DESIGNING QUESTIONS FOR QUESTIONNAIRES & INTERVIEWS

Guidelines

1. **Avoid loaded words**

   Certain words or phrases may cause a respondent to experience a markedly positive or negative feeling.   Words like abusive, terrorism, euthanasia, etc. may elicit reactions to the term rather than to the question.

2. **Avoid loaded response categories**

   When using closed questions make sure the anchors (the provided responses) are balanced.   If the number of positive anchors is not the same as the number of negative anchors, this lack of balance influences the respondent's perspective.

3. **Avoid loading the entire questionnaire/interview**

   The questionnaire/interview must not reflect bias on an issue.   Regarding controversial issues, make sure that both sides are given equal representation.

4. **Avoid leading questions**

   Leading questions imply responses that are socially acceptable or that telegraph the viewpoint of the data collector.   Respondents may reply to leading questions on the basis of pleasing the data collector.

5. **Avoid vague words or phrases**

   Specify to whom or what a question refers, and cite specific dates and timeframes. Avoid jargon and highly subjective terms.

6. **Avoid complicated questions**

   Questions that are too complicated may incur negative feelings in respondents toward the questionnaire/interview (and/or the data collector).

7. **Avoid offensive or threatening questions**
    Some questions may threaten or offend the respondent.   Questions regarding personal matters may be seen as invasions of privacy.   Most respondents are reluctant to provide information when they are unsure how the data will be used.

8. **Avoid asking off-topic questions**

    Stay true to the purpose of the information gathering effort, and avoid asking for information that is irrelevant or unimportant.

9. **Avoid double-barrelled questions**

    Double-barrelled questions pose two linked issues that require more than one answer.

10. **Avoid questions that lock-in the respondent**

    When asking for a "yes" or "no" on a matter of *interpretation*, always include a "maybe" or **"**don't know" category.

11. **Avoid confusion in the sequence of questions**

    Cluster questions according to simple issues vs. complex issues.
    Then arrange clusters in a respondent-friendly sequence.

    In a questionnaire/interview of modest length, one sequence of simple cluster vs. complex cluster vs. simple cluster works well.
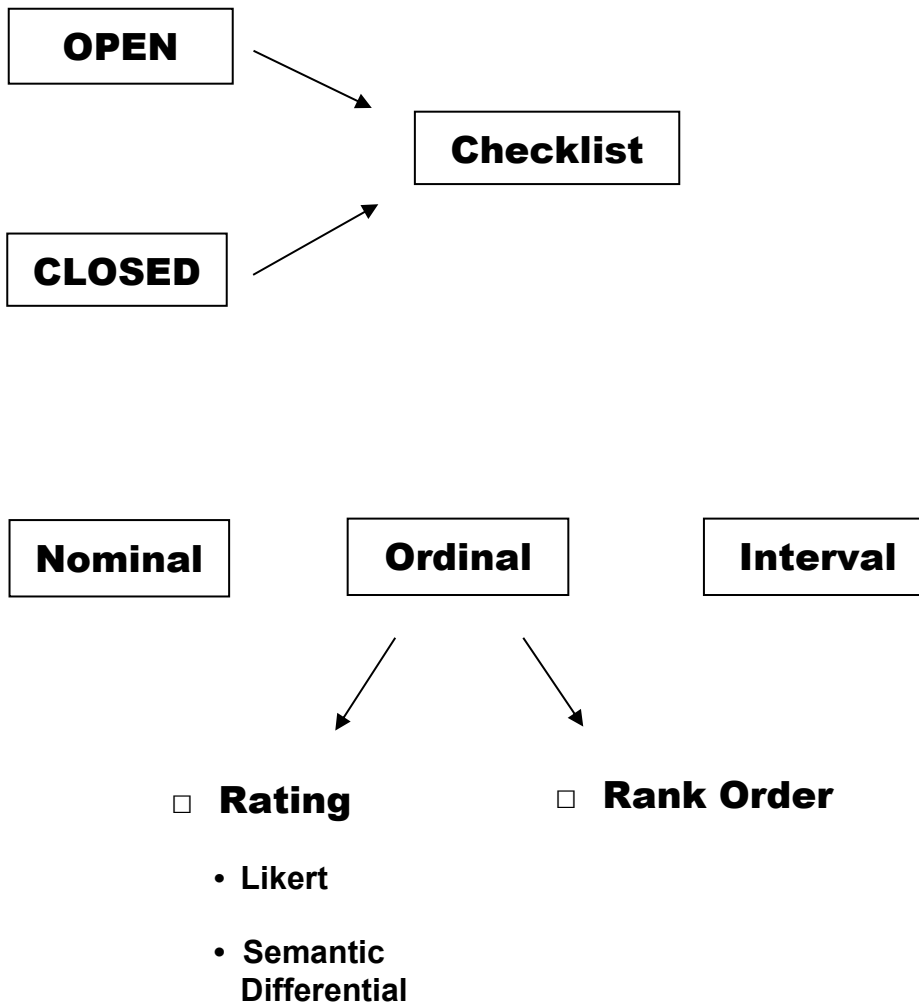
    For longer questionnaires/interviews, use sections of simple/complex/simple clusters – and then look for simple/complex/simple in the overall sectioning of the questionnaire/interview.

