

PEPPER GUIDE 4:

ENTER AND EDIT PEPSTORE VARIABLES AND PVSP DATA

Overview

For each PepFile entered and saved in PEPPER there is an associated database called PepStore that contains over 20,000 fields also called *variables*. These variables have both numbers (e.g., V0, V34, V3314) and names (e.g., *FileName*, *SampType*, *PCC*). Some values for variables are entered manually and can be edited as needed. Other variables, such as the data that appear in PepAnalyses outputs, are computed by PEPPER based on the PepFile's perceptual and/or acoustic data. The latter variables cannot be entered or edited manually and therefore will not be addressed in this guide. A "Copy Demographics" feature allows certain variables to be copied from one PepFile to one or more other PepFiles, which can save keyboarding time in situations where multiple PepFiles have the same demographic variables (i.e., sex, age, transcriber name, etc.).

Data from the *Prosody-Voice Screening Profile (PVSP)* ([Shriberg, Kwiatkowski, & Rasmussen, 1990](#)) are also entered and stored as variables in PepStore. As mentioned elsewhere, the PVSP is completed for conversational samples only and is required for completing acoustic analyses on conversational samples.

Getting Acquainted with the PepStore Database

A PepFile must be open in PEPPER in order to view, enter, or edit variables in PepStore. After opening the PepFile, click on the *PepFunctions* menu in PEPPER, use the mouse to highlight the *PepStore* submenu, and then click on *Enter/Edit/View PepStore*. A new window will open that displays all of the open PepFile's corresponding variables in the PepStore database. The variables are arranged in numeric order in columns with 1000 variables per column. The line for each variable contains the following from left to right:

1. The variable number
2. The value that has been entered or computed for that variable. The blue characters indicate variables that can be entered or edited; the black characters indicate values or data that are generated by PEPPER and cannot be changed by the keyboarder. An asterisk (*) indicates that the value is undefined.
3. The variable name. If the variable has a name, it appears next. The variable name, which may be an abbreviation, is followed by a colon. Following the colon is a description of the variable. For some variables, there is information in parentheses that serves as a guide to the keyboarder as to how the value should be entered. For example, for V2, "Sex," a "1" is entered for "male" or "2" for "female" (not "M" or "F").

The horizontal and vertical scroll bars to the bottom and right of the screen, respectively, can be used to move around within PepStore. The up and down arrow keys on the keyboard can be used to move vertically line by line from one blue variable to another; "black" variables in between "blue" variables are skipped. The left mouse button can be used to click on any of the "blue" variables. To jump to a specific variable or section in PepStore, press Ctrl+G. A window opens wherein a section of the database can be selected from a drop-down list, or a variable name or number can be typed into a field. (If entering a variable number, it is not necessary to type the "V" preceding the number.) After choosing a section or entering a variable, click OK. PEPPER will jump to the first variable in the chosen section or to the variable specified by the keyboarder.

Entering and Editing PepStore Variables

The procedures for entering variables are the same for PepFiles and protocols. Any "blue" values can be entered or edited in the PepStore database window. Any variables that require specific coding or formatting conventions have descriptions or keys in parentheses; these should be followed so that PEPPER "recognizes" the data, which may be especially important for some analyses.

To enter or edit variables in PepStore,

1. Open PEPPER.
2. Open the PepFile or protocol ([PG3](#)).
3. Open the PepStore window by clicking on the PepFunctions menu, highlighting PepStore, and then clicking on *Enter/Edit/View PepStore*. (NOTE: The PepStore window will appear over and "hide" the PepFile transcript.)
4. Enter a value into the corresponding "blue" field for each required variable and each additional variable of interest by clicking on the blue asterisk and entering number(s) and/or letter(s). Follow any applicable keyboarding guidelines described in parentheses in the variable line. Edit a previously entered "blue" value by left-clicking in the field and adding, deleting, and/or typing character(s) to be changed.
5. Close the PepStore window by clicking on the red X button in the upper right corner. After closing PepStore, the PepFile/protocol window is again visible.
6. Save additions and changes made in PepStore by going to the File menu and choosing "Save" or typing Ctrl+S. If you forget to save after exiting PepStore, you will be prompted to save your changes before exiting the PepFile and/or PEPPER.

