

STUDENT FEEDBACK FORM

This section details the *extent* to which the assessment criteria are demonstrated by you, which in turn determines your mark. The marks available for each category of skill are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Generic Assessment Criteria	Marks available	Marks awarded
1. Engagement with Literature Skills		
	10	
2. Knowledge and Understanding Skills		
	25	
3. Cognitive and Intellectual Skills		
	25	
4. Practical Application Skills		
	20	
5. Transferable Skills for Life and Professional Practice		
	20	

Assessment Mark (Assessment marks are subject to ratification at the Exam Board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)	Late Submission Penalties (tick if appropriate)		%
	Up to 1 week late (40% Max)		
	Over 1 week late (0%)		

University of Wales Trinity Saint David

BSc. Health, Nutrition and Lifestyle

BMHN5003 – The Psychology of Exercise and Physical Activity

Assignment 2 (Report)

Motives and barriers that prevent regular physical activity among adults including university students (Participant B), along with the impact Covid-19 may have had in this regard.

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1.0 Introduction / Result

Despite the extensive research that links exercise to the prevention and control of many chronic diseases and conditions such as diabetes, obesity and heart failure; many still do not exercise in line with the recommended guidelines (Ebben and Brudzynski, 2008). An interview was conducted with a full time female undergraduate student to determine her motives and barriers to regular physical activity and whether COVID-19 had any impact on these. This student will be further referred to as Participant B. Participant B is between 25 – 30 years of age, works part-time and has a pre-teen son. Details on her motives and barriers were extracted from the interview and presented in the table below. Appendix A gives the full transcript of the interview.

Table 1. Participant B's barriers and motives based on responses

Factors	Barrier indication	Motives indication
Health	"times when I feel like I have to do it...just to stay healthy"	"to maintain a healthy weight...keep...cardiovascular system healthy"
Time	"depending on how busy my week is in terms of school"	
Family	"those that don't exercise kind of demotivates me cause while I'm doing they're just enjoying life"	"few of my family part take in physical activity and it does give me motivation"
Social	"there are days when I rather be alone doing it by myself...chances are you will be distracted...talking with them and stuff..."	"there are other times when I would rather group"
Enjoyment		"once it's sport related, I tend to enjoy more"

Environment	“ gym can be intimidating ...”running faster than you....coming more times a week than you and thy’re achieving the goals that you want” “it can be intimidating and discouraging. So definitely don’t do this” “restrictive ...always inside of a building”	"if I'm outside, I'm like, I feel a bit more free"
Job		“There was a particular job being physically active was a requirement”
Other priority	“family commitment”	

Participant B indicated that exercise is important to her and considers it to be something that needs to be done “because it keeps us fit, helps us to maintain a healthy weight and keeps our bodies such as our cardiovascular system healthy especially as we age”. However, only “sometimes” does she think that she meets the recommended guidelines. Participant B used to be “very active” in the past where she exercised “five days a week for at least 4 hours a day”. This was done mainly because of a job she was interested in and that she “needed to lose the weight” as she was obese. Although Participant B also played PE and tennis in school, she only “jog at least twice a week” at present.

Participant B “tend to enjoy” exercise more if it is sport related or involves “being in the pool” as she likes swimming. As shown in *Table 1*, Participant B enjoys exercising in a group but also likes exercising by herself on some occasions. She prefers the outdoors as it makes her feel “more free” and not as “intimidating and discouraging” as the gym or as “restrictive” as indoors. She also prefers to exercise in the morning to “get fresh air”, “less traffic” and “less distraction”. Participant B did not find technology to be a motivation to exercise but found “you tubers a life saver” as they allowed her to “put on a video and work out to the video inside my room” when

she didn't want to go outside. Her past and present motivations are more or less the same except for fitness because "plans changed", which is in referral to the job she was pursuing.

There is no medical condition that prevents her from exercising regularly. She indicated that she is "healthy as a horse". As reflected in *Table 1*, time, family commitment and feeling that she has to exercise to keep healthy as some reasons Participant B does not exercise regularly but she believes that she will be able to exercise more once she "finish school". She indicates that it will give her "more time at home" and "wouldn't have assignments to focus on". Participant B has access to a gym but has mentioned that she does not like the environment and agreed that the workload at school does not permit her to go.

