GERT User's Guide

1. Goal, features, and versions of the GERT

The Geneva Emotion Recognition Test (GERT; Schlegel, Grandjean, & Scherer, 2014) is a performance-based test to measure individual differences in people's ability to recognize others' emotions in the face, voice, and body. This ability is considered a central component of emotional competence or intelligence.

It consists of short video clips with audio in which *ten actors* (five male, five female) express *14 different emotions*. These clips were taken from the GEneva Multimodal Emotion Portrayals database (GEMEP, Bänziger et al., 2011). After each clip, participants are asked to choose which of the 14 emotions was expressed by the actor. For details, please see the GERT article (Schlegel, Grandjean, & Scherer, 2014, Psychological Assessment).

The following features distinguish the GERT from other existing emotion recognition tests:

- The GERT is based exclusively on dynamic, multimodal emotion expressions (i.e., short video clips with sound) in order to measure emotion recognition ability in a more ecologically valid fashion
- The GERT features 14 different emotions, including 6 positive ones, in order to assess ERA more comprehensively than tests relying on basic emotions
- The GERT was developed and validated based on modern psychometric principles (Item Response Theory, Rasch model)

There are two version of the GERT, the <u>standard version</u> (83 items, duration 15-20 minutes), and the <u>short version</u> GERT-S (42 items, duration about 10 minutes; Schlegel & Scherer, 2015). The tests are **online tests** that require participants to have an internet connection. There is no standalone version of the GERT.

The GERT and GERT-S are currently available in **English**, **German**, **French**, **Dutch**, **Italian**, **Chinese**, **Hungarian and Turkish** (check <u>http://www.affective-sciences.org/content/geneva-emotion-recognition-test-gert</u> for updates).

2. Obtaining the GERT or GERT-S for research purposes

The GERT and GERT-S are available for academic research purposes free of charge. Researchers who would like to use the tests are requested to complete the user agreement that can be downloaded here: http://www.affective-sciences.org/content/geneva-emotion-recognition-test-gent.

The distribution of the tests is currently handled by the European Consortium for Research on Emotional Competence Assessment (EURECA) based at Ghent University in Belgium. The completed user agreement (signed and scanned) and a 1/2 page project description need to be sent to eureca@ugent.be . If all conditions specified in the user agreement are met, EURECA will share the requested test either via **Qualtrics** (Qualtrics is a registered trademark of Qualtrics, Provo, UT) or **LimeSurvey** (LimeSurvey Project Team/ Carsten Schmitz, 2012). If you do not have any experience with any of the two survey tools, we recommend using Qualtrics.

<u>Please keep in mind that each new study requires a new application, even if you have previously</u> <u>received access for a different study.</u> Access to the GERT is granted for a maximum period of one year per study.

Qualtrics version

The Qualtrics version requires the researcher to have a Qualtrics account (please check with your research institution whether you have access). Please note: You cannot use the GERT with the free trial account – you need to have the paid version.

If you have a Qualtrics account through your institution, EURECA will share the GERT with you and it will appear under "My Surveys" in your account.

<u>The researcher may not make copies of the survey without permission from the EURECA</u> <u>contact person</u>. Other people involved in the study besides the researcher (e.g., research assistants) can be invited to collaborate in the survey with permission from EURECA. The survey can be adapted by the researcher for his or her specific needs (e.g., by adding questions before or after the test), but no changes to the instructions or the structure of the GERT may be made (e.g., removing videos).

The last item in the Qualtrics version is a feedback ("You correctly recognized xx% of the clips"). Please delete this item if you do not want your participants to see any feedback.

Please note that we do not provide support for Qualtrics-related issues. Please see the Qualtrics support page or contact the customer support if you have questions.

Limesurvey version

The researcher will receive a free account on the EURECA Limesurvey server which will contain a personal copy of the GERT survey. He or she may not make copies of the survey without permission from the EURECA contact person, i.e., data needs to be collected with the survey created by EURECA. Other people involved in the study besides the researcher (e.g., research assistants) can request an extra account on the EURECA Limesurvey server to receive access to this survey. The survey can be adapted by the researcher for his or her specific needs (e.g., by adding questions before or after the test), but no changes to the instructions or the structure of the GERT may be made (e.g., removing videos).

If you do not want your participants to see any feedback ("You correctly recognized xx% of the clips") at the end of the survey please delete the "Feedback question" in the "Calculate score" group before you activate the survey. Don't delete the "score" question in this group since this calculates the total score in the background.

