

Guide for the interpretation of the PAHCO scales

Dear interested users,

this is a document that helps the potential user of the assessment instrument for Physical Activity-Related Health Competence (PAHCO) to interpret the included scales. Target groups of the present document are representatives from science, medicine, health counselling, psychology and, in particular, physical activity promotion and exercise therapy.

The research group of Friedrich-Alexander University Erlangen-Nürnberg worked out a ten-factor assessment on the first-order level and, importantly, a three-factor assessment on the second-order level of PAHCO, which puts the assessment of PAHCO on a broad and solid basis. In some certain cases, it may be useful to supplement the assessment with further (ideally competence-formulated) facetson physical activity. Since this opportunity has already been used in a few projects, potential users are invited to contact the Erlangen research group for consultation. Although reference values are available for specific samples, representative studies are outstanding that enable a comprehensive standardization of PAHCO.

In the following sections, you can find three different but consistently positively scaled scores:

- The **sum scales** result from the addition of the individual items (first order) and individual factors (second-order/sub-competence). Due to the different number of items or factors, it is hardly possible to compare the absolute values of the scores.
- The **mean value scales** are transformed to the range of 0 - 4 (having the character of a ratio scale).
- The **percentage scales** have been transformed to a range of 0 - 100.

Sum scales (xxx_sum)

Scale	Range	
	Min	Max
FIRST-ORDER LEVEL		
Manageability of endurance demands (end)	0	16
Manageability of strength demands (str)	0	16
Manageability of balance demands (bal)	0	20
Body awareness (baw)	0	20
Control of physical load (ccpl)	0	24
Affect regulation (ar)	0	16
Self-efficacy (se)	0	12
Self-control (sc)	0	12
Cognitive attitude toward physical activity (atcog)	0	24
Emotional attitude toward physical activity (atem)	0	24
SECOND-ORDER LEVEL (SUB-COMPETENCES)		
Movement competence	0	17,6
Control competence	0	10,8
Self-regulation competence	0	14,8

Mean value scales (xxx_mean)

Scale	Range		Verbal anchoring (interpretation)
	Min	Max	
FIRST-ORDER LEVEL			
Manageability of endurance demands (end)	0	4	0 = I cannot do this 1 = I have major problems 2 = I have moderate problems 3 = I have some slight problems 4 = I can do this without any problems
Manageability of strength demands (str)	0	4	0 = I cannot do this 1 = I have major problems 2 = I have moderate problems 3 = I have some slight problems 4 = I can do this without any problems
Manageability of balance demands (bal)	0	4	0 = It is not true (that I am capable of doing so) 4 = It is true (that I am capable of doing so)
Body awareness (baw)	0	4	0 = It is not true (that I am capable of doing so) 4 = It is true (that I am capable of doing so)
Control of physical load (ccpl)	0	4	0 = It is not true (that I am capable of doing so) 4 = It is true (that I am capable of doing so)
Affect regulation (ar)	0	4	0 = It is not true (that I am capable of doing so) 4 = It is true (that I am capable of doing so)
Self-efficacy (se)	0	4	0 = It is not true (that I am capable of doing so) 4 = It is true (that I am capable of doing so)
Self-control (sc)	0	4	0 = It is not true (that I am capable of doing so) 4 = It is true (that I am capable of doing so)
Cognitive attitude toward physical activity (atcog)	0	4	0 = very "negative" 4 = very "positive"

Emotional attitude toward physical activity (atem)	0	4	0 = very "negative" 4 = very "positive"
SECOND-ORDER LEVEL (SUB-COMPETENCES)			
movement competence	0	4	0 = very low movement competence 4 = very good movement competence
control competence	0	4	0 = very low control competence 4 = very good control competence
self-regulation competence	0	4	0 = very low self-regulation competence 4 = very good self-regulation competence

Percentage Scales (xxx_pz)

Scale	Range		Verbale anchoring (interpretation)
	Min	Max	
FIRST-ORDER LEVEL			
Manageability of endurance demands (end)	0	100	0 = I cannot do this 25 = I have major problems 50 = I have moderate problems 75 = I have some slight problems 100 = I can do this without any problems
Manageability of strength demands (str)	0	100	0 = I cannot do this 25 = I have major problems 50 = I have moderate problems 75 = I have some slight problems 100 = I can do this without any problems
Manageability of balance demands (bal)	0	100	0 = It is not true (that I am capable of doing so) 100 = It is true (that I am capable of doing so)
Body awareness (baw)	0	100	0 = It is not true (that I am capable of doing so) 100 = It is true (that I am capable of doing so)
Control of physical load (ccpl)	0	100	0 = It is not true (that I am capable of doing so) 100 = It is true (that I am capable of doing so)
Affect regulation (ar)	0	100	0 = It is not true (that I am capable of doing so) 100 = It is true (that I am capable of doing so)
Self-efficacy (se)	0	100	0 = It is not true (that I am capable of doing so) 100 = It is true (that I am capable of doing so)
Self-control (sc)	0	100	0 = It is not true (that I am capable of doing so) 100 = It is true (that I am capable of doing so)
Cognitive attitude toward physical activity (atcog)	0	100	0 = very "negative" 100 = very "positive"
Emotional attitude toward physical activity (atem)	0	100	0 = very "negative" 100 = very "positive"
SECOND-ORDER LEVEL (SUB-COMPETENCES)			
Movement competence	0	100	0 = very low movement competence 100 = very good movement competence
Control competence	0	100	0 = very low control competence 100 = very good control competence
Self-regulation competence	0	100	0 = very low self-regulation competence 100 = very good self-regulation competence