

CHI Learning & Development System (CHILD)

Project Title

Development and Implementation of an Escape Room as a Teaching Strategy for Occupational Therapy Education in Palliative Care Education

Project Lead and Members

Project lead: Neo Cui Fang Josephine

Project members: Nurul Ain Binte Rahmat, Zhuang Yuna, Florence Cheong Wai Fong

Organisation(s) Involved

Tan Tock Seng Hospital

Healthcare Family Group Involved in this Project

Allied Health

Specialty or Discipline (if applicable)

Occupational Therapy

Project Period

Start date: 22nd Jan 2021

Completed date: 21st Jan 2022

Aims

The aims of the study was to evaluate the use of an educational escape room in increasing Occupational Therapists' knowledge in palliative care rehabilitation and to understand their perceived value of the game. Our hypothesis was that gamification through escape room can enhance learning in the modern adult learner. The research questions were "Does the use of escape room as an educational activity increase occupational therapists' knowledge in palliative care rehabilitation?" and "What are occupational therapists' perception and experiences towards the use of escape room as a learning activity?"



CHI Learning & Development System (CHILD)

Background

See poster appended / below

Methods

See poster appended / below

Results

See poster appended / below

Lessons Learnt

• Participants' positive experience to the session and agreement it had helped them to learn in a way that could be applied in future, shows the potential of escape rooms as a novel methodology for educators to use to engage learners to actively participate in their learning. Our study showed that medical escape room facilitate engagement, learners to gain new knowledge and increase confidence towards practice. This was consistent with other similar studies on use of medical escape room. This could be contributed by the fun and interesting learning environment, adding to their engagement and participation in the game. In the participants' opinions, they would also like to see an increased use of games in medical education.

Conclusion

See poster appended / below

Additional Information

Nevertheless, this study has a few limitations. First of all, the study was carried out in a single profession and institution, which could potentially limit the generalisation of its results. There was also a lack of comparison group and a lack of comparison of findings with other teaching methods. Lastly, there was limitations in the evaluation of our intervention. For our short pilot prototyping the concept, we limited evaluation to the first and second level of Kirkpatrick's evaluation model



CHI Learning & Development System (CHILD)

Note: Singapore Health & Biomedical Congress (SHBC) 2021 – Bronze (Category: Health Professions Education Research Investigator Award)

Project Category

Training & Education, Learning Approach, Gamification, Care Continuum, Rehabilitative Care, End-of-Life Care, Palliative Care

Keywords

Escape Rooms, Palliative Rehabilitation Education, Teaching Strategy, Active Learning

Name and Email of Project Contact Person(s)

Name: Neo Cui Fang Josephine

Email: Josephine_CF_Neo@ttsh.com.sg



Can You Escape? The Use of Escape Room in Palliative Rehabilitation Education



Josephine Neo, Zhuang Yuna, Florence Cheong, Nurul Ain Binte Rahmat Occupational Therapy Department, Tan Tock Seng Hospital, Singapore

Introduction

Escape rooms, which have been gaining popularity recently, were originally conceived as a game in which a team of players cooperatively discover clues, solve puzzles, and complete tasks in order to progress and achieve specific goals.

Studies have found that educational escape room is an innovative and engaging teaching strategy that provides a potentially valuable supplement to existing teaching concepts.

This research aims to evaluate the use of an educational escape room in increasing Occupational Therapists' skills and knowledge in palliative care rehabilitation and to understand their perceived value of the game.

Methods

An escape room focusing on the education of palliative care rehabilitation was developed and implemented in Tan Tock Seng Hospital.

97 Occupational Therapists (OT) participated in groups of 4-5 and applied skills and knowledge found in clues to solve a series of puzzles and help the protagonist – a woman with cancer – reintegrate into the community, within 75 minutes.

Participants' knowledge of palliative care rehabilitation and perceptions of the game were evaluated using a pre- and post-knowledge test and survey, followed by a structured debrief session where participants were facilitated to reflect on their experience. Ethics approval from DSRB (NHG DSRB Ref: 2020/01210) was obtained prior study commencement.





Photos: escape room set-up (left) and encryption clue (right)

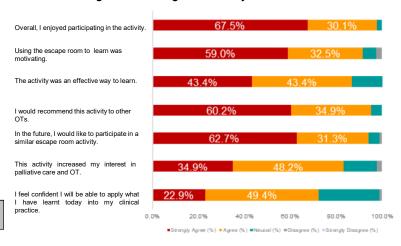
Results and Discussion

Participants showed an increase in knowledge after game completion. Average score for the knowledge quiz improved from 66% to 77%.

Results and Discussion

A mean of 93% and 77% agreed or strongly agreed that learning through an educational escape game was effective, and that the escape room game increased their interest and confidence respectively.

Figure 1: Post-game survey results



Survey feedback and debrief sessions also showed the participants found the escape room a positive experience as it was fun, engaging, impactful, and learning was made easier.

Using Kirkpatrick's Model, a globally recognised method of evaluating the results of trainings, the escape room was successful in achieving level 1 and 2 – reaction and learning – of the four levels of an effective training.

Conclusion

Gamification through the use of escape room can encourage active learning. Medical escape room provides a novel methodology for educators to engage learners to actively participate in their learning. It can facilitate learners to gain new knowledge and increase confidence towards practice.

The findings of this study are consistent with previous studies on students' perceptions of participating in escape rooms, validating the continual use of this methodology, and offering benefits beyond its novelty, in education.

Acknowledgements

The authors would like to thank the escape room team members, and 'The Escape Artist', for assisting with the game implementation.