








# Exercise Motivations, Barriers, and Preferences of Tahfiz Students: A Qualitative Study

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## Abstract

**Background:** In Malaysia, the increasing prevalence of physical inactivity is alarming. The effects of adopting a sedentary lifestyle have led to health problems such as coronary heart disease and type II diabetes mellitus, as well as increased mortality rates. Young adults, including tahfiz students, tend to be physically inactive due to much time spent sitting during lectures or studying. Therefore, an active lifestyle must be encouraged. This study aims to identify the factors that influence tahfiz students to exercise.

**Methods:** Data from 12 male and 19 female students were collected through in-depth interviews, which were recorded and transcribed into text then subjected to thematic analysis.

**Results:** Results show that the main motivations to exercise were body health and fitness, self-appearance, and sense of togetherness. The main themes for barriers were aversion to exercise time and commitment. In general, respondents preferred a moderate, 10–30 minute group sessions for 3–5 times per week.

**Conclusions:** This study revealed five themes for motivations (body health and fitness, psychological wellbeing, appearance, physical support, and enforcement), and six themes for barriers to exercise (aversion to exercise, time, commitment, discomfort, no motivation, and the environment). These factors could be considered in exercise module development to improve students' engagement.

**Keywords:** barriers, exercise, motivation, preferences, students

## INTRODUCTION

Physical activity is defined as any body movement that is caused by skeletal muscles and consumes energy.<sup>1,2</sup> Such activities involve intentional skeletal muscle contraction while using mechanical energy through work and movement, and often followed by heat release. Notably, a physical activity is purposely planned, structured, and repeated to enhance or maintain one or more physical fitness components of an individual. The Centers for Disease Control & Prevention (CDC) recommends that exercise must consist of at least 150 minutes of moderate-intensity physical activity per week and at least 2–3 times per week of muscle strengthening activities.<sup>3</sup> This recommendation implies that exercise must be carried out at regular intervals with adequate durations.

The benefits of physical and mental health against the risk of mortality are well documented.<sup>4</sup> For instance, irrefutable evidence shows the effectiveness of regular physical activity in the primary and secondary prevention of several chronic diseases (e.g., cardiovascular disease, diabetes, cancer, hypertension, obesity, depression, and osteoporosis) and premature death.<sup>5</sup> In addition, physical activity is also essential for university students because the transition from adolescence to adulthood is critical in shaping their future lifestyle.<sup>6</sup> The implication is that the inactivity of an adolescent might continue into his/her adulthood.

However, despite numerous studies demonstrating the benefits of exercise and physical health, Malaysians in general remain physically inactive and lead a sedentary lifestyle.<sup>7</sup> In 2010, the World Health Organization (WHO) ranked Malaysia as one of the top 10 countries in the world whose populations are physically inactive.<sup>8</sup> This ranking is supported by findings of the National Health & Morbidity Survey (NHMS 2019) that one of every four Malaysian adults is physically inactive, among whom 39% are students.<sup>9</sup> In addition, students' physical activities have shown a decline during their university

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years<sup>10</sup> in relation with increasing age.<sup>11</sup> Exercise motivation, barriers<sup>12</sup> and preferences<sup>13</sup> are found significantly associated with the levels of physical activity.

In terms of education, an increasing trend of parental preference has been observed in Malaysia,<sup>14,15</sup> including the choice to send children to religion-based institutions. Among Muslim parents, tahfiz school is one of the popular choices for their children, as indicated by the 30% increase in the number of private tahfiz schools as reported by Department of Islamic Development Malaysia (JAKIM) in 2019.<sup>16</sup> However, despite the increase in their popularity, tahfiz schools show no evidence of structured modules that incorporate the teaching and implementation of health and well-being for their students. This lack of emphasis on nutrition, health and well-being, and physical activities has become a major concern.<sup>17,18</sup>

Unfortunately, scientific research has not fully explored public health among tahfiz institutions. Tahfiz is defined as the act of memorizing the Quran and the people who do so are referred to as hafiz.<sup>19</sup> This definition has led to the lack of understanding regarding the qualitative factors influencing tahfiz students to exercise. This explorative study therefore aims to investigate the motivations, barriers, and exercise preferences of tahfiz students to provide a broader and deeper understanding that can aid in developing exercise modules or health campaigns in similar institutions. With this approach, we hope to facilitate the improvement of physical activity and exercise engagement among tahfiz students.