To activate the survey click on the activate button

On the next page click on Save / Activate Survey (you can leave the default settings). On the next screen you can choose between token based and open access mode (anonymous). With token based access mode you have to invite a respondent to participate so you can keep track of who completes the survey. With open access mode the url of the survey is fixed. For more information https://manual.limesurvey.org/LimeSurvey Manual

https://manual.limesurvey.org/Survey_participants

Please note that we do not provide support for Limesurvey-related issues. Please consult the Limesurvey support forum if you have questions. (https://forums.limesurvey.org/)

3. Results

Qualtrics datafile and scoring

We recommend downloading the data in SPSS format under "View results". In this file, in the Variable View, the <u>GERT total score</u> (number of correct responses) <u>has the name "score"</u>. This sum score can be divided by the number of items (42 for the short version, 83 for the long version) to calculate a mean score.

See below for a description of the timing and item-level variables (at the very end of the datafile). In order to create variables for each item that show which emotion was selected and whether the response was correct or incorrect, see SPSS syntax "Syntax_GERT-shortVersion" or "Syntax_GERT-longVersion" (download text file here: <u>http://www.affective-sciences.org/content/geneva-emotion-recognition-test-gert</u> and copy into SPSS syntax). The syntax files also contain more information on each item (actor number/gender and target emotion). Most other variables in the file represent the instructions of the GERT and can be disregarded.

Timing and item-level variables in Qualtrics SPSS file:

- A(1-83)_Q236_First_Click: Time between when the clip stopped playing and the participant made the first click in the emotion wheel for item 1 to 83 ("reaction time")
- A(1-83)_Q236_Last_Click: Time in seconds between when the clip stopped playing and the participant made the last click in the emotion wheel for item 1 to 83
- A(1-83)_Q236_Page_Submit: Time in seconds between when the clip stopped playing and the participant clicked on "continue" for item 1 to 83
- A(1-83)_Q236_Click_Count: Number of times the participant clicked in the wheel for item 1 to 83.
- A(1-83)_item_1: Shows whether "anger" was selected (off=not selected, on= selected) for item 1-83
- A(1-83)_item_2: Shows whether "pride" was selected
- A(1-83) item 3 Shows whether "joy" was selected
- A(1-83)_item_4 Shows whether "amusement" was selected
- A(1-83)_item_5: Shows whether "pleasure" was selected
- A(1-83)_item_6: Shows whether "relief" was selected
- A(1-83) item 7: Shows whether "interest" was selected
- A(1-83) item 8: Shows whether "surprise" was selected
- A(1-83) item 9: Shows whether "anxiety" was selected
- A(1-83) item 10: Shows whether "fear" was selected
- A(1-83) item 11: Shows whether "despair" was selected
- A(1-83) item 12: Shows whether "sadness" was selected
- A(1-83)_item_13: Shows whether "disgust" was selected
- A(1-83)_item_14: Shows whether "irritation" was selected

Limesurvey datafile and scoring

To export your data click on the data icon and select "Responses & statistics". The two main export formats available in Limesurvey can be found here.

1. SPSS format

2. CSV format (Comma Separated Values)

We will explain both formats since the data layout is different. In the CSV format timing data is available which isn't available in the SPSS format. If you don't need the timing data we recommend downloading your data in the SPSS format. The table 1 and 2 in Appendix A can be used to deduce which emotion was selected for each item. The GERT-S (42 items) are the first 42 items in the standard GERT (83 items).

SPSS format

When exporting data to SPSS there are two filter options. You can select **which data** should be selected (*all records/completed records only/incompleted records only*) and for **which SPSS version** the export files will be used (*prior version 16/16 or up*).

SPSS export includes two files:

- 1. a syntax file (*survey_xxxx_SPSS_syntax_file.sps*)
- 2. and a data file (*survey_xxxx_SPSS_data_file.dat*).

The syntax file holds the commands that should be run to import the data. It is like a programming language inside SPSS. The data file contains a comma separated file with all data. Place the two files in the same folder on your drive (example: *c:\data\survey_xxxx_SPSS_syntax_file.sps* and *c:\data\survey_xxxx_SPSS_data_file.dat*)

c:\data\survey_xxxx_SPSS_syntax_file.sps and *c:\data\survey_xxxx_SPSS_data_file.dat*) Open SPSS

- Choose File->Open->Syntax
- Choose the appropriate file: c:\data\survey_xxxx_SPSS_syntax_file.sps
- Now the syntax opens.
- Change the line that reads /*FILE='survey_xxxx_SPSS_data_file.dat'* to include the path where the files are: /*FILE='c:\data\survey_xxxx_SPSS_data_file.dat'*
- Now mark the whole command text and choose Run->All from the menu and after a while (please be patient) your dataset will open in a separate window.
- save your dataset as a normal .sav file.