12. **Validate the questionnaire/interview**

    Validate the questionnaire/interview by piloting it with a few colleagues who are familiar with questionnaires/interviews and data collection methods.   Do they notice ambiguities/contradictions?

Question Types

There are two types of questions that are used in questionnaires/interviews: open and closed. (As indicated below, a checklist may incorporate either an "open" or "closed" perspective.)

| OPEN |

| Checklist |

| CLOSED |

| Nominal | | Ordinal | | Interval |

☐ **Rating**

☐ **Rank Order**

- **Likert**
- **Semantic Differential**

The following examples do not represent an actual questionnaire or interview. The questions are numbered only for the purpose of organizing the following material.

1) Open Questions

Open questions allow respondents to answer in any way they choose. Open questions are useful for identifying (without prompting) the respondents' personal views on an issue, program, or service.

Open questions are used to elicit concerns, suggestions, opinions, attitudes, solutions, and/or personal observations in the respondents' own words. Open questions obtain responses that are relatively free of influence from the data collector. However, open questions do influence respondents to an extent. Simply by asking a question we are directing attention to a certain issue.

☐ Do *not* position the open question as the first item in a questionnaire. Engage respondents with a few closed questions before you task the respondents with answering an open question

☐ Do *not* position in consecutive order two or more open questions in a questionnaire, for doing so tends to diminish the volume of response to either or both questions

☐ In a questionnaire, StFX provides exactly 1½ inches (3.8 cm) of response space (depth) per open question. StFX prefers boxed space (rather than lined space or blank space)

☐ Use "And why?" or "Explain" or "Describe" or "Give examples" as an accompaniment to most open questions, in both questionnaires and interviews, in order to prevent a nominal-style response – just a list with no explanation

Open Questions

- *If you had ½ hour to speak with the CEO, what would you say to her? And why?*

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- *In your experience, what are the interesting issues you face as a manager? Explain.*

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2) Closed Questions

Closed questions provide respondents with a limited set of anchors (responses). Data collectors use three types of closed questions: nominal scale, ordinal scale, and interval scale.

a) Nominal Scale

- ☐ The nominal scale presents non-numerical anchors

- ☐ When using nominal scales, all possible anchors must be provided

- ☐ Nominal scales are used to gather factual information; they do not measure feelings, opinions, etc.

The first example below provides only two anchors; the second example provides a list of anchors from which the respondent selects one.   Since the second example does not include all possible options, "none of the above" is provided in the list.

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│  Nominal Scales                                                          │
│                                                                           │
│  •  Were you born in Canada?  Note: avoid instructions in the yes/no nominal │
│                                                                           │
│     ___ Yes      ___ No                                                   │
│                                                                           │
│  •  From which of the following grocers do you buy most of your foodstuffs?  (check one) │
│     ___ Loblaws                                                           │
│     ___ Safeway                                                           │
│     ___ Sobeys                                                            │
│     ___ SuperStore                                                        │
│     ___ None of the above                                                │
│                                                                           │
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b) Ordinal Scale

- ☐ Ordinal scales are useful in obtaining respondents' opinions, attitudes, and judgements

