



QUESTIONNAIRE DESIGN¹

TABLE OF CONTENT

	Page
1. INTRODUCTION	2
2. ADVANTAGES AND DISADVANTAGES OF SELF-ADMINISTERED STRUCTURED QUESTIONNAIRES	2
3. GETTING STARTED	3
4. TYPES OF QUESTIONS	5
5. TYPES OF RESPONSE ALTERNATIVES	8
6. QUESTION WORDING	10
7. LEVELS OF MEASUREMENT	13
8. THE STRUCTURE OF A QUESTIONNAIRE	15
9. ADDITIONAL READING	15
10. QUESTIONNAIRE EXAMPLE	17

¹ Adapted by Dr RJ Eiselen and Prof Tina Uys from Eiselen, R., Uys, T., Potgieter, N. (2005). *Analysing survey data using SPSS13: A workbook*. University of Johannesburg.

1. INTRODUCTION

Questionnaires usually form an integral part of descriptive and opinion-related surveys. Questionnaires can either be in the form of a self-administered questionnaire i.e. where the respondents is requested to complete the questionnaire in his/her own time or in the form of a structured interview, where the interviewer (very often the researcher) writes down the answers of the respondent during a telephone or face-to-face interview.

Irrespective of which method is used, the formulation of the questions and the structure of the questionnaire are critical to the success of the survey. This document focuses on the issues involved in the design of a structured questionnaire.

2. ADVANTAGES AND DISADVANTAGES OF SELF-ADMINISTERED STRUCTURED QUESTIONNAIRES

Self-administered structured questionnaires, whether disseminated by hand (i.e. delivered at a person's home or office), by post, (i.e. via *snail-mail*), via e-mail or the Web, have the following distinct advantages:

- They are more cost effective to administer than personal (face-to-face) interviews.
- They are relatively easy to administer and analyse
- Most people are familiar with the concept of a questionnaire
- They reduce the possibility of interviewer bias
- They are perceived to be less intrusive than telephone or face-to-face surveys and hence, respondents will more readily respond truthfully to sensitive questions
- They are convenient since respondents can complete it at a time and place that is convenient for them.

The most important disadvantage of self-administered structured questionnaires that are disseminated by hand, post, e-mail or the Web is that the response rate tends to be low, especially when the questionnaire is too long or is complicated to complete, the subject matter is either not interesting to the respondent or is perceived as being of a sensitive nature. Another disadvantage is that the researcher does not have control over who fills in the questionnaire even though it may be addressed or delivered to the intended participant.

3. GETTING STARTED

Before one starts formulating questions to include in a questionnaire, it is imperative to have clarity about the research question and intended goals. A well defined research question and clearly defined goals for an intended study is the first step towards ensuring that **all** the relevant questions but **only** relevant questions are asked: Each question should thus be directly linked to the research question(s) and the intended goals.

Therefore, knowing in advance how the response-information is going to be utilised is important. No 'nice to haves' should be asked, only 'need to haves'. The length of the questionnaire is inversely proportional to the response rate. Unnecessary questions should therefore be eliminated. This is especially important with regard to biographical or background questions. Do not ask biographical questions just because everybody else seems to be asking it. If knowing your respondent's marital status is not going to contribute towards answering the research question, then don't ask it!

It is not necessary to start from scratch with each study you do. It is a good idea to get hold of copies of questionnaires that deal with similar topics or to consult the literature for similar studies that have been conducted. In that way you will avoid re-inventing the wheel.

The following steps should be followed when designing a questionnaire:

Formulate the research question and research objectives / goals - what do you wish to ascertain?

- (1) Provide a clear, concise formulation of the research question(s), i.e. what do you wish to ascertain and why?
- (2) Specify clear and unambiguous goals for the intended study

Define the target population – who do you wish to target?

- (1) Provide a clear, concise and unambiguous formulation of who the target population is, i.e. who the intended study is aimed at.
- (2) A clear description of the target population allows the researcher to ask relevant background questions and to formulate the questions in such a way that it is understood by the respondents.

