

Everything You Always Wanted to Know About the Self-Efficacy Scale But Were Afraid to Ask

by Ralf Schwarzer
Updated: April 22, 2005

The intended purpose of this **FAQ** is to assist the users of the scales published at the author's web pages <http://www.ralfschwarzer.de/> Before attending to the questions below, you should carefully study our web. You might have no questions any longer after reading the web pages.

Do I need permission to use the General Perceived Self-Efficacy (GSE) scale?

You do not explicitly need our permission to utilize it in your research studies. We hereby grant you permission to use and reproduce the General Self-Efficacy scale for your study, given that appropriate recognition of the source of the scale is made in the write-up of your study.

The international source is:

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.

The source for the German version is:

Schwarzer, R., & Jerusalem, M. (Eds.). (1999). *Skalen zur Erfassung von Lehrer- und Schülermerkmalen: Dokumentation der psychometrischen Verfahren im Rahmen der Wissenschaftlichen Begleitung des Modellversuchs Selbstwirksame Schulen*. Berlin: Freie Universität Berlin.

I am not sure whether I want to measure general perceived self-efficacy (GSE) or specific health-related self-efficacy.

You have to decide which one fits your research question. If you intend to predict a particular behavior, you are better off with a specific scale. You might be best off by designing your own items, tailored to your study, such as:

"I am certain that I can do .xy., even if ..zz .." (1 2 3 4).

Health-specific self-efficacy scales can be found at:

<http://userpage.fu-berlin.de/~health/healself.pdf>

What is the scoring procedure for the GSE?

Add up all responses to a sum score. The range is from 10 to 40 points. Or use a mean score, such as:

COMPUTE SEFF = Mean (SE1, SE2, SE3, SE4, SE5, SE6, SE7, SE8, SE9, SE10).

In many samples, the mean was around 2.9.

Occasionally, someone will not respond to some of the items. What do you recommend to do with missing data?

Our rule of thumb is that we calculate a score as long as no more than three items on the 10-item scale are missing.

In SPSS this is done by:

```
COMPUTE SEFF = Mean.7 (SE1, SE2, SE3, SE4, SE5, SE6, SE7, SE8, SE9, SE10).
```

However, there are also other methods, such as regression, hot deck, or multiple imputations techniques (ask your advisor).

How can I categorize persons as high or low self-efficacious?

We do not endorse the view that people should be categorized this way. There is no cut-off score. One could, however, establish groups on the basis of the empirical distributions of a particular reference population. One could do a median split, which is to dichotomize the sample, for example at the cut-off point of 30 (if this is near the median in your sample).

Can I use some original data as a comparison for my own data?

Yes, there is an international data set as an SPSS SAV file that includes about 18,000 respondents. Available for free download at:

http://www.fu-berlin.de/gesund/gesu_engl/world_zip.htm

What are the psychometric characteristics of the GSE?

It depends on the sample and the study context. There are more than 1,000 studies that have used the scales in many countries and languages (Currently, there are scale versions adapted to 29 languages, see <http://userpage.fu-berlin.de/~health/selfscal.htm>).

Updated psychometric findings have been published recently, for example, in:

Scholz, U., Gutiérrez-Doña, B., Sud, S., & Schwarzer, R. (2002). Is general self-efficacy a universal construct? Psychometric findings from 25 countries. *European Journal of Psychological Assessment*, 18(3), 242-251.

Luszczynska, A., Gutiérrez-Doña, B., & Schwarzer, R. (2004-in press). General self-efficacy in various domains of human functioning: Evidence from five countries. *International Journal of Psychology*.

 **Can you tell me more about the validity of the GSE?**

Concurrent and Prognostic Validity of General Perceived Self-Efficacy				
	1989		1991	
	<i>Men</i>	<i>Women</i>	<i>Men</i>	<i>Women</i>
Depression	-.31	-.44	-.27	-.32
Loneliness	-.39	-.39	-.27	-.24
Anxiety	-.41	-.45	-.31	-.32
Shyness	-.47	-.47	-.33	-.29
Self-Esteem	.51	.59	.34	.40
Optimism	.48	.51	.20	.56
Pessimism	-.27	-.30	-.20	-.19

Note. The correlations were derived from a sample of East German migrants in 1989 and 1991. $n = 528$ men and $n = 380$ women took part in the first wave of data collection, $n = 122$ men and $n = 102$ women participated also at the second point in time.