In relation to COVID-19, her exercise involvement "was more" but due to a change in location I was exercising somewhat less". She stated that "COVID did not affect my ability to exercise because we had no restriction and we could have done precisely whatever we wanted".

1.1 Evaluation of results in light of previous research

Ebben and Brudzynski (2008) found that college student in the US were not exercising to guidelines. When it was asked what can make them be more involved in exercise, they expressed the need to have more time and less school work. As with Participant B, she found that between work and family life, finishing school will permit her more time to exercise as she would have no assignment to focus on. However, is it possible that this barrier is more associated with females? There were 66% females in the study by Ebben and Brudzynski (2008). Pauline (2013) voiced the need to consider gender in motivation and barriers. This study found that males are motivated to exercise by competition along with the achievement of strength and endurance. On the other hand, females are generally motivated by weight management, appearance and positive health as

seen with Participant B. Other studies found that these are common across gender but research continues to find a positive relationship between motivation for exercise and gender.

Egli et al. (2011) found that males are more intrinsically motivated than females. Pauline (2013) stated that men are more likely to find time to exercise regardless of time constraint than their female counterparts. Most research appear to support this theory except for some Brazilian studies such as that of Molanorouzi, Khoo and Morris (2015) that found little differences in motivation across gender. Irregardless of the differences these studies have found, body image can be a motivation and barrier to physical activity.

Participant B expressed that she preferred to exercise outside because places such as the gym can be “intimidating and discouraging”. Coulter (2021) has noted that as inspiring as gyms can be along with the benefits they can help provide, individuals can easily be prevented from achieving their goals due to many distractions. The lack of enthusiasm to carry out physical activity may come from “the presence of hardcore gym regulars, exercise fanatics or beautiful people who engender negative social comparison. Participant B stated that “a gym can be intimidating because “other people are around...they running faster than you or somebody might be coming more times a week than you and they’re achieving goals that you want to... so definitely don’t do this”. “Enjoyment has been linked more strongly to sport participation than to physical activity overall” (Aaltonen et al., 2013).

The only consistent motivation that is enjoyable for Participant B if her past and present relationship is compared is being involved in a sport such as tennis or swimming. She also likes the outdoors because it makes her “feel a bit more free to do whatever”. This is in accordance with Duranso (2019) who established that outdoor exercise helps to improve self-efficacy and has major impact on one’s well-being. The similar themes in previous research and these current findings that we will discuss further in the following section is self-efficacy, self-determination theory and the transtheoretical model.

1.2 Relation of findings to current behavior change theory

The findings from this interview are suggestive that Participant B may not be exercising regularly because she is mostly extrinsically motivated. Buckworth et al. (2013) indicates that the less intrinsically motivated an individual is the less likely they are to adhere to exercise. Despite the possible mediating factor that Participant B has relocated and is studying full time, the only motive that changed was her wanting to be fit for a job she once pursued.

