o <u>Traffic matters</u>
- o Agricultural matters
- o Educational matters
- o Prominent persons (ministers, members of parliament, etc.)
- → Irrespective of the option chosen, go to 2. Concept

1.2. Domain: European Union Politics

Indicate the specific subject concerning European politics of the question being coded.

- o <u>European Community government</u>
- o <u>European Community institutions</u>
- o European Community issues
- o <u>Political parties</u>
- o Elections
- o <u>Trade unions and employee organisations</u>
- o <u>Employer's organisations</u>
- o <u>Pressure groups</u>
- o <u>Legal matters</u>
- Economic/ financial matters
- o <u>Defence matters</u>
- o Social matters
- Environmental matters
- o <u>Technological matters</u>
- o <u>Traffic matters</u>
- o <u>Agricultural matters</u>
- o <u>Educational matters</u>
- Prominent persons
- o Other
- → Irrespective of the option chosen, go to 2. Concept

1.3. Domain: International Politics

Indicate the specific subject concerning International politics of the question being coded.

- o Relations with other European countries (non EC members)
- o Relations with United States/ Canada
- o Relations with Latin America
- o Relations with Asian countries
- Relations with African countries
- o Relations with United Nations
- Other international institutions
- o <u>Prominent persons</u>
- o <u>Other</u>
- → Irrespective of the option chosen, go to 2. Concept

1.4. Domain: Family

Indicate the specific subject concerning family of the question being coded.

- Size/ Composition
- o Relations to members
- o Relations to relatives
- Household matters
- o Sexual relations
- o Personal life history (childhood, adults, retirement)
- o Personal time budget
- o Accidents
- o Other
- → Irrespective of the option chosen, go to 2. Concept

1.5. Domain: Personal relations

Indicate the specific subject concerning personal relations of the question being coded.

- o Friends
- o <u>Neighbours</u>
- o Workplace
- Norms of other people
- o <u>Membership of organisations</u>
- o Religion/ Philosophy
- o Other
- → Irrespective of the option chosen, go to 2. Concept

1.6. Domain: Work

Indicate the specific subject concerning work of the question being coded.

- Place of work
- Kind of work
- o Working hours
- Size of the company
- Occupation
- o <u>Prospects/Career</u>
- o <u>Further education</u>
- o Change in occupation
- Business conditions
- o Other
- → Irrespective of the option chosen, go to 2. Concept

1.7. Domain: Consumer Behaviour

Indicate the specific subject concerning consumer behaviour of the question being coded.

- Kind of housing
- o <u>Housing expenditures</u>
- o Housing conditions (furniture, heating, garden, etc.)
- o <u>Durables (car, tv, computer, etc.)</u>
- o Food and nutrition expenditures (not in restaurant)
- o <u>Tobacco, liquor</u>
- Clothing
- o <u>Preferences for shops, brands</u>
- o <u>Preferences for payment</u>
- o Household budgeting
- o <u>Consumer organisations</u>
- Saving and investment of money
- o <u>Loans, mortgages</u>
- o Banks
- o <u>Insurances</u>
- o Other
- → Irrespective of the option chosen, go to 2. Concept

1.8. Domain: Leisure activities

Indicate the specific subject concerning leisure activities of the question being coded.

- <u>Cultural activities (theatre, concert, exhibitions, etc.)</u>
- o Sports
- o <u>Do-it-yourself</u>
- o Gambling
- o Restaurants/ bars
- o <u>Holidays/ travel</u>
- Newspapers/ periodicals
- o Radio
- o <u>Television</u>
- Internet
- Other activities
- → Irrespective of the option chosen, go to 2. Concept

1.9. Domain: Health

Indicate the specific subject concerning health of the question being coded.

- o Personal physical health condition
- o Personal mental health condition
- o Physical illnesses
- o <u>Mental illnesses</u>
- Disabilities
- o <u>Use of medicine</u>
- o <u>Use of drugs</u>
- o <u>Medical institutions and hospitals</u>
- o <u>Doctor's treatment</u>
- o Other
- → Irrespective of the option chosen, go to 2. Concept

1.10. Domain: Living Conditions and Background Variables

Indicate the specific subject concerning living conditions and background variables of the question being coded.

- ∘<u>Age</u>
- ∘ <u>Sex</u>
- o Marital status
- o Place of birth
- o Place of residence
- o Nationality
- o Ethnicity
- o Income
- o Education (schools, degrees, courses)
- o Religion
- o Other
- → Irrespective of the option chosen, go to 2. Concept

1.11. Domain: Other Beliefs

Indicate the specific subject concerning other beliefs of the question being coded.

- o Religion
- o Philosophy
- Sexuality
- o Race
- o Norms
- o <u>Life in general</u>
- Happiness
- o Yourself
- o Other
- → Irrespective of the option chosen, go to 2. Concept

2. CONCEPT

In addition to the 'Domain', a request for an answer is characterized by a 'Concept', i.e. what the researcher really wants to know about a subject or domain. However, there are so many concepts used in survey research that Saris and Gallhofer (2007) made a classification in basic concepts. Based on this classification, only some basic concepts are mentioned on the first screen, while the others can be found on the follow-up screens under the options 'All other simple concepts' and 'Complex concepts'. Below, the first screen options are described.

<u>Evaluative belief:</u> These are requests that seek to obtain an evaluation of the respondent's belief in something without explicitly using evaluative words such as good/bad, positive/negative, etc. For evaluative beliefs, the evaluation is implicitly suggested in the positive or negative connotation of some words. For example:

"Illegal stone mining has caused irreparable damage to the 20th century"

"The budget reform has led to prosperity in the United States"

"The war destroyed a lot of buildings"

"Immigrants steal jobs"

The word expressing an evaluative connotation has been emphasized in each assertion. Typical words expressing evaluative beliefs are: abandoned, diminished, embrace, enrich, harm, success, etc.

<u>Feelings:</u> These refer to affective evaluations or feelings for something. Assertions expressing feelings can have three basic forms, examples of which are:

"My job is enjoyable"

"I like my job"

"Politicians make me angry"

The word expressing a feeling has been emphasized in each assertion. Typical words expressing feelings are: fear, disgust, anger, satisfaction, surprise, shame, hope, desire, happiness, etc.

o <u>Importance of something:</u> These types of requests will usually include an expression of "importance" as subject complement. For example:

"My work is important"

"Honesty is very important to me"

The word expressing the importance of something has been emphasized in both assertions.

o <u>Expectation of future events:</u> These are beliefs regarding what will happen in the future. For example:

"I am going to get a new job?"

"NATO will leave Afghanistan"

The verb tense expressing a future event or action has been emphasized in both assertions.

o <u>Facts, background or behaviour:</u> These refer to objective variables, variables for which information could also be, in principle, obtained from a source other than the respondent. For instance, age can be obtained from birth records, vote choice could be obtained from voting ballots (except that this is forbidden by law), medical history from hospitals (idem), etc.

Facts are sometimes asked to test the knowledge of the respondent. For example:

"Who was the 35th President of the United States?"

Demographic or background questions are objective variables such as: educational level, age, gender, income, household composition, marital status, etc. For example:

"How old were you when you completed your full-time education?"

Finally, behaviour refers to present or past actions or activities of the respondent. For example:

"How many hours a week do you usually spend watching television?"

- → Irrespective of the option chosen above, go to 3. Social Desirability
- O All other simple concepts: This option gives the respondent the possibility to select among others, equally important, simple concepts used in survey research. These are: judgements, relationships, evaluations, preferences, policies, rights, and action tendencies. By clicking on this option, a detailed description of each will be provided in the next help screen.
- → Go to 2.1 All other simple concepts
- O Complex concepts: Complex concepts are combinations of two or more simple concepts of the above. Therefore, this option should be used to indicate when the request does not only use a simple concept but rather when it uses a combination of them. The following different types of complex concepts are proposed: Importance of a judgement, certainty of a judgement and others (e.g. agreement with a policy, an opinion, etc.).
- → Go to 2.2 Complex concepts

2.1. All other simple concepts

 Judgements: These are remarks about someone or something but not in positive or negative terms. For example:

"Do you have a large family?"

"To what extent are you able to participate in politics?"

The word expressing a judgement has been emphasized in both assertions.

Relationships between two people or things. For example:

"Is x the cause of y?"

"Are x and y similar?"

"Are you strongly attached to the Conservative party?"

"Were new laws the cause of the change in the position of black people?"

The word expressing the relationship between two objects has been emphasized in each assertion.

o <u>Evaluations</u> can easily be identified by evaluative words such as good/bad, positive/negative, perfect/imperfect, superior/inferior, useful/useless, etc. For example:

"Was Clinton a good president?"

"Was their work perfect?"

The word expressing an evaluation has been emphasized in both assertions.

o <u>Preferences:</u> They are frequently used in consumer research, election studies and in studies of policies where items are compared from the most to the least preferred. For example:

"How do you like to spend your free time?"

"Are you in favour of a directly elected President?"

The word expressing a preference has been emphasized in both assertions.

Norms: These are actions regarded by a set of persons to be proper or correct (Coleman, 1990). An assertion expressing a norm often contains the words "should" or "have to". For example:

"Should a woman be prepared to cut down on her paid work for the sake of the family?"

"Do you have to check in at work?"

The word expressing a norm has been emphasized in both assertions.

o <u>Policies:</u> These are norms (use of "should" or "have to") about what the government or people in power should do. For example:

"Should the government not allow more immigrants?"

"Has the government to resign?"

