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**The role of agent age and gender for middle-grade girls.**

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Summary: Compared to boys, many girls are more aware of a social context in the learning process and perform better when the environment supports frequent interactions and social relationships. For these girls, embodied agents (animated on-screen characters acting as tutors) could afford simulated social interactions in computer-based learning and thereby supply a girl-friendly instructional context. This study examined the effects of the age and gender of an agent on ninth-grade Caucasian and ethnic-minority girls' perceptions of the agent, mathematics attitudes, and learning in a computer-based algebra-learning environment. In general, the findings support that a virtual agent plays both social and instructional roles that favor teenage girls and could be a viable tool to create a favorable context for girls learning challenging topics.

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*Keywords:* embodied agents; interactive learning environments; human-computer interaction; pedagogical agents; agent personal attributes; gender

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