Formulate the questions in order to answer the research question(s)

- (1) List ALL the information needed to be able to answer all the research question(s)
- (2) Scrutinise the existing body of knowledge, e.g. available questionnaires or articles regarding similar studies in order to select questions that are relevant for your purposes
- (3) Adapt and refine the available questions
- (4) Formulate your own questions where necessary

- (5) Decide on the appropriate level of measurement for **each** question
- (6) Determine the appropriate statistical techniques to be used.

Organise the questions

- (1) Questions should be organised in logical order e.g. background questions in the same section; opinion-related questions dealing with the same topic in a separate section, etc.
- (2) It is often a good idea to start with a question that is non-threatening, yet interesting to the respondent.

Consult experts

Once you have a first draft of the questionnaire:

- (1) Consult experts in the specific field of study to ascertain their opinion whether you have addressed all relevant issues and formulated the questions in an understandable and unambiguous way
- (2) Consult an expert in questionnaire design to assist with the formulation of the questions and the response format.

Do a pilot study among a small group of respondents similar to those in the target population

A pilot study is imperative in any study since it

- (1) Enables the researcher to identify and rectify problems prior to the survey being conducted.
- (2) Provides an indication of the response rate that can be expected.

Adhere to ethical standards

The rights of respondents as human beings should be respected at all times (Cohen, Manion & Morrison 2004). This implies that

- (1) The decision to take part in a survey (by completing the questionnaire) remains the choice of the respondent
- (2) A respondent should be given the option to withdraw from the study at any time
- (3) A respondent cannot be coerced into providing information, especially not information that may be perceived as sensitive or incriminating
- (3) Respondents should be given the assurance that their responses will remain anonymous and that the information they provide will be treated as confidential at all times

4. TYPES OF QUESTIONS

The types of questions to be asked are directly related to the information the researcher requires. A questionnaire usually consists of a combination of the following types of questions:

Factual and opinion-related questions

Factual questions

Factual questions mostly relate to facts about a respondent's demography, habits or hobbies but can also test a respondent's knowledge on a particular subject.

Example:

Can you contract HIV and AIDS by having sex with multiple partners without using a condom?

Care should be taken to phrase factual questions in such a way that it does not require complicated calculations

Example:

How much money did you spend on clothes last year?

Remember that respondents are notoriously unreliable about issues such as income. It is therefore better to ask income categories rather than exact income.

The questions in section A of the Example questionnaire are factual questions

Opinion-related questions

Opinion-related questions refer to questions that reveal respondents' attitudes or perceptions or their perception of the frequency of a particular behaviour. The questions in section C of the example questionnaire are opinion-related questions

One should avoid asking respondents to provide information about someone else's opinions.

Example: *Are your male colleagues sexist?*

It is often a good idea to assess the respondent's knowledge about an issue before asking him/her to express an opinion as people often base their opinions on inaccurate factual knowledge (Neuman 2001).

Threatening or sensitive and non-threatening or non-sensitive questions

Threatening or sensitive questions relate to sexual behaviour, illegal activities, mental health, alcohol and drug use, deviant behaviour or controversial public issues. These questions should preferably be avoided as it tends to have a negative impact on response rate and, in addition, respondents tend to give socially acceptable answers to

these rather than the true answer (Cohen, et al. 2004). If you cannot avoid asking a question that may be perceived as threatening or sensitive, position the question towards the end of the questionnaire.

Question 16 (section B) of the example questionnaire may be perceived as a sensitive question as people do not like to acknowledge that they are addicts or that drinking coffee is an addiction.

Open-ended versus closed questions

Open questions

With open-ended questions, no pre-coded answers, i.e. response categories are provided. These questions are particularly useful when it is important to avoid influencing respondents by providing a list of possible answers to choose from, for example, reasons for a particular behaviour or an opinion.