The words expressing a policy have been emphasized in both assertions.

o <u>Rights:</u> These are expressions of permission such as "accepted", "allowed", or "justified". For example:

"Is abortion permitted?"

"Have immigrants the right to social security?"

The word expressing a right has been emphasized in both assertions.

o Action tendencies refer to what someone intends to do in the future. For example:

"Are you going to the doctor?"

"Will you do your homework soon?"

The word expressing an action tendency has been emphasized in both assertions.

→ Irrespective of the option chosen above, go to 3. Social Desirability

2.2. Complex concepts

o <u>Importance of a judgement</u> is a combination of the concept "Importance of something" and "Judgement". For example:

"How important is it that basketball players are tall?"

"How important is it that people are honest with you?"

The words expressing importance and judgement have been emphasized in the assertions.

o <u>Certainty of a judgement</u> combine "Certainty" and the concept "Judgement". For example:

"How certain are you that you are able to participate in politics?"

"How certain are you that politicians are often honest with their voters"

The words expressing certainty and judgement have been emphasized in the assertions.

Other: Many more combinations of concepts are possible. For example:

"To what extent are you in favour of abortion being permitted?"

The emphasized words in the assertion are expressing a preference of a right.

"Do you prefer the Social Democratic Party above the Christian Democratic Party?"

The emphasized words in the assertion are expressing a preference of a relationship.

"To what extent do you **agree or disagree** with the following assertion: I love learning new things"

The emphasized words in the assertion are expressing an agreement of a preference. Agreements can be combined with any simple concept.

→ Irrespective of the option chosen above, the coding continues in 3. Social Desirability

3. SOCIAL DESIRABILITY

Socially desirable responses can occur when the respondent thinks that some response categories are more approved of by society than others. Topics where this can occur are: voting behaviour, behaviour related to addiction, crimes, illnesses, racism, sexual behaviour, charity, physical violence, financial matters, being a well-informed and cultivated person, religion, etc. The choice of the category should be based on the specific population under study, and cultural and time references must be taken into account.

- O Not present: When there are no answers seen as more desirable than others. For example: "Do you prefer apples or oranges?", "Have you been to the cinema in the last week?", "How many members are there in your family?", etc..
- A bit: Although it will depend on the cultural and intellectual background of the respondents, this will group all personal questions related to a low level of social desirability. Possibly, the social desirability of these questions will be detected by some respondents but not for others. For example: Personal income and earnings: some respondents will to some degree tend to raise or lower the true amount. Other examples are: illnesses, charity, financial matters, being a well-informed and cultivated person, evaluating the performance of the government or other institutions, persons or objects, etc.
- o <u>A lot:</u> These questions are often uncommon in most countries because of their high degree of social desirability. Most of the respondents will feel exposed by such types of questions. For example: Racism, physical violence, religion (depending on the cultural background), voting behaviour (depending on the political situation of the country), crimes, sexual relationships, drugs, etc.

4. CENTRALITY

Some topics are more central in the mind of the respondents than other topics. The choice of the category should be based on the respondents characteristics, and coders should consider whether the topic is central or not in the mind of the survey respondents in general.

o <u>Not at all central/ salient:</u> These are topics which the respondents are rarely familiar with. The requests for an answer usually require a judgement about something or someone not directly related to the respondent. For example:

"Do you think the government should favour the use of solar-powered cars?"

o <u>A bit central:</u> These are topics which the respondents are slightly more familiar with. The requests for an answer usually require a judgement about something or someone not directly related to the respondent. For example:

"Do employees need strong trade unions to protect their working conditions and wages?"

o <u>Rather central:</u> These are typical requests for an answer to questions which the respondents have not necessarily thought about before but to which they can easily create an answer based on their experience or what they have heard. For example:

"How far do you trust the legal system in your country?"

O Central: These questions refer to the respondents' usual activities or thoughts. Although they should be very central in the mind of the respondent, the formulation of the requests for an answer require the respondent to think about a specific moment, amount or type to come up with the specific answer. For example:

"On a weekday, how much time do you spend in total listening to the radio?"

"Mark which types of fruits you have eaten during the last week"

o <u>Very central/ salient:</u> These questions refer to the respondents' usual activities or thoughts. The requests for an answer require no further effort from the respondent than looking for the appropriate category for his or her answer. For example:

"How satisfied or dissatisfied are you with your job?"

"What is your highest level of education?"

5. REFERENCE PERIOD

Requests can be asked about a <u>Present</u> situation: feelings at the moment, satisfaction with different aspects of life or opinions about policies, norms, or rights.

Requests can also be directed to <u>Future</u> events or intended behaviours. The request for an answer can ask for instance, whether one will buy some goods in the future, will support some activity or expect any changes.

Finally, survey questions can be directed to the <u>Past</u>, asking for example, whether one has bought something during the last week or whether one has been to a physician, dentist or hospital during the last year.

6. FORMULATION OF THE REQUEST FOR AN ANSWER: BASIC CHOICE

Requests for an answer can either be formulated as:

Indirect requests, which are characterized by the use of pre-requests such as:

"Do you think that ...?"

"Would you say that ...?"

"Could you tell me...?"

"Please tell me what you think about..."

"Please indicate on a scale from 0 to 10 how much..."

"Do you agree or disagree..."

These types of requests are more formal and polite than direct requests. For example:

"Please indicate how satisfied you are with the present state of the economy in your country?"

"Would you say that cultural life is generally enriched or undermined by people coming to live here from other countries?"

o <u>Direct requests</u> do not contain a pre-request but are characterized by the inversion of the verb and the subject. For example:

"How satisfied are you with the present state of the economy in your country?"

"Is cultural life generally enriched or undermined by people coming to live here from other countries?"

"On an average weekday, how much time in total, do you spend surfing the Internet?"

- → Irrespective of the option chosen above, the coding continues in <u>7. WH word used in the</u> request
- No request present (e.g. not the first item of battery): Commonly this occurs in batteries, where a set of stimulus or statement is given, implying through the context or the response options that an answer is required. In batteries, the request is formulated before the first item and is not repeated after that. In that case, after the first item all items do not contain any request. Click here to see how batteries are treated in SQP. For example:

[Request for an answer]: "Using this card, please say to what extent you agree or disagree with each of the following statements:

	Disagree strongly	Disagree	Neither agree nor disagree	Agree	Agree strongly
[Statement 1] The government should take measures to reduce differences in income levels	•	•	•	•	•
[Statement 2] Gay men and lesbians should be free to live their own lives as they wish	•	•	•	•	•
[Statement 3] Political parties that wish to overthrow democracy should be banned"	•	•	•	•	•

In this example, only the first item (consisting of the request for an answer and the first statement) would be coded with request present (specifically as Indirect request). However, statements 2 and 3 will be coded by using the option No request present.

→ Go to 14. Use of stimulus or statement in the request

7. WH WORD USED IN THE REQUEST

Requests are often opened with a word such as 'who', 'which', 'what', 'when', 'where' but also 'how', 'to what extent', 'to what/which degree' or 'whether'. The common denominator of these words is that they replace the information asked for in the question sentence. These question words are called 'WH words' because in English they often start with the letters "wh". However, SQP uses 'WH words' as a generic name, therefore, 'combien' (French 'how much'), 'cuál' (Spanish 'which'), 'warum' (German 'why') and 'когда' (Russian 'when') are also considered 'WH words'.

- → If a WH word is used in the request, the coding continues in 7.1 WH word
- → If the request is without a WH word, go to 8. Request for an answer type

7.1 WH word

Below, examples of each of the 'WH word' options are presented:

- o Who: e.g. "Who is the president of the European Commission?"
- o Which: e.g. "Which candidate do you prefer?"
- o What: e.g. "What did you buy?"

Note that expressions like "to what extent do you agree with..." should not be coded as 'what' because the meaning is rather 'how much' like the WH words 'How (intensity)' or 'How (extremity)'. The code 'what' refers to the use of the word what in phrases like: "What did you buy yesterday?"

- When TIME: e.g. "When did you go to school for the first time?"
- o Where PLACE: e.g. "Where did you go by car?"
- o How (procedure): e.g. "How did you pay for the car?"
- How (relationship): e.g. "How did the position of blacks change?"
- How (opinion): e.g. "How do you see the future?"
- o How (quantity): e.g. "How often do you go to church?" or "How many..."
- o <u>How (extremity):</u> e.g. "How interested are you in politics" or "To what extent are you satisfied with your job?"
- o <u>How (intensity):</u> e.g. "How strongly do you believe that you will get a job?" or "To what extent do you agree or disagree with the belief that global warming will harm future generations?
 - o Why: e.g. "Why did you leave school?"

8. REQUEST FOR AN ANSWER TYPE

Requests for an answer are usually formulated in one of the following options:

- o Interrogative requests can be identified with statements such as:
- "Do you agree or disagree that..."
- "Would you say that...?"
- "Are you satisfied or dissatisfied...?"
- "What would you prefer ...?"
- o <u>Imperative</u> requests are instructions to the respondents that usually include statements like:
- "Please indicate on a scale from 0 to 10 how much..."
- "Please read each question and tick the box on each line that shows how much time..."
- "Tell me to what extent..."
- o <u>Declarative</u> requests which can be formulated like statements, but are very infrequent, such as:
- "Now I would like to ask you..."
- "We are interested in knowing your opinion about..."
- o <u>None of the above</u> occurs when there is no request present (see <u>'Formulation of the request for an answer: basic choice'</u>), i.e. when there is only a stimulus or statement of a

battery. Click <u>here</u> to see how batteries are treated in SQP. In the example below only the first statement will have the request present and its characteristics will be coded. However, the second statement will be presented to the respondent without repeating the request again and therefore, its characteristics will not be coded again.