Required and Common PepStore Variables

The fields for ***the following variables must have values*** (i.e., no asterisks) for PepAnalyses (PepClass and PepAssess - [PG7](#)) computations and outputs:

- V0 "FileName" - This "black" value is automatically filled in by PEPPER. It is the file name under which the PepFile is saved.
- V2 "Sex" - This "blue" value must be manually entered as 1 or 2 (1=male; 2=female).
- V4 "Months" - This "blue" value is the participant's age in months and must be manually entered.
- V34 "SampType" - This "blue" value is the type of sample or speech task [1 = artic test (i.e., single word), 2 = continuous (i.e., conversational speech), 3 = multiword (i.e., phrases or sentences)] and must be manually entered.
- V35 "SampMode" - This "blue" value is the speech sampling mode (1 = spontaneous, 2 = imitative, 3 = other) and must be manually entered.

See Table 1 below for values that should be entered for variables 34 and 35 for speech tasks administered as part of the Madison Speech Assessment Protocol ([MSAP](#)).

The following variables are commonly entered but optional. They are listed here because they may be of particular use or interest to other PEPPER users:

- V26 "PepStore" - This "blue" record-keeping number is assigned to the PepFile transcript. Every PepFile entered has its own unique PepStore number.
- V32 "ExamDate" - This "blue" value is the date that the speech sample was collected. It is particularly informative for samples collected on different dates for the same participant (i.e., multiple treatment sessions, testing dates for longitudinal studies).
- V40 "TransWho" - This "blue" value is the name of the person who phonetically transcribed the sample.
- V41 "SSegWho" - This "blue" value is the name of the person who completed the suprasegmental ratings (i.e., the person who coded the PVSP) and applies only to the conversational sample.
- V42 "SSegUtts" - This "blue" value is the number of non-excluded PVSP utterances that were coded for prosody and voice. (Again, this applies only to the conversational sample.) A number less than 24 in this field may indicate that the sample is short and/or does not have sufficient data for some analyses.
- V44 "Subject" - This "blue" record-keeping "subject number" is a unique number that is assigned to the participant/speaker. For all PepFiles for a given participant, the value entered for this database variable is the same.
- V45 "RemotSubjID" - This "blue" record-keeping "remote subject identification number" is a number that has been assigned by an external, collaborative clinical or research site.
- V14026 "Peplog" - This "blue" record-keeping "Peplog number" serves as a way to organize, file, and locate hard copies of recordings (tapes, disks, etc.) and/or folders containing hard copies of scoring forms, questionnaires, etc. A Peplog number can be assigned to more than one PepFile transcript and/or more than one participant.

MSAP Task	Variable 34	Variable 35
Conversation (CS)	2	1
CWT	1	2
DDK	1	3
EST	3	2
GF	1	1
LST	1	2
MWT1	1	2
MWT2	1	2
NRT	1	2
RST	1	2
SCT	1	3
SPT	3	2
SRT	1	2
SVT	1	3
VT 1	1	2
VT 2	1	2
VT 3	3	2

Table 1. Sample type (V34) and sample mode (V35) values for MSAP tasks.

The "Copy Demographics" Feature

This feature allows you to copy demographic variables from one PepFile to one or more other PepFiles. (NOTE: Non-demographic variables cannot be copied using this feature.) To copy demographic variables from one PepFile to another, follow these steps:

1. Open PEPPER.
2. Create or open a PEPPER variable list (*.pvl) ([PG6](#)) that includes the variables to be copied. Leave the list open.
3. Open the PepFile that will be receiving the values.
4. Click on the PepFunctions menu, highlight PepStore, and then click on *Copy Demographics...*A window will open wherein you can select the PepFile that is the source of the values to be copied.
5. Select the PepFile that is the source of the values to be copied and click the Open button. This window closes. The selected source PepFile does not open, but the values specified in the open variable list are copied from its PepStore database into the database of the PepFile that is still open and now visible on the screen.
6. Before closing the PepFile that has received the values, click "Save" under the File menu or type Ctrl+S. If you forget to save after exiting the PepStore database, you will be prompted to save your changes before exiting the PepFile and/or PEPPER.
7. Close the *.pvl (or save the *.pvl before closing if it will be used in the future).

