

Adaptation and Psychometric Analysis of the Leipziger Kurzfragebogen für chronischen Stress (LKCS) in the Portuguese – A study with Youngsters and Young adults

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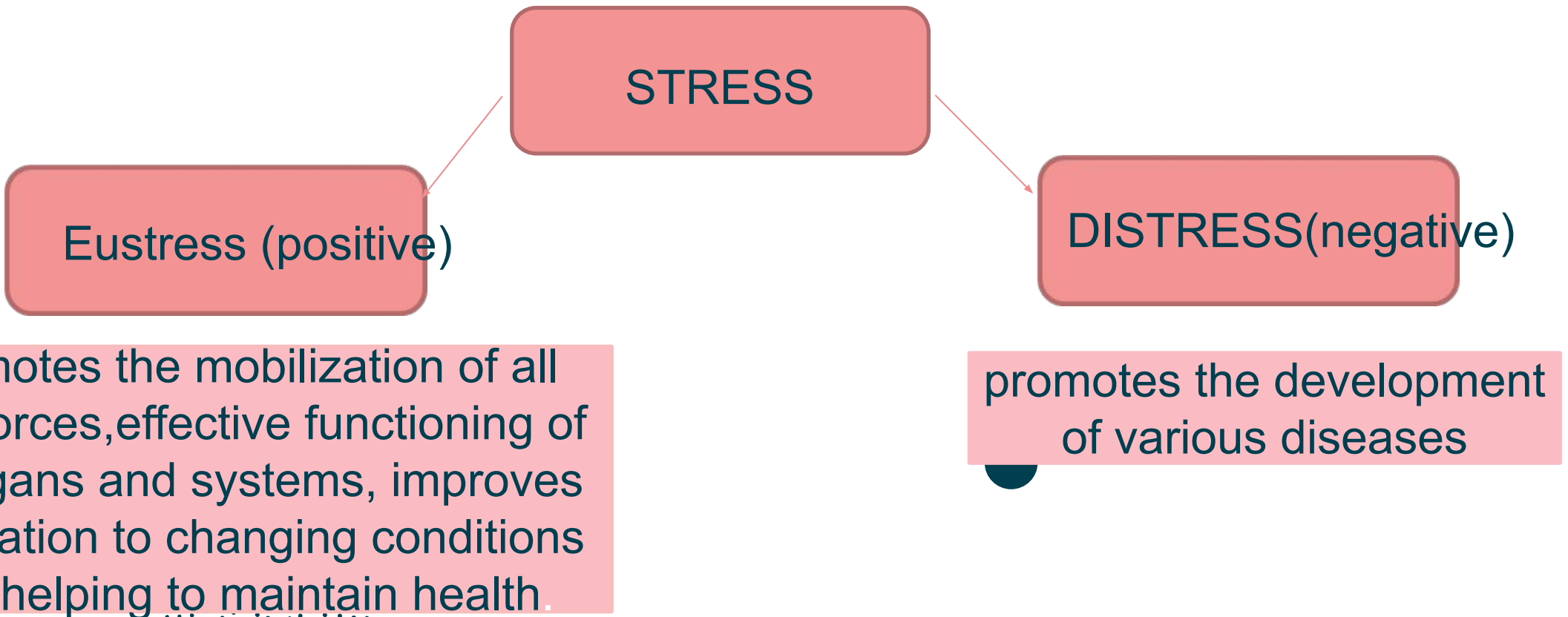
Stress: A PUBLIC HEALTH PROBLEM

- Main cause for increasing number of body diseases.
 - A cause for psychological suffering.
 - An old companion of human being.