[Request for an answer]: "Using this card, please say to what extent you agree or disagree with each of the following statements:

	Disagree strongly	Disagree	Neither agree nor disagree	Agree	Agree strongly
[Statement 1] The government should take measures to reduce differences in income levels	•	•	•	•	•
[Statement 2] Gay men and lesbians should be free to live their own lives as they wish	•	•	•	•	•

9. USE OF GRADATION

A request for an answer contains gradation if it indicates that the response scale will allow answers which can be ordered from low to high or from high to low. For example:

10. BALANCE OF THE REQUEST

The use of a <u>bipolar</u> concept does not mean that the request for an answer is actually formulated using both poles of the concept. 'Balance of the request' captures this characteristic. Depending on how the request is formulated, requests can be balanced or unbalanced.

A request is <u>Balanced</u> when possible answer categories of both directions are mentioned in the request for an answer. In other words, when the concept used is bipolar and the two possible poles are used in the request for an answer. For example:

"Do you like or dislike foreigners?"

"How satisfied or dissatisfied would you say you are with your job?"

A request is <u>Unbalanced</u> when only one direction is indicated, while the other direction is possible. In other words, when the concept is bipolar but only one pole is used in the request. This is what is called a leading question, because the one sided formulation can influence the respondent to answer in this direction. For example:

"Do you dislike foreigners?"

"How satisfied would you say you are with your job?"

[&]quot;Could you tell me how much..."

[&]quot;To what extent do you..."

[&]quot;Please tell me to which degree you..."

A request should be coded as <u>Not applicable</u> when there are not two possible directions, i.e. when the concept measured is <u>unipolar</u>. This is true for all questions regarding frequencies, probabilities, likelihood, etc. For example:

"How often do you meet foreigners?"

"How much time do you spend watching television?"

"How important is income for well-being?"

Although unimportant exists it is not considered the negative pole of important but as the zero point.

Exceptions:

- 1) There are concepts that only vary from zero to one end of the scale. For example, in "How guilty is this terrorist?" only two possible options are available, either the terrorist is guilty or they are not, and the same happens with "How sweet is this drink?". In these cases the other direction cannot be formulated and so these requests are also considered Not applicable with respect to balance. Another example is "Do you think that abortion should be legalized?". This request should be coded as Not applicable because abortion can only be legalized or not legalized, i.e. prohibited, so there is no opposite pole for legalization, other than the automatic zero point which is prohibition.
- 2) Coders must be aware that this characteristic is language specific. For example, in Spanish there is no such opposite pole for 'successful' like 'unsuccessful'. In Spanish the opposite is 'not successful'. This word cannot be considered the opposite. 'Fracaso', the synonym of not successful, would not be considered as an opposite pole either, but rather as the automatic zero point of 'éxito'. So, if they ask in Spanish "How successful is the police?" this request will be considered as Not applicable with respect to balance, because in Spanish the opposite is not 'unsuccessful' as in English but 'not successful', which is the zero point of 'successful' rather than the opposite.
- 3) Coders can also find requests formulated like "Do you think that the government is doing a good job or not?" which are also language specific. For these types of questions, and for any language, if the opposite pole 'bad' exists, then the request is <u>Unbalanced</u> with respect to balance, because it exists and it is not used. However, if the opposite pole for 'good' (other than 'not good') does not exist for the language, then the balance of the request is considered Not applicable.

11. Presence of encouragement to answer

These requests usually use words to stimulate the respondent to answer, such as:

"Please read this question carefully before answering"

"Could you tell me...?"

"We would like to ask you..."

"Please tell me..."

"It is important for our research to know..."

12. EMPHASIS ON SUBJECTIVE OPINION IN REQUEST

These are requests that seek to obtain the subjective opinion of the respondent. To do so, expressions such as the following are used:

"Please, give us your opinion about..."

"What do you think about ...?"

"According to you what is the..."

"In your opinion..."

"To what extent would you say the government is doing a good job?"

13. INFORMATION ABOUT THE OPINION OF OTHER PEOPLE

When information about other people is given in the request, statements such as the following are used:

"Some people are against nuclear energy while others favor it..."

"Most people think that..."

14. USE OF STIMULUS OR STATEMENT IN THE REQUEST

Both stimulus and statements only occur in batteries of survey questions. In batteries, a set of stimulus or statements is given, implying through the context or the response options that an answer is required. In batteries, the request is formulated before the first item and not repeated after that. Click here to see how batteries are treated in SQP.

A **stimulus** in a battery of questions can be a noun or a combination of nouns such as a party name, a name of an institution or a brand. For example:

"Please indicate how much trust you have in each of the following institutions:

	No trust at all				Complete trust
The police	•	•	•	•	•
The European Parliament	•	•	•	•	•
The Polish Parliament"	•	•	•	•	•

A **statement** is a complete sentence. For example:

"Using this card, please tell me how far you agree or disagree with the following statements:

	Disagree strongly	Disagree	Neither agree not disagree	Agree	Agree strongly
A woman should not have to cut down on her paid work for the sake of her family	•	•	•	•	•
Women should take more responsibility for the home and children than men"	•	•	•	•	•

In SQP the first stimulus or statement of a battery of questions, e.g. The police, is coded together with the request for an answer. However, the following items, e.g. The European parliament and the Polish parliament, are coded separately. The same is done for the statements. Thus, a request for an answer can include a stimulus or statement, this being the first item of the battery of questions, but a stimulus or statement can also appear without a request.

15. ABSOLUTE OR COMPARATIVE JUDGEMENT

A request for an answer uses a <u>Comparative judgement</u> if the respondents are asked to compare two events or things. For example:

"Are you more or less satisfied now than in the past?"

"Is Britain made a better or a worse place to live by people coming to live here?"

A request for an answer uses an <u>Absolute judgement</u> if respondents only have to evaluate an event or something else. For example:

"How satisfied are you with your health?"

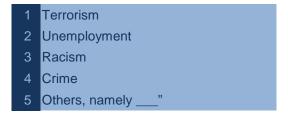
"Would you say that most people can be trusted?"

16. RESPONSE SCALE: BASIC CHOICE

A request also usually contains a response scale to express the answers. There are question types that seek to obtain a defined answer from a closed range of possible answers. These response scales are summarized under the options categories and yes/no scales. Furthermore, there are questions where no answer categories are suggested. In these cases, response options such as numerical open-ended scales, magnitude estimation and line production are often used.

More than 2 categories scales: When the number of response options is higher than
 For example:

"What is the most serious problem in our country?



- → Continue in 16.1 Number of categories
- o <u>Two-category scale:</u> Answer scales with 2 options are summarized under the name of yes/no scales. For example:

"Did you go to college?

```
1 Yes
2 No"
```

→ Go to 17. Don't know option

 Numerical open-ended scales: these refer to answer options where no answer categories are specified. They can be easily identified by statements such as:
"What percentage of your time do you spend on housework? 0% means none at all and 100 % means absolutely all of it. Write in percentage:"
"How many years did you live in New York? Write in:years"
"On an average weekday, how much time , in total, do you spend watching television?
WRITE IN HOURS AND MINUTES:"
→ Continue in 16.2 Maximum possible value
o <u>Magnitude estimation:</u> In magnitude estimation subjects are presented with a standard stimulus (a modulus) and are told that the stimulus has a magnitude of a certain value. The subjects are then presented with a series of stimuli that vary in extremity and are asked to assign each of the stimuli a number relative to the standard stimulus. For example:
"If we gave the status of a schoolteacher a score of 100, how would you evaluate the status of a physician? If the status of this occupation is twice as high as that of the schoolteacher, give a number twice as large or 200. If the status of this occupation is half of that of a schoolteacher, divide the number by 2, which gives 50"
→ Continue in 16.3 Maximum possible value
 <u>Line production</u>: In line production, subjects are presented with a standard line of a certain length. The subjects are then presented with a series of stimuli that vary in extremity
and are asked to assign each of the stimuli a line relative to the standard line. For example:
"How satisfied are you with your house? Express your opinion in length of lines, where completely dissatisfied is expressed by the following line
_
and completely satisfied by the following line
indicate your opinion by drawing a line here:"
→ Go to 16.3 Maximum possible value
o More steps procedures: These requests consist of more than one question. Click here for an illustration of how to introduce and code a more steps procedure question in SQP. For example: Q1 "Do you favour or oppose abortion? 1 Favour → [Go to Q2] 2 Oppose" → [Go to Q3]
Q2 "How far are you in favour of abortion?
1 I am very much in favour
2 I am much in favour"
Q3 "How far do you oppose abortion?
1 I am completely opposed
2 I am opposed"

→ Go to 16.1 Number of categories

16.1 Number of categories

Enter the number of categories of the answer options. For example:

No time at all
Less than ½ hour
½ hour to 1 hour
More than 1 hour, up to 1½ hours
More than 1½ hours, up to 2 hours
More than 2 hours, up to 2½ hours
More than 2½ hours, up to 3 hours
More than 3 hours

SQP will provide a 'Suggested value' for this particular characteristic. In the example, the total number of categories is 8.

The 'don't know' option should never be counted as an answer category.

→ Continue in 16.4 Labels of categories

16.2 Maximum possible value

Enter the maximum possible value obtainable in the 'Numerical open-ended' scale. For example:

"What percentage of your time do you spend on housework? 0 means that you spend 0% of your time and 100 means that you spend 100% of your time. Write in percentage: ______" - Here the maximum number is 101.

