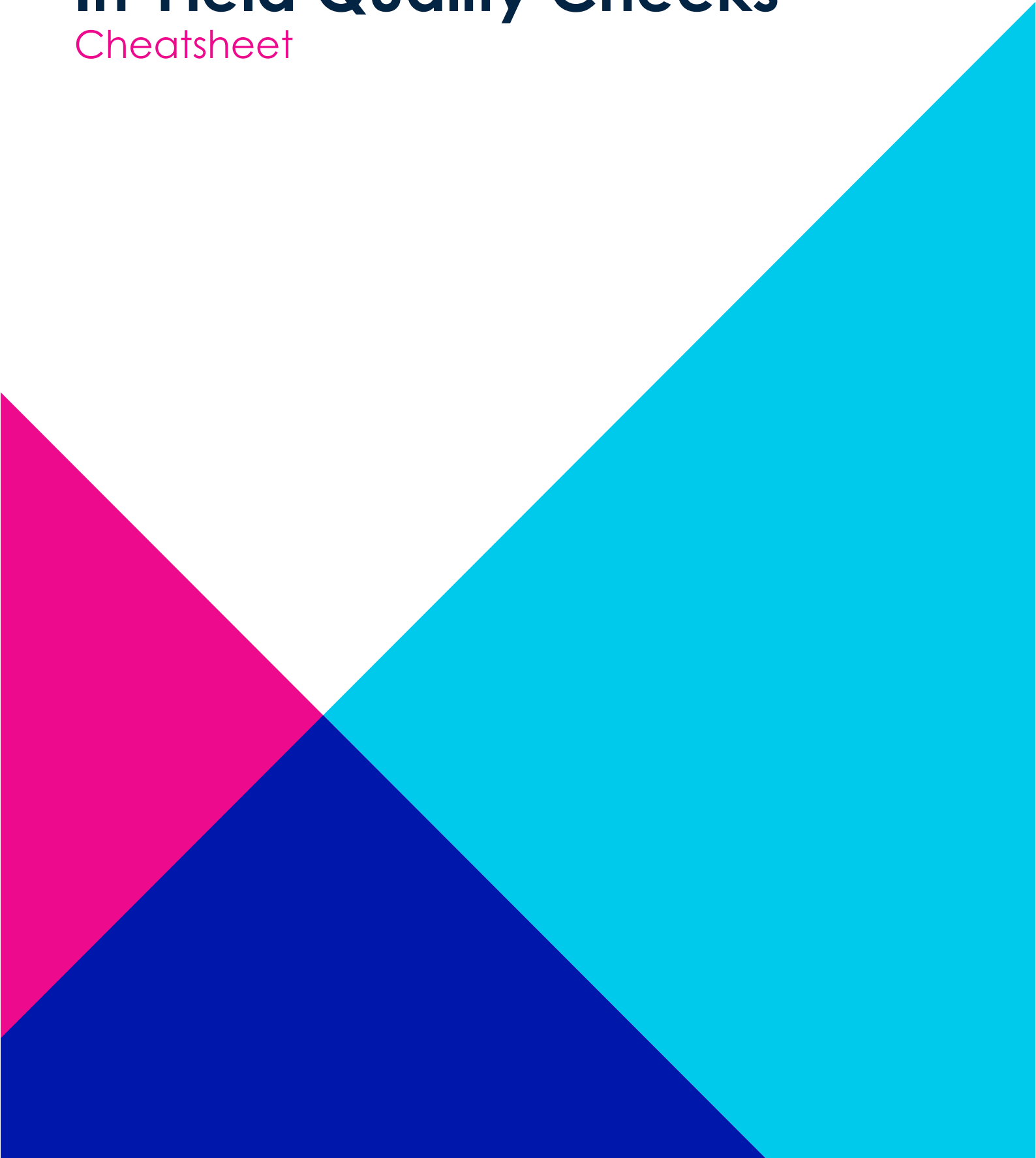


# In-Field Quality Checks

## Cheatsheet



### At a glance

Respondents are human, and sometimes external factors can momentarily distract them during a survey. They might pause because their bus stop is approaching, a child needs attention, or they receive a phone call. Temporary distractions like these are normal, but it's important to identify respondents who were excessively distracted or disengaged, as their data may not meet quality standards and should be excluded.

To ensure your survey data is accurate and reliable, it's critical to include a range of in-field quality checks during questionnaire design. Recommended checks include:

- Attention checks (Red herring/trap questions)
- Logic checks
- Straight-lining checks
- Open-end checks

A robust survey incorporates multiple in-field quality checks. Toluna Start provides automated tools such as open-end checks and copy-and-paste detection, which automatically flag and remove low-quality responses or respondents misusing the copy-paste function. Alongside these, we also recommend implementing your own manual quality checks for added rigor.

By combining automated and manual checks, you can enhance the reliability and integrity of your survey data.