Open-ended questions have certain disadvantages:

- Open questions can only be coded after the survey has been conducted and are thus time-consuming.
- An open question often yields unusable information due to the fact that the respondent does not understand the question.
- The respondent should have the necessary skills to record his/her own response, i.e. the respondent should be able to write down a response. Semi-literate respondents or those who have difficulty expressing their thoughts and ideas, often avoid answering open questions.

Open-ended questions should therefore be used circumspectly and only when absolutely necessary.

Question 31 (Section C) in the example questionnaire is an open-ended question.

Closed questions

Closed questions are often referred to as multiple-choice questions.

Response categories are provided and respondents only need to select a particular answer or answers. These are especially useful to indicate the level of detail one expects the respondent to provide.

Example: When one asks about religious affiliation for example, the response categories can be broad categories such as Christian, Hindu, Jewish, Muslim etc. or they can indicate particular groupings within the various religions such as Protestant, Catholic, etc. The extent of detail required is then clear from the response alternatives provided.

When formulating closed questions keep the following in mind:

- Each question should contain clear instructions as to how to fill it in, i.e. tell the respondent when the question requires only one answer and when more than one answer may be given.
- Make sure that all possible answers /alternatives are provided, i.e. the response alternatives should be *exhaustive*. Use *other (please specify)* if you are not sure.
- If only one answer / alternative is to be marked, the alternatives should not overlap, i.e. the alternatives should be *mutually exclusive*.
- If the possibility exists that a question does not apply to a respondent, include *Not Applicable as one* of the alternatives.

All of the questions in the example questionnaire, except question 31 (Section C) are closed questions

Skip, branching or contingency questions

This kind of question is used when a set of questions is only applicable to a subgroup of respondents.

Example: *Do you smoke cigarettes? YES / NO.*

If yes, how many cigarettes do you smoke on average per day?

<i>Less than 10</i>	<i>10-19</i>	<i>20-39</i>	<i>40 or more</i>
---------------------	--------------	--------------	-------------------

If no, please proceed to question 6

Branching questions should be used with care as respondents (and sometimes researchers!) can easily get confused, which may result in a loss of information. It is therefore essential to give clear, unambiguous instructions.

Question 8 (Section B) in the example questionnaire is an example of a skip or branching question.

5. TYPES OF RESPONSE ALTERNATIVES (RESPONSE CATEGORIES)

- **Yes/No answers**

These answer categories are usually provided with factual questions.

Example:

<i>Do you smoke cigarettes?</i>	<i>YES</i>	<i>NO</i>
---------------------------------	------------	-----------

Question 8 (Section B) is an example of a Yes/No question.

- **Extent of agreement, level of importance or frequency of behaviour**

Questions 10 to 11 (Section B) in the example questionnaire are examples of frequency of behaviour questions; question 15 (Section B) is an example of a level of importance question and questions 17 to 30 (Section C) are examples of extent of agreement questions.

Examples:

To what extent do you agree with the following statement?

Capital punishment should be re-instated in South Africa

<i>Strongly agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly disagree</i>
<i>5</i>	<i>4</i>	<i>3</i>	<i>2</i>	<i>1</i>

How often do you participate in the activities of your group of friends?

<i>Always</i>	<i>Often</i>	<i>Sometimes</i>	<i>Seldom</i>	<i>Never</i>
<i>5</i>	<i>4</i>	<i>3</i>	<i>2</i>	<i>1</i>

This response format is commonly known as the Likert scale or format. There are a number of issues that need to be considered with regard to this response format.

- **Number of response categories:** Researchers do not agree about the number of categories that should be provided. This can vary from three, four to nine or even ten categories. It is important to consider how 'finely' you want respondents to express their views. It is often argued that more than seven categories only confuse respondents and hence yield unreliable responses.
- **Odd or even number of categories:** The decision whether to use an odd or an even number of categories is related to whether to include a middle or neutral category. Not including a neutral option may mean that you force your respondents to take a stance on an issue about which they feel neutral. On the other hand, providing a neutral option may lead to some respondents choosing the neutral position even though they do

have an opinion on the issue. There is no clear-cut solution to this problem. It is important, however, to place the neutral position in the middle, as respondents seem to be more likely to choose categories towards the end of a scale (Neuman 2001: 263).