"On an average weekday, how much time, in total, do you spend watching television? Write in hours and minutes" - Here the maximum number is 24 hours.

→ Go to 17. Don't know option

16.3 Maximum possible value

Enter the maximum possible value obtainable by the 'Magnitude estimation' or 'Line production' scale. If this value is not known, enter the maximum value observed in the data. For example:

"If we gave the status of a schoolteacher a score of 100, how would you evaluate the status of a physician? If the status of this occupation is twice as high as that of the schoolteacher, give a number twice as large or 200. If the status of this occupation is half of that of a schoolteacher, divide the number by 2, which gives 50"

In this case, the maximum possible value is not defined by the procedure. The maximum value possible should be determined on the basis of the highest value given in the data.

"How satisfied are you with your house? Express your opinion in length of lines, where completely dissatisfied is expressed by the following line

_

and completely satisfied by the following line

indicate your opinion by drawing a line here:"

In this case, the maximum possible value is determined by the length of the line of the highest possible value "completely satisfied". The maximum numerical value is the number of times the longest line is larger than the shortest line.

→ Go to 16.8 Theoretical range of the concept bipolar/unipolar

16.4 Labels of categories

The text related to each category (i.e. the labels) can be:

No labels: There are no labels for any of the categories of the scale. Example:

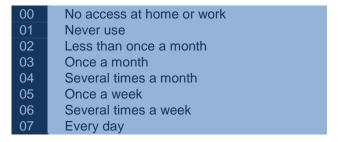
"Using a scale from 1 to 5, where 1 means strongly disagree and 5 means strongly agree, to what extent do you agree or disagree with the current political situation?"



o <u>Partially labelled</u>: Some of the categories of the answer scale, but not all, are labelled. Example:



o Fully labelled: All categories of the answer scale are labelled. Example:



16.5 Labels with short text or complete sentences

Short labels are short texts (i.e. single words) and longer texts are complete sentences. One has the choice between complete sentences or short predicates.

- Short text: e.g. "Agree completely", "More than a quarter of the time" or "In favour"
- o <u>Complete sentences:</u> e.g. "Doctors rarely tell the whole truth to their patients" or "I am in favour of the president"

16.6 Order of the labels

Is the first mentioned answer category the most negative or the most positive one?

o <u>First label negative</u>: The first category in the answer scale has the most negative formulation. For example:

"How would you rate the quality of fast-food restaurants?

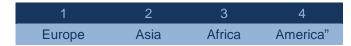


"How often do you watch TV?



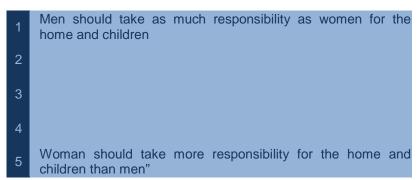
Not applicable: Nominal answer scales do not have an order of labels. For example:

"In which continent do you live?



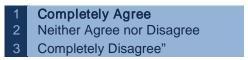
Moreover, there are questions for which the positive or negative connotation is subjective and the order has to be considered <u>Not applicable</u>. For example:

"Please show how close your opinion is to the statements on this card by choosing a number between 1 and 5.



o <u>First label positive</u>: The first category in the answer scale has the most positive formulation. For example:

"Do you agree or disagree with the fact that doctors keep the whole truth from their patients?

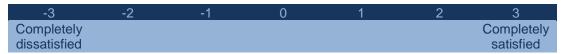


16.7 Correspondence between the labels and the numbers of the scale

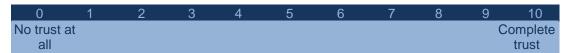
Correspondence measures the level of relation between the numbers and the labels in a category scale. The numbers ordering the scale should be related to the labels of the categories. Thus, the most negative labels in the categories should be related to the lowest numbers in the scale, while the most positive labels should be related to the highest numbers. The better the relationship between numbers and labels, the higher the correspondence.

The following scale has a <u>High correspondence</u> because one label is the opposite of the other and therefore it makes sense that one label has the opposite value of the other label.

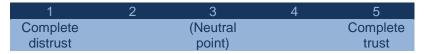
For this reason, if the label 'Completely satisfied' corresponds to the value 3, the opposite label 'Completely dissatisfied' corresponds to the value -3.



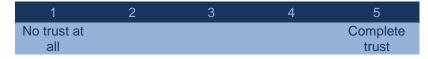
In the following example, a <u>High correspondence</u> happens because the label 'No trust at all' represents zero trust and corresponds to the value '0', while the final point corresponds to the label 'Complete trust'.



As in the following example, a <u>Medium correspondence</u> happens when both the numbers and the labels are ordered from the most negative label, 'Complete distrust', and lowest value, '1', to the most positive label, 'Complete trust', and highest value, '5'. The example does not have a High correspondence because the label 'Complete distrust' does not correspond to the opposite value of 'Complete trust', which would be '-5'.



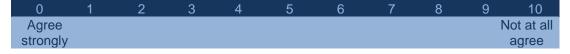
Similarly, the following scale has a <u>Medium correspondence</u>. The label 'No trust at all' represents zero trust and is not connected to the value '0' but to the value '1'. Both the numbers and the labels are ordered from the most negative label 'No trust at all', and lowest value, '1', to the most positive label 'Complete trust', and highest value, '5'.



The following scale has a <u>Low correspondence</u> because while the labels are ordered from the most positive label 'Strongly agree' to the most negative label 'Strongly disagree', the numbers are ordered from the lowest '1' to the highest value '5'.



Similarly, in the following example, the scale has a <u>Low correspondence</u> because while the labels are ordered from the most positive label 'Agree strongly' to the most negative label 'Not at all agree', the numbers are ordered from the lowest '0' to the highest value '10'.



Finally, nominal scales or scales that use, for instance, letters or radio buttons rather than numbers, would be coded as <u>Not applicable</u>. For example:



16.8 Theoretical range of concept bipolar/unipolar

This characteristic identifies whether the concept measured in the request is theoretically bipolar or unipolar, independently from the formulation used by the researcher in the question.

O Theoretically bipolar means that the theoretical concept contains two opposing poles. For example, the concept "feeling towards foreigners" is a bipolar concept because one can like and dislike them. Thus, an option would be to use a bipolar request:

"Do you like or dislike foreigners?"

Even though both poles are not explicitly mentioned in the request, if theoretically the opposite pole exists, coders should continue considering the theoretical range as bipolar. For example:

"Do you like foreigners?"

- → Continue in 16.9. Range of the used scale bipolar/unipolar
- o <u>Theoretically unipolar</u> is a concept for which one cannot formulate an opposite pole. For example, the concept "frequency of events" typically have theoretical and response scales that are both unipolar:

"How often do you listen to music when doing housework?"

"How important is it for you to follow your project timeline?"

Furthermore, the concepts "likelihood and probability of events" and "certainty of something" are unipolar even though unlikely, improbable and uncertain are used in the question and answer categories:

"How likely are you to hire our company again?

→ Go to 16.12 Number of fixed reference points

In the case of questions measuring complex concepts, such as the agreement with a policy, the certainty of a judgement, etc., the theoretical range of the concept will be led by the main concept in the question, the one on which the answer options is based. For more information, go to Appendix 3.1.

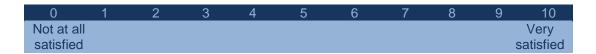
The term theoretical range is <u>Not applicable</u> in the case where nominal scales, yes/no, true/false answers, or numbers are used.

16.9 Range of the used scale bipolar/unipolar

This characteristic identifies if the answer scale used in the question is bipolar or unipolar, independently from the formulation used by the researcher in the request.

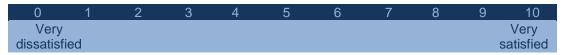
When the theoretical range of the concept is unipolar, then the answer options are always unipolar. Thus, SQP do not ask to code this characteristic, if previously the concept was coded as theoretically unipolar. However, if the theoretical range is bipolar, SQP will allow you to code whether the scale is unipolar or bipolar. This can be seen by looking at the end points of the answer scale.

o <u>Unipolar:</u> When there is only one pole, or frequencies or probabilities are used in the scale. For example:



This is a unipolar scale because the opposite pole 'dissatisfied' is ignored, even if they exist in English. Thus, theoretically this scale would be bipolar but the scale specified is unipolar.

- → Go to 16.11 Neutral category
 - o <u>Bipolar:</u> When the two poles are used in the answer scale. For example:



This is a bipolar scale, because the two opposite poles of the scale are mentioned.

→ Continue in 16.10 Symmetry of response scale

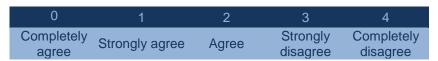
16.10 Symmetry of response scale

A scale is <u>Symmetric</u> when there is a correspondence between all terms so their relationship is reversible. The scale must thus be bipolar, and the quantifiers on both sides must be similar. For example:



Nominal scales are also symmetric.

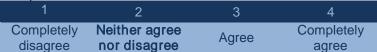
A scale is <u>Asymmetric</u> when the number of response options or the distance between the response options at both sides of the scale is different. For example:



In the example above, there are 3 categories in the positive side of the scale and 2 categories in the negative side of the scale. Thus, the scale is asymmetric.

16.11 Neutral category

A neutral category can be either implicitly placed in the middle of a scale or mentioned explicitly. For example:



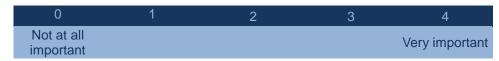
Although this scale has no middle point, it has an explicit neutral category ('2. Neither agree nor disagree'). Implicit neutral categories can be detected depending on the bipolarity or unipolarity of the scale.