### In-field Quality Checks

**For surveys programmed in Toluna Start:** Some in-field quality checks are automated, while others will need to be manually added.

**For surveys programmed on other platforms:** Please ensure all recommended in-field quality checks are implemented to maintain data integrity.

## Automated In-field Quality Checks in Toluna Start

In accordance with ISO 20252 section E.3.3, Toluna Start has established procedures to detect and exclude fraudulent or inattentive participants. The platform incorporates automated checks to monitor open-ended survey responses and in-survey behavior. These checks evaluate responses against specific criteria, and participants who fail to meet these standards are automatically removed from the survey.

### Automated Open-End Checks:

#### Gibberish

- How it works: Terminates respondents as soon as they give a gibberish open end; only checks words with 4 or more letters
- Languages: Dutch, English, French, German, Italian, Malay, Portuguese, Spanish-language surveys
- Examples: 'adlh opffksjd', 'adiodoidjh', 'sskss'

#### Foreign Language

- How it works: Terminates respondent as soon as they give a Chinese, Hindi, or Arabic open-end text in a market where this language wouldn't be expected

#### Duplicate Responses

- How it works: Terminates respondents as soon as they
  - give the same open-end answer with 20 words or more as given by at least 3 other respondents within the same survey
  - give the same open-end answer with more than 3 words in a survey more than 3 times

- give the same open-end answer with more than 9 words across more than 3 other surveys
- Ignores spaces, punctuations and cases
- Languages: All languages

### Short Open-Ends

- How it works: Terminates respondents as soon as they give a response that is too short (under 3 characters) and are not dictionary words
- Languages: Dutch, English, French, German, Italian, Malay, Portuguese, Spanish-language surveys
- Examples: 'Ch', 'S', 'A2'

### Illogical Responses

- How it works: Terminates respondents as soon as they give an open-end that is grammatically valid but doesn't logically answer the question. The check uses advanced AI to assess contextual relevance, ensuring responses align with the question's intent
- Languages: All languages, except Chinese

### Profanity

- How it works: Terminates respondents as soon as they provide an open-end response containing extreme profanity or offensive language. The check uses advanced AI to evaluate the response within its survey context and is triggered only when content is clearly inappropriate
- Languages: All languages

### Copy & Paste Behavior:

- How it works: Terminates respondents as soon as they use either the copy and/or paste function on their device but within the survey browser tab. Works on keyboard shortcuts (e.g. 'ctrl + c' or 'ctrl + v'), mouse usage (e.g.

'right click + copy' or 'right click + paste'), and any code that uses copy or paste commands

- Languages: All languages

## Recommended Manual In-Field Quality Checks

Although Toluna Start includes some automated in-field quality checks, we advise incorporating the following manual checks into your survey design process. Please note that these checks are not built into the Toluna Start platform by default. Some manual checks can be implemented using logic while others require reviewing data files. If fielding time allows, we suggest conducting at least one manual data review during fieldwork (around 50% completion). This proactive approach helps clean the data early, reducing the need for extensive data cleaning at the end of fielding.

### Attention checks (Red Herring/Trap Questions):

These questions are designed to check if respondents are paying attention and reading questions carefully.

★ *Toluna DIY Automated Solutions : These templates have built-in red herring questions.*

Recommendation: For surveys with 10-30 questions, we recommend including 2- 3 red herring questions, and for surveys with 30+ questions, 3-4 red herrings are ideal. These questions should start appearing somewhere towards the ¼ point mark of the survey and be adequately spaced apart.

- **If a respondent fails 1 red herring**: Flag and review their responses alongside other quality checks.
- **If a respondent fails 2 or more red herrings**: Add a screen out logic to remove these respondents from the survey in real-time.

Examples of Red Herring/Trap Questions:

Individual question – set up a separate question with only one correct answer	Part of a grid – include an instruction as part of a grid question
<p><b>Example:</b></p> <p>Hey, are you still paying attention? Please choose the third option from the list below:</p> <ul style="list-style-type: none"> <li>• Green</li> <li>• Red</li> <li>• <b>Blue</b></li> <li>• Yellow</li> </ul>	<p><b>Example:</b></p> <p>Please choose 'completely agree' for this statement.</p> <ul style="list-style-type: none"> <li>• Completely disagree</li> <li>• Disagree</li> <li>• Neither agree nor disagree</li> <li>• Agree</li> <li>• <b>Completely agree</b></li> </ul>

### Logic Checks:

Logic checks assess whether a respondent's answers follow a consistent and logical pattern. They help identify respondents who may not be truthful or have lost focus during the survey.

### Recommendation:

- Include several logic checks in the screener section to filter responses early.
- Place additional logic checks in the main body of the survey to maintain quality throughout.
- Review these checks post-field alongside other quality assurance measures to ensure accuracy and reliability.
- Toluna Start automatically includes a 5% oversample. If post-field cleaning results in the removal of more than 5% of the sample, please reach out to your Client Services Team.

