strategies and their impact on different variables such as performance, goals, efficacy, emotion and motivation are another idea which is worth exploring.

Implications and limitations

The findings of this study might have implications for university students, lecturers and materials developers in the field of teaching and learning. It may increase lecturers' ability to address student learning needs, promptly recognize struggling students' strengths and weaknesses, prepare metacognitive instructional designs, improve their pedagogical knowledge, manage educational complexity and encourage learners to take an active self-regulated role in learning. Materials developers should evaluate the curriculum and modify it as necessary and design materials with metacognitive tasks to encourage the use of metacognitive strategies.

The main limitation of this study is the use of a self-report questionnaire. Multiple methods can be used to assess it, such as think aloud and interview, which enables the researcher to hold eye contact with the interviewee and take note of comments which are of particular interest. A further limitation is that the study did not address the actual student employment of metacognitive strategies during teaching and learning. The researcher would like to address this gap in a future study by exploring how to accurately measure what students do in the classroom. Finally, the study was restricted to the BA and BS undergraduate students in both groups. Despite these limitations, the study results, due to the large random sample size, can be generalized to whole related populations.

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