When the scale is bipolar, and the category scales have an uneven number of categories, the middle point should always be considered as a neutral point in the scale. For example:



The middle point of this scale should be considered an implicit neutral category even though it is not labelled.

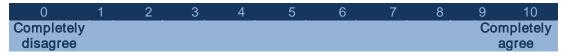
When the scale is unipolar, there cannot be neutral points. Unipolar scales go from the zero point towards the positive end point of the scale, and each point in the scale is an increase on the label. For example:



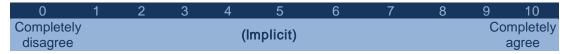
Note that the neutral category is not equal to no answer, no opinion or the option don't know.

16.12 Number of fixed reference points

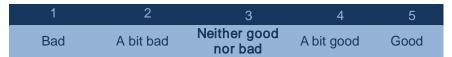
The characteristic 'fixed reference points' asks how many reference points of a scale are taken as fixed references to give a fixed answer. "Fixed" means there is no doubt where the point lies on the subjective scale perceived by respondents. Using the following scale, there is no doubt that categories 0 and 10 are fixed reference points of the scale because one cannot be more than 'completely' in agreement or in disagreement.



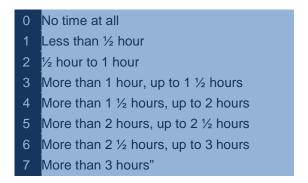
However, using the following scale, the categories 0 and 10 are still fixed reference points but in this case there is a third fixed point, which is the fifth category (neutral category). This can easily be seen because in a bipolar and symmetric scale with an uneven number of categories, the middle point is the neutral category, and a neutral category is always a fixed reference point.



If the end points had been labelled 'bad' and 'good' these reference points should not be seen as fixed because one can be worse than bad and better than good. Therefore, the following scale does not have 3 fixed reference points (1.Bad; 3.Neither good or bad; and 5.Good), but has only 1 fixed reference point, the neutral category (3.Neither good or bad).



Furthermore, take into account the following case. In those types of category scales where frequencies are defined, coders should say that categories 1 to 6 are fixed reference points because the time range is closed, i.e. the category 1 goes from no time to 30 minutes, category 2 from 30 minutes to 1 hour, and so on. Category 0 'No time at all' is also a fixed reference point because one cannot spend less than 'No time at all' doing something. However, the last category 7 'More than 3 hours' is an open category because the maximum number is not defined.



In conclusion, coders should say that this category scale has 7 fixed reference points, which correspond to categories 0 to 6.

In a different example of a frequency scale, only the extremes will be considered as fixed reference points.



17. DON'T KNOW OPTION

The 'Don't know' (DK) option will often not appear as an answer option in SQP but this does not mean that this option was not in the questionnaire. In order to check if the item being coded uses a 'Don't know' option as a possible answer, coders should look at the real questionnaire. The following 'Don't know' options should be considered:

o <u>DK option present</u>: The DK option is explicitly mentioned to the respondent among the response options. For example:

"In an average weekday, how often do you access social media?"



O <u>DK option only registered</u>: The DK option is not explicitly given to the respondent. In the questionnaire, it is indicated that the interviewer should not read it. However, in case the respondent says that he does not know the answer, the response can be registered as such by the interviewer. For example:

"How interested would you say you are in politics?"



<u>DK option not present</u>: A DK option is not present and not registered.

The 'Don't know' option in SQP applies for "no response". It is also not the same as choosing a neutral category.

18. INTERVIEWER INSTRUCTION

There are requests for an answer which incorporate instructions for the interviewer such as:

"Read out"

"If unclear, repeat the instructions"

"Card 1"

These instructions are usually differentiated from the main text of the request i.e. by using bold letters, underlined letters, etc. But this kind of instructions will not usually appear in the SQP request text as they are not mentioned to the respondent when asking the question. Coders must check this question's characteristic in the questionnaire.

19. RESPONDENT INSTRUCTION

Researchers can give instructions to the respondent, which are linguistically characterized by the imperative mode or polite versions of it. For example:

"Answer the question with this card"

"Please imagine a scale from 1 to 5"

"Using this card, please tell me..."

"Give a number between 0 and 100"

In this case, a respondent's instruction should appear in the SQP request text as it is part of the request for an answer text.

20. EXTRA INFORMATION OR DEFINITION AVAILABLE

An <u>extra definition</u> or <u>information</u> regarding the concept measured is sometimes provided in the survey item. This text is considered extra because the question could also be asked without it. For example:

"We'd now like to ask you about housework. By housework we mean things done around the home, such as cooking, washing, cleaning, care of clothes, shopping, maintenance of property, but not childcare, looking after other people and leisure activities. On a typical weekday, approximately how many hours in total do people in your household spend on housework for your home?"

- → If the extra information or definition is absent, go to 21. Introduction available
- \rightarrow If the extra information or definition is present, the coding continues in <u>20.1 Knowledge provided</u>

20.1 Knowledge provided

In survey questions, relevant information can be provided such as information regarding the topic, or definition of terms or both.

- o <u>Definitions only</u>: These give an explanation of the meaning of the terms used in the question. For example:
- "Please tell me on a score of 0 to 10, where 0 **means** that you are completely dissatisfied and 10 **means** that you are completely satisfied"
- "By housework we **mean** things done around the home, such as cooking, washing, cleaning, care of clothes, shopping, maintenance of property, but not childcare or leisure activities"
- Other explanations: Explanations do not intend to define the terms of the question, but rather they intend to give further information about them. For example:

"The EU suggests austerity measures to reduce the Greek deficit. Are you in favour of applying austerity measures in Greece?"

"Please say on a scale of 0 to 10 how far you personally trust the police. If you have no trust at all give a score of 0. If you have complete trust, give a score of 10"

o <u>Both definitions and other explanations:</u> when a combination of both is used in the survey question.

21. Introduction available?

Introductions mainly serve to initiate the topic of the request for an answer to the respondent. For example:

"Now, a couple of questions follow about your health"

"The next few questions deal with your work"

"I'd like to know your feelings towards some of our political leaders"

Introductions will usually be found in SQP as a text set apart from the request. The text will appear clearly identified as an Introduction text. In this case, SQP will ask coders to code its characteristics.

Introduction Text:

"In politics people sometimes talk about 'left' and 'right'"

Request for Answer Text:

"Using this card, where would you place yourself on this scale, where 0 means the left and 10 means the right?"

- → If an introduction is available, continue in 21.1 Request present in the introduction
- → If an introduction is not available, go to 22. Number of sentences in request

21.1 Request present in the introduction

In the introduction an interrogative form can be used. Example:

Introduction Text:

"Would you mind telling me your race or ethnic origin?"

Request for Answer Text

"What is your race?"

Because the first sentence does not have to be answered, coders should code it as an introduction.

21.2 Number of sentences in the introduction

Enter the number of sentences found in the introduction text. SQP will provide a 'Suggested Value' for this particular characteristic. However, coders should verify it. Example:

"The following set of questions will be about your household [SENTENCE 1]. Firstly, I would like to ask you about housework [SENTENCE 2]"

The total number of sentences in this example is 2.

21.3 Number of words in the introduction

Enter the number of words. SQP will provide a 'Suggested Value' for this particular characteristic. However, coders should verify it. Example:

"The following set of questions will be about your household. Firstly, I would like to ask you about housework"

The total number of words is 19.

21.4 Number of subordinate clauses in the introduction

Enter the number of subordinate clauses. A subordinate clause, also called a dependent clause, will begin with a subordinate conjunction (i.e. although, because, if, that, when, etc...) or a relative pronoun (i.e. which, who, whose, etc...) and will contain both a subject and a verb. Subordinated clauses appear because some sentences cannot be expressed by a simple independent main clause. For example:

"The following set of questions will be about your household. Firstly, I would like to ask you about housework" – Here there are no subordinate clauses in this request.

"Some people are in favour of gun legalization [MAIN 1] while others are against it [SUBORDINATED 1]" – Here the total number of subordinated clauses is 1.

22. NUMBER OF SENTENCES IN THE REQUEST

Enter the number of sentences in the request for an answer text. SQP will provide a 'Suggested Value' for this particular characteristic. However, coders should verify it. Example:

"Please indicate how far you agree or disagree with each of the following statements concerning doctors in general [SENTENCE 1]. Doctors rarely keep the whole truth from their patients [SENTENCE 2]"

The total number of sentences in the request is 2.

23. NUMBER OF WORDS IN THE REQUEST

Enter the number of words in the request for an answer text. SQP will provide a 'Suggested Value' for this particular characteristic. However, coders should verify it. Example:

"Please indicate how far you agree or disagree with each of the following statements concerning doctors in general. Doctors rarely keep the whole truth from their patients"

The total number of words in the request is 27.

24. TOTAL NUMBER OF NOUNS IN THE REQUEST FOR AN ANSWER

Enter the number of nouns in the request for an answer text. A noun is a word used to name a person, animal, place, thing or abstract idea. Note that a number is not a noun. Also words such as he, she, I, you, etc. are personal pronouns not nouns. SQP will parse the sentence, denoting the nouns as NN, and will provide a 'Suggested Value' for this particular characteristic. i.e the number of times the code NN occurs. However, coders should verify it. The highlighted words in the following requests are all nouns:

"Was Maria Callas an opera singer?" - Here the total number of nouns is 4.

"Did the **bus inspector** look at all the **passengers' passes**?" – Here the total number of nouns is 4.

"Was the library at Alexandria destroyed in 48 B.C?" - Here the total number of nouns is 2.

