Antarjami: Exploring psychometric evaluation through a computer-based game

Anirban Lahiri

Arndit Ltd., Cambridge, United Kingdom

Utanko Mitra

Indian Institute of Technology, Kharagpur, Kharagpur, India

Sunreeta Sen

Arndit Ltd., Kolkata, India

Mreenal Chakraborty

Arndit Ltd., Kolkata, India

Max Kleiman-Weiner

Massachusetts Institute of Technology, Cambridge, Massachusetts, United States

Rajlakshmi Guha

Indian Institute of Technology, Kharagpur, India

Pabitra Mitra

Indian Institute of Technology, Kharagpur, India

Anupam Basu

Indian Institute of Technology, Kharagpur, India

Partha Pratim Chakraborty

Indian Institute of Technology, Kharagpur, India

Abstract

A number of questionnaire based psychometric testing frameworks are globally for example OCEAN (Five factor) indicator, MBTI (Myers Brigg Type Indicator) etc. However, questionnaire based psychometric tests have some known shortcomings. This work explores whether these shortcomings can be mitigated through computer-based gaming platforms for evaluating psychometric parameters. A computer based psychometric game framework called Antarjami has been developed for evaluating OCEAN (Five factor) indicators. It investigates the feasibility of extracting psychometric parameters through computer-based games, utilizing underlying improvements in the area of modern artificial intelligence. The candidates for the test are subjected to a number scenarios as part of the computer based game and their reactions/responses are used to evaluate their psychometric parameters. As part of the study, the parameters obtained from the game were compared with those evaluated using paper based tests and scores given by a panel of psychologists. The achieved results were very promising.