Entering PVSP Data

This section assumes that the keyboarder is sufficiently familiar with PVSP procedures, terms (e.g., *exclusion code*, *codable utterance*, *Sequential Utterance Log*), and forms to understand and enter PVSP variables as described in this section. [Training materials for the PVSP](#) are available from our website. To open the window where PVSP data are entered in PEPPER, complete the following steps:

1. Open PEPPER.
2. Open the CS Pepfile (*.pep).
3. Open the PVSP Log entry window by clicking on the PepFunctions menu, highlighting PepStore, and then clicking on *Enter/Edit/View PVSP Log*. (NOTE: The PVSP Log window will appear over and partially or completely "hide" the PepFile transcript.)

All of the PVSP variables that can be entered are indicated by blue asterisks; when the PVSP Log window opens, the cursor is automatically placed at the first blue asterisk.

The PVSP Log window is divided into 3 parts: 1) Identification (found on p. 1 of the *PVSP Scoring Form*) and supplemental information (if applicable, found on the *PVSP Scoring Supplemental Sheet*); 2) "Combination Codes," which are utterance-by-utterance prosody and voice codes from the *Prosody-Voice Coding Log* (on p. 3 of the *PVSP Scoring Form*), and 3) "Sequential Utterance Log," which are the codable utterance numbers and exclusion codes (if any) recorded in the *Sequential Utterance Log* found in the section at the top of p. 3 of the *PVSP Scoring Form*.

Below is an example of the first section of the PVSP Log window wherein PVSP variables (blue text) have been entered. The PepStore variable numbers in the first column do not appear in the PVSP Log view in PEPPER. As mentioned previously, all values in the second column are blue asterisks until data are entered to replace them. Entered values are also in blue text and can be edited like any other "blue" variables in the PepStore database. The third column contains the label and description of the variable, plus any keyboarding guidelines in parentheses.

V14008	<i>speaks softly</i>	PVSP General Comment
V14016	0	Narrative-- Re-tell as story (0=no 1=yes)
V14017	0	Narrative-- Make up a story (0=no 1=yes)
V14018	0	Narrative-- Comments on pictures (0=no 1=yes)
V14019	0	Narrative-- Comments on actions (0=no 1=yes)
V14015	0	Narrative-- Other (0=no 1=yes)
V14020	1	Conversation—Spontaneous interaction (0=no 1=yes)
V14021	0	Conversation—Controlled interaction (0=no 1=yes)

V14022	0	Conversation—Interview (0=no 1=yes)
V14023	0	Conversation—Other (0=no 1=yes)
V14024	6/2/17	Scoring date
V14025	McSweeny	Scorer
V14026	3581	Tape Label (i.e., Peplog Number)
V14027	*	Tape Side (hold-over from the days of audiocassette tapes, no longer used)
V14028	0:48	Counter Number, beginning of sample
V14029	1:16	Counter Number, first coded utterance
V14030	8:10	Counter Number, last coded utterance
V14031	21	Coding time (in minutes)
V14032	40	Total time (in minutes, glossing time plus coding time)
V14033	0	DiffJudg: Difficult to judge
V14034	0	Telegraf: Telegraphic speech (0=no 1=yes)
V14035	0	Resplnvl: Respiratory Involvement (0=no 1=yes)
V14074	18	Total Number of 4+ Utterances

As mentioned previously, almost all of the values in the first section above come from information written in the "Identification" section on the first page of the *PVSP Scoring Form* and from the *PVSP Scoring Supplemental Sheet*. The last value (V14074) is the total count of check marks recorded in the "4(+)" Words" column of the "Prosody-Voice Coding Log" on page 3 of the *PVSP Scoring Form*. The 4(+) words boxes are checked for the coded utterances that contain 4 or more intelligible whole words.