"Please indicate how far you agree or disagree with each of the following **statements** concerning **doctors** in **general**. **Doctors** rarely keep the whole **truth** from their **patients**" – Here the total number of nouns is 6.

25. Total number of abstract nouns in the request for an answer

Enter the number of abstract nouns in the request for an answer text. Abstract nouns indicate objects that one cannot, in principle, perceive through physical senses: touch, sight, taste, hearing, or smell. SQP will **not** provide a 'Suggested Value' for this particular characteristic. Therefore, coders will need to count them.

Abstract nouns	Concrete nouns
Government	The king
Justice	A judge
Schizophrenia	A schizophrenic
Childhood	A child
France (the country)	A Frenchman
Police (institution)	A policeman
Parliament	A politician
Party	People
Weekday	Television
Hour	A watch
Humans	Immigrants
Democracy	Radio
Work	Newspaper

For example:

"Please indicate how far you agree or disagree with each of the following **statements** concerning doctors in general. Doctors rarely keep the whole **truth** from their patients."

The total number of abstract nouns in the request is 2.

26. TOTAL NUMBER OF SYLLABLES IN REQUEST

Enter the number of syllables in the request for an answer text. SQP will often provide a 'Suggested Value' for this particular characteristic based on the hyphenation (i.e. an algorithm doing automatic syllabification) of the words. However, coders should verify it. If the software is not providing it, one would have to count them. Example:

"Please in-di-cate how much you a-gree or dis-a-gree with each of the fo-llow-ing statements a-bout doc-tors in gen-er-al. Doc-tors rare-ly keep the whole truth from their pa-tients."

The total number of syllables in the request is 42.

27. NUMBER OF SUBORDINATE CLAUSES IN REQUEST

Enter the number of subordinate clauses. A subordinate clause, also called a dependent clause, will begin with a subordinate conjunction (i.e. although, because, if, that, when, etc...) or a relative pronoun (i.e. which, who, whose, etc...) and will contain both a subject and a verb. Subordinated clauses appear because some sentences cannot be expressed by a simple independent main clause. Often subordinate clauses appear in sentences after the pre-requests, such as:

"Do you think that Catalunya should be independent?"

"Would you say that Greece should be supported?"

"Please tell me what you think of foreigners coming to your country?"

For example:

"Please answer on a scale from 0 to 10 [MAIN 1], where 0 means strongly disagree [SUBORDINATE 1] and 10 means strongly agree [SUBORDINATE 2]"

But also present participles such as: 'using this card', 'now thinking about', etc., can be links between main and subordinated clauses. For example:

"Using this card [SUBORDINATE 1] tell me [MAIN 1] which measures you take [SUBORDINATE 2] to improve your financial situation [SUBORDINATE 3]?"

"Using this card [SUBORDINATE 1], generally speaking [SUBORDINATE 2], would you say [MAIN 1] that most people can be trusted [SUBORDINATE 3], or that you can't be too careful [SUBORDINATE 4] in dealing with people [SUBORDINATE 5]?"

28. NUMBER OF SYLLABLES IN ANSWER SCALE

Enter the number of syllables in the answer options text. SQP will often provide a 'Suggested Value' for this particular characteristic based on the hyphenation (i.e. an algorithm doing automatic syllabification) of words. However, coders should verify it. If the software is not providing it, one would have to count them. This characteristic refers to the total number of syllables for all of the words in all the response options. For example:

1 Dis-a-gree strong-ly2 Dis-a-gree3 Nei-ther a-gree nor dis-agree4 A-gree5 A-gree strong-ly

The total number of syllables in the answer scale is 22.

However, SQP would suggest 27 because it also includes the numbers before the category labels. If that is the case, then coders have to correct the suggested number by the number of categories.

29. TOTAL NUMBER OF NOUNS IN ANSWER SCALE

Enter the number of nouns in the answer options text. A noun is a word used to name a person, animal, place, thing or abstract idea. SQP will provide a 'Suggested Value' for this particular characteristic. However, coders should verify it. The highlighted words in the following answer scales are all nouns:

Disagree stronglyDisagreeNeither agree nor disagreeAgreeAgree strongly

The total number of nouns is 0.

A woman should be prepared to cut down on her paid work for the sake of her family

A woman should not have to cut down on her paid work for the sake of her family

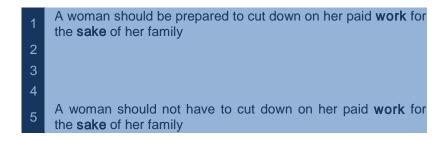
The total number of nouns is 8.

30. TOTAL NUMBER OF ABSTRACT NOUNS IN ANSWER SCALE

Enter the number of abstract nouns in the request for an answer text. Abstract nouns indicate objects that one cannot, in principle, perceive through physical senses: touch, sight, taste, hearing, or smell. SQP will **not** provide a 'Suggested Value' for this particular characteristic. Therefore, coders will need to count them.

Abstract nouns	Concrete nouns
Government	The king
Justice	A judge
Schizophrenia	A schizophrenic
Childhood	A child
France (the country)	A Frenchman
Police (institution)	A policeman
Parliament	A politician
Party	People
Weekday	Television
Hour	A watch
Humans	Immigrants
Democracy	Radio
Work	Newspaper

For example:



The total number of abstract nouns in the answer scale is 4.

31. SHOWCARD OR OTHER VISUAL AIDS USED

Showcards are often used during face-to-face interviews to show the response options or to explain the question. Although in some cases it is specified in the SQP request for an answer text whether a showcard has to be used or not (e.g. "Use Card J"), coders have to check it on the questionnaire. The characteristics of the showcard can also be used to capture the characteristics of the screen layout in web surveys.

o Showcard or visual aid not used: → Go to 32. Computer assisted

"How interested would you say you are in politics – are you ... READ OUT ..."

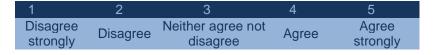
o Showcard or visual aid used: → Continue in 31.1 Horizontal or vertical scale

A5 CARD 4 "Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves? Please use this card to answer"

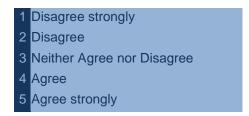
31.1 Horizontal or vertical scale

Select one of the options depending on the format of the scale, presented on the visual aid, not in the SQP answer options text.

o Horizontal:



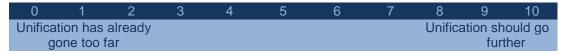
Vertical:



31.2 Overlap of scale labels and categories

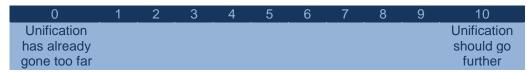
Overlap happens when the label meant to mark one category overlaps with another. Select one of the options depending on the format of the scale presented on the visual aid, not on the basis of the SQP answer options text.

Overlap present:



In this scale the labels belong to categories 0 and 10. However, the labels are overlapping with the other categories in the scale.

o <u>Text clearly connected to the category</u>:



31.3 Numbers or letters before answer categories

Numbers or letters usually order the answer options of a request. Select one of the options depending on the format of the scale presented on the visual aid, not on the SQP answer options text.

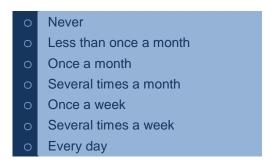
o Numbers:



o <u>Letters:</u>



- → Independently of the option chosen above, the coding continues in 31.4 Scale with only numbers or numbers in boxes
 - Neither:

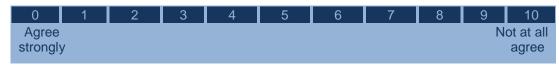


→ Continue in 31.5 Start of the response sentence on the show card

31.4 Scale with only numbers or numbers in boxes

Sometimes the numbers or letters before the categories are in boxes. For example:

o Numbers in boxes:



o Only numbers:

	0	1	2	3	4	5	6	7	8	9	10
ĺ	Agree									N	ot at all
	strongly										agree

31.5 Start of the response sentence on the visual aid

Visual aids can also provide the start of the response sentence. Example:

Spain's policy should be to...

Allow many to come and live here

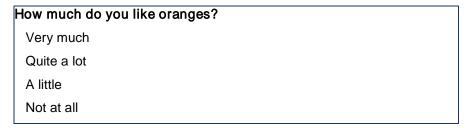
Allow some

Allow a few

Allow none

31.6 Request on the visual aid

Visual aids can also provide the whole request for an answer before the answer categories. Example:



31.7 Picture provided?

Sometimes there are pictures which provide extra information for the respondent, related to the request for an answer. For example:



32. COMPUTER ASSISTED

This characteristic refers to the mode the answers were registered. The answers can be registered by a computer or manually on a paper questionnaire. The only mode of data collection that would not be considered computer assisted would be the paper and pencil interview, which can be either face-to-face, self-completion or by telephone.

33. INTERVIEWER

This characteristic refers to the mode the questions were provided. The coder must have to find out if the interviewer read the question to the respondent (i.e. in a face-to-face or telephone interview) or if the question was answered in a self-completed mode.

34. VISUAL OR ORAL PRESENTATION

This characteristic refers to the way the question is provided to the respondent. One has to take into account the previous code 'Interviewer' in order to know if the question was provided in an oral or visual way. Thus, if the interviewer administers the questionnaire, then this will be done in an <u>Oral</u> way (i.e. the interviewer will read the questions to the respondent), while if the interviewer does not administer the questionnaire because it is self-completed by the respondent, then the questionnaire is filled in as a <u>Visual</u> support (either paper or computer).