Germany: since 1980s, various studies have been initiated with support of health authorities. Researchers at the University of Leipzig started the development of the program, “Optimistisch den Stress meistern“ (Optimistic Management of Stress)

(Reschke and Schröder, 1995, 2000, 2010)

TYPES OF STRESS




STRESS THEORIES

**General
Adaptation
Syndrome
Selye (GAS)**

**Lazarus
Differential Stress
Perception**

**McEwen
Allostase**





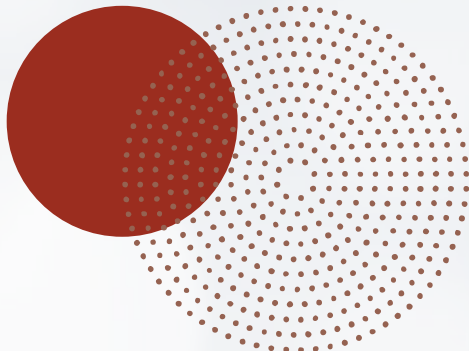
German cognitive regulation model

STRESS is a state of psychophysical regulation.

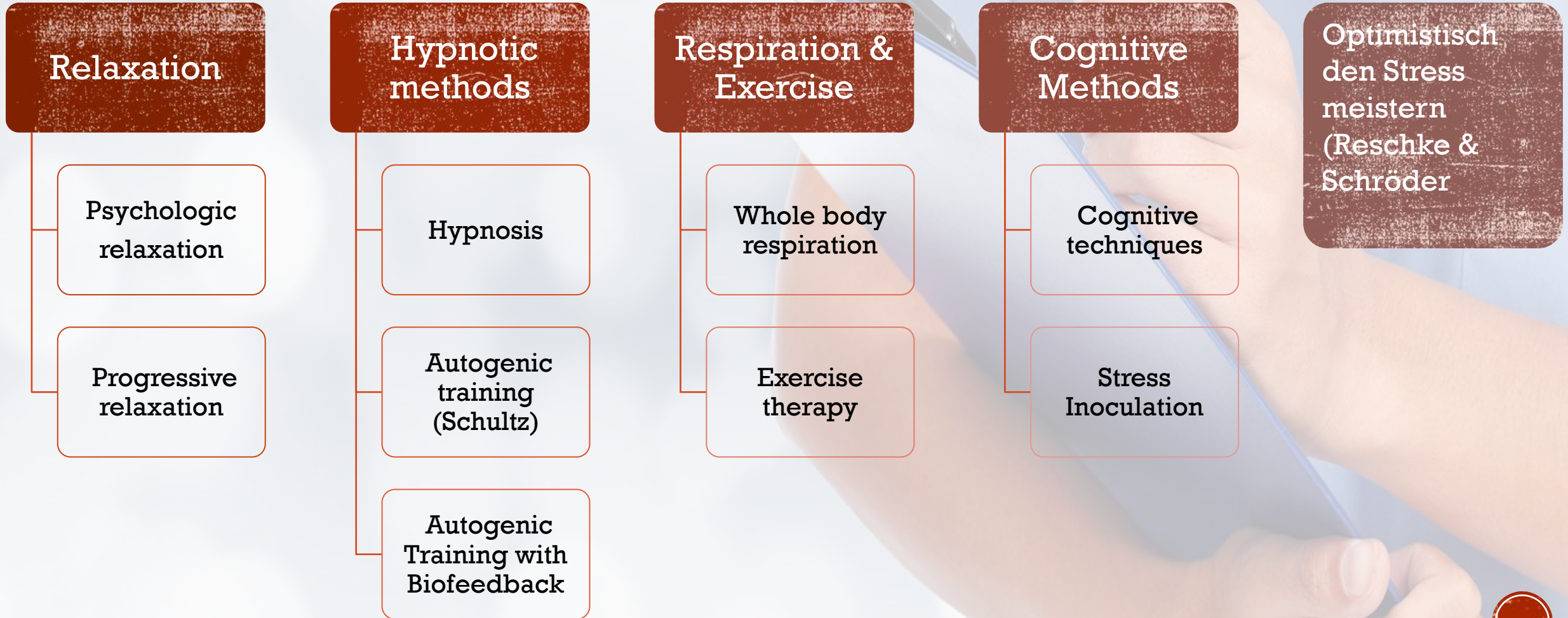
The individual uses skills to cope with demands in the environment (stressors) in order to keep an equilibrium.

This effort can be successful or not.

When it is not possible to balance the relationship this situation is experienced in the form of threat, instability and overload.