In the SPSS file, in the Variable View, the <u>GERT total score</u> (number of correct responses) <u>has the</u> <u>name "score"</u>. This sum score can be divided by the number of items (42 for the short version, 83 for the long version) to calculate a mean score.

CSV format

Make the following selections in the "Export options" window.

Format: CSV format Heading: question codes

Open the downloaded CSV file in Excel. The data is now represented in one column instead of separate columns for each variable (Appendix B screenshot 1). Select the first column, open the Data tab and select "Text to Columns". Select "delimited data" in the wizard (screenshot 2) that opens and click next. Select a comma as data separator and a double quote as text qualifier (screenshot 3). On the next screen open the "Advanced settings" (screenshot 4 & 5) and change the decimal separator to a point and the thousands separator to nothing and click "Finish". You can find the variables that tell you which emotion a participant chose for each item by looking for the variable names shown in Table 2 in your data file. These variable names in the data file contain the following information: Variable name from Table 2 + 1 character for the gender of the actor (male or female) + the item number from Table 2 + fixed string "[X]" (Example for item 1: A01amu124m1[X] means that this item was portrayed by actor 01 who is male, and the correct emotion was amusement). The values in these variables correspond to the emotions shown in Table 1.

These variable names followed by the string "Time" contain how much time the respondent spent on the emotion wheel page for each item ("reaction time"). Most other variables in the file represent the instructions of the GERT and can be disregarded.

	Target emotion
1	Anger
2	Pride
3	Joy
4	Amusement
5	Pleasure
6	Relief
7	Interest
8	Surprise
9	Anxiety
10	Fear
11	Despair
12	Sadness
13	Disgust
14	Irritation

Appendix A Table 1: Values for each emotion in data file

Table 2:

Order of GERT items in Qualtrics and LimeSurvey results files (Please note: The first 42 items show the order of the GERT-S. The full table ((83 items) shows the order of items in the full GERT).

Target gender: Actors A01, A03, A04, A05, and A08 are male; A02, A06, A07; A09, and A10 are female.

	Variable name (first		Target answer
	2 numbers= actor		(value)
Item	ID)	Target emotion	in Limesurvey
1	A01amu124	Amusement	4
2	A01joi112	Joy	3
3	A01sur111	Surprise	8
4	A02amu112	Amusement	4
5	A02deg125	Disgust	13
6	A02tri112	Sadness	12
7	A03des121	Despair	11
8	A04sou117	Relief	6
9	A04deg112	Disgust	13
10	A04inq124	Anxiety	9
11	A04col112	Anger	1
12	A04tri111	Sadness	12
13	A05pla121	Pleasure	5
14	A05peu113	Fear	10
15	A05irr121	Irritation	14
16	A05inq114	Anxiety	9

			1
17	A05des118	Despair	11
18	A05deg122	Disgust	13
19	A05int121	Interest	7
20	A06col112	Anger	1
21	A06fie122	Pride	2
22	A06irr116	Irritation	14
23	A06sou1110	Relief	6
24	A06sur122	Surprise	8
25	A07inq123	Anxiety	9
26	A07irr126	Irritation	14
27	A07joi114	Joy	3
28	A07peu126	Fear	10
29	A07pla125	Pleasure	5
30	A07sur115	Surprise	8
31	A08col129	Anger	1
32	A08fie125	Pride	2
33	A08joi121	Joy	3
34	A08peu128	Fear	10
35	A08pla118	Pleasure	5
36	A09fie121	Pride	2
37	A09int112	Interest	7
38	A09sou111	Relief	6
39	A09des122	Despair	11
40	A10amu111	Amusement	4
41	A10int122	Interest	7
42	A10tri123	Sadness	12
43	A01int114	Interest	7
44	A01pla113	Pleasure	5
45	A01sou123	Relief	6
46	A01sur125	Surprise	8
47	A02des112	Despair	11
48	A02inq112	Anxiety	9
49	A02int122	Interest	7
50	A02joi113	Joy	3
51	A02tri122	Sadness	12
52	A03amu111	Amusement	4
53	A03col123	Anger	1
54	A03fie112	Pride	2
55	A03joi111	Joy	3
56	A03peu124	Fear	10
57	A03sou121	Relief	6
58	A03sur121	Surprise	8
59	A04amu111	Amusement	4
60	A04deg121	Disgust	13
61	A04int121	Interest	7
62	A04irr112	Irritation	14
63	A05fie111	Pride	2
64	A05tri119	Sadness	12
04	A0301113	Jauliess	12

