

UnderStandingAmericaStudy

UAS HRS WAVE 4 COGNITIVE SCORING



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1 INTRODUCTION

This document describes the scoring of the cognitive tests in UAS HRS Wave 4 A-D in UAS396.

2 SERIAL SEVENS

The HRS serial sevens cognitive test involves asking respondents to subtract 7 from 100 and then to continue for a total of five subtractions in a row. It is administered to all respondents of UAS396. The answers to the subtractions are captured in variables d142, d143, d144, d145 and d146. The scoring variables are as follows:

- d142_ok: indicates if the subtraction of 100 minus 7 is correct.
- d143_ok: indicates if the subtraction of the answer to d142 minus 7 is correct.
- d144_ok: indicates if the subtraction of the answer to d143 minus 7 is correct.
- d145_ok: indicates if the subtraction of the answer to d144 minus 7 is correct.
- d146_ok: indicates if the subtraction of the answer to d145 minus 7 is correct.
- serialseven: indicates how many subtractions are correct.

Answers are scored as follows:

- An answer is marked incorrect (denoted by e.g. d142_ok=5) if:
 - It is preceded by a non-answer (indicated by “.e”) in the series. For example, if the answer to d143 and d144 is correct, but d142 equals “.e”, d143 and d144 are also considered to be “.e”.
 - The answer is NOT the result of the subtraction of 100 minus 7 (for d142) or the preceding answer minus 7 (for d143 to 146)
- An answer is marked correct (denoted by e.g. d142_ok=1) if:
 - It is NOT preceded by a non-answer (indicated by “.e”) in the series. For example, if the answer to d143 and d144 is correct, but d142 equals “.e”, d143 and d144 are also considered to be “.e”.
 - The answer is the result of the subtraction of 100 minus 7 (for d142) or the preceding answer minus 7 (for d143 to 146)

- No score is provided (denoted by e.g. d142_ok=.a) if the subtraction was not asked, reflected for example by d142 equals “a.”.

3 WORD RECALL

The HRS word recall cognitive test involves asking respondents to recall a randomly assigned list of ten words that are presented one at a time with a few seconds between them. It is administered to all respondents of UAS396. The recalled words themselves are not contained within the data set. The relevant variables are:

- wordlistvalue: the randomly assigned list of words ranging from "1 Word list 1" to "4 Word list 4". The exact lists are provided below in Appendix A.
- recall1_score: the number of correctly recalled words (immediate recall directly following presentation of the list) once a manual verification of the scoring has been completed (e.g. to account for minor misspellings).
- recall1_refuse: indicates if the respondent said they don't want to try and remember any words in the first recall. Note: variable recall1_score is set to .r for such respondent. Also, the second recall is not asked if the respondent refused for the first recall and the variables recall2_score, recall2_refuse and recall2_nowords are set to .a (not asked). It is left to the user whether to code a refusal as a failure to recall any words, i.e., 0.
- recall1_nowords: indicates if the respondent said they don't remember any words in the first recall. Note: variable recall1_score is set to .d for such respondent. Also, the second recall is not asked if the respondent refused for the first recall and the variables recall2_score, recall2_refuse and recall2_nowords are set to .a (not asked). It is left to the user, but it is typical to code "I don't remember any words" as 0 words recalled.
- recall2_score: the number of correctly recalled words for the second recall (delayed recall after having answered several other questions) once a manual verification of the scoring has been completed (e.g. to account for minor misspellings).
- recall2_refuse: indicates if the respondent said they don't want to try and remember any words in the second recall. Note: variable recall2_score is set to .r for such respondent. It is left to the user, but it is typical to code this response as 0.
- recall2_nowords: indicates if the respondent said they don't remember any words in the second recall. Note: variable recall2_score is set to .d for such respondent. It is left to the user, but it is typical to code "I don't remember any words" as 0 words recalled.

In addition, the data set contains a set of raw data variables from which the above discussed variables have been derived. Data users are advised to use the above variables, we list the raw data variables here for completeness only:

- d106_score: the number of correctly recalled words for the first recall (directly following presentation of the list) via an automatic check during survey administration. The raw scores in this variable are the basis for variable recall1_score, where manual verification and if needed adjustment of the raw scores has been applied (e.g. to allow for minor misspellings of recalled words).
- d106_dkrfs97: indicates if the respondent checked that they don't remember any words in the first recall. This variable forms the basis for the recall1_nowords variable.
- d106_dkrfs98: indicates if the respondent checked that they don't want to try and remember any words in the first recall. This variable forms the basis for the recall1_refuse variable.
- d148_score: the number of correctly recalled words for the second recall (after having answered several other questions) via an automatic check during survey administration. The raw scores in this variable are the basis for variable recall2_score, where manual verification and if needed adjustment of the raw scores has been applied (e.g. to allow for minor misspellings of recalled words).
- d148_dkrfs97: indicates if the respondent checked that they don't remember any words in the second recall. This variable forms the basis for the recall2_nowords variable.
- d148_dkrfs98: indicates if the respondent checked that they don't want to try and remember any words in the second recall. This variable forms the basis for the recall2_refuse variable.

APPENDIX A - WORD RECALL LISTS

The HRS word recall lists used in UAS396 are the following:

English

List 1	List 2	List 3	List 4
Hotel River Tree Skin Gold Market Paper Child King Book	Sky Ocean Flag Dollar Wife Machine Home Earth College Butter	Woman Rock Blood Corner Shoes Letter Girl House Valley Engine	Water Church Doctor Palace Fire Garden Sea Village Baby Table

Spanish

List 1	List 2	List 3	List 4
Hotel Río Árbol Cara Oro Tienda Papel Niño Monarca Libro	Nube Océano Bandera Dólar Esposa Aparato Sitio Tierra Colegio Mantequilla	Hombre Piedra Sangre Esquina Zapatos Letra Niña Casa Valle Máquina	Agua Iglesia Doctor Hacienda Fuego Jardín Mar Pueblo Bebé Silla