## METHODS

### Sampling and recruitment

This study investigated the exercise motivations, barriers, and preferences among tahfiz students in Darul Quran JAKIM, Malaysia. Darul Quran is an Islamic tertiary education institution under the JAKIM. Tahfiz is defined as the act of memorizing the Quran while the people who do so are referred to as hafiz.<sup>19</sup> Data from 12 male and 19 female students were collected through in-depth interviews, which were recorded and transcribed into text then subjected to thematic analysis. Respondents were recruited using purposive sampling and following Dworkin,<sup>20</sup> who stated that a 25–30 sample size is sufficient to achieve data saturation and redundancy for research using the interview method. The inclusion criteria for the sample were as follows: a) officially registered students of Darul Quran; b) age between 18–24 years old, and c) full-time students. Married, childbearing female students, and students suffering from chronic diseases were excluded from this study.

### Ethics statement

This study strictly followed the ethical standards of the Helsinki Declaration, and ethical approval was obtained from the Universiti Kebangsaan Malaysia Human Research Ethic Committee (UKM PPI/111/8/JEP-2021-321). Respondents were briefed on the study purpose and procedures. Given the context of the Coronavirus disease 2019 pandemic, consent forms were emailed to individual respondents, who signed and returned the forms prior to the interviews.

### Interviews

Following Manaf *et al.*,<sup>21</sup> this study adopted a semi-structured interview protocol, and the adapted Interview script was provided in Appendix I. Modifications on the interview script were carried out in subsequent sessions. A single interviewer (NAM) carried out the interview to reduce potential discrepancies. The interviews were conducted in the Malay language to allow respondents to answer each question more comfortably in their mother tongue. Each interview session lasted approximately 30 minutes via one-on-one phone calls between May to June 2021. Respondents were asked about their motivations to exercise, reasons for not exercising, and preferences based on frequency, intensity, duration, time, and type of exercise.

### Data handling and analysis

For each interview session, data collection and analysis were carried out concurrently. A smartphone recording application was used to record and transcribed each interview session verbatim. The data were subjected to thematic analysis, which involves three steps.<sup>22</sup> The verbatim transcriptions for each interview session were read repetitively to increase the understanding of responses, which were subsequently categorized and grouped into themes. Finally, general concepts were formulated<sup>22</sup> with adjustments made to the identified categories and themes. Subsequently, the results were reviewed in collaboration with another researcher (AFML) to further consolidate the number of categories and identify relevant themes and general concepts that answer the research questioned. AFML is an expert in physical activity and exercise physiology, providing credibility in data analysis. A meeting was then held with three other researchers (IYI, FWI, and NMAW), who had distinguished experience in tahfiz-related study. Unanimous agreement for the final themes was thus achieved.

## RESULTS

### Respondents' characteristics

A total of 31 Tahfiz Al-Quran wal Qiraat Darul Quran diploma students, aged 19–23, were recruited. Among them, 12 are males and 19 are females, and 24 were third semester while seven were fifth semester.

### Motivation to exercise

Several factors influence the respondents to begin and maintain their daily exercise. In this study, five themes emerged as motivation for exercise, as follows: body health and fitness, psychological well-being, appearance, physical support, and discipline/commitment. Table 1 summarizes the findings and responses regarding the motivations to exercise.

#### Theme 1: Body health and fitness

Most respondents stated that their main reason for exercising for body health and fitness (n = 40). When probed further, respondents mentioned maintaining or improving health (n = 19), health benefits (n = 14), and body fitness (n = 7) as their motivations. One of the respondent's statements is as follows:

*"Firstly, I exercise to stay healthy. I always look upon the famous Arabic words, which says, An intelligent mind comes from an active body... So, when our body is fit, and we spare at least an hour a day to exercise, an intelligent mind can be achieved... Whatever work that we plan to do, such as assignments or anything become easier to be done."* (Respondent 4, Male, 20)

Another response is:

*"I exercise because... I want to maintain a healthy body. Besides that, I may gain benefits from both Al-Quran and a healthier body."* (Respondent 18, Female, 19)