Correlations Between Self-Efficacy and Other Personality Traits	
Extraversion (FPI)	.49
Neuroticism	-.42
Extraversion (PDE)	.64
Failure or action orientation	.43
Decision or action orientation	.49
Action centering	.15
Hope for success	.46
Fear of failure	-.45

Note. The correlations were derived from a sample of $N = 180$ university students. All correlations are highly significant.

 **What are the norms of the GSE?**

T-Norms of the General Perceived Self-Efficacy Scale					
Heterogenous Adult Population		High-School Students		US-American Adult Population	
x	T	x	T	x	T
10	12	10	1		
11	14	11	3	11	14
12	16	12	6	12	16
13	18	13	8	13	18
14	20	14	11	14	20
15	22	15	13	15	22
16	24	16	16	16	24
17	26	17	19	17	26
18	28	18	21	18	28
19	30	19	24	19	30
20	32	20	26	20	32
21	34	21	29	21	33
22	36	22	31	22	35
23	38	23	34	23	37
24	40	24	36	24	39
25	42	25	39	25	41
26	44	26	41	26	43
27	46	27	44	27	45
28	48	28	46	28	47
29	49	29	49	29	49
30	51	30	51	30	51
31	53	31	54	31	53
32	55	32	56	32	55
33	57	33	59	33	57
34	59	34	61	34	59
35	61	35	64	35	61
36	63	36	66	36	63
37	65	37	69	37	65
38	67	38	71	38	67
39	69	39	74	39	69
40	71	40	76	40	70

Note. *Heterogenous Adult Population:* The T-norms for the German version of this scale are based on a sample of $N = 1,660$ persons. The weighted mean was found to be 29.28, the weighted variance equalled 25.91.

High-School Students: These T-norms were derived from a sample of $N = 3,494$ German high-school students (12 to 17 years old). In this sample, the mean was found to be 29.60, standard deviation equalled 4.0.

US-American Adult Population: These T-norms were derived from a sample of $N = 1,594$ US-American adults. In this sample, the mean was found to be 29.48, standard deviation equalled 5.13. Gender was equally distributed, men 50.9%, women 49.1%.

Where can I read more about the scale and the research that has been conducted with it?

- Jerusalem, M., & Schwarzer, R. (1992). Self-efficacy as a resource factor in stress appraisal processes. In R. Schwarzer (Ed.), *Self-efficacy: Thought control of action* (pp. 195-213). Washington, DC: Hemisphere.
- Mittag, W., & Schwarzer, R. (1993). Interaction of employment status and self-efficacy on alcohol consumption: A two-wave study on stressful life transitions. *Psychology & Health, 8*, 77-87.
- Schwarzer, R. (1993). *Measurement of perceived self-efficacy. Psychometric scales for cross-cultural research*. Berlin, Germany: Freie Universität Berlin (*no longer available*)
- Schwarzer, R. (1994). Optimism, vulnerability, and self-beliefs as health-related cognitions: A systematic overview. *Psychology & Health, 9*, 161-180.
- Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.
- Zhang, J. X., & Schwarzer, R. (1995). Measuring optimistic self-beliefs: A Chinese adaptation of the General Self-Efficacy Scale. *Psychologia: An International Journal of Psychology in the Orient, 38*(3), 174-181.
- Bäßler, J., & Schwarzer, R. (1996). Evaluación de la autoeficacia: Adaptación española de la escala de autoeficacia general [Measuring generalized self-beliefs: A Spanish adaptation of the General Self-Efficacy scale]. *Ansiedad y Estrés, 2*(1), 1-8.
- Schwarzer, R., & Fuchs, R. (1996). Self-efficacy and health behaviors. In M. Conner & P. Norman (Eds.), *Predicting health behavior: Research and practice with social cognition models*. (pp. 163-196). Buckingham, UK: Open University Press.
- Schwarzer, R., Jerusalem, M., & Romek, V. (1996). Russian version of the General Self-Efficacy Scale. *Foreign Psychology (Moscow), 7*, 71-77 [in Russian].
- Schwarzer, R., Bäßler, J., Kwiatek, P., Schröder, K., & Zhang, J. X. (1997). The assessment of optimistic self-beliefs: Comparison of the German, Spanish, and Chinese versions of the General Self-Efficacy Scale. *Applied Psychology: An International Review, 46*(1), 69-88.
- Schwarzer, R., & Born, A. (1997). Optimistic self-beliefs: Assessment of general perceived self-efficacy in thirteen cultures. *World Psychology, 3*(1-2), 177-190.
- Schwarzer, R., Born, A., Iwawaki, S., Lee, Y.-M., Saito, E., & Yue, X. (1997). The assessment of optimistic self-beliefs: Comparison of the Chinese, Indonesian, Japanese and Korean versions of the General Self-Efficacy Scale. *Psychologia: An International Journal of Psychology in the Orient, 40*(1), 1-13.
- Schwarzer, R., Mueller, J., & Greenglass, E. (1999). Assessment of perceived general self-efficacy on the Internet: Data collection in cyberspace. *Anxiety, Stress, and Coping, 12*, 145-161.
- Rimm, H., & Jerusalem, M. (1999). Adaptation and validation of an Estonian version of the General Self-Efficacy Scale (ESES). *Anxiety, Stress, and Coping, 12*, 329-345.