The following values in the "Identification" section of the *PVSP Scoring Form* are not included/entered in the PVSP Log window. They can be entered using the regular PepStore database view described on p. 2. As mentioned previously, values are required for V2 and V4.

V1	Last, First	Name
V4	154	Months
V2	1	Sex (1=male 2=female)
V32	6/16/17	ExamDate: Date of speech sample
V33	McSweeny	ExamWho: Sampling examiner

The "Screening Outcome" part of the "Identification" section on p. 1 of the *PVSP Scoring Form* is not entered in the database.

The "Combination Codes" section of the PVSP Log window is where all inappropriate codes and Notes recorded in the "Prosody-Voice Coding Log" on p. 3 of the *PVSP Scoring Form* are entered. A *combination code* is the concatenation, separated by spaces, of inappropriate codes for each coded utterance. Even though there are 25 rows on the form, note that there are lines to enter data for only 24 coded utterances in PEPPER. If fewer than 24 utterances have been coded, enter the data for those utterances that have been coded and leave asterisks in the fields for the remaining utterance numbers up to and including utterance 24.

Only inappropriate codes (all codes other than '1') are entered; a code of '1' (the code for "appropriate") is never entered. Multiple inappropriate codes are separated by spaces. To enter a note, type a slash (/) followed by the note. Circled (i.e., unsure) codes are entered either by preceding them with a period (.) or by surrounding the code with parentheses. There is a limit to the number of characters that can be entered in each line. It may be necessary to abbreviate comments in the Notes column in order to avoid exceeding the character limit, especially if multiple inappropriate codes are entered.

Below is an example of a "Combination Codes" section with entered data for 22 coded utterances. The database variable numbers in the first column do not appear on the PVSP Log entry screen. Additional entry guidelines follow this example.

V14153	1		
V14154	2	.24	/thought PRO, rough at end
V14155	3	19	
V14156	4		/thought PRO
V14157	5	.17 .24	
V14158	6	.17	
V14159	7	6 17 .24	
V14160	8		
V14161	9	17 24 30	
V14162	10	.15	/small BLO
V14163	11		/rough, breathy at end
V14164	12	17	
V14165	13		
V14166	14	6 24	

V14167	15	.17	
V14168	16	.14 24	/borderline GF, monotone
V14169	17	29	/24 & 26, shift
V14170	18		
V14171	19		
V14172	20	.17 24	/thought PRO
V14173	21	24	
V14174	22	2 .17	
V14175	23	*	
V14176	24	*	

All blue values start out as *, which indicates missing data. If an utterance is coded as entirely appropriate and has no Notes to enter (as in utterances 1, 8, 13, 18, and 19 in the example above), the asterisk is deleted. If there are fewer than 24 codable utterances (i.e., utterances with combination codes), the remaining blue values should remain as asterisks (as in the fields for utterances 23 and 24 above).

Inappropriate Stress codes 15 and 16 require additional comments (which should be recorded in the Notes column of the *PVSP Scoring Form*). When inappropriate code 16 (Multiple Stress Features) is entered, PEPPER brings up a dialog to select two or three Stress codes from 13, 14 and 15. When an inappropriate Stress code 15 or an inappropriate Stress code 16 that includes a code 15 is entered, PEPPER brings up a dialog to select one or more of the following abbreviations: MP, BLO, PRO, EE, and SING. The selected abbreviations will automatically be added to the Notes column. Additional data can be entered to the Notes column if space allows. (If a 15 or 16 code is recorded in the Prosody-Voice Coding Log without the required supplemental abbreviation(s) in the Notes section, it should be returned to the scorer with a request to add this information to the form.)

Certain codes are incompatible with each other; attempts to enter both incompatible codes in the same utterance line will generate an error message. PEPPER will generate an error message if the keyboarder attempts to enter any of the following incompatible code combinations:

- Inappropriate Rate code 12 (Fast/Acceleration) and an inappropriate Stress code. In an utterance with fast/accelerated rate, stress cannot be judged. In this situation,

an asterisk should be recorded in the Stress Approp column in the "Prosody-Voice Coding Log" on p. 3 of the *PVSP Scoring Form*.