#### Theme 2: Psychological well-being

In general, the term psychological well-being has no specific definition. However, researchers agreed that individuals with positive mind and emotions have a positive psychological outlook, which can lead to positive functioning.<sup>21-26</sup> In the present study, psychological well-being is one of the motivations mentioned by respondents (n = 28) to exercise. This theme is further subdivided into mood improvement (n = 19) and self-satisfaction (n = 9). One respondent was quoted saying: *"Because exercise relieves stress, I have to commit to classes during the day, so when it is evening, I get to spare some time to enjoy and spend some hours with friends, relaxing."* (Respondent 30, Male, 20)

Other respondents stated that spending time with friends (n = 16) or family also improved their mood. For example:

*"Firstly, because of my friends. If someone invites or just accompanies me to exercise, that would surely motivate me a lot. The biggest factor for me is when there is someone with me."* (Respondent 10, Female, 19)

Another response is:

*"Maybe. When there are friends. I usually need someone to exercise with to excite or motivate me to do exercise. Sometimes, if I am planning to exercise, I ask for a friend to exercise with."* (Respondent 9, Female, 20)

#### Theme 3: Physical appearance

The third theme identified in this study is physical appearance (n = 14). Respondents engaged in physical exercise to reduce their body weight and achieved their preferred physical appearance. The example of responses under this theme are as follows:

*"Um, for motivation to exercise, sometimes because I want to lose weight."* (Respondent 3, Female, 20)

Another response is:

*"Hmm usually I used to compare my current appearance with my appearance back then during my school days. I used to be slim and fit before, but after entering university life, people started to say that I am becoming plumper and chubbier. Therefore, that is my motivation to exercise. I want to improve my appearance."* (Respondent 27, Male, 19)

#### Theme 4: Physical support

The theme of physical support as a motivation to exercise is exemplified by the responses (n = 3) below:

*"Hmm... for me, I usually download apps. So, when there are apps, it keeps on motivating me to exercise."* (Respondent 3, Female, 19)

*"Hmm I usually spend my time on YouTube, and my YouTube playlist usually shows plenty of videos regarding exercise. Sometimes, looking at those videos motivates me to start exercising."* (Respondent 27, Male, 19)

#### Theme 5: Enforcement

Enforcement can be internal or external. The former was exhibited by having self-discipline in performing exercise. For example, a respondent states that:

*"My motivation to exercise is by setting a target and be disciplined to achieve those target that I had set. Those targets then motivate me to exercise. It is like I succeed in doing what I had planned."* (Respondent 5, Male, 21)

By comparison, external enforcement likely involves programs imposed by the institution. For example, a respondent was quoted saying:

*"Hm, maybe if there are some exercise programs organized by Darul Quran for students, I would be participating in it."* (Respondent 20, Female, 20)

#### Barriers to exercise

The responses led to the identification of six themes as barriers to exercise, including aversion to exercise, time, commitment, discomfort, lack of motivation, and environments. Table 2 summarizes the overall findings and responses for the barriers to perform exercise.

**Theme 1: Aversion to exercise**

The majority of respondents who avoided exercising stated that they dislike exercise or physical activity (n = 19). They also mentioned that they simply dislike performing exercise and being sweaty. For example:

*"Hmm because I am actually not into physical exercise, sometimes I do it when I feel like doing it. But most of the time, I don't."* (Respondent 22, Male, 20)

*"Hmm, the first reason is because I just do not feel like doing it. I prefer sitting down for the entire day and reluctant to leave my home just to exercise. It is tiring and I am too lazy to do that."* (Respondent 11, Female, 20)

One of the respondents stated that she dislikes being sweaty, as follows: *"I sweat a lot if I jog, so it is kind of uncomfortable. Being outside, sweaty and all, does not suit me at all."* (Respondent 21, Female, 19)

**Theme 2: Time**

Another major barrier to exercise is lack of time (n = 16). The majority of respondents reported difficulties in managing their time (n = 11) and exercise was cited as time consuming (n = 5). One response was: *"Hmm, sometimes while scrolling phones, we get distracted and addicted to it. So, basically, we are dealing with a time management issue."* (Respondent 2, Male, 20)