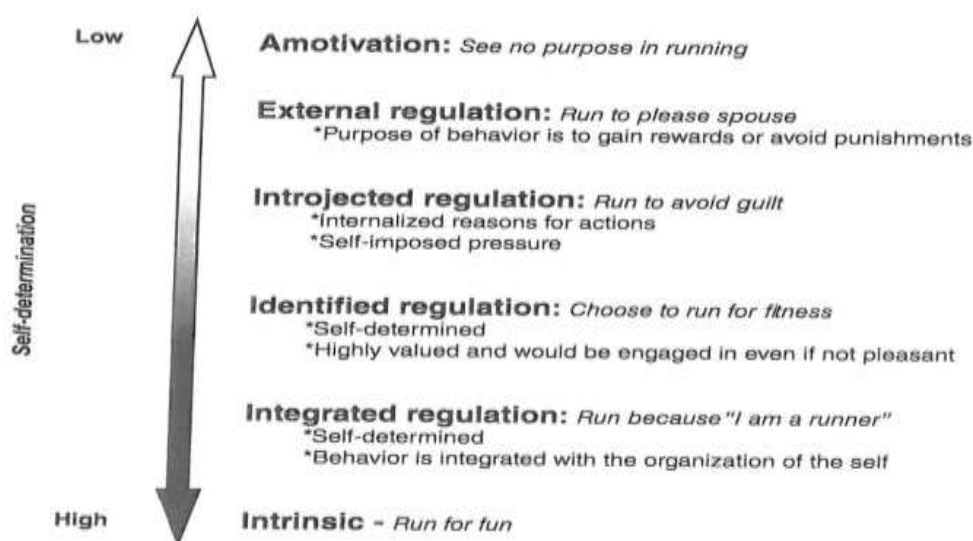


Figure 1. Self-determination continuum

Looking at this extract from Buckworth et al. (2013), it can be said that in the past Participant B's motivation for exercise was mainly externally regulated. However, because she still exercises to keep healthy her motivation can be deemed to move further along the scale to identified regulation. This is so because she understands the benefit of exercise and does it to obtain these benefits. Then why is she not exercising regularly? Participant B mentioned that she sometimes dislikes exercise because she feels that she has to do it to remain healthy and keep away from diseases. This can be interpreted as guilt which makes her motivation now introjected. The other times that Participant B enjoys exercise is when it relates to a sport or involves the pool as she likes to swim. It may be possible that should she have access to a pool or the opportunity to take part in a sport she will exercise more regularly as it is what she enjoys.

There may be interpretation differences; however, Participant B's attitude towards exercising in a gym can be seen as a result of having low self-efficacy in the given situation. Self-efficacy can be described as one's belief in their ability to carry out a task to achieve a particular goal (Bandura, 1997). When she said "other people are around...they running faster" and that she found it difficult to see others achieve the goals that she wants to, it shows that she may not be as confident (affect state) in her ability which causes intimidation as a result. Liu et al. (2018) suggested "that students with high self-efficacy ...tend to be more physically active despite facing numerous obstacles ... pressure from examination....and coping with studies". Nevertheless, it is good that Participant B still exercises.

Based on the transtheoretical model, she is at the stage of preparation. The preparation stage of the transtheoretical model is where an individual intends to exercise in less than a month or have started to exercise but below the criteria (Buckworth et al., 2013). The criteria is said to generally be more than 20 minutes of exercise a day for 3 or more times a week at a moderate intensity. Liu et al. (2018) propose the use of interventions that utilize approaches based on the stage an individual is at as it can help to increase physical activity participation, adherence and chance of relapse reduction.

1.3 Suggested approaches to elicit behavior change for Participant B

Time constraint was a major issue for students participating in exercise (Van Dyck et al., 2015 and Liu, K.T. et al., 2018) and leisure sports (Othman et al., 2022). The lack of time varied from travel to and from campus and part taking in other non-exercise related activities. Participant B is in the preparation stage of change toward exercise and it is generally recommended that individuals at this stage be assisted in developing and executing an achievable "action plan". As Pauline (2013) also suggested, individuals should be taught how to incorporate physical activity into their schedule. Participant B mentioned that YouTube helped by allowing her to exercise in her room when she did not want to go outside. She can try this means more often. Participant B

may also check if there is a swimming pool near her she can access that might encourage her to go swimming often or join a sports club she may find fun since she enjoys sport related activities. This is supported by Jeon et al. (2014) who suggested that self-efficacy is a factor that contributed to the transition from the preparation stage to that of the action stage. They further advised that in increasing self-efficacy it is necessary to encourage persons to select an exercise of their own.

In terms of the intimidation that is sometimes felt in a gym setting, Coulter (2019) suggested that the usage of one's cell phone in the gym can aid in filtering out potentially negative distractions. Participant B may also explore the option of exercising with someone who is intrinsically motivated and can cheer her on. A study by Scarapicchia et al. (2013) showed that verbal priming can result in contagious motivation and may be a possible channel to increase self-efficacy. In this study

In this study, 42 healthy females were randomly assigned to exercise at a self-selected pace on thread mills. Unknowingly next to them were confederates who gave intrinsic verbal primes to one half and extrinsic verbal primes given to the other half. All the participants in the group that received the positive verbal primes continued to exercise over the study time, whereas most of them who received the extrinsic primes stopped when the time was up. Only 6 of the 21 in the extrinsic verbal primes continued to exercise.

