

Cronbach alphas

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4/22/2021

For each of the question groupings that you have given us, we have:

- 1) Reversed the scores for the questions that you identified.
- 2) Within each question-group we have created a correlation matrix of those questions. Because you reversed the scores for questions, all of the correlations are positive. Within the correlation matrix you can see the pairs of questions that have the highest correlation. (Reminder: A correlation score of 1.0 is a perfect correlation between two questions. A correlation score of 0.0 says that there is no correlation between two questions. In group1, you can see that the highest correlation between questions is between Q6: Tchr_uses_trgt_lang_90prct and Q12: Tchr_DOESNOT_use_Eng_as_prmy_lng).
- 3) Within each question-group we have calculated the Cronbach's alpha. Cronbach's alpha (or the "coefficient alpha") measures the internal consistency within a group of questions. It, like correlation, also ranges between 0 and 1. And in the social sciences, the following table gives the most widely used interpretation of a Cronbach alpha score. If you wish to learn more about Cronbach's alpha, the following is a useful link: <https://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/>

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Figure 1: Accepted alpha interpretation

- 4) There are other measures of internal consistency for survey questions, and recent work is pointing to the use of a measure called McDonald's omega. If you wish to learn more about McDonald's omega, the following is a useful link: <https://personality-project.org/r/psych/HowTo/omega.pdf>

GROUP 1

Q6: Teachers use the target language in the classroom 90% or more of the time.

Q12: Teachers use English as the primary language of instruction in the classroom.

Q32: Students use the target language during assessments.

Q35: Students use English during assessments.

Correlation Matrix:

	T____	T_DOE	S____	S_DON
Tchr_uses_trgt_lang_90prcnt	1.00			
Tchr_DOESNOT_uses_Eng_as_prmry_lng	0.57	1.00		
Stdnts_use_trgt_lang_for_assmnt	0.39	0.33	1.00	
Stdnts_DONOT_use_Eng_for_assmnt	0.20	0.33	0.38	1.00

Cronbach Alpha = 0.695

GROUP 2

Q8:

Q9:

Q15:

Correlation Matrix:

	T____	T_DOE	S____	S_DON
Tchr_uses_trgt_lang_90prcnt	1.00			
Tchr_DOESNOT_uses_Eng_as_prmry_lng	0.57	1.00		
Stdnts_use_trgt_lang_for_assmnt	0.39	0.33	1.00	
Stdnts_DONOT_use_Eng_for_assmnt	0.20	0.33	0.38	1.00

Cronbach Alpha = 0.695

GROUP 3

Q6:

Q17:

Q24:

Correlation Matrix:

	T____	T_DOE	S____	S_DON
Tchr_uses_trgt_lang_90prcnt	1.00			
Tchr_DOESNOT_uses_Eng_as_prmry_lng	0.57	1.00		
Stdnts_use_trgt_lang_for_assmnt	0.39	0.33	1.00	
Stdnts_DONOT_use_Eng_for_assmnt	0.20	0.33	0.38	1.00

Cronbach Alpha = 0.695

GROUP 4

Q1:

Q2:

Q3:

Q4:

Q10:

Q18:

Correlation Matrix:

	T____	T_DOE	S____	S_DON
Tchr_uses_trgt_lang_90prcnt	1.00			
Tchr_DOESNOT_uses_Eng_as_prmry_lng	0.57	1.00		
Stdnts_use_trgt_lang_for_assmnt	0.39	0.33	1.00	
Stdnts_DONOT_use_Eng_for_assmnt	0.20	0.33	0.38	1.00

Cronbach Alpha = 0.695

GROUP 5

Q25:

Q26:

Q27:

Q28:

Q19:

Q20:

Q23:

Q24:

Correlation Matrix:

	T_____	T_DOE	S_____	S_DON
Tchr_uses_trgt_lang_90prcnt	1.00			
Tchr_DOESNOT_uses_Eng_as_prmry_lng	0.57	1.00		
Stdnts_use_trgt_lang_for_assmnt	0.39	0.33	1.00	
Stdnts_DONOT_use_Eng_for_assmnt	0.20	0.33	0.38	1.00

Cronbach Alpha = 0.695

GROUP 6

Q14:

Q13:

Q22:

Q29:

Q21:

Correlation Matrix:

	T_____	T_DOE	S_____	S_DON
Tchr_uses_trgt_lang_90prcnt	1.00			
Tchr_DOESNOT_uses_Eng_as_prmry_lng	0.57	1.00		
Stdnts_use_trgt_lang_for_assmnt	0.39	0.33	1.00	
Stdnts_DONOT_use_Eng_for_assmnt	0.20	0.33	0.38	1.00

Cronbach Alpha = 0.695

GROUP 7

Q11:

Q30:

Q31:

Q33:

Q34:

Correlation Matrix:

	T_____	T_DOE	S_____	S_DON
Tchr_uses_trgt_lang_90prcnt	1.00			
Tchr_DOESNOT_uses_Eng_as_prmry_lng	0.57	1.00		
Stdnts_use_trgt_lang_for_assmnt	0.39	0.33	1.00	
Stdnts_DONOT_use_Eng_for_assmnt	0.20	0.33	0.38	1.00

Cronbach Alpha = 0.695