**TABLE 1.** Summary for motivation to perform exercise

Motivations		
Theme	Subtheme	Respondents' Response
<b>Body health &amp; fitness</b>	Maintain/improve health (n = 19)	<i>"I exercise because... I want to maintain a healthy body. Besides that, I may gain benefits from both Al-Quran and a healthier body."</i> (Respondent 18, Female, 19)
	Health benefits (n = 14)	<i>"Hmm because I am aware of the benefits I get by doing exercises, such being healthy, fit, and fresh!"</i> (Respondent 12, Female, 19)
	Fitness (n = 7)	<i>"I exercise because... I want to maintain a healthy body"</i> (Respondent 4, Male, 20)  <i>"...I exercise to just stay fit..."</i> (Respondent 23, Male, 20)
<b>Psychological Well-being</b>	Mood improvement (n = 19)	<i>"Hm when I am stressed with assignments or else, I remove those feelings by playing with sports or any exercise. I think by doing so, I am boosting my mood a little bit."</i> (Respondent 19, Female, 19)  <i>"Firstly, because of my friends. If someone invites or just accompanies me to exercise, that would surely motivate me a lot. The biggest factor for me is when there is someone with me."</i> (Respondent 10, Female, 19)
	Self-satisfaction (n = 9)	<i>"I exercise because it's fun..."</i> (Respondent 30, Male, 20)
<b>Appearance</b>	Lose weight (n = 14)	<i>"Um, for motivation to exercise, sometimes because I want to lose weight."</i> (Respondent 3, Female, 20)
<b>Physical support</b>	Physical support (n = 3)	<i>"Hmm... for me, I usually download apps. So, when there are apps, it keeps on motivating me to exercise."</i> (Respondent 3, Female, 19)
<b>Enforcement</b>	Internal enforcement (n = 1)	<i>"My motivation to exercise is by setting a target and be disciplined to achieve those target that I had set. Those targets then motivate me to exercise. It is like I succeed in doing what I had planned."</i> (Respondent 5, Male, 21)
	External enforcement (n = 1)	<i>"Hm, maybe if there are some exercise programs organized by Darul Quran for students, I would be participating in it..."</i> (Respondent 20, Female, 20)

**TABLE 2.** Summary for barriers to perform exercise

Barriers		
Theme	Subtheme	Respondents' Response
<b>Aversion to exercise</b>	Dislike exercise (n = 20)	<i>"Hmm because I am actually not into physical exercise, sometimes I do it when I feel like doing it. But most of the time, I don't."</i> (Respondent 22, Male, 20)
		<i>"I sweat a lot if I jog, so it is kind of uncomfortable. Being outside, sweaty and all, does not suit me at all."</i> (Respondent 21, Female, 19)
<b>Time</b>	Time management (n = 11)	<i>"Hmm, sometimes while scrolling on phones, we get distracted and addicted to it. So, basically, we are dealing with a time management issue."</i> (Respondent 2, Male, 20)
	Time consuming (n = 5)	<i>"I think because I am compact with things. At home, I am busy doing some house chores, while in college, I am busy with college students' things, and I thought exercising was so time consuming."</i> (Respondent 15, Female, 20)
<b>Commitment</b>	Commitment as hafiz Al-Quran (n = 10)	<i>"Hmm we are tahfiz students, and so we spend most of our time repeating and memorizing the Quran. Moreover, most students had to allocate their time based on their preferences. Some prefer memorizing the Quran after late afternoon prayer (asr), or after sunset prayer (maghrib). As for me, I do not prefer memorizing the Quran after Maghrib, maybe because it is loud, and there are more people in the mosque, so I prefer doing it after asr, which makes me skip exercising in the evening."</i> (Respondent 14, Male, 20)
	Workload (n = 5)	<i>"I do want to exercise sometimes, but time constraints and workload prevent me from doing so."</i> (Respondent 7, Female, 19)
<b>Discomfort</b>	Fatigue (n = 11)	<i>"Attending classes is tiring. Hmm so I would rather not do anything afterwards which costs more of my energy, such as exercising."</i> (Respondent 6, Female, 20)
	Post-exercise body ache (n = 2)	<i>"The thing about exercise that I dislike is that afterwards, I get body aches and pain."</i> (Respondent 34, Female, 20)
	Full & in discomfort (n = 1)	<i>"My evening is my catching time for eating, so I eat until I am full, which afterwards makes me feel uncomfortable to exercise."</i> (Respondent 27, Male, 19)
<b>Lack of motivation</b>	Lack of motivation (n = 14)	<i>"I easily lose my motivation to exercise, so when there is no motivation, I do not exercise."</i> (Respondent 34, Female, 19)
<b>Environment</b>	Weather (n = 5)	<i>"Sometimes, the weather does not allow me to exercise. It is always raining here, so I don't."</i> (Respondent 23, Male, 20)

