

Science Motivation Questionnaire-II

OVERVIEW

- This scale assesses students' motivation to learn science

SUBSCALES

- Intrinsic Motivation
 - Learning science is interesting
- Self-Efficacy
 - I believe I can master science knowledge and skills
- Self-Determination
 - I use strategies to learn science well
- Grade Motivation
 - It is important that I get an "A" in science
- Career Motivation
 - My career will involve science

THEME(S)

- Education, Training, & Apprenticeships

- Youth achieve academic success
- Youth have educational experiences that respond to their needs and prepare them to lead

TARGET POPULATION

- Youth from 13 years of age or older

LENGTH & HOW IT IS MEASURED

- 25 items
- Responses to the scale range from 0 (never) to 4 (always)
- Self-report, paper-pencil version
- Available in: English, Chinese, Dutch, German, Greek, Japanese, Korean, Russian, Spanish, and Turkish

DEVELOPER

- Glynn, S. M., 2011
- Glynn & Koballa, 2006

GOOD TO KNOW

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- Separate questionnaires to measure students' motivation to learn biology, chemistry, and physics are also available.

PSYCHOMETRICS

RELIABILITY

- High reliability (internal consistency $\alpha > .90$)

VALIDITY

- Content validity
- Construct validity
- Criterion-related

Learn more:

- Glynn, S. M., & Koballa, T. R., Jr. (2006). Motivation to learn college science. In J. J. Mintzes & W. H. Leonard (Eds.), Handbook of college science teaching (pp. 25-32). Arlington, VA: National Science Teachers Association Press.
- Glynn, S. M., Taasobshirazi, G., & Brickman, P. (2009). Science Motivation Questionnaire: Construct validation with nonscience majors. Journal of Research in Science Teaching, 46, 127-146.

Science Motivation Questionnaire II (SMQ-II): Components

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In order to better understand what you think and how you feel about your science courses, please respond to each of the following statements from the perspective of “When I am in a science course...”

Components (Scales) and Statements (Items)	Never 0	Rarely 1	Sometimes 2	Often 3	Always 4
Intrinsic Motivation					
01. The science I learn is relevant to my life.					
03. Learning science is interesting.					
12. Learning science makes my life more meaningful.					
17. I am curious about discoveries in science.					
19. I enjoy learning science.					
Self-Efficacy					
09. I am confident I will do well on science tests.					
14. I am confident I will do well on science labs and projects.					
15. I believe I can master science knowledge and skills.					
18. I believe I can earn a grade of “A” in science.					
21. I am sure I can understand science.					
Self-Determination					
05. I put enough effort into learning science.					
06. I use strategies to learn science well.					
11. I spend a lot of time learning science.					
16. I prepare well for science tests and labs.					
22. I study hard to learn science.					
Grade Motivation					
02. I like to do better than other students on science tests.					
04. Getting a good science grade is important to me.					
08. It is important that I get an "A" in science.					
20. I think about the grade I will get in science.					
24. Scoring high on science tests and labs matters to me.					
Career Motivation					
07. Learning science will help me get a good job.					
10. Knowing science will give me a career advantage.					
13. Understanding science will benefit me in my career.					
23. My career will involve science.					
25. I will use science problem-solving skills in my career.					

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