1.4 Ideas for future research in this area

From the studies covered, an area for future research will be to investigate ways in which the intrinsic motivation of an inactive persons or irregular exercisers can be awakened to promote positive behavioral change.

Another area that can use more attention if possible would be explore how likely females who are at the preparation stage are to adhere to exercise if permitted to carry out physical activities based on their respective likes and enjoyment over a 12 month period.

Word count: 1995

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Appendix

Appendix A

Said prior to interview

Thank you for agreeing to participate in this research project. As part of this study I am talking to individuals about their experiences of exercise and physical activity.

The interview contains several parts that will discuss your experiences of exercise and physical activity. The results from this study will be used as part of a piece of coursework for a psychology module within my degree programme. Please remember that all the information you provide is completely anonymous and your name will not be linked to your responses. When writing up this work I may select quotes from this interview to illustrate important points, but your identity will be protected. In order to ensure a complete and accurate account of your responses, this teams meeting will be recorded.

As a participant you have certain distinct rights:

This interview is about your experiences of participating in exercise and physical activity, and as such if you feel uncomfortable about answering any of the questions, then you are free to decline to answer or ask for the interview to be stopped. The purpose of this interview is to learn about your experiences of exercise and physical activity, and as such, there are no right or wrong answers to the questions within the interview. I hope therefore, that you will respond in a clear and straightforward way. If there are any questions you do not feel comfortable answering or if something is not clear, please let me know. If you do not want to enter into discussion about a particular topic any further, just say “no comment” and we can move on. If you have questions, please feel free to ask them at any point.

Important: During the interview I will be asking about your experiences of exercise and physical activity which may go back many years. I will also be asking about your motivation and barriers to exercise since that time. Please feel free to take your time when recalling any aspect of these experiences; and do not hesitate to include anything that you believe to be important.

This may include things such as relationships, family or work. If you are unable to recall an event, please let me know rather than guess.

Before we progress on to the interview do you have any questions?

Thank you once again for your participation.

Throughout this transcription the text in **bold** will be the interviewer speaking, therefore the participant will be presented in plain text.

Recording starts.

✓ **Do you consider exercise as something that needs to be done?**

Yes.

It's very. **Why?**

Because it keeps us fit, keeps us to maintain a healthy weight and keeps our Bodies such as our cardiovascular system healthy especially as we age.

✓ **OK, is participating in exercise something that is important to you given that reason?**

Yes it is.

Why's that so, because of those benefits or other benefits?

Well, yeah, because of those benefits and also there was a particular job that I had in mind, and physical, being physically fit was a requirement. So that also played a role in that decision.

✓ **Alright, are you aware of the current recommended guidelines regarding physical activity?**

Yes I am.

What?

Is 3.

Go ahead.

At least 16, 16 minutes I think.

ahh

three to five times a week and two days of strength training.

At what intensity and what type of exercise?

Moder, moderate to um, moderate to **Vigorous** Vigorous intensity

And what type of exercise?

Mainly cardio. Well aerobic, aerobic, anaerobic? One of them. I don't know. Whichever one uses oxygen but like cardio and like resistance training twice a week which would fall under strength training.

✓ **Okay, do you think that you meet these requirements?**

Not all the time. Sometimes.

Depending on how busy my week is in terms of school, family commitments, stuff like that.

✓ **OK.Um, do you presently take part in any form of physical activity or exercise?**

Yes, I jog at least twice a week, right now.

✓ **Okay, can you tell me about your past relationship with exercise?**

OK, so about three years ago I was exercising five days a week for at least 4 hours a day, which included cardio, resistance, all of the above.

Well.

So that would have been my relationship with exercise. I was very active.

Was that because of the job that you were looking at or the benefits that can be gained from it?

It was mainly because of the job I was looking at, but I was also obese, well overweight and I needed to lose the weight.

Okay, what about in school? Did you do like PE in school?

Yep, I.

✓ **Does any of your family party can exercise? Does that encourage you in anyway?**

Doesn't encourage you?

So in school I did PE, but I also played a sport I was a tennis player?

Few of my family part, part take in physical well in exercise and it does give me motivation then. Well the latter part which is those that don't exercise kind of demotivates me cause while I'm doing they're just enjoying life so it can be demotivating.

Okay.

- ✓ **So do you enjoy exercise itself or you just do it because of the benefits?**

Sometimes I enjoy it.