- Schwarzer, R., & Jerusalem, M. (Eds.). (1999). *Skalen zur Erfassung von Lehrer- und Schülermerkmalen: Dokumentation der psychometrischen Verfahren im Rahmen der Wissenschaftlichen Begleitung des Modellversuchs Selbstwirksame Schulen* [Scales for the assessment of teacher and student characteristics.]. Berlin: Freie Universität Berlin.
- Scholz, U., Gutiérrez-Doña, B., Sud, S., & Schwarzer, R. (2002). Is general self-efficacy a universal construct? Psychometric findings from 25 countries. *European Journal of Psychological Assessment*, 18(3), 242-251.
- Schwarzer, R. (2003). Selbstwirksamkeitserwartung – ein psychologisches Konstrukt für die pädagogische Praxis [Self-efficacy—A psychological construct for pedagogical practice]. In J. Koblitz & N. Posse (Eds.), *Weiterbildung und Beratung – Zum Dialog von Theorie und Praxis. Festschrift für Christine Schwarzer* (pp. 125-152). Berlin: Logos Verlag.
- Luszczynska, A., Scholz, U., & Schwarzer, R. (2004). *The General Self-Efficacy Scale: Multicultural validation studies*. Manuscript submitted for publication.
- Schwarzer, R., & Jerusalem, M. (2004). General self-efficacy scale. In S. Salek (Ed.), *Compendium of quality of life instruments* (Vol. 6, Section 2A:1) [CD-ROM]. Cardiff, Wales: Centre for Socioeconomic Research, Cardiff University. Haslemere, England: Euromed Communications [CD-ROM publication, without page numbers].
- Schwarzer, R., & Schmitz, G. S. (2004). *Perceived self-efficacy and teacher burnout: A longitudinal study in ten schools*. Manuscript submitted for publication.
- Luszczynska, A., Gutiérrez-Doña, B., & Schwarzer, R. (2004, in press). General self-efficacy in various domains of human functioning: Evidence from five countries. *International Journal of Psychology*.
- Luszczynska, A., & Schwarzer, R. (in press). Multidimensional health locus of control: Comments on the construct and its measurement. *Journal of Health Psychology*.
- Luszczynska, A., & Schwarzer, R. (in press). Social cognitive theory. In M. Conner & P. Norman (Eds.), *Predicting health behavior* (2nd ed. rev.). Buckingham, England: Open University Press.
- Luszczynska, A., & Schwarzer, R. (in press). The role of self-efficacy in health self-regulation. In W. Greve, K. Rothermund, & D. Wentura (Eds.), *The adaptive self: Personal continuity and intentional self-development*. Göttingen, Germany: Hogrefe/Huber.
- Schwarzer, R., & Luszczynska, A. (in press). Self-efficacy, adolescent's risk taking, and health. In F. Pajares & T. Urdan (Eds.), *Self-efficacy beliefs of adolescents. Adolescence and education* (Vol. V). Greenwich, CT: Information Age Publishing.
- Schwarzer, R., & Schmitz, G. S. (in press). Perceived self-efficacy as a resource factor in teachers. In M. Salanova, R. Grau, I. Martínez, E. Cifre, S. Llorens, & M. Garcia (Eds.), *Nuevos horizontes en la investigación sobre la autoeficacia* [New horizons in self-efficacy research]. Castellón, Spain: Colección Psique. Universitat Jaume I.
- Schwarzer, R., Böhmer, S., Luszczynska, A., Mohamed, N. E., & Knoll, N. (in press). Dispositional self-efficacy as a personal resource factor in coping after surgery. *Personality and Individual Differences*.



We wish you much success with your research.



If you still have any questions, after reading the web pages, you may send an e-mail to Ralf Schwarzer: health@zedat.fu-berlin.de