

Chapter 3 – Results

This section shows the type of exercise (aerobic or anaerobic) and its duration per week.

Table 1

Mean and standard deviation scores for type of exercise and duration of exercise (Main Effects).

Variable	Mean	Standard deviation
Aerobic	44.94	7.69
Anaerobic	46.55	11.17
+ 150 Minutes	48.42	9.27
60-150 Minutes	48.66	5.40
Less than 60 Minutes.	44.50	6.64
No Exercise.	38.00	11.63

Table 1 shows the greater scores on the Warick Edinburgh well-being scale was greatest in the +150 minutes variable and poorest score was the no exercise variable. A two-way ANOVA was carried out and showed the following results:

A significant main effect for Exercise Duration – $F(3,45) = 4.172$, $p < .011$, $\eta^2 .218$ with +150 minutes duration producing better scores from the Warick Edinburgh well-being scale than no exercise.

A significant main effect for Type of exercise – $F(1,45) = .077$, $p = .783$, $\eta^2 .002$ with the anaerobic variable producing higher scores on the Warick Edinburgh well-being scale.

Table 2

Mean and standard deviation scores for the interaction between type and duration of exercise.

Variable	Mean	Standard deviation
Aerobic / +150 Minutes	46.16	8.58
Aerobic / 60-150 Minutes	47.63	5.51
Aerobic / Less than 60 Minutes	44.83	6.60
Aerobic / No Exercise.	39.00	10.56
Anaerobic / + 150 Minutes	50.12	9.97
Anaerobic / 60-150 Minutes	51.50	4.50
Anaerobic / Less than 60 Minutes	42.50	9.19
Anaerobic / No Exercise.	36.50	14.66

Table 2 shows that the highest score on the Warick Edinburgh well-being scale was for anaerobic exercise for 60-150 minutes a week (mean- 51.50) and the lowest score was in the anaerobic group that did not exercise (mean- 36.50). Duration of exercise X type of exercise revealed a significant interaction $F(3, 45) = .472, p < .703, \eta^2 .031$. This shows that the well-being scores were affected by the duration of exercise with 60-150 minutes in the anaerobic condition produced the best well-being score.

Familiarization phase

Numerous participants have associated exercise with mental health and wellness, highlighting its beneficial effects on mood, stress reduction, and self-esteem. However, many participants found it difficult to include exercise in their busy lifestyles due to restricted time and a lack of energy. When it came to exercising, preferences varied: some people enjoyed the accountability and motivation that came with working out in groups or pairs, while others preferred working out alone to focus. Overall, time and social variables had a significant impact on involvement in exercise, despite the fact that it was acknowledged to be good for both physical and mental health.

Table 3

Themes and quoted keywords from the analyzed questionnaire

Theme	Quoted keyword	Question / participant
Self-perception and mental well-being	"Definitely, makes you feel good physically and mentally."	Question 8, participant 3
	"Whenever I go for a walk or hike outdoors, I feel so much more relaxed and positive about myself."	Question 8, participant 12
	"Yes, it makes me feel better about my body image."	Question 8, participant 44
	" Yes- makes me feel more positive and more productive in my day-to-day life".	Question 8, participant 38

Barriers to exercise	"I don't exercise due to lack of time."	Question 7, participant 11
	" i did participate in exercise...then stopped as the gym I was at was getting expensive."	Question 7, participant 14
	" I don't participate in heavy exercise due to severe knee pain and osteoarthritis in my knee as its too painful."	Question 7, participant 28
	" Hard to get myself motivated."	Question 7, participant 8
Personal preference in exercise	"Group, helps motivate me."	Question 10, participant 51
	" I need to be alone...to complete my sessions without distractions and get into the heads pace."	Question 10, participant 19
	" I prefer to do it as a pair as you have each other to push to your best potential and become better."	Question 10, participant 14
	" Prefer to be alone as I feel too embarrassed to exercise with others."	Question 10, participant 28
Physical health and fitness goals	" To better my performance on the football pitch."	Question 7, participant 12
	"Help towards my weight loss goal."	Question 7, participant 17
	" Keep fit, lose weight."	Question 7, participant 42
	"To gain muscle."	

Chapter 4- Discussion.