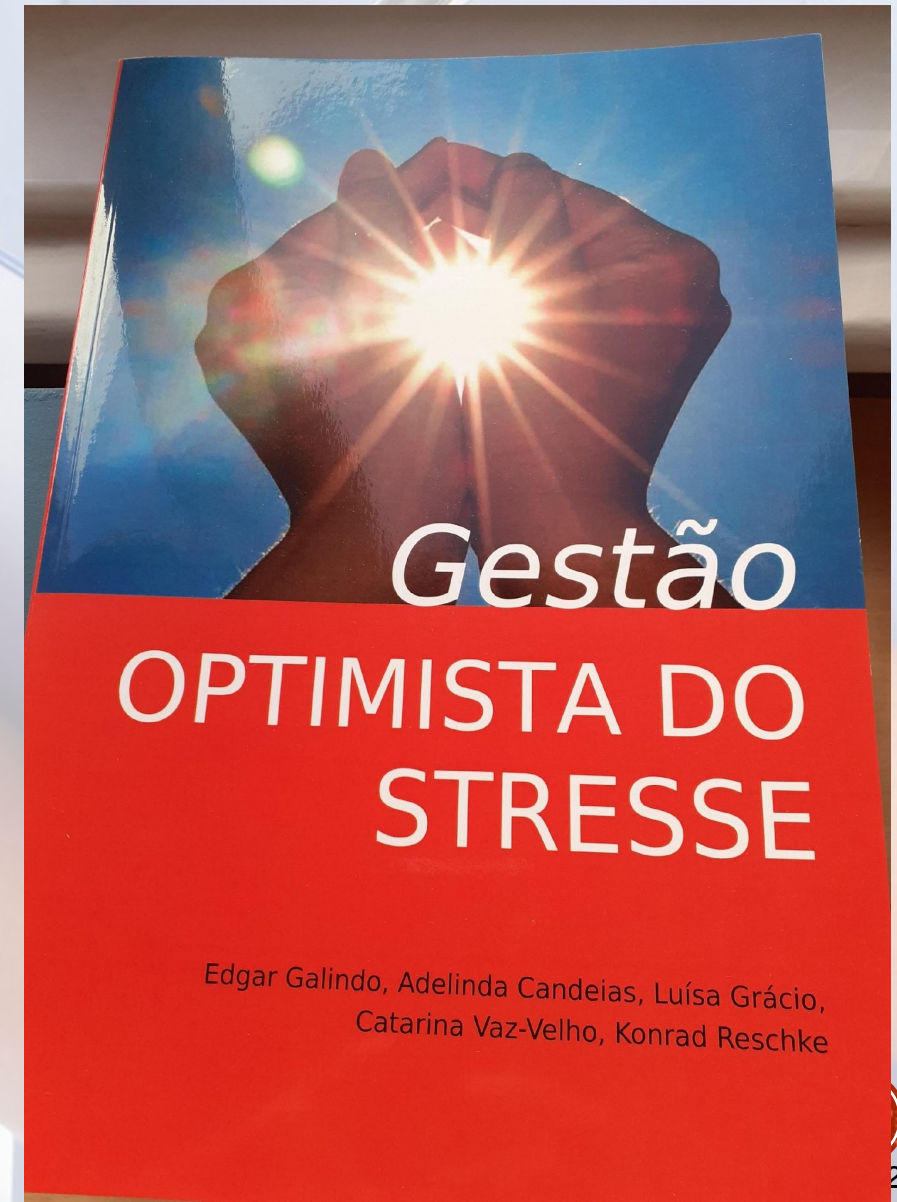
STRESS MANAGEMENT METHODS



STRESS MANAGEMENT PROGRAM AIMED AT YOUNG AND MATURE ADULTS (FROM 16 TO 70 YEARS) LIVING STRESSFUL PHASES OF LIFE AND/OR AT PEOPLE LEARNING PREVENTION STRATEGIES AGAINST STRESS.