- **Non-attitudes:** Researchers do not agree about whether respondents should be given the opportunity to indicate that they do not have a view on a particular issue, by providing options like 'don't know', 'unsure' or 'no opinion'. Those against are afraid that respondents will choose the 'no opinion' option to avoid having to make a choice. On the other hand, not providing the option could mean that respondents are forced to express an opinion when they don't actually have one (Neuman 2001: 262). It is important to remember that being neutral is not the same as not having an opinion.
- **Description for each category:** Researchers also debate whether one should provide a description for each category or whether only the two extreme positions should be named. Those who take the latter position believe that it creates an impression of equal intervals in the minds of the respondents and is therefore to be preferred.

- **Rankings or ratings**

Respondents are sometimes asked to rank various options in order of importance.

Example:

Arrange the following six issues in order of the importance they have in your life by allocating a 1 to the most important issue, a 2 to the second-most important and continue in this way until you allocate a 6 to the least important issue. Use each number only once.

<i>Economic situation</i>	
<i>Living conditions in your community</i>	
<i>Educational facilities</i>	
<i>Provision of social services</i>	
<i>Participation in decision making</i>	
<i>Human dignity</i>	

Question 9 (Section B) of the example questionnaire is an example of a ranking question.

Ranking questions should be used with extreme care. Respondents seem to find it difficult to rank more than six options. Even highly educated respondents sometimes misunderstand a question like this and would allocate the same rank to more than one option, especially if there are a large number of options. Therefore it should only be used when absolutely necessary.

6. QUESTION WORDING

The wording of every question is of the utmost importance. A 'good' question should satisfy EACH of the following criteria:

- **The question should be short, simple and to the point**

This implies, amongst others, that *double-barrelled questions*, i.e. a single question addressing more than one issue, should be avoided.

Example of a double-barrelled question

Do you believe employment equity training should be linked to the availability of present posts and future vacancies as a result of natural attrition at your company?

A short and simple question should not contain jargon, slang or abbreviations.

- **The question should be clear and unambiguous**

There should be no room for misunderstanding on the part of the respondent as to the meaning of the question. The researcher should also understand the answer in the way meant by the respondent.

Example of an ambiguous question

How many family members do you have?

The word family means different things to different people.

- **The question should have a clear instruction**

Example of a question without a clear instruction

The following question does not contain a clear instruction as to how to answer it:

What brand of computer (PC) do you own?

<i>Dell</i>	<i>1</i>
<i>Mecer</i>	<i>2</i>
<i>Apple</i>	<i>3</i>
<i>Other (please specify)</i>	<i>4</i>

The respondent is not told whether only one or more than one option should be marked. There are other problems with this question – can you see what they are?

- **The question should not contain double negatives**

This occurs when respondents are asked whether they agree or disagree with a negative statement. If they disagree with the statement they are expressing a double negative because they disagree with not doing or believing something.

Example of a double-negative question:

Do you agree or disagree with the following statement:

I do not feel threatened by the employment equity process at my company

- **Respondents should be asked to express opinions about their own views, not what they think somebody else thinks.**

Researchers sometimes draw conclusions about the views of respondents when they were asked to express an opinion about someone else's views. This only results in unreliable and incorrect information. Therefore conclusions cannot be drawn about other people's views on the basis of what a respondent believe these views are.

Example of a question where the views of others are required :

Do you think men are more positive about women's abilities as equals than was the case in the past?

- **The question should be phrased neutrally**

Questions that contain value-judgements or give the respondent an indication of what the socially desirable answer is are called *leading questions*. These should be avoided as respondents have a tendency to give researchers the answers they think the researchers expects.

Example of a leading question

Has your company acted in a responsible manner by implementing an HIV/AIDS policy?

- **The question should not contain emotional language**

One should avoid using words with emotional connotations when formulating a question, as respondents would tend to react to the emotional connotation rather than the issue.