What makes you?

The times when I see you like have to do it, I don't enjoy it.

Okay, what makes you feel like you have to do it? What type of situations?

Weight control, healthy Cardiovascular system just to stay healthy and keep away diseases.

Okay, so me what makes you want to do it? What makes you enjoy it then? What type of exercise do you enjoy doing?

Urm, playing sports, being in the pool, tennis, which I haven't done for a while.

Okay.

So once it's sports related, I tend to enjoy more rather than actual gym exercise.

- ✓ **So when performing exercise, do you rather do it in your group or by yourself?**

Hmm, hmph.

And why?

It's 5050 with that cause there are days when I rather be alone doing it by myself and there are other times when I would rather group because it tends when you're doing it with groups. It's sometimes motivates you, especially when other people are a bit better than you at something, but at the same time, if you're exercising, then a group of people that you know, chances are you will be distracted, your they're talking with them and stuff, so it's half, half.

- ✓ **Okay. What type of location do you enjoy doing exercise in outside, gyms, by yourself? Your own space, on the beach?**

Outdoors, definitely outdoors. For me it, as long as its outdoor it can be outdoor by a park on the road, on the main road running.

So it doesn't matter if it's a green space, as long as it's outside?

As long as it's outside yeah.

What about inside that you do not like?

I just feel like gyms are a bit restrictive.

In terms of space?

Not just space. I mean you're always inside of a building. For me it feels restricted because I'm literally always inside of a building and if I'm outside, I'm like I feel a bit more free to do whatever I want and a gym can be an can be intimidated because other people are around you and somebody might be on the thread mill and they're running faster than you or somebody might be coming more times a week than you and they're

achieving the goals that you want to so it can be intimidating and discouraging. So definitely outdoor.

✓ **OK. Alright, So what time of day do you prefer to exercise and why?**

Early morning. Well, because of my current location. Now early morning is best. You get fresh air. There's a less traffic on the road. There's a less distraction. It's just you and nature.

✓ **Okay, has the development in technology encouraged you to exercise at all in any way, you know the fitness apps, watches?**

Definitely not

No?

Demotivating, I don't know. But YouTube, YouTube has been a life saver four days when I don't want to go outside

Okay.

✓ **So when we compare your past physical activity to what you are currently doing now, has your motivation changed in anyway or it's more or less have been the same?**

Hmm, the aspect of getting a job, the job that requires physical fitness, that part that Demotivation has dropped because plans changed basically.

Well apart from that I would say it's still somewhat the same, somewhat.

Yeah, because you do it because you know that it's good for you, right?

Yeah, but I don't get it without often as I like because of work school, commit, family commitments.

✓ **Okay, do you have any medical condition that's also adds to the reason why you can't exercise to the guidelines?**

No mam healthy as a horse.

Healthy as a horse.

✓ **Okay, So what do you think would be able to help you or what change in situation can help you to exercise more regularly to the guidelines.**

Probably when I finish school.

Yeah, that's that's just it.

After school?

Do you have access to the gym at school or is it because, well, the workload at school?

well workload and time, yeah.

Okay, but even after you finish school, I think you did mention school and home?

Is it that with school it would give you one once you've finished, it will give you more time at home you don't have to answer that question if you don't wish to.

Yes, there will definitely be more time at home cause I wouldn't have assignments to focus on.

✓ **OK.**

How about the recent pandemic? Has that affected your participation in exercise in anyway? Like how would you compare your exercise routine before and after

COVID or during? Ahh. So before it was more but then due to a change in location. I was exercising somewhat less than I was previously, but more than I am currently. But COVID did not affect my ability to exercise.

Because we have no restrictions, we could have done precisely whatever we wanted.

OK.

I think that brings us to the end of our interview.

✓ **How do you feel that the interview went?**

Went well.

✓ **And did you feel that you were able to tell everything that you wanted to?**

Yes mam.

✓ **Are you unhappy with any of the questions that I ask?**

No mam.

✓ **Did you think that a led or influenced your answers in anyway?**

Pardon.

✓ **Did you think I led or influenced your answers in anyway?**

No mam.

Alright, thank you so much for your time today.

Thank you so much as well. Alright.

End of recording.