- ☐ Ordinal scales must present a range of anchors in a logical and ordered sequence (least-to-most, or vice versa)

- ☐ Ordinal scales also can be used to collect factual information, and often can provide more precision than nominal scale questions

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┌─────────────────────────────────────────────────────────────────────────┐
│  Ordinal Scale                                                           │
│                                                                           │
│  •  How often do you take recyclables to the municipal depot?  (check one) │
│                                                                           │
│     ___ Once per week                                                     │
│     ___ Once per month                                                    │
│     ___ Once per year                                                     │
│     ___ Never                                                             │
│                                                                           │
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b-1) Rating Scale (a form of ordinal scale)

- ☐ Rating scales can be used to determine respondents' reactions, opinions, or feelings about an issue

◻ Note options on the positioning of anchors as illustrated in the following examples: to the exterior of the scale; directly beneath the entry (left) and exit (right) positions; or by using icons to link the anchors to their specific numerical values

◻ Note that the anchors are "balanced" (of equal weight)

◻ In a given instrument, StFX requires that the anchors in all rating, Likert, and semantic differential scales follow the same positive-to-negative pattern (or vice versa)

Rating Scales:

- *To what degree is your employer's support for career development important to you? (circle one #)*

    not important   1   2   3   4   5   important

- *To what extent do you think a CPR program would be useful to your staff? (circle one #)*

    1   2   3   4   5
    not   useful
    useful

- *In your experience over the last quarter, how has the policy on flexible work hours affected your supervisory duties? (circle one #)*

    1   2   3   4   5
    *   *
    very unfavourably   very favourably

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b-2)   Likert Scale (a form of ordinal scale, rating type)

The Likert scale is the type of ordinal scale question that is most frequently used for gathering attitude/opinion data. Also, it is the most commonly used rating-type scale.   The scale is named for its designer, Rensis Likert (USA).

◻ Notice the Likert's unique format: double-positive anchor, positive anchor, negative anchor, double-negative anchor (or vice versa)

◻ As in the first example below, the data collector may add a fifth anchor – *uncertain*, *no opinion*, *cannot respond*, etc. Typically such an anchor is positioned as shown, but it also could be presented as anchor #1 or #5 (see second example)

☐ Both the assertion-style (see first example) and interrogative-style (see second example) Likert "stems" are illustrated below

☐ Note that the anchors are "balanced" (of equal weight)

☐ In a given instrument, StFX requires that the anchors in all rating, Likert, and semantic differential scales follow the same positive-to-negative pattern (or vice versa)

Likert Scales

- *Learning about different methods to assess training needs will help me in my work. (check one)*
  - ___ *Strongly disagree*
  - ___ *Disagree*
  - ___ *Uncertain*
  - ___ *Agree*
  - ___ *Strongly agree*

- *Do you agree or disagree that there is support among senior managers for the organization's leadership training initiative? (check one)*
  - ___ *Strongly disagree*
  - ___ *Disagree*
  - ___ *Agree*
  - ___ *Strongly agree*
  - ___ *No opinion*

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b-3) Semantic Differential Scale (a form of ordinal scale, rating type)

Semantic differential scales are used to explore an attitude or a personal impression from a subjective viewpoint.

In this type of scale, the respondent is asked to check one of the lines between two opposites (antonyms).

Literate respondents find semantic differentials to be "fun". Illiterate respondents find this type of scale to be too challenging.

☐ The semantic differential scale may be presented in sets (multiple scales, as in the example below) or as one pair of anchors

☐ Notice that when sets are used, both the anchors and the check lines are aligned as shown

☐ The traditional semantic differential scale presents seven check lines, but other formats are acceptable

☐ Note that the anchors are "balanced" (of equal weight)

☐ In a given instrument, StFX requires that the anchors in all rating, Likert, and semantic differential scales follow the same positive-to-negative pattern (or vice versa)

Semantic Differential Scales

- *Indicate your opinion about the role play activity in the session. (place a checkmark on one of the lines between each pair of terms)*

Boring	___	___	___	___	___	___	___	Stimulating
Contrived	___	___	___	___	___	___	___	Realistic

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b-4)   Rank Order Scale (a form of ordinal scale)

Rank order scales ask respondents to express their prioritization of anchors.

