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## South African science students' perceptions of physics as a fundamental discipline

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Meaningful development of scientific literacy is underpinned by coherent acquisition of scientific skills. The development of physics knowledge in particular hinges to a large degree on cognitive and affective factors. In light of this key imperative, students' perceptions of physics as a fundamental discipline were established through the administration of Physics Anxiety Questionnaire with first year science students at a South African university. The questionnaire provided a meaningful platform to identify students' perceptions in relation to various aspects such as physics experimental work, mathematical knowledge required to navigate physics studies, physics problem-solving, application of physics general knowledge in daily life as well as the concomitant integrated assessment of physics skills and knowledge in various instructional settings. Key findings of the study strongly suggest that the acquisition of physics skills is crucially dependent on a conflation of cognitive and affective factors forming an integral part of the learning process. Theoretical implications for meaningful development of scientific literacy are discussed.

**Apply to be considered for a student award (Yes / No)?**

No

**Level for award (Hons, MSc, PhD, N/A)?**

N/A

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