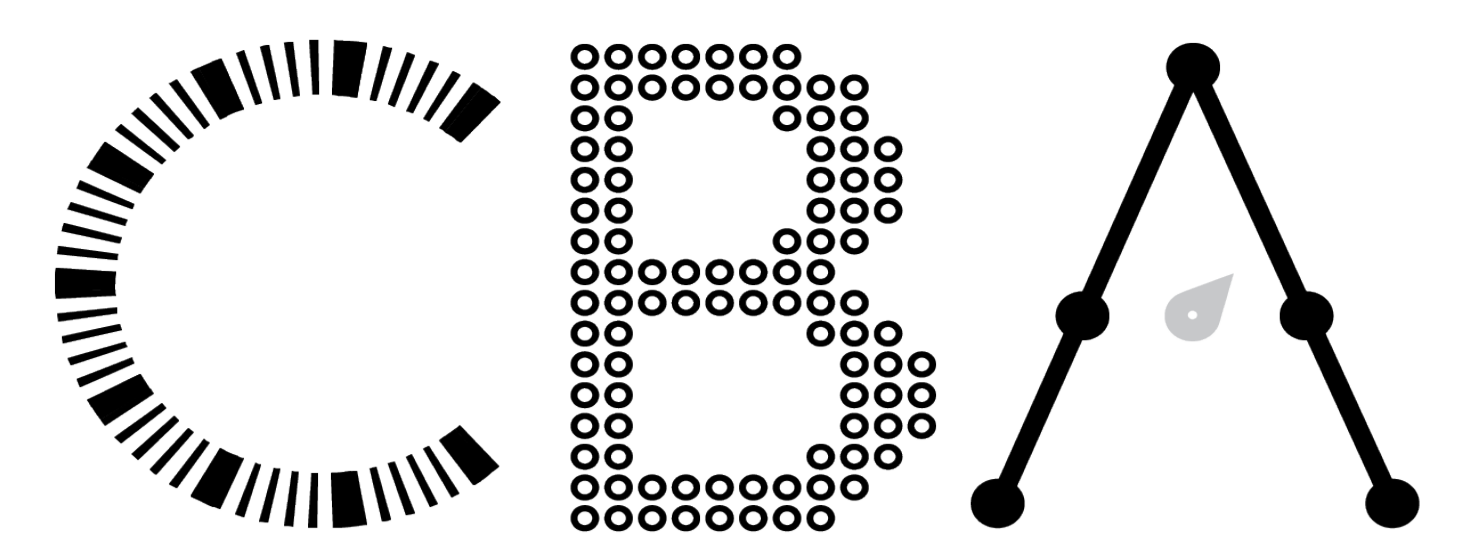


Assessing subjective university success with the Subjective Academic Achievement Scale (SAAS)



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Introduction

University achievement is a highly relevant educational outcome with implications for students' academic and professional future. As the majority of students that drop out of university do so due to subjective reasons in contrast to a lack of capability to handle the workload, a measure of subjective university achievement (complementing grade point average) is useful to enhance educational research on causes, correlates, and consequences of university success. The aim of this study is to introduce a short scale for the assessment of subjective academic achievement – the SAAS – and to provide first results on its psychometric properties. Based on two independent samples of university students, the internal consistency, factorial validity, and construct validity of the SAAS is corroborated suggesting the administration of the measure in educational research on university success and related issues.

Item development and description

Subjective achievement can be defined as a combination of the internalized achievement evaluations made by significant others and one's own evaluation of achievement, weighted against the careers of peers and certain age-related or personal expectations about achievement (Betz, & Fitzgerald, 1987). The SAAS was constructed in line with this definition and proposed guidelines of short form development (see for example Ziegler, Kemper, & Krueger, 2014). Students are required to rate their academic achievement relative to their personal goals, their invested effort, and their peers' achievement on a scale from 1 to 5.

Item	English	German	French
1	I am satisfied with my grades at university.	Ich bin mit meinen Noten im Studium zufrieden.	Je suis satisfait(e) de mes notes de mes études universitaires.
2	I am successful in my studies.	Ich bin in meinem Studium erfolgreich.	Je suis avec succès mes études universitaires.
3	My grades are appropriate for my effort.	Meine Noten sind für meinen Arbeitsaufwand angemessen.	Mes notes sont adéquates par rapport à ma charge de travail.
4	I progress adequately fast in my studies.	Ich komme in meinem Studium schnell genug voran.	J'avance de manière suffisamment rapide dans mes études.
5	My fellow students study more successfully than I.	Meine Mitstudenten studieren erfolgreicher als ich.	Mes camarades étudiants suivent leurs études avec plus de succès que moi.

Empirical validation

Sample 1

N=165 Students (multiple subjects)
62.2% female
M=22.53 Jahre (SD=3.83)

Sample 2

N=305 Students (Teachers)
70.9% female
M=23.63 Jahre (SD=5.08)

Measures

Subjective Academic Achievement Scale (SAAS)
Objective university achievement (GPA)

Statistical analyses

Missing values were handled using full information maximum likelihood estimation. Model fit assessment was based on fit indices recommended by Beauducel and Wittmann (2005) and criteria proposed by Hu and Bentler (1999).

Descriptive Statistics

Variables	Mean (SD)		Internal Consistency	
	Sample 1	Sample 2	Sample 1	Sample 2
SAAS	16.45 (2.95)	17.27 (2.49)	.82	.79
GPA	2.31 (.61)	2.17 (.47)	.92	.93

Factorial and construct validity

Sample	Items					Model Fit					
	1	2	3	4	5	χ^2	df	p	RMSEA	CFI	SRMR
1	.80	.90	.45	.65	.73	2.83	4	.29	.00	1.00	.02
2	.84	.81	.68	.58	.45	3.05	4	.27	.00	1.00	.02

The relations found between the SAAS and GPA scores were in line with our expectations with a correlation of $r = .57$ ($p < .01$) in Sample 1 and $r = .52$ ($p < .01$) in Sample 2 indicating convergent validity of the SAAS score.

Diskussion

The aim of this study was to introduce a short scale for the assessment of subjective academic achievement – the SAAS – and provide first results on its validity. Based on two independent samples of the targeted population, we found results supporting the internal consistency, factorial validity, and convergent validity of the SAAS. For both samples, we found the measurement models of the SAAS to fit very well to the data. Regarding convergent validity, the strong, but far from perfect correlations between SAAS scores and students' GPA demonstrated that SAAS scores reflect an evaluation of students' university achievement that is related but not equal to their objective grades.

References

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