# BE HEALTHY ZIGE BOARD GAME

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### **ABSTRACT**

During the Covid19 pandemic, Malaysians have to stay in their houses to reduce or prevent getting and spreading of Covid19 with people not staying in the same house. People in some places are not allowed to exercise outside their residences. Many Malaysians have their physical, psychology, mental, emotional, spiritual, and social health affected due to being in their residence for too long following Movement Control Order (MCO). The objectives of the boardgame are to get family members and those living in the same residence to be aware of the importance of health during the Covid 19 pandemic in Malaysia., to remind society to interact and exercise to take care, to maintain, or improve their physical, mental, emotional, spiritual, and social health, and to prevent people from getting sick during Covid19 MCO. Research has found that playing boardgame is able to improve health or prevent sickness from isolation. This board game will enable the teaching and learning of health management during Covid19 MCO to the public can be done in a safe setting, such as at home, school, etc. Basic knowledge sharing of health management will not be limited to normal classrooms by a highly qualified person in health management. This innovation will help to maintain or improve public physical, mental, emotional, spiritual, and social health during MCO.

**Keywords:** health, exercise, boardgame, socialization

# 1. INTRODUCTION

BE HEALTHY ZiGE Board Game is a board game to encourage quality family time through interaction and exercise during Movement Control Order (MCO). Many studies have found the benefit of playing board games, and also exercises done together with other people. Andrea Gauthier, et al (2019) found preliminary evidence for the use of board games to improve knowledge in health outcomes. Mutsuhiro Nakao (2019) found that playing of traditional board games (e.g., chess, Go, and Shogi) helps to improve cognitive impairment and depression and that the playing of newly developed board games is beneficial for behavioural modifications, such as the promotion of healthy eating, smoking cessation, and safe sex.

### 2. MATERIALS AND METHODS

The board game is played with a die, tokens and an adjustable handgrip with a counter. The players can be between two to four players, between ages of 6 years old to 60 years old (or older, depending on the capability to use the handgrip exercise device).







Before the game begins, the players have to decide the total number of handgrip exercises to be done by a winner. The movement of the tokens is based on the numbers shown on the die. If a token lands on ZiGE space, the player will have to exercise with the handgrip the number of times it is shown on the space he landed, the methodology must be clearly stated and described in sufficient detail or with adequate references. The game ends when a player achieved the number of handgrip exercise that has been agreed before the game begins.

#### 3. RESULTS AND DISCUSSION

Different players show different health effect from playing the board game. But as stated by Lam (2018), Rinku Garg et al., (2014) exercising using an isometric handgrip device is good for a person's blood pressure. B.K. Labotta et al., (2020) found positive effects of exercise training on handgrip strength in older adults.

Andrea Gauthier, et al (2019) found preliminary evidence for the use of board games to improve knowledge in health outcomes. Mutsuhiro Nakao (2019) found that playing of traditional board games (e.g., chess, Go, and Shogi) among others helps to improve cognitive impairment and depression.

Thus, studies have shown that playing board games, and exercise with a handgrip device give benefits in terms of physical, mental, and social health. The combination of playing a board game with a handgrip device facilitates people during Covid19 MCO, to maintain, improve their health., besides preventing or reducing from being sick.

# 4. CONTRIBUTION AND USEFULNESS/COMMERCIALISATION

The teaching and learning of health management during Covid19 MCO to the public can be done in a safe setting, such as at home, school, etc. The basic knowledge sharing of health management will not be limited to normal classrooms, by a highly qualified person in health management. This innovation will help to maintain or improve public physical, mental, emotional, spiritual, and social health during MCO.

The combination of play, education and health management using boardgame and exercise will help people affected by Covid19 MCO to manage their health while being isolated from others. Even though a household maybe in isolation, but by playing the board game, they can still maintain a healthy social interaction among themselves.

This board game has a huge commercial potential as the boardgames sales have been increasing during Covid19 worldwide, as many researchers have found the benefit of playing boardgame for health. This board game has a great potential for spin-off into other board games, upgraded versions, additional exercises, additional exercise equipment, turning into card games, electronic games, etc. The content of the board can be adapted according to the intended players or market.

### 5. CONCLUSION

Playing this board game with benefit the players' physical, mental, and social health. The players need to adjust the handgrip device to ensure that individual players are able to do handgrip properly, suitable with the handgrip strength. The combination of playing a board game with a handgrip device facilitates people during Covid19 MCO, to maintain, improve their health., besides preventing or reducing from being sick.

Future research can be conducted to find the effect of playing boardgame and handgrip devices on stress among university students isolated at their universities during Covid19 or non Covid19 MCO.

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