Although this is generally true, it may be the case that the interviewer is there but that the respondent has to fill in some questions him/herself, especially sensitive questions. In this case, the questionnaire will be considered <u>Visual</u>.

35. Position

This characteristic refers to the position of the request in the questionnaire. For this characteristic it is necessary to count the number of questions before the specific question.

APPENDIX 1: DEFINITION OF RELIABILITY, VALIDITY AND QUALITY

The purpose of SQP is to provide information regarding the quality of survey questions. The quality of a survey question is defined as the strength between the latent concept of interest and the observed response to the measure or survey question. In order to determine the quality of survey questions, the sources of measurement errors have to first be determined. A first source of measurement error is 'Random error'. Random measurement errors are due to unintended and unpredictable mistakes by either the respondents when choosing the right answer, the interviewers when reporting the answer given by the respondent or the data coders when coding the responses into the database. Thus, if one were able to ask the same question several times, people would not give the same answer and the coders would not code the answers in the same way. So the responses of respondents contain random measurement errors.

A second source of measurement error is the way people react to the different ways of formulating a survey question, for example the response may be different for a question depending on whether a categorical scale with 5 points or an 11-point scale is used, because people may react differently to the different formulations. Some respondents usually give extreme answers to an 11-point scale while others do not use the most extreme responses. On the other hand, both groups of respondents may use the 5-point scale in the same way (Saris and Gallhofer, 2014). This source of measurement errors is named 'Method effect' or 'Systematic error'.

Finally, the third source of measurement error appears when a question does not perfectly cover the concept of interest that is intended to be measured. Imagine the situation in which we want the complex concept "Job satisfaction" to be measured and for that the following survey question: "Would you choose the same job if you could choose again?" is used. Although the question used is probably a good reflection of the complex concept that it intends to evaluate, namely the satisfaction with the respondent's current job, he could for instance, consider in his response not only the satisfaction with his current job but also the satisfaction he may have had with other possible jobs. This suggests that there is a difference, which is called a 'Unique component', between the complex concept to be measured and the simple concept measured by the question. Figure 1 indicates where these different errors can play a role.

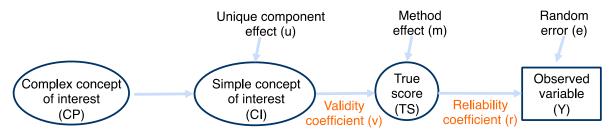


Figure 1: The true score model with measurement errors

The observed variable (Y) contains the responses to a specific survey question. As illustrated in Figure 1, this observed variable also contains random errors (e). Therefore, the latent true score for this observed variable (TS) can be defined as the observed variables minus the random errors. The strength between the true score and the observed variable is the reliability (r^2) of the question. The larger the contribution of the true score to the observed score, the higher the reliability of the question. 'Reliability' can thus be formulated as:

Reliability
$$(r^2) = 1$$
 – proportion random error in the observed variance

Because all survey questions are formulated in a specific way, the true score is partially affected by the variable the question is supposed to measure (i.e. the simple concept of interest) and partially by the reaction of the respondents to the method used (i.e. the method effect). In other words, the latent simple concept of interest can be defined as the latent true score minus the method effect, simply called 'Method error variance'. The strength between

the simple concept of interest and the true score is the validity (v²) of the question. 'Validity' can be formulated as:

Validity
$$(v^2) = 1$$
 – proportion method error variance in the true score variance

Up to this point it could be said that by removing the method effects from the true scores, the scores obtained would represent the concept that the question was supposed to measure. However, as said before, this simple concept may not perfectly represent the complex concept the researcher intends to measure. It may be that these two differ due to unique components. This last part of the measurement process is not taken into account by the SQP quality prediction. The quality prediction given by SQP only refers to simple concepts. The evaluation of the quality of complex concepts requires more research and analysis (Saris and Gallhofer, 2014 and DeCastellarnau and Saris, 2014).

The above definition of 'Reliability' is the same as in the literature in general, but the definition of the validity is different because some authors call 'Construct validity' the product of the SQP definitions of validity and the reliability (Andrews, 1984). Others define the 'Validity' as the relationship between the complex concept of interest and the observed variable. SQP prefers using the concepts "Reliability" and "Validity" as defined above and call the product of these two the 'Quality' of a survey question.

Quality
$$(q^2)$$
 = reliability (r^2) x validity (v^2)

The quality indicators of survey questions, reliability and validity, are estimated by the so-called Multitrait-Multimethod (MTMM) experiments, where different traits (i.e. simple concepts) are measured with different methods (i.e. different formulations of survey questions). The basic model used for the estimation of the relationships between the simple concept of interest, the true score and the observed variable is presented in Figure 1, where the effects between these variables are represented by the 'Reliability coefficient' (r) and the 'Validity coefficient' (v), which squared provide respectively the estimates of the 'Reliability' and the 'Validity'. For details of the procedures, go to Saris and Gallhofer (2014).

In the quality output of SQP, two different values are given for each measure. The squared values (r^2 , v^2 and q^2) represent the predictions of the 'Reliability', 'Validity' and 'Quality'; while r, v and q represent the 'Reliability coefficient', the 'Validity coefficient' and the 'Quality coefficient'.

In this general definition, it is assumed that the variables of interest are continuous, while often the observed variables are measured in a limited number of categories. If that is the case, the 'Reliability' is also affected by the so-called 'Categorization errors' (Saris, Van Wijk and Scherpenzeel, 1998). In such a case, the 'Reliability' will be not only affected by 'Random error' but also by 'Categorization error'.

Reliability
$$(r^2) = 1 - variance$$
 of random and categorization errors

Besides being measures of the strength of a survey question, reliability and validity can also be used to correct for measurement errors (Saris and Gallhofer, 2014 and DeCastellarnau and Saris, 2014).

APPENDIX 2: PRESENTATION OF BATTERIES OF QUESTIONS IN SQP

SQP has a special way of treating batteries of questions. A battery of questions consists of a set of stimulus or statements with a common request for an answer and answer options that have to be evaluated by the respondents. In batteries, the request for an answer, and if applicable, the introduction, will be placed just before the first stimulus or statement. SQP refers to a stimulus or statement as each sentence in the battery that has to be evaluated by the respondent. A stimulus in a question can be a noun or a combination of nouns, e.g. a party name, a name of an institution or a brand, while a statement consists of a complete sentence. The coder must reflect on how the text in a battery of questions is read to the respondent, and code the item in that form.

Below is an example of a battery from the <u>ESS Round 6</u>. In this questionnaire, items E17 to E19 asked about the democracy in the country using the following battery of questions:

"Now some questions on the same topics, but this time about how you think democracy is working in [country] today. Again, there are no right or wrong answers, so please just tell me what you think.

Using this card, please tell me to what extent you think each of the following statements applies in [country]. 0 means you think the statement does not apply at all and 10 means you think it applies completely.

	Does not apply at all										Applies completely
E17 National elections in [country] are free and fair	0	1	2	3	4	5	6	7	8	9	10
E18 Voters in [country] discuss with people they know before deciding how to vote	0	1	2	3	4	5	6	7	8	9	10
E19 Different political parties in [country] offer clear alternatives to one another"	0	1	2	3	4	5	6	7	8	9	10

This battery will be introduced in SQP in the way the interviewer will read the battery to the respondent i.e. first of all, the introduction, secondly the request for an answer, thirdly the first statement will be read. These texts together form the first question and an answer will be given by the respondent. Next, the second statement will be read, the respondent will have to give an answer for this second statement and so on. For the next questions, the introduction and the request for an answer will not be repeated so these questions only consist of the stimulus or statement.

The batteries should be added in SQP as indicated, even when it is self-completed (i.e. an interviewer is not reading the questions).

Thus, the text in SQP for the questions presented in the battery above will be as follows:

E17 ESS Round 6 SOURCE - English

Introduction Text: Answer options: Now some questions about the same topics, but this time about how 0 Does not apply at all you think democracy is working in [country] today. Again, there are 2 no right or wrong answers, so please just tell me what you think. 3 Request for Answer Text: Using this card, please tell me to what extent you think each of the 5 following statements applies in [country]. 0 means you think the statement does not apply at all and 10 means you think it applies 6 completely. National elections in [country] are free and fair. • 8 10 Applies completely

E18 ESS Round 6 SOURCE - English

Request for Answer Text: **Answer options:** Voters in [country] discuss politics with people they know before · 0 Does not apply at all deciding how to vote. 2 3 5 6 R 10 Applies completely

E19 ESS Round 6 SOURCE - English

Request for Answer Text: Different political parties in [country] offer clear alternatives to one another. Answer options:

0 Does not apply at all

1

2

3

4

5

6

7

8

9

10 Applies completely

This layout will matter for the coding of the characteristics 'Formulation of the request for an answer' and 'Use of stimulus or statement in the request'.

Following the example, it should be indicated that question E17 is formulated as an indirect request ("Using this card, please tell me to what extent you think each of the following statements applies in [country]...") with a stimulus or statement present ("National elections in [country] are free and fair") preceded by an introduction. However, questions E18 and E19 will be coded as having 'No request present' (in the characteristic 'Formulation of the request for an answer') and with a stimulus or statement present (i.e. for E18 the statement is "Voters in [country] discuss politics with people they know before deciding how to vote" and for E19 it is "Different political parties in [country] offer clear alternatives in one another").

APPENDIX 3: DEFINITION OF BIPOLARITY AND UNIPOLARITY

Appendix 3.1: What are theoretically Bipolar and Unipolar concepts?