Example of an emotive question

Under what circumstances would you agree to murdering babies by allowing the mother to have an abortion?

- **The question should not make the respondent feel guilty**

If respondents feel that they are implicating themselves by answering a question truthfully, they will tend to lie.

Example of a question that may make a respondent feel guilty

How often have you cheated on your tax returns in the past five years?

- **The question should not have prestige bias**

If a particular opinion is linked to a person with high status in the community it influences the respondent's reply. If respondents respect the high-status person they will tend to assume that s/he must be right and will reply accordingly.

Example

President Mbeki believes that HIV does not cause AIDS. Do you agree?

- **The question should accommodate all possible answers**

The response alternatives should be exhaustive. If one is unsure whether all possibilities have been provided, it is important to include an option stating *Other (please specify)*. If a substantial number of respondents choose a particular alternative, this can then be coded after the questionnaires are received back.

Example

What is your religious affiliation?

<i>Christian</i>	<i>1</i>	
<i>Hindu</i>	<i>2</i>	
<i>Jewish</i>	<i>3</i>	

What should respondents who are Muslim or do not have a religious affiliation reply here?

- **The response alternatives should be mutually exclusive**

Response categories should not overlap or be unbalanced. Only one response alternative should be applicable to a particular respondent.

Example of a question where the response alternatives are NOT mutually exclusive

What is your age group in full years?'

<i>18-25</i>	<i>1</i>	
<i>25-35</i>	<i>2</i>	
<i>35-45</i>	<i>3</i>	
<i>45 or older</i>	<i>4</i>	

A person who is 25 years old can mark more than one options.

- **The question should not make assumptions**

A question should not begin with a premise and then ask questions based on the premise.

Example of a question where an assumption is made

Are you satisfied with your current short-term insurance? Yes/No

The assumption here is that all the respondents have short-term insurance.

- **The question should not ask about hypothetical situations**

Respondents tend to answer explicit, tangible questions about topics that relate to their experience much more reliably than abstract hypothetical questions. The latter type of question expects of respondents to consider what they would do or think should they find themselves in a hypothetical situation. The majority of respondents find this very difficult to do.

Example of a hypothetical question

What would you do if your 15-year old daughter fell pregnant?

- **The question should be asked on the highest level of measurement that would still make sense.**

This criterion will be discussed in the next section.

7. LEVELS OF MEASUREMENT

Numbers have four characteristics that can be used to measure variables on different levels. The first is a distinction between different mutually exclusive categories, secondly their rank, thirdly equal intervals between successive numbers and fourthly the existence of an absolute zero value. These characteristics form a hierarchy that means that later characteristics include the earlier ones. The presence of one or more of these characteristics indicates a particular level of measurement of a variable.

- **Nominal measurements**

We talk about *nominal* measurement if people can be divided into different mutually exclusive categories according to this measurement. The people in a particular category are then similar according to the characteristic that is measured and differ from those who are placed in another category. Each person belongs to one category only. Although a number is allocated to each category such as, for example, 1 for female and 2 for male, these numbers are only used to distinguish between the categories and we could just as well use a letter. Examples of nominal measurements in our study are gender, where students live (type of residence), which faculty they belong to and whether they are contemplating leaving South Africa.

- **Ordinal measurements**

Apart from categorising people, ordinal level measurements have the additional characteristic that the various categories can be arranged in an order from low to high. Each category, therefore, has more of the relevant characteristic than the one preceding it. Examples of ordinal measurements in our example are year of study as well as the extent to

which students feel that crime has increased over the past five years and the extent to which they feel safe in South Africa. In fact, questions 17 to 30 in the example questionnaire are examples of ordinal measurements. They are often referred to as Likert scale items (named after the person who created this type of measurement).