65	A05tri126	Sadness	12
66	A06amu123	Amusement	4
67	A06inq122	Anxiety	9
68	A06joi125	Joy	3
69	A06peu111	Fear	10
70	A06pla114	Pleasure	5
71	A06sur124	Surprise	8
72	A07col124	Anger	1
73	A07sou1212	Relief	6
74	A08col1210	Anger	1
75	A08inq125	Anxiety	9
76	A08irr125	Irritation	14
77	A09deg117	Disgust	13
78	A09deg125	Disgust	13
79	A09des112	Despair	11
80	A09fie118	Pride	2
81	A09irr121	Irritation	14
82	A10peu122	Fear	10
83	A10pla122	Pleasure	5

Appendix B

screenshot 1

FILE	HOME		PAGE LAYOU	T FOR	MULAS	DATA	REVIEW	VIE	w						results-	survey17368	6.csv - Exce							
From Access	Web Te	m From Other at Sources * t External Data	Existing Connections	Refresh All •	Connecti Propertie Connections	s Z↓		Filter	🌠 Advar	ply	Text to	o Flash	Remove	Data s Validation Data	Consolida *	te What-If Analysis	Relationsh	iips Grou	p Ungroup	Subtot Outline	-Эн	ide Detail ide Detail ច		
A1	*	: × .,	f_x id,	"submitd	ate","lastp	age","sta	rtlangua	age","IN	NTRO1","	INTRO2		RO3","I	NTRO4","	delay2sect	01","html5	videoD1",	'emotiew	elD1[X]",	"delay2se	cD2","ł	ntml5vi	deoD2","	emotiewie	elD2[X]","de
	Α	B C	D	E	F	G	H	H	Ι			<u>.</u>	L	м	N	0	Р	Q	R		S	т	U	V
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screenshot 2

Convert Text to Columns Wizard - Step 1 of 3
The Text Wizard has determined that your data is Delimited.
If this is correct, choose Next, or choose the data type that best describes your data.
Original data type
Choose the file type that best describes your data:
• Characters such as commas or tabs separate each field.
C Fixed width - Fields are aligned in columns with spaces between each field.
Preview of selected data:
1 id, "submitdate", "lastpage", "startlanguage", "INTRO1", "INTRO2", "I 2 47, "1980-01-01 00:00:00", "146", "it", "", "", "", "", "", "", "", "", "",
<u>₹</u>
Cancel < Back. <u>Next ></u> <u>Finish</u>

screenshot 3

Convert Text to Columns Wizard - Step 2 of 3	?	X
This screen lets you set the delimiters your data contains. You can see how your tex in the preview below.	t is affe	cted
Delimiters □ Tab □ Semicolon □ Semicolon □ Space □ Other:		
Data preview		
id submitdate lastpage startlanguage INTRO1 INTRO 47 1980-01-01 00:00:00 146 it	2 INT	4
	•	
Cancel < <u>B</u> ack <u>N</u> ext >	<u>F</u> inisl	n

screenshot 4

Convert Text to Columns Wizard -	Step 3 of 3				?	X		
This screen lets you select each colu	umn and set f	the Data Format.						
Column data format								
🖲 <u>G</u> eneral	(Canaral) a	e mueste munecie vel		nhara d				
C <u>T</u> ext		onverts numeric val nd all remaining va			ate va	lues		
C <u>D</u> ate: DMY ▼	C Date: DMY ▼							
C Do not import column (skip)								
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screenshot 5

Convert Text to Col	umns Wizard - Step 3 of 3
This screen lets you	select each column and set the Data Format.
Column data form	at
General	'General' converts numeric values to numbers, date values
C Iext	Advanced Text Import Settings
C Do not impo	Settings used to recognize numeric data
Destination: SA	Decimal separator:
	Thousands separator:
Data assuigue	Note: Numbers will be displayed using the numeric
Data <u>p</u> review—	settings specified in the Regional Settings control panel.
GenerGenera	Reset Trailing minus for negative numbers
id submit	OK Cancel
47 1980-0	
	Cancel < <u>B</u> ack Next > <u>F</u> inish