

Brief Report

Argument Evaluation Test for Critical Thinking Ability Assessment: A Preliminary Study

Christin N. K. Lunggito, Anindito Aditomo, and Ide Bagus Siaputra
Faculty of Psychology
Universitas Surabaya

Critical thinking is a highly valued learning outcome in all educational levels. This study explores students ability to evaluate arguments as one manifestation of critical thinking. Using a newly developed instrument (the Argument Evaluation Test), we describe high school graduates' ($N = 2201$) ability to distinguish between sound and fallacious arguments, without explicit instruction. The results indicate that about half of the participants were able to spontaneously evaluate arguments and identify logical fallacies. This is significant considering that argumentation and logical fallacies are not part of the school curriculum in Indonesia. Thus, the ability to identify at least some types of logical fallacies could be obtained through informal learning and therefore the knowledge underlying this ability is likely to be implicit. Another finding was that the ability to evaluate arguments seem to vary depending on the type of fallacy, with ad hominem arguments easier to be identified as fallacious compared to ad populum arguments, as well as demographic variables such as gender and ethnicity

Keywords: critical thinking, argument evaluation test, fallacious reasoning

Keterampilan berpikir kritis adalah capaian pembelajaran yang sangat penting. Penelitian ini mengeksplorasi salah satu bentuk spesifik keterampilan berpikir kritis, yakni kemampuan mengevaluasi argumen. Menggunakan sebuah instrumen baru (Tes Evaluasi Argumen), peneliti memetakan tingkat kemampuan evaluasi argumen remaja lulusan SMA ($N = 2201$) yang akan menjadi mahasiswa di sebuah perguruan tinggi swasta. Hasil penelitian menunjukkan bahwa cukup banyak lulusan SMA yang secara spontan mampu mengevaluasi argumen. Temuan ini cukup signifikan, mengingat argumentasi dan kesalahan penalaran (*logical fallacies*) tidak diajarkan secara formal di sekolah dan universitas di Indonesia. Dengan demikian, kemampuan mengevaluasi argumen dan mengenali kesalahan penalaran tampaknya didapat melalui proses pembelajaran yang informal dan karenanya pengetahuan tersebut bersifat implisit. Simpulan lain yang bisa diperoleh adalah bahwa kemampuan mengevaluasi argumen tampaknya bervariasi, tergantung pada jenis kesalahan penalaran yang harus dievaluasi serta variabel demografis seperti gender dan etnis.

Kata kunci: berpikir kritis, tes evaluasi argumen, kesalahan penalaran

Reasoning is a specific learning achievement of every course of study, apart from mastery of knowledge and work skills. Reasoning is also a general ability required in any relevant situations. Since reasoning is a general ability, any formal education put this ability as main objectives, particularly in higher education (Kuhn, 2005). The importance of reasoning ability agreed by those who

work with university graduates (Badcock et al, 2010). Google, for instance, had decided that the first requirement for their new recruited employees was new information learning process skill for problem solving. Google did not make the GPA nor any other academic achievement at school as the employee recruitment main criterions (Friedman, 2014).

The faculties and the higher education authority realized the importance of general thinking ability. This was clearly seen from their assertion about desired university graduates qualification. The government of

This research was funded by a Fundamental Research grant (2014-2015) from the Indonesian Directorate of Higher Education to the second and third authors.

Correspondence concerning this article should be addressed to Anindito Aditomo, Faculty of Psychology, Universitas Surabaya, Jalan Raya Kalirungkut, Surabaya 60293. E-mail: a.aditomo@gmail.com