A disadvantage of the rank order is that ranking an anchor as one's first choice does not necessarily indicate real interest. It merely indicates that one's first choice is the most preferred among the listed anchors.

When using a rank order scale it is prudent to use a follow-up question to assess the strength of the preference.

☐ The rank order scale presents 5-7 anchors

☐ Do not include a write-in option: *other (specify)* _____.   Doing so invites a unique set of anchors from each respondent, which makes the tabulation of the data too difficult

☐ Notice the instructions that are used in each example: choose either format and adhere to it in any one instrument

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Rank Order Scales

- *Rank the following in order of your interest in attending a session about each topic. (place a 1 beside the session you would most like to attend, a 2 beside your next choice and so on):*
  - __ *Managing your time for health and profit*
  - __ *Supervisory excellence*
  - __ *Coaching for performance improvement*
  - __ *Effective speaking skills*
  - __ *Improving your written communications*

- *As a potential car buyer, rank the following in order of your preference to purchase. (1 = your first choice, 2 = your next choice, and so on):*
  - __ *Accent*
  - __ *Civic*
  - __ *Golf*
  - __ *smart fortwo*
  - __ *Versa*

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c) **Interval Scale**

The interval scale is characterized by the logical sequence of its anchors.

Interval scales are used to gather quantitative information.   Often, interval scales inquire of sensitive data: the respondent's age, income, frequency of attendance at worship, etc.

Interval scales also provide an efficient way to stratify a sample of respondents according to the variable of choice (age, income, etc.).
When using interval scales, it is important to remember the following:

☐ The intake and exit anchors sometimes are not expressed as ranges

☐ In the "true" interval scale, each anchor is the same size. If the first anchor is 1-10, the next anchor must be 11-20. Hence, no overlap (see the first example)

☐ In certain instances, the natural demographics of a group (or other) may require uneven anchors. Such a scale is not a "true" interval scale, but it is acceptable (see the second example)

☐ The anchors must be listed in logical order: from least-to-most or vice versa

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Interval Scales

- *Indicate your age group. (check one)*
  ___ *20 years and younger*
  ___ *21 to 30 years*
  ___ *31 to 40 years*
  ___ *41 to 50 years*
  ___ *51 years and older*

- *In the last calendar year, how much money did you donate to registered charities? (check one)*
  ___ *$100 or less*
  ___ *$100.01 to $500*
  ___ *$500.01 to $1,000*
  ___ *$1,000.01 to $2,500*
  ___ *$2,500.01 or more*

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3) Checklists

How many anchors may be offered in a checklist? Some researchers say approximately 6 anchors; other researchers say not more than 12 anchors. StFX suggests 6-12 (with flexibility, according to the subject of the inquiry).

☐ A checklist is used when there is more than one eligible response. When designing a checklist, remember that the list should include all possible choices and that it must not contain overlapping anchors

☐ A checklist may be "open" or "closed", in terms of its design

☐ In an "open" checklist it is common to offer write-in spaces for the respondent to provide unanticipated anchors (see the first example)

☐ In a "closed" checklist – in which all possible choices are provided to respondents – write-in spaces are not used (see the second example)

Checklists

- *The following is a list of programs for the sole child, ages 10-12 (as of June 30, 2014) proposed by Municipal Recreation for the July-August, 2014, period. Which program(s) might your child attend? (indicate your choice(s) by a check)*
  - __ *Art*
  - __ *Badminton*
  - __ *Basketball*
  - __ *Computer camp*
  - __ *Drama lab*
  - __ *Soccer*
  - __ *Other (specify) _____*
  - __ *Other (specify) _____*

- *Health & Safety announces that these workshops are available to staff during September-December, 2013, inclusive. (check all those that you are interested in attending)*
  - __ *CPR*
  - __ *First Aid*
  - __ *WHMIS*
  - __ *Relieving Workplace Stress*
  - __ *Back Care*
  - __ *Aerobics at Lunch*

Tips

FORMAT	*TIP*
• Open	• Opinions, judgments, interpretations
• Checklist	• General interest
• Nominal	• Facts
• Ordinal (proper)	• Frequency
• Rating • Likert • Semantic differential	• Depth of feeling
• Rank order	• Prioritization
• Interval	• Sensitive data, stratification