

ESCAPE ROOMS IN MEDICAL EDUCATION AND TRAINING

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Simulation-based education is gaining increasing recognition as an effective teaching method in medical education; placing learners at the center of innovative and learner-centered models.¹

One of such methods is Escape rooms, which have emerged as a valuable simulation-based tool in medical education, offering a unique approach to learning.² Healthcare simulation escape rooms engage students in an interactive way incorporating clues and puzzles to solve tasks related to healthcare themes.

Incorporating game elements into non-game contexts (gamification) is an immersive experience grounded in educational theory. It caters to the needs of modern learners like millennial students which makes it popular.

Escape rooms motivate learners, increase engagement, and encourage social interaction, making them an ideal fit for medical education. They align with Kolb's experiential learning theory, offering concrete experiences that promote reflective observation and active experimentation.³ They provide opportunities for team building, skills development, knowledge acquisition, and educational research.

The medical training benefits of escape rooms can be explored by case studies and theoretical perspectives.

Team Building: A study involving core medical trainees demonstrated that escape rooms can enhance teamwork, communication, and awareness of individual strengths and weaknesses.⁴ The escape room experience allowed participants to learn about peer capabilities and adaptability in time-pressured situations.

Research Tool: In another study, an escape room was used as an adjunct to traditional dermatology lectures for clinical-stage medical students. It served both as a method to present dermatological content and as a research tool to assess student perceptions of dermatology as a specialty.⁵ This showcases the

versatility of escape rooms in fulfilling multiple academic and educational purposes.

Learning Tool: Escape rooms have also been useful in high-pressure clinical specialties like obstetrics. Trainees were challenged with solving clues related to clinical processes, promoting effective teamwork and communication. Participants reported that they acquired valuable skills applicable to real-life clinical practice.

The popularity of escape rooms in education can also be attributed to several factors:

Millennial Learners: Millennials, who dominate the current medical education cohort, are technologically adept and value collaborative learning thus aligning escape rooms with these preferences for interaction.

Gamification: The incorporation of game elements into non-game contexts, reverberates with millennials.⁶ Escape rooms are thus ideal for motivating learners and increasing and encouraging social engagement.

Convenience: Escape rooms offer discrete, time-efficient learning experiences that can be completed in less than an hour. They are cost-effective and do not require expert facilitators, making them a convenient choice for medical curriculum delivery.

The following analysis shows how Escape Rooms are strongly aligned with educational theory in several ways:

Experiential Learning: Escape rooms effectively follow Kolb's experiential learning cycle, enabling active experimentation in a safe environment and emphasizing the importance of debriefing and reflection.

Gamification and Motivation: Self-determination theory highlights the role of autonomy, competence, and relatedness in motivation. Escape rooms set achievable goals, offer freedom of choice, and promote effective teamwork, enhancing participants' motivation to learn.⁷

In conclusion, escape rooms have emerged as a powerful educational tool in the field of medical training, aligning with the needs and capitalizing on the preferences of today's learners, particularly millennial medical students. The theoretical perspectives show that escape rooms offer a multifaceted approach to learning, enhancing various aspects of medical education. Grounded in educational theory, they offer a flexible and effective means of teaching a range of skills and knowledge while promoting student teamwork and engagement.

Escape rooms offer a means of delivering quality education in a timely and cost-effective manner, without

compromising patient contact or clinical time. Furthermore, their alignment with established educational theories, such as Kolb's experiential learning, reinforces their value as a pedagogical tool.

In essence, escape rooms have transcended their origins as entertainment and evolved into an integral component of modern medical education. They are a compelling choice for educators and institutions seeking innovative ways to prepare the healthcare professionals of tomorrow. As the landscape of medical education evolves, escape rooms are poised to play an increasingly significant role in shaping the future of healthcare training.

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