- **Interval measurements**

With interval measurements there are equal intervals between the different categories. Numbers are allocated in such a way that the distance between the numbers corresponds to the difference in the degree to which the characteristic is present. In addition to the fact that we can distinguish between the measurements and the ranking of the measurements, interval measurements also have the characteristic of equal intervals. Examples of interval measurements are IQ or temperature. If, for example, a person has an IQ of 150 and another has an IQ of 75, one can only say that there is a 75-point difference between their IQ levels. One cannot say that the one student is twice as intelligent as the other. This illustrates the fact that distances are assumed equal but, because there is no absolute zero level, relative comparisons cannot be made.

- **Ratio measurements**

Ratio measurement has the same characteristics as interval measurement, with the added characteristic of having an absolute zero value. In this case, the amount indicated by the numbers corresponds to the amount of the particular variable that is present. An absolute zero value means that the 0 represents the total absence of the variable. Examples of ratio measurements are income, family size and age. Differences can be calculated and relative comparisons can be made for ratio measurements. For example, a person of age 60 is three times older and is 40 years older than a person who is 20 years old.

It is important to know on what level a measurement is because the measurement level determines the statistical techniques that may be used in analyses. A wide variety of techniques are available on the higher measurement levels (interval and ratio) while the types of statistical techniques on the lower measurement levels are more limited. In general, the same statistical techniques may be used for interval and ratio measurements. We therefore often talk about interval-ratio, numerical, continuous or metric data.

Variables should preferably be conceptualised and measured on the highest possible measurement level that would still make sense. If, for example, one knows what the actual ages of respondents are (ratio level), it is possible to re-assign them to age categories (younger than 18, 19-25, 26-35, 36-45, etc.), but if you only know the age category to which respondents belong, there is no way to establish the respondents' exact ages. This would restrict the number of statistical techniques available.

8. THE STRUCTURE OF A QUESTIONNAIRE

Question order

- Questions should be grouped in logical groups that relate to a particular topic.
- A questionnaire should be viewed as a conversation and hence should have a certain logical order. It is therefore important to exhaust a particular topic before the next one is introduced.
- The more general questions about a particular topic should be asked first, followed by the more specific questions thereby creating a funnel effect.
- Questions dealing with biographical information are usually placed at the beginning of a questionnaire, since they deal with factual information and are generally perceived to be non-threatening.
- Transitions between questions should be smooth.
- One should avoid structuring the questionnaire in such a way that a response pattern develops where respondents answer all the questions in a particular way without reading the questions properly.

Length of the questionnaire

- Response rate is often inversely proportional to the length of the questionnaire, i.e. the longer the questionnaire the lower the response rate tends to be
- The length of a questionnaire depends on the survey format and the characteristics of the respondents.
- As a rule of thumb, it should take no longer than 30-45 MINUTES to complete a face-to-face (personal) interview, 15-20 MINUTES to complete a self-administered questionnaire and 5-8 minutes to complete a telephone interview.

Format and layout

The following should be taken into account as far as the physical appearance of the questionnaire is concerned.

- The font size should not be too small. Choose a style that is easy to read, such as Arial 11 or 12.
- The layout should not be cramped to avoid respondents missing a question.
- With regard to paper size, A4 or A5 is preferable.
- If the questionnaire is printed on both sides of the page to avoid costs, it should be crammed to read like a book. If it is crammed in the upper left-hand corner there is a danger that respondents might miss the questions on the back page.

The cover letter

The cover letter is the researcher's last chance to elicit a response. It is important to provide a well-written cover letter that provides the following information:

- Why is the study being conducted?
- Who is doing the study?
- Why is it important to respond?
- How long will it take to complete the questionnaire?
- How and when should the questionnaire be returned?
- What are the contact details of the researcher?
- Whether his/her responses will be treated confidentially, i.e. ensure the respondent of anonymity.

9. ADDITIONAL READING

<http://www.statpac.com/surveys/>

http://www.cc.gatech.edu/classes/cs6751_97_winter/Topics/quest-design/

Cohen, L., Manion, L., Morrison, K. (2004). *Research methods in Education*. 5th Edition. Routledge-Falmer: London

Eiselen, R., Uys, T., Potgieter, N. (2005). *Analysing survey data using SPSS13: A workbook*. University of Johannesburg.