Self-perception and mental well-being

Several participants associated exercise with a range of benefits, including the social aspect, a way to clear their minds of stress, and the "feel-good" sense of achievement afterward. A recurring theme was how exercise positively affected their mental well-being. For instance, participant 24 said, "It clears my thoughts, and I feel focused and relaxed after exercise." This suggests that physical activity helps with mental relaxation and enhances focus. Similarly, participant 19 shared, "I use the gym to deal with day-to-day stress," indicating that exercise can help reduce stress and improve mental clarity by releasing endorphins, which boost mood and help the body and mind reset. Additionally, participant 12 noted, "Exercise is a good mood booster and makes me feel more energized." This suggests that exercise triggers the release of endorphins, chemicals that promote happiness, while also increasing blood flow and oxygen to the muscles, which helps individuals feel more energized (Golen & Ricciotti, 2021). This is supported by Mahindru et al. (2023), who suggested that exercise promotes the production of neurotransmitters like endorphins, which produce feelings of pleasure and satisfaction, which can improve your general well-being and quality of life.

Furthermore, participants also mentioned that they engage in exercise to improve their self-perception. For instance, participant 47 stated that they exercise "to feel good about my appearance." This suggests that exercise has a significant impact on both our physical and mental well-being. Regular physical activity leads to improvements in strength, fitness, and appearance, all of which can contribute to a greater sense of self-worth. Similarly, participant 1 highlighted "confidence" as their reason for exercising. This demonstrates the "feel-good feeling" associated with exercise, which is linked to the release of endorphins. When participants notice physical changes, such as weight loss or improved posture, they experience a sense of accomplishment, further enhancing their self-perception and overall well-being. Iwon et al. (2021) supported this, noting that individuals who are more active tend to have a more positive body image and higher self-esteem.

In addition, the social aspect of exercising was another frequently mentioned reason for participation. When participant 16 stated, “I love the social side of training,” it suggests they experience a sense of belonging and community. This feeling of connection with others likely enhances their sense of well-being, as they are surrounded by individuals with similar goals and interests, who can encourage and motivate one another. Likewise, participant 32 noted, “time to be with friends in a supporting team sport environment.” By being part of a group with shared ambitions, they create a secure, non-judgmental space that allows the individual to experience the “feel-good” effects of exercise, gaining a sense of purpose and stability from their teammates. This is supported by Hovland et al. (2023), who previously mentioned that exercise can enhance social interaction and contribute to improved mental well-being.

Barriers in exercise

Whilst conducting the analysis, the researcher noted a consistency with lack of time and motivation when it came to barriers faced in exercise. Participant 30 stated, “not enough hours in the day”, this suggests how difficult it may be to make exercise a priority when other obligations, such work, family, or personal commitments take up most of their time. It illustrates how people do not appear to have enough time to fit exercise in, even when they are aware of its advantages. Likewise, participant 15 stated, “find it difficult to make time and see it as a chore”. This also suggests that they have a busy lifestyle, where they are not able to incorporate exercise into their routine. However, they also referred to exercise as a ‘chore’ which suggests that the participant views it as an obligation or task to be completed rather than something that brings them joy or relaxation. Additionally, participant 7 stated, “hard to get myself motivated”, this suggests that the participant may be struggling with mental issues such as stress as this can make it difficult to find the energy, hard to focus on goals or decreased enthusiasm. This is supported by Herazo-Beltrán et al. (2017) who previously suggested that lack of time and lack of motivation was one of the highest prevention indicators in exercise.

Furthermore, another barrier that prevents participation in exercise would be injury. Participant 18 stated, “mobility issues and pain”. This suggests that their inability to move or discomfort prevents them from exercising. Muscle strains or chronic illnesses like arthritis can all cause pain, which can make activity uncomfortable or even dangerous. Therefore, in order to avoid

making their condition worse or creating more pain, the person avoids exercising. Similarly, participant 23 stated, “I do not participate in heavy exercise due to severe knee pain and osteoarthritis.” It indicates that they avoid strenuous or high impact exercises as it might aggravate their symptoms or create greater pain. The fact that only two participants stated injury as a barrier for exercise, this supports Herazo-Beltrán et al. (2017) as they mentioned previously that injury was the least frequent barrier within exercise.

Moreover, another barrier to exercise would be accessible funds for gym membership. Participant 12 stated, “the gym I was at was getting expensive” and participant 23 stated, “limited funds to join a gym”. Both these participants suggested that funding for gym membership was a barrier that they faced, which suggests that cost of the membership was no longer accessible, which prevented them from attending the gym. However, this barrier should not prevent participation, as there are plenty of alternatives to choose from that do not require membership. This might suggest the reason why this was not a barrier within Herazo-Beltrán et al. (2017) study as it does not prevent participation within exercise.