The concept (i.e. the variable of interest) to be measured can be either bipolar or unipolar. Bipolar concepts have two theoretical opposite poles (e.g. positive/negative or active/passive), while unipolar concepts have only one theoretical pole. Below are examples of bipolar and unipolar concepts in English.

Bipolar concepts						
Concept	Negative pole	Positive pole				
Agreement	Disagree -	Agree				
Evaluation	Bad ←	Good				
Satisfaction	Dissatisfied -	Satisfied				
Happiness	Sad	Нарру				

Unipolar concepts						
Concept	Zero point Positive pole					
Frequency	Never	Always				
Likelihood	Not at all likely Very likely					
Importance	Unimportant* —	Important				

*Note: Unimportant means not important, lacking in significance or value (cf: Wordreference). Thus unimportant is not considered as a negative point but as a zero point.

The bipolarity or unipolarity of a concept is language specific. The same concepts can be expressed in the different languages either as bipolar or unipolar concepts. Thus, bipolar concepts in one language may not be translatable as such in other languages.

The polarity of a concept has to be coded in SQP using the characteristic 'Theoretical range of the scale bipolar/ unipolar'.

In order to transform theoretically bipolar or unipolar concepts into survey questions, a request for an answer and a response scale has to be developed. In theory, bipolar concepts can be measured by both bipolar and unipolar requests and scales, while theoretically unipolar concepts can only be measured by unipolar requests and scales.

Often survey questions are measured using complex concepts which combine two basic

concepts. Examples of these are:

- 1. "To what extent do you **agree or disagree** with the statement: **The government should** take measures to reduce differences in income levels".
- 2. "How far do you **agree or disagree** with the statement: I generally **feel** that what I do in my life is valuable and worthwhile".
- 3. "How likely is it that you become unemployed in the next 12 months?"

The words in bold in the examples highlight the complex concept, respectively: an agreement regarding a policy, an agreement regarding a feeling and the likelihood regarding a future expectation.

The first example is composed of the concepts 'Agreement' and 'Policy'. While agreements are theoretically bipolar concepts, the norm regarding what the government should or should not do is theoretically unipolar. Similarly, in the second example the request is composed of an agreement with regard to a feeling. In such cases where the concept 'Agreement' has the main role in the request, users should indicate in SQP that the concept is theoretically bipolar.

Complex concepts can also be composed as in the third example. In that case, both concepts of 'Likelihood' and the 'Future expectation' of employment status are theoretically unipolar. Similarly, because the main role in the question comes from the concept 'Likelihood', users should identify in SQP that the concept is theoretically unipolar.

Appendix 3.2: What are Bipolar and Unipolar requests?

The differentiation between bipolar and unipolar requests will matter for the SQP coding of the characteristic 'Balance of the request'. A theoretically bipolar concept is characterized by the existence of two opposite poles. Thus, if a bipolar concept is formulated in a request for an answer using the two opposite poles of the concept, the range used in the request for an answer is also considered bipolar. For example:

- Bipolar concept: satisfaction
- Bipolar request: "How satisfied or dissatisfied are you with the present state of the economy in your country?"

Because the concept "satisfaction" is bipolar and the request also used both possible poles, this request will be considered 'Balanced'.

However, theoretically bipolar concepts can also be formulated as unipolar requests, if only one of the poles is used in the request for an answer.

 Unipolar request: "How satisfied are you with the present state of the economy in your country?"

In this case, because the request will lead the answer to one of the poles when both are available, it should be considered as 'Unbalanced'.

A theoretically unipolar concept is characterized by the existence of only one pole. Thus, as a unipolar concept can only be formulated in a request for an answer using the unique theoretical pole of the concept, the range used in the request for an answer (i.e. the balance of the request) is also considered unipolar. For example:

- Unipolar concept: importance
- Unipolar request: "How **important** do you think being able to speak English should be in deciding whether someone born, brought up and living outside Great Britain

should be able to come and live here?

When the concept measured is unipolar, the balance of the request does not apply, and thus it should be considered as 'Not applicable'.

Appendix 3.3: What are Bipolar and Unipolar scales?

Scales in agreement with bipolar requests and bipolar concepts should measure two poles: positive to negative or active to passive. For example:

- Bipolar concept: satisfaction
- Bipolar request: "How **satisfied** or **dissatisfied** are you with the present state of the economy in your country?"
- Bipolar scale: 1. Extremely dissatisfied
 - 2. Dissatisfied
 - 3. Neither satisfied nor dissatisfied
 - 4. Satisfied
 - 5. Extremely satisfied

However, theoretically bipolar concepts and requests can also be formulated using unipolar scales, if only one of the poles is used in the response scale.

- Unipolar request: "How satisfied are you with the present state of the economy in your country?"
- Unipolar scale: 1. Not at all satisfied
 - 2. Fairly satisfied
 - 3. Very satisfied
 - 4. Extremely satisfied

Besides, theoretically unipolar concepts have just one pole and the scales go from zero to positive or from zero to negative.

- Unipolar concept: importance
- Unipolar request: "How **important** do you think being able to speak English should be in deciding whether someone born, brought up and living outside Great Britain should be able to come and live here?
- Unipolar scale:
 - 0. Not at all important 1. 2. 3. 4. 5. 6. Extremely important

APPENDIX 4: CODING A QUESTION WITH SEVERAL STEPS

Response scales with several steps are usually measurement procedures consisting of two or more requests and answer scales. For example take the following set of questions:

Q1 "Do you favour or oppose abortion?

Favour go to Q2
 Oppose" go to Q3

Q2 "How far do you favour abortion?

- 1. I am completely in favour
- 2. I am in favour"
- Q3 "How far do you oppose abortion?
 - 1. I am completely opposed
 - 2. I am opposed"

Following this example, the variable to be measured is a combination of Q2 and Q3, Q1 being a filter question. In SQP, these questions will need to be coded as one, as they intend to measure a unique variable of interest "attitudes towards abortion" and cannot be analysed separately. In order to group the three questions into a unique question, Q1 has to be considered an introduction and Q2 and Q3, the two requests for an answer. However, to code the formal and linguistic characteristics of the request for an answer as 'Bipolarity or Unipolarity', 'Emphasis', 'Encouragement', 'Number of words', one of the two requests, which usually has similar characteristics, needs to be chosen to be presented in the SQP text. Thus, the text to be entered in SQP will be as follows:

Introduction box: Do you favour or oppose abortion?

Request for an answer text box: 1. How far do you favour abortion?

(Because people will only get Q2 or Q3, just one of them needs to be put into the text box)

Answer options box: 1. I am completely in favour

2. I am infavour

3. I am opposed

4. I am completely opposed

The formal characteristics of the request for an answer will be coded as usual. However, in order to code the answer options' characteristics, it should be indicated in the characteristic 'Response scale: basic choice' the option: 'More step procedures'. In the following characteristics regarding the response scale, the total number of categories, the order of the labels, the correspondence and other characteristics of the scale should be indicated.

To take into account the fact that Q1, a question which is indicated as an introduction, should be coded as a 'Request is present' in the characteristics regarding the introduction.

Furthermore, the linguistic characteristics of the request for an answer should not be the total of the 2 requests but rather only one should be used or an average of the two, if they are different. In the example, both statements have 6 words, 9 syllables, etc.

REFERENCES

Andrews, F. M. (1984). Construct Validity and error components of survey measures: structural equation approach. *Public Opinion Quarterly, 48, pp. 409-442.*

Coleman, J. S. (1990). Foundations of Social Theory. *Cambridge MA: Belknap Press of Harvard University.*

DeCastellarnau, A. and Saris, W. E. (2014). A simple procedure to correct for measurement errors in survey research. *European Social Survey Education Net (ESS EduNet)*. Available at: http://essedunet.nsd.uib.no/cms/topics/measurement/

Fowler, F. J. (1995). Improving Survey Questions: Design and Evaluation. *Applied Social Research Methods Series*, *38*, *56-57*.

Revilla, M., Saris, W. E., and Krosnick, J. A. (2013). Choosing the number of categories in agree-disagree scales. *Sociological Methods and Research February 2014 43: 73-97*

Saris, W. E., Van Wijk, T. and Scherpenzeel, A. (1998). Validity and reliability of subjective social indicators. *Social indicators Research*, 45, 173-199.

Saris, W. E. (2001). SQP: survey quality predictor. DOS application program.

Saris, W. E., Oberski, D. L. and Kuipers, S. (2004). SQP: survey quality predictor. *Windows application program*.

Saris, W. E. and Gallhofer, I. N. (2007). Design, evaluation and analysis of questionnaires for survey research. *Hoboken, Wiley.*

Saris, W. E., Revilla, M., Krosnick, J.A. and Shaeffer, E.M. (2010). Comparing Questions with Agree/Disagree Response Options to Questions with Construct-Specific Response Options. Survey Research Methods, 4(1): 61-79. Available at: https://ojs.ub.uni-konstanz.de/srm/article/view/2682

Saris, W. E., Oberski, D., Revilla, M., Zavala-Rojas, D., Lilleoja, L., Gallhofer, I. N., and Gruner, T. (2011). The development of the program SQP 2.0 for the prediction of the quality of survey questions. *RECSM Working Paper 24. Available at:* http://www.upf.edu/survey/pdf/RECSM_wp024.pdf

Saris, W. E. and Gallhofer, I. N. (2014). Design, Evaluation and Analysis of Questionnaires for Survey Research. *Second edition, New York: Wiley.*

Saris, W. E. and Revilla, M. (2015). Correction for measurement errors in survey research: necessary and possible. *Social Indicators Research*.