Neuman, W.L. (2001). *Social Research Methods: qualitative and quantitative approaches*, 4th edition. Massachusetts: Allyn and Bacon.

10. QUESTIONNAIRE EXAMPLE²

Market Research Inc.
P O Box 555555 Auckland Park 2006
Tel: + 27 11 555 5555

12 March 2007

Dear sir/ madam

We, Market Research Inc. are undertaking a research project to determine the habits, preferences and reasons why consumers drink coffee or do not drink coffee. To this end we kindly request that you complete the following short questionnaire regarding your habits, preferences and attitudes towards coffee. It should take no longer than 10 minutes of your time. Although your response is of the utmost importance to us, your participation in this survey is entirely voluntary.

Please do not enter your name or contact details on the questionnaire. It remains anonymous. Information provided by you remains confidential and will be reported in summary format only.

Kindly return the completed questionnaire to us in the postage paid return envelope on or before **1 June 2007**.

Summary results of this research will be published in the media and will be available on our website: www.marketresearchinc.co.za in July 2007.

Should you have any queries or comments regarding this survey, you are welcome to contact us telephonically at 011 555 5555 or e-mail us at marketresearch@inc.co.za.

Con Sumer

Yours sincerely
CON SUMER
MD: Market Research Inc.

² This is a fictitious survey. The questions only serve as **examples** of different FORMATS in which closed ended questions can be asked.

PLEASE ANSWER THE FOLLOWING QUESTIONS BY CROSSING (✕) THE RELEVANT BLOCK OR WRITING DOWN YOUR ANSWER IN THE SPACE PROVIDED.

EXAMPLE of how to complete this questionnaire:

Your gender?

If you are female:

Male	1
Female	2

Section A – Background information

This section of the questionnaire refers to background or biographical information. Although we are aware of the sensitivity of the questions in this section, the information will allow us to compare groups of respondents. Once again, we assure you that your response will remain anonymous. Your co-operation is appreciated.

1. Gender

Male	1
Female	2

2. Age (in complete years)

--	--

3. Ethnicity

Black	1
White	2
Coloured	3
Indian or Asian	4

4. How would you describe your economic status?

Poor	1
Below average	2
Average	3
Above average	4
Affluent	5

5. Your highest educational qualification?

Grade 11 or lower (std 9 or lower)	1
Grade 12 (Matric, std 10)	2
Post-Matric Diploma or certificate	3
Baccalaureate Degree(s)	4
Post- Graduate Degree(s)	5

6. How would you describe the area in which you are residing?

Urban	1
Rural	2

7. Size of your household, i.e. the number of people, including yourself, who live in your house/dwelling for at least three months of the year?

Live alone	1
2	2
3	3
4	4
5 or 6	5
More than 6	6

Section B

This section of the questionnaire explores your habits and preferences, if any, with regard to the consumption of coffee.

8. Have you drunk at least one cup of coffee in the past 6 months?

Yes	1
No	2

If you answered **no** to question 8, please answer question 9 only. If you answered **yes** to question 8, please skip question 9 and continue from question 10.

9. Please rank, in order of importance, each of the following reasons for not consuming coffee in the last six months.

Allocate a rank of 1 to the most important reason for not consuming coffee in the last six months, a rank of 2 to the second most important reason, etc. Allocate a rank of 6 to the least important reason for not consuming coffee in the last 6 months.

Use each of the numbers 1 to 6 only once.

<i>Reasons for not consuming coffee in last 6 months</i>	<i>Rank</i>
I do not like the taste of coffee	
I do not like the smell of coffee	
Coffee is expensive	
I do not drink coffee for health reasons	
I cannot sleep when drinking coffee	
I prefer drinking tea	

Thank you for your co-operation in completing this questionnaire. Kindly return the questionnaire as specified in the cover letter.

The following questions only pertain to people who have consumed coffee in the last six months.