### Examples of Logic Checks:

- **Low-incidence options:** Include answers that are plausible but unlikely within the context (e.g., "Booked a cruise in the last 7 days") to identify overclaiming and inattention.
- **Overstatement:** Identify exaggerated or unrealistic claims (e.g., claiming to have visited all the museums in the world).
- **Fake options:** Introduce non-existent brands, products, or places to detect inattentive or disengaged respondents.
- **Inconsistencies:** Flag contradictory responses across questions (e.g., saying

they like a brand in one question but dislike it in another).

- **Unlikely combinations/plausibility:** Identify responses that are technically possible but highly improbable when combined (e.g., claiming to be 18 years old and have 5 children).

Logic checks are most effective when **planned during questionnaire design**, rather than applied only during data cleaning.

**Low-incidence options** – include a few rare items in existing question lists. If a respondent selects all the items, they may be overstating.

**Example:**

Did you buy any of the following in the last 7 days?

- Bread
- Flowers
- Chocolates
- Cleaning Products
- **Car Insurance**
- **Mobile Phone**
- **DVD**
- None of these

What activities have you done in the last month?

- Went grocery shopping
- Watched movies
- Exercised
- Ate at a restaurant
- **Booked a cruise**
- **Installed a home security system**
- **Purchased cryptocurrency**
- None of these

How often do you typically do the following?

- Watch TV
- Shop online
- Use social media
- **File insurance claims**
- **Volunteer in emergency response situations (e.g., disaster relief)**
- **Handle legal disputes or mediation cases**

**Overstatement** – useful to identify exaggerated or implausible answers. If respondent selects “Yes”, they may be overstating.

**Example:**

Have you tried all the beverages in the world?

- **Yes**
- No

Have you watched every *movie ever released on Netflix*?

- **Yes**
- No

From memory, can you recall what the weather was like every day since you were born?

- **Yes**
- No
- **I remember them all**
- **Completely**

**Fake options** – include fake brands, sports, cities, etc. in question lists. If a respondent selects the fake option, they may not be paying attention

**Example:**

Which of the following German car brands have you heard of?

- Audi
- BMW
- Porsche
- **Pitu**
- Volkswagen
- None of these

**Inconsistencies** – ask similar questions in different ways to spot conflicting answers

**Example:**

- How often do you drink coffee?
  - When did you last drink coffee?
- e.g. “Never” + “Today” = **inconsistency**

- Do you own a car?
  - What brand is your car?
- e.g. “No” + selects a brand = **inconsistency**

**Unlikely combinations/plausibility** – combine questions that are technically possible but highly improbably when combined

**Example:**

- What is your age?
  - How many children do you have?
- e.g. 18 years old with 5 children = **unlikely combination**

- What is your highest level of education?
  - What is your current occupation?
- e.g. no formal education + medical doctor = **unlikely combination**

- What is your age?
  - How many years of work experience do you have?
- e.g. 20 years old with 10 years of experience = **unlikely combination**

### **Straight-Lining Checks:**

These checks help identify respondents who may have lost focus or motivation and are simply clicking through the survey by selecting the same option repeatedly in grid questions.

Recommendation: Apply straight-lining checks on grids with 15+ items. To reduce respondent fatigue, split grids with more than 20 items into pages with at least 10 items each. If, after splitting, no grids have 15+ items, apply the check to those with 10+ items.

- If the **standard deviation is below 0.5 in two or more grids**, the respondent should be removed from the dataset.
- If the **standard deviation is below 0.5 in only one grid**, the respondent should be flagged and their responses reviewed alongside other quality checks.

Note: Only apply straight-lining checks to grids where some variation in responses is expected. For grids where it is reasonable for respondents to select the same option, these checks may not be applicable.

Manual straight-lining checks can be conducted by reviewing exported data files.

## In-Field Quality Checks

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The raw participant data within Toluna Analytics can be analyzed to identify individual respondents who have straight-lined their responses.

If you would like to implement live straight-lining checks to remove respondents immediately during the survey, please contact your Client Services Team.

Toluna Start automatically includes a 5% oversample. If post-field cleaning results in removing more than 5% of the sample, please reach out to your Client Services Team for assistance.

### **Open-End Checks:**

Open-end checks are used to identify respondents who may be disengaged or providing fraudulent responses. While some open-end checks are automated in Toluna Start, a thorough manual review is recommended for complete validation.

#### Recommended Open-End Checks:

- Gibberish
- Foreign Language
- Duplicate Responses
- Short Open-Ended Responses
- Profanity
- Illogical Responses
- Suspected AI-Generated Responses

Toluna Start automatically includes a 5% oversample. If post-field cleaning results in the removal of more than 5% of the sample, please reach out to your Client Services Team.

By combining automated tools with a comprehensive manual review, you can ensure the highest quality and reliability of open-ended survey responses.