- Inappropriate Pitch code 19 (Low Pitch/Glottal Fry) or 21 (High Pitch/Falsetto) and an inappropriate Laryngeal Quality code. In an utterance with glottal fry or falsetto pitch, laryngeal quality cannot be judged. In this situation, an asterisk should be recorded in the Quality Approp column in the "Prosody-Voice Coding Log." (Note: Resonance can still be judged, and an inappropriate Resonance code can be recorded and entered.)
- Inappropriate Laryngeal Quality code 23 (Breathy) and an inappropriate Pitch code. In an utterance with breathy laryngeal quality, pitch cannot be judged; an asterisk should be recorded in the Pitch Approp column in the "Prosody-Voice Coding Log."

For more detailed information on, including the rationale for, these incompatible code combinations, see the PVSP manual.

The last section of the PVSP Log entry window contains the values (coded utterance numbers and exclusion codes) taken from the "Sequential Utterance Log" found on p. 3 of the *PVSP Scoring Form*. (NOTE: The first 3 codable utterances--called U1, U2, and U3--are recorded and entered in the "Sequential Utterance Log" but are not judged for prosody and voice; i.e., they do not have combination codes.) This section, unlike the previous 2 sections, does not have corresponding PepStore database variable numbers; however, the exclusion code counts in the PepStore database for V14038 through V14072 are calculated from the data entered in this section.

Ideally, the utterance numbers in the "Sequential Utterance Log" should correspond to the utterance numbers in the handwritten transcript and corresponding PepFile. To streamline the entry process, default values are shown as the "Sequential Utterance Log" values are entered in PepStore. These default values include the next utterance number for a codable utterance (starting with U1, U2, U3 for the first three codable non-coded utterances) and the previously entered exclusion code, if any. To select/enter the default codable utterance number, press the Enter key. To select/enter the default exclusion code, press the 'x' key. To enter something else, type it. If more than one exclusion code must be entered for an utterance, enter a space between each one.

Here is an example of data entry for the "Sequential Utterance Log:"

1	U1
2	U2
3	C5 C7 C12
4	U3
5	C7

6	1
7	2
8	C2
9	3
10	4
11	C2 C5
12	C5
13	5
14	6
15	7
16	8
17	9
18	10
19	11
20	12
21	13
22	14
23	15
24	16
25	17
26	18
27	19
28	20
29	C5 C7
30	21
31	22
32	23

33 C7

34 24

When entering the data from the "Prosody-Voice Coding Log" or the "Sequential Utterance Log," the commands on the Edit menu to Cut, Copy, Paste, Insert or Delete a line can be used as needed.

PVSP Data Entry Error Messages

*** line in middle of combination codes:** The * lines should occur in the combination codes section only when there are fewer than 24 coded utterances. In that case, they should be used for the utterances in the combination codes section past the number of utterances coded. In this situation, PEPPER identifies and flags a line with a blue asterisk (*) followed by a line with one or more entered combination codes. This most commonly happens when the keyboarder forgets to delete the * for a coded utterance with no inappropriate codes or notes.

Sequential Utterance Log Missing: This error message appears when the combination codes are entered without entering data in the corresponding "Sequential Utterance Log."

There are *nn* coded utterances in Seq. Utt. Log, but there are *mm* Combination Codes: The number of coded utterances entered in the "Sequential Utterance Log" (ignoring U1, U2, U3) must equal the number of utterances with entered combination codes. This error message appears when they do not.

Seq. Utt. Log has an empty line: There should be a code on every "Sequential Utterance Log" line. The "Delete Line" feature on the Edit menu can be used to remove the empty line.

Value must be at least *nn*; Value must be no more than *mm*: The value entered is too small or too large. For example, the value for "Conversation--Spontaneous interaction" must be 0 or 1. A negative value is too small; a value of 2 or more is too large.

Reference

Shriberg, L.D., Kwiatkowski, J., & Rasmussen, C. (1990). *The Prosody-Voice Screening Profile*. Originally published by Communication Skill Builders, Tucson, AZ; rights returned to The Phonology Project, University of Wisconsin-Madison, Madison, WI.