

Prevention Technology Transfer Center Network Funded by Substance Abuse and Mental Health Services Administration

How to Create a Pseudocode

What Are Pseudocodes?

Pseudocode means a "fake code" that severs the link between the data and the provider.

Why Use Pseudocodes?

Evaluators use pseudocodes to protect a participant's anonymity when asking protected questions.

In many cases, to complete quality evaluations, the evaluator needs the ability to match a pre-survey with a post-survey. Matching an individual's pre-survey with their postsurvey can improve the evaluator's understanding of how effective a program is and what changes should be recommended.

For example, a student in an eighth-grade history class may be given a pre-survey or pre-test at the beginning of the year. Then, at the end of the year, that same student is asked to complete a post-survey or post-test. Comparing the scores' changes over time would allow the teacher to understand better what information, or knowledge, has improved, what information or knowledge has declined, and what changes to instructional practices may be warranted. However, collecting data about a student's knowledge of U.S. Presidents, as an example, is much easier than asking a participant about possible illegal activity, such as substance use. Thus, when asking about private and potentially illegal activities, the participant requires additional protections.

To help protect your participants' anonymity when asking them to complete a survey containing protected questions, a practitioner can use pseudocodes. Pseudocodes help prevent a person's identity from being connected with a specific data point. For example, suppose you ask about a participant's past drug misuse. That data should be protected so that if the participant's completed survey is left on a table, no one could easily identify who completed the survey. However, the participant's anonymity is not assured if you use a participant's name or student identification number. To help protect the participant, pseudocodes can be utilized to remove the need to include the participant's name or other common identifier from the survey form.

Examples of Pseudocodes

There are multiple examples of pseudocodes. The three most common are: Full Answer, Rubric, and Touch Tone code.

The **Full Answer** pseudocodes require that participants answer questions that only they would know. For example, a participant-generated code uses a list of questions to provide a unique and anonymous code. For example, you can ask, "What is your favorite movie?" "What is your favorite pet's name?" and "What are the last two digits of your phone number?" The participant can provide their own code by answering these questions. The downside to this approach is that the participant will need to remember their answers when the post-survey is administered. An example of a Full Answer pseudocode would be "Avatar, Sarge, 73."

Rubric codes are created by the participant as they answer standard questions. For example, participants are asked to create a rubric code by doing the following:

- 1. What is the second letter of your mother's first name?
- 2. What is the fourth digit of your social security number?
- 3. What is the last letter of the state's name in which you were born?
- 4. What is the last digit of your home telephone number?
- 5. What is the second letter of the month in which you were born?
- 6. What is the fourth letter in the name of your favorite teacher's last name?

As with the full-answer code, the downside to this approach is that the participant will need to remember their answer when the post-survey is administered. An example of a Rubric code would be "O4S3OI."

The **Touch Tone** code is the number you get when you convert your name to a numerical code using your phone pad. The downside to this approach is if a participant changes their name. An example of a Touch Tone pseudocode is 42536727747423622435.

How to Create a Touch Tone Pseudocode

Step 1: Spell out your full name

Write out your full name, including your middle name if you have one. When you write out your name, do not include spaces, do not include prefixes (e.g., Dr., etc.), and do not include suffixes (Sr., Jr. etc.).

Step 2: Convert your name into a number

Using a touch tone keypad, convert each letter of your name into a number. For example, if your name is Halen Parsiphae Maciel, your touch tone pseudocode would be 42536727747423622435.

Sample Instruction Sheet

The next page has a sample instruction sheet for participants to create their pseudocode. To use this form, replace "ABC" with the name of your agency or program.

PSEUDOCODE

To determine the effectiveness of this event, ABC needs to be able to match pre-and post-surveys. Matching surveys will help the agency determine if this event was effective and if it should be implemented again, in the future. However, ABC is dedicated to ensuring everyone's anonymity. To accomplish this, ABC is using a pseudocode to identify the pre-and post-surveys. A pseudocode is simply a way that you, the student, or participant, can create a code that only you will know BUT one that you will be able to recreate. Thus, ABC will utilize the "Touchtone" Pseudocode for this event.

To create your personal Touchtone Pseudocode, you will be asked to write out your full name, including your middle name, if you have one. NOTE: The page you write out your name on will be one that you get to keep and dispose of yourself. We are only using it to help you create your unique Touchtone code. Please note the following rules to developing your Touchtone Pseudo Code:

1.	Use your full first, middle, and last name.
2.	Do NOT use any prefix or suffix (e.g., Mr. Mrs., Jr., etc.)
3.	Do NOT put spaces between your first, middle, last name.

Once you write out your full name, including first, middle, and last, you will use the touchtone keypad to create a unique number.



His unique pseudocode would be: 526234692732277464866

L	Α	N	C	Е	Η	0	W	A	R	D	В	A	R	R	I	N	G	т	0	N	
5	2	6	2	3	4	6	9	2	7	3	2	2	7	7	4	6	4	8	6	6	

Now, create your own Touchtone Pseudocode. In the space below, write your full name. Remember to use your first, middle, and last name. Underneath, create your Touchtone Pseudocode.

Name:											
Touchtone											
Pseudocode:											

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