10. In a typical day, how many cups of coffee do you drink?

2 cups or less	1
3-4 cups	2
5-6 cups	3
7-8 cups	4
9 cups or more	5

11. How often do you drink coffee on each of the following occasions?

	Never	Rarely	Often	Always
First thing after waking up in the morning?	1	2	3	4
With breakfast?	1	2	3	4
During your morning break?	1	2	3	4
With lunch?	1	2	3	4
During your afternoon break?	1	2	3	4
With dinner?	1	2	3	4
In the evening after dinner?	1	2	3	4
At bedtime?	1	2	3	4
When going out for a meal at a restaurant?	1	2	3	4
When visiting friends or family?	1	2	3	4
When you are stressed?	1	2	3	4

12. Please indicate which **one** of the following types of coffee you **use** most and which **one** you **prefer** most. (Mark one option only in each of the columns.)

	<i>Used most</i>	<i>Preferred</i>
Instant (e.g.. Frisco)	1	1
Freeze-dried (e.g.. Nestle Freeze dried)	2	2
Ground / filter coffee (e.g.. House of Coffees)	3	3
Instant decaffeinated	4	4
Ground decaffeinated	5	5
Other (specify)	6	6

13. What is the most important reason for **using** the type of coffee specified in question 12. (Mark one option only.)

It is the type I prefer	1
It tastes best	2
It is the most affordable	3
It is the most readily available	4
The place where I work / study provides the most used type	5
Other members in my household prefer most used brand	6
Other (specify)	7

14. If the type of coffee you use most often differs from the type you prefer most, what is the most important reason for this discrepancy? (Mark one option only.)

If there is no discrepancy, please go to question 15.

I cannot afford my preferred type	1
The place where I work/study does not use the preferred type	2
Other members in my household prefer another type of coffee	3
Other (specify)	4

15. How important is each of the following to you when purchasing/ordering coffee?

Please indicate your answer using the following 4-point scale where

1 = Totally unimportant

2 = Unimportant

3 = Important

4 = Very important

	Totally unimportant	Unimportant	Important	Very important
Low price	1	2	3	4
Smooth taste	1	2	3	4
Purchasing/ordering a specific brand	1	2	3	4
The strength of the coffee	1	2	3	4
Purchasing/ordering a local brand	1	2	3	4
Purchasing/Ordering and imported brand	1	2	3	4

16. Do you consider yourself to be a coffee addict?

Yes	1
No	2

Section C

This section explores your attitude and perceptions regarding coffee consumption.

To what extent do you agree with each of the following statements. Please indicate your answer using the following 5-point scale where:

1. = Strongly disagree (SD)
2. = Disagree (D)
3. = Neutral (N)
4. = Agree (A)
5. = Strongly Agree (SA)

	SD	D	N	A	SA
17. Drinking coffee increases my risk of getting cancer	1	2	3	4	5
18. Drinking coffee increases my risk of heart disease	1	2	3	4	5
19. I cannot fall asleep when I drink coffee during the day	1	2	3	4	5
20. I prefer drinking tea to drinking decaffeinated coffee	1	2	3	4	5
21. Drinking coffee gives me an energy boost	1	2	3	4	5
22. I drink coffee because my friends do	1	2	3	4	5
23. I drink coffee for the taste	1	2	3	4	5
24. I drink coffee because it is fashionable	1	2	3	4	5
25. Drinking coffee relaxes me	1	2	3	4	5
26. I prefer drinking tea to drinking any type of coffee					
27. I cannot fall asleep when drinking coffee in the evening	1	2	3	4	5
28. I drink coffee to help me stay awake	1	2	3	4	5
29. I prefer local brands of coffee to imported ones	1	2	3	4	5
30. Drinking coffee makes me feel important	1	2	3	4	5

31. Please enter your perception regarding any other beneficial or detrimental effects of coffee drinking in the space provided

Thank you for your co-operation in completing this questionnaire. Kindly return the questionnaire as specified in the cover letter.