TABLE 2. Continue

Barriers		
Theme	Subtheme	Respondents' Response
	Physical environment (n = 7)	"Hmm, it is like sometimes if the place or exercise equipment is not there, it is not fun to exercise, too." (Respondent 6, Male, 20)
	Movement Control Order (MCO) (n = 2)	"During MCO, when all of us must stay home, I do not have the motivation to do any exercise because I cannot go out." (Respondent 7, Female, 19)

Another respondent stated that: "I think because I am compact with things. At home, I am busy doing some house chores, while in college, I am busy with college students' things, and I thought exercising was so time consuming." (Respondent 15, Female, 20)

### Theme 3: Commitment

The next theme identified in this study is commitment. Respondents needed to balance their academic responsibilities and the lifetime commitment as a tahfiz student. This theme is further divided into two sub-themes, namely, commitment as hafiz (n = 10) and academic workload (n = 5). Most of the respondents stated that their commitment as tahfiz students was one of the reasons that hindered them from exercising. For example: "Hmm we are tahfiz students, and so we spend most of our time repeating and memorizing the Quran. Moreover, most students had to allocate their time based on their preferences. Some prefer memorizing the Quran after late afternoon prayer (asr), or after sunset prayer (maghrib). As for me, I do not prefer memorizing the Quran after maghrib, maybe because it is loud, and there are more people in the mosque, so I prefer doing it after asr, which makes me skip exercising in the evening." (Respondent 14, Male, 20)

Another respondent stated that: "I do want to exercise sometimes, but time constraints prevent me from doing so." (Respondent 7, Female, 19)

### Theme 4: Discomfort

Most of the respondents also reported discomfort during or after exercise (n = 14) as a deterrent. Fatigue (n = 11), post-exercise body ache (n = 2), and excessive satiety (n = 1) which caused discomfort prevent them from exercising. The majority of the respondents stated that they were too tired to exercise due to their hectic schedule, which begins as early as 8 a.m. and ends at 5 p.m.

An example of a response for fatigue was: "Attending classes was tiring. Hmm so I would rather not do anything afterwards which costs more of my energy, such as exercising." (Respondent 6, Female, 20)

In terms of post-exercise pain, respondents stated that, "The thing about exercise that I dislike is that afterwards, I get body aches and pain." (Respondent 34, Female, 20)

One respondent stated that due to his hectic schedule, the evening was reserved for eating rather than sports. "My evening is my catching time for eating, so I eat until I am full, which afterwards makes me feel uncomfortable to exercise." (Respondent 27, Male, 19)

### Theme 5: Lack of motivation

Lack of motivation among the students (n = 14) is also a barrier to exercise. For example, one respondent stated that: "I easily lose my motivation to exercise, so when there is no motivation, I do not exercise." (Respondent 34, Female, 19)

Another respondent stated that, "Hmm, I think I don't exercise because there is no motivation and awareness regarding this." (Respondent 20, Female, 20)

### Theme 6: Environment

The final theme is the environment (n = 14), which is further subdivided into three aspects: limited physical support for exercise (n = 7), weather (n = 5), and movement control order (MCO) imposed by authorities (n = 2). The majority of respondents stated that limited physical environment, such as lack of suitable exercise space or equipment, led to difficulties to exercise. For example, "Hmm, it is like sometimes if the place or exercise equipment is not there, it is not fun to exercise too." (Respondent 6, Male, 20)

Another respondent stated that: "One of the things that makes it difficult for me to exercise is the fact that I live in an apartment. It is troublesome for me to go out and exercise." (Respondent 3, Male, 20)

### Exercise preferences

Exercise preferences refer to individual choices and situations that encourage respondents to carry out physical activity. The feedback from respondents was classified according to the F.I.T.T. principle: Frequency, Intensity, Time, and Type of preferred exercise. Table 3

summarizes the overall findings and responses on exercise preferences.

In terms of frequency, most of the respondents (n = 16) preferred to exercise 3–5 times per week, while others

limited their exercise to 1–2 times per week (n = 9). One of the respondents quoted: *“As for me, three to four times a week is more than enough to keep me fit. However, I do believe that everyone’s views on this differ.”* (Respondent 7, Female, 20).

