Can We Tell AI from Reality? A Study of Detection Accuracy and Influencing Factors Among Students and Adults in Dhaka.

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Abstract

Media generated by artificial intelligence (AI) is becoming increasingly sophisticated and difficult to distinguish from authentic content, which is why this mixed-method study has been conducted to examine how people in Dhaka, Bangladesh detect such media and how confidence, media type, and social media exposure influence their judgments. The research involved 185 participants, divided into 140 students (13–25 years) and 45 adults (26+ years), who were asked to evaluate a series of image-only, text-only, and multimodal AI-generated and authentic stimuli. Quantitative analysis measured detection accuracy and correlations with confidence levels, while qualitative interviews explored participants' evaluation strategies. Results indicated that students achieved higher overall detection accuracy (M = 70.0%, SD = 10.5) than adults (M = 63.6%, SD = 14.2%), particularly for image-based content, often relying on pattern recognition and heuristic cues from frequent social media interaction. Confidence was weakly associated with accuracy among students (r = .183, p = .030) and not significant for adults (r = .265, p = .078), highlighting a recurring mismatch between perceived and actual ability. Text-only stimuli posed the greatest challenge for both groups. These findings suggest that exposure to AI content or digital literacy alone is insufficient for accurate detection and underscore the importance of cultivating evaluative competence, bias awareness, and guided judgment. A more detailed study with a larger adult sample is needed to better understand detection patterns and cognitive strategies in older populations. Nonetheless, this study provides a foundation for designing targeted educational interventions to enhance critical media skills across generations in highly mediated urban environments.

Keywords: AI-generated content, deepfake, disinformation