The Leipziger Kurzfragebogen für chronischen Stress (Leipzig short questionnaire for chronic stress), is one of the measurement instruments used by the stress management program at the University of Leipzig. (Schröder & Reschke, 2010)

CURRENT STUDY: analyse the psychometric properties of LCKS in the Portuguese population



LEIPZIGER KURZFRAGEBOGEN FÜR CHRONISCHEN STRESS

Standardized questionnaire early detection of stress conditions.

Used for the individual diagnosis of chronic stress.

Short screening procedure designed to measure seven different stress areas

Covered dimensions: loss of control, loss of meaning, negative emotions, early psychosomatic symptom, sleep disorders, inability to recover, specific stress issues and a lack of social support.



METHOD

Participants

772 Portuguese students 1. Youngsters from secondary school (N=364; 47.2%); 2. Young adults from university (N=408; 52.8%), 580 (75.1%) females and 192 (24.9%) males, 16 to 37 years.

Instrument: LKCS

To assess subjective intensity of chronic stress self

Seven items, i.e.: "Dissatisfaction and anger are my daily companions".

Items are associated to: loss of control, loss of meaning, anger/dissatisfaction, ability to rest, worrying personal issues, or social support.

4-point Likert scale

28 points, denoting the highest level of stress

Electronic version(Eysenbach (2012)).

Procedure

Authorization granted

Disseminated via email and social networks to several organizations in the fields of education (Secondary Schools, Universities and Polytechnic Institutes), during 2020 and 2021.

RESULTS: DESCRIPTIVE ANALYSIS OF THE ITEMS OF LKCS (N=772)

Items	N	Min	Max	Mode	Mean	Standard Deviation	Corrected Scale Total Item Correlation	Cronbach's Alpha if the item is excluded
1.	772	1	4	3	2,54	1,056	,575	,767
2.	772	1	4	3	2,44	1,034	,504	,780
3.	772	1	4	2	2,15	1,006	,652	,753
4.	772	1	4	1	2,14	1,123	,394	,801
5.	772	1	4	3	2,60	1,075	,597	,762
6.	772	1	4	4	2,90	1,040	,588	,764
7.	772	1	4	1	1,77	,975	,431	,792



RESULTS: PRINCIPAL COMPONENT ANALYSIS IN EIV (772)

Item	1
3.	,783
6.	,733
5.	,729
1.	,720
2.	,659
7.	,572
4.	,527

Extraction Method: Principal Component analysis.

a. 1 Extracted components.



RESULTS

1) CORRELATION BETWEEN LKCS AND AGE AND LEVEL OF EDUCATION

2) DIFFERENCES BETWEEN THE GENDER OF YOUNGSTER'S AT LKCS

	Age	Level of Education
LKCS	-,094 **	-.068

** . The correlation is significant at the 0.01 level

Variable	Sex		F	Sig.
	Feminine M (SD)	Masculine M (SD)		
LKCS	17.809 (4.868)	14.692 (4.965)	30.624	<.001



**RESULTS: 1) DIFFERENCES BETWEEN THE GENDER OF YOUNGSTER'S AT LKCS (N=364),
2) DIFFERENCES BETWEEN THE GENDER OF YOUNG ADULTS AT LKCS (N=408)**

Sex				
Variable	Feminine M (SD)	Masculine M (SD)	<i>F</i>	Sig.
LKCS	17.809 (4.868)	14.692 (4.965)	30.624	<.001

Sex				
Variable	Feminine M (SD)	Masculine M (SD)	<i>F</i>	Sig.
LKCS	16.464 (4.836)	15.306 (4.454)	3.986	.047



DISCUSSION & CONCLUSIONS

- Factor structure and composition of the LKCS replicate Reschke and Schröder (1995, 2000, 2010), unifactorial proposal of Stress global index.
- The instrument is a valid and reliable measure (Kline, 2010).
- The main dimensions were also identified in the Portuguese version.
- Correlational studies revealed a negative relationship between age, educational level and Index of Stress: youngsters could show more vulnerability to chronic stress symptoms.
- Differences between, men and women: women seem are more sensitive of stress symptoms.
- Coincidence with former Portuguese studies (Pires, 2018; Félix, 2022; Silva, 2022).
- LKCS is a valid and reliable tool for a better understanding of the chronic stress indicators.