**TABLE 3.** Summary for motivation, barriers, and preferences to perform exercise

Exercise Preferences		
Theme	Subtheme	Respondents' Response
<b>Frequency</b>	1–2 times/week (n = 9)	<i>“I think, one to two times a week, is enough for me to stay healthy.”</i> (Respondent 1, Male, 20)
	3–5 times/week (n = 16)	<i>“As for me, three to four times a week is more than enough to keep me fit. However, I do believe that everyone’s views on this differ.”</i> (Respondent 7, Female, 20)
	Less than 1–2 times/week (n = 6)	<i>“I prefer exercise that does not take a longer time, so it would not be tiring me out.”</i> (Respondent 15, Female, 19)
<b>Intensity</b>	Light intensity (n = 8)	<i>“Something light, such as slow walk. So, I won’t get so tired.”</i> (Respondent, Female, 19)
	Moderate intensity (n = 11)	<i>“I prefer something moderate, such as cycling or jogging.”</i> (Respondent 5, Male, 20).
	High intensity (n = 9)	<i>“I prefer sports such as soccer, badminton, volleyball.”</i> (Respondent 22, Male, 20)
<b>Time/Duration</b>	Less than 10 minutes	-
	10–30 minutes/ session (n = 19)	<i>“At least in 30 minutes for evening walk or any recreational activity each day, so it maintains my stamina and helps me with memorizing the Quran.”</i> (Respondent 29, Male, 20)
	More than 30 minutes/ session (n = 9)	<i>“If I am free and really in the mood to do sports, there are times when I would spend up to three hours outside, breaking a sweat.”</i> (Respondent 22, Male, 20)
<b>Type</b>	Group activity (n = 16)	<i>“Exercising in a group motivates me. It is when I look around and see everyone else doing it with me.”</i> (Respondent 20, Female, 20).
	Elements of competition (n = 14)	<i>“I am a competitive person. So, I prefer doing exercise in any competitive way. It motivates me to participate.”</i> (Respondent 34, Male, 20)
	Guided (14)	<i>“I am a beginner, so I would prefer something structured and has a module that I can follow step by step.”</i> (Respondent, 32, Female, 19)
		<i>“If someone coaches me, then it would be fun. It is like having some pushing factor for me to exercise.”</i> (Respondent 3, Female, 19)
	Flexible in time/place (n = 10)	<i>“I prefer something flexible, so it can fit my own way and schedule.”</i> (Respondent 33, Male, 21)
	Individual (8)	<i>“I prefer to exercise alone, because I don’t want to be distracted by others. I sometimes have to wait for my friends if I decide to exercise with them. So, I prefer to do sports by myself, which helps me to focus on reaching my goals.”</i> (Respondent 7, Female, 20)

In terms of intensity, most respondents preferred to perform moderate intensity exercise (n = 11) while the remainder chose high (n = 9) or light (n = 8) intensity exercise. For example, one respondent stated that: *"I prefer something moderate, such as cycling or jogging."* (Respondent 5, Male, 20)

More than half of the respondents (n = 19) preferred to exercise for 10–30 minutes per session, while others preferred to exercise for longer than 30 minutes per session (n = 9). Notably, none of the respondents exercised for less than 10 minutes per session (n = 0). Most of the tahfiz Darul Quran students stated that their time was limited, which caused difficulties for them to exercise regularly. However, when they did have free time for sports, they tended to spend quite a significant amount on it. One of the respondents stated that, *"If I am free and really in the mood to do sports, there are times when I would spend up to three hours outside, breaking a sweat."* (Respondent 22, Male, 20)

As for activity type, most of the respondents (n = 16) appeared to prefer group exercises. Several respondents claimed that joining groups of friends or family members can boost their enthusiasm to exercise. One respondent stated that: *"Exercising in a group motivates me. It is when I look around and see everyone else doing it with me."* (Respondent 20, Female, 20). However, other respondents (n = 8) preferred to exercise alone. They described the benefits and drawbacks of exercising alone rather than in groups. The following was an example: *"I prefer to exercise alone, because I don't want to be distracted by others. I sometimes have to wait for my friends if I decide to exercise with them. So, I prefer to do sports by myself, which helps me to focus on reaching my goals."* (Respondent 7, Female, 20)

Other elements that are identified in this study include the competitive nature of exercise. Among the respondents, 14 mentioned that they were motivated by and preferred this type of exercise. The same number of students stated that they preferred guided exercise, from either a structured exercise program or coaches. Their responses were as follows:

*"I am a beginner, so I would prefer something structured and has a module that I can follow step by step."* (Respondent, 32, Female, 19)

*"If someone coaches me, then it would be fun. It is like having some pushing factor for me to exercise."* (Respondent 3, Female, 19)

Preference toward flexibility in terms of timing and places were mentioned 10 times. One example was as follows:

*"I prefer something flexible, so it can fit my own way and schedule."* (Respondent 33, Male, 21)

## DISCUSSION

This qualitative study explores and identifies the factors that influence Darul Quran tahfiz students to exercise. These factors can play significant roles in encouraging such students to practice an active lifestyle. The respondents demonstrate that the motivations to exercise include body health and fitness, physical appearance, togetherness, enjoyment, psychological well-being, and discipline. These findings are consistent with those of previous studies indicating that one of the main motivations for people to exercise is to maintain or improve their health.<sup>27,28</sup>

Gender differences are found related to the motivation to engage in physical activities.<sup>29</sup> Compared with males, females perform exercise mainly due to motivational factors such as self-appearance (self-image) and weight loss.<sup>28</sup> However, in the present study, both sexes agree that the main reason they exercise are for body health and fitness. Only a small number of male students state that their passion for exercise is sufficient motivation. The possible reason is that males tend to be highly motivated when their daily activities include elements of challenge, competition, and fun.<sup>30</sup>

The results on barriers to exercise indicate that aversion to exercise, time, commitment, discomfort, lack of motivation, and environmental factors pose as the main hindrances for tahfiz Darul Quran students. For most of the respondents, one of the factors contributing to their aversion to exercise is laziness. Similarly, this finding is consistent with that of previous literature.<sup>31</sup> These barriers have been known to result in inactive lifestyles.<sup>32</sup>

Other barriers to exercise are identified that have been reported in previous studies. Time factors and lack of physical support are stated as hindrances.<sup>21,27,33</sup> The environment is also one of the barriers, such as unpredictable weather, quiet residential areas, and lack of appropriate infrastructure, which hamper the drive to exercise.<sup>34,35</sup> Pain during or after exercise is also one of the results of physical activities that respondents dislike.<sup>34,36</sup> Therefore, information on proper exercise practices to avoid or reduce pain can benefit the respondents.

Majority of the respondents prefer to exercise 3–5 times a week, 10–30 minutes per session, and group activities as the type of exercise. Social support plays an important role in physical activity engagement.<sup>34</sup> As the social support received increases, the changes in physical activity engagement also become easier to see.<sup>37</sup> Thus, the social engagement aspects of exercise need



consideration in designing future exercise programs or modules.

Male students prefer to exercise 3–5 times a week, while the majority of female students prefer to exercise 1–2 times a week. The results support previous findings that compared with women, men usually have higher rates of physical activity.<sup>38,39</sup> The present study also finds that the more senior the respondents are, the higher exercise frequency they prefer. By contrast, previous studies report that students' exercise frequency tends to decline as their seniority increase.<sup>27,40,41</sup> The possible reason is the nature of tahfiz study wherein the more senior the students become, the more chapters of Quran they have memorized. As such, these students have more available time to spend on exercise.

Notably, one-on-one in-depth interviews are comparatively better than focus group discussions. The reason is that respondents can better express their points of view. To the best of our knowledge, this is the first study to investigate the motivations, barriers, and preferences toward exercise, specifically among tahfiz students in Malaysia. However, given that this study is carried out during the MCO period, where physical meetings were restricted, the interviews are completed over phone calls. This approach may hinder the depth of the interview because the respondents may lose interest during the session. Moreover, the interview is carried out at a well-established institution that is financially supported by the government. Thus, the findings of this study may not be applicable to the rest of the self-funded tahfiz institutions.

## CONCLUSIONS

This study unravels five themes as motivating factors and six themes as barriers to exercise. The motivation themes include body health and fitness, psychological wellbeing, appearance, physical support, and enforcement. Meanwhile, aversion to exercise, time, commitment, discomfort, no motivation, and the environment constitute the barriers to exercise. This study also reveals that tahfiz students in Darul Quran prefer group exercises, moderate intensity exercise 3–5 times a week, and 10–30 minutes per session. Addressing these factors can better enable the students to practice an active and meaningful lifestyle. Thus, the information gathered from this study could help exercise educators and practitioners in designing effective exercise modules for tahfiz students.

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## CONFLICT OF INTEREST

The authors report no competing interests.

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