An investigation into an individual's experiences and perception regarding the impact of exercise on physiological and psychological well-being: An open-ended questionnaire study

Abstract

This was a qualitative review and thematic analysis of an open-ended questionnaire, targeting the impact both physiological and psychological of exercise on well-being. The aim of this investigation was to gather an accurate number of codes and themes through the thematic process, analysing every sentence and word. This questionnaire consisted of fifteen open-ended questions targeting why do you exercise, good and bad experiences, initial thoughts on the subject, perception of the self and others, benefits and preferred styles. The importance of this report is that it details the positive effects exercise has on an individual with the themes and most prominent categories, indicated through the thematic process being 'Escapism', 'Responsibility','Expressiveness' and 'Beneficial'. Findings indicated that exercise has a major heightened effect on well-being and self-esteem levels. In aid of future research, it can support those who suffer from mental health issues, with evidence of exercise being a natural remedy.

Introduction/Literature review

Exercise is often a structured, planned but also repetitive attribute, with often a particular difficulty target or aim of improvement or maintenance of one's physical fitness (Caspersen et al,1985). Physical fitness is the set of attributes that are health-related or set skills, which are gained from exercising (Corbin et al, 2000). Physical activity on the other hand, is defined as several body movement gained from skeletal muscles, which results in releasing energy (Frontera et al, 2015). It can be categorised into occupational activities, sporting, conditioning or household activities (Kohl et al, 2019). This frame work of 'Exercise' was compared to one's wellbeing in this investigation, there are multiple definitions of well-being within academic literature. Although, scholars state that wellbeing is an 'elusive' element (Crego et al, 2020) is also broad and multidimensional (Prilleltensky et al, 2015). The most prevalent definition of wellbeing, is that it is the current state of mind that is content, happy or comfortable (Barley & Lawson, 2016).

Exercise can be a high attribute and a major consideration to one's positive well-being (Rodrigues et al, 2022). One of many is the support it gives with stress management (Seaward, 2017). Stress is one of the leading issues associated with mental and physical health and contributes to someone's poor well-being (Sirois et al, 2016). Exercise is often recommended to work as an intervention during stress reduction (Kisner et al, 2017). Stress activates a range of physiological responses creating changes in the nervous and immune systems, giving an increased level of cortisol, heart rate, and blood pressure (Devi et al,2019). In Europe, of every 100,000 educators in the UK, 2,100 of them suffer from stress. With 595,000 employees stated that they are a stress sufferer, with 15.4 million days of work are not catered for due to this issue (Redín et al, 2020).With the high likelihood of stress in various environments, there is a need for more interventions and stress-reduction methods. Evidence has demonstrated the effectiveness of exercise in reducing stress, with interventions including a set of planned, repetitive and structured physical activities. This could also work as an adaptive strategy with the reduction process, including endurance, balance, flexibility and strength management (Kisner et al, 2017). The most prevalent exercises used in sports literature with stress management, are endurance/aerobic exercises, these are running, dancing, walking or swimming (Bernstein et al, 2017). The effectiveness of exercise on physical well-being and health, evidently works in stress reduction and its related manifestations, reducing anxiety and depression symptoms (Sharon-David et al, 2017). Exercise also works as a way of escapism and freedom, by distracting the mind, by focusing on the activity at hand and works as a distraction towards negative thoughts and worries, supporting its benefits to mental wellbeing (Mikkelsen et al, 2017) .

Individuals who are physically inactive, have been reported to have higher rates of morbidity or healthcare expenditures (Gaetano, 2016). Through a review by Mahindru et al (2023) investigated the affect exercise had on mental health and wellbeing with an attempt to understand the physiological and psychological mechanisms which are beneficial to mental health. The most significant effect of physical exercise through this review was emphasised on greater self-concept and body image with regular exercise, improving the function of the hypothalamus-pituitary-adrenal, with further benefits to mood improvement and improved quality of life. There was evidently a positive correlation with further evidence that exercise therapy is recommended to cater towards the challenges faced by mental health and wellbeing.

The physical well-being and stress levels of an individual changes between individual and team sports, the role of responsibility is heightened with team sports, with the need of more team-work and close consideration to any mistakes as it could contribute to the overall performance of the game (Zanin, 2018). Comparably to individual sports or attending a gym for example, you work on yourself and only gain responsibility from your own actions, and do not have that necessary stress for anyone else (PĂUNESCU & Popescu, 2016). The importance of an exercise routine is highlighted with individual sports, especially integrating it into a routine if catering to mental illness or to increase happiness (Garvey et al, 2023). A routine is especially prevalent if an individual attends a gym, the ability to control what you do and to change if needed is easily done with a gym routine (Kaushal & Rhodes, 2015).

However, attending a gym can be a great motivation to take part in exercise as you can set targets and goals (Jeong et al, 2023) or can be a pressure and can cause guilt (Harman, 2016). An individual also may rely on an exercise routine to document individual progress and performance, and can control any changes that are needed (Howley & Thompson, 2022). A study by Whiteman-Sandland et al (2018) heightened the feelings of gym friendliness and community on an individual, with its positive impact on self-concept and well-being levels, with the sense of belongingness emphasised. However, a further study by Power (2020) explains the impact that gym reliance can have, relying on going to exercise to be happy and improve self-esteem, which can contribute to poor mental health and disordered eating. Discorded eating can be influenced by a controlled intake of food or those which are specific and excessive need for exercise.

The rationale of this report is to critically analyse an open-ended questionnaire detailing an individuals perceptions of exercise on physiological and psychological well-being, through a thematic analysis. The study details the positive impact exercise has on well-being and mental health on the participant. Carried out through a qualitative analysis, which allowed questions to be asked surrounding the responses and added depth to the ability to ask questions (Cleland, 2017). To conclude, the aim of this study is to investigate the impact exercise has on an individuals well-being levels, both psychological and psychologically. The questions are aimed at differed aspects of the individuals perceptions towards exercise and has targeted both categories of this focus.

Method/Methodology

Design

A non experimental qualitative approach was taken using a thematic analyse of a fifteen question questionnaire, detailing the impact (physiological and psychological) of exercise on the well-being of an individual.

Participants

The questionnaire was emailed to and completed by a single level 5Applied Psychology student

The data was analysed by a level 5 Applied Psychology student in aid of their sport and exercise psychology assignment.

Please see appendix 4 for consent form

Please see appendix 5 for information sheet

Materials

A computer, or any electronic device which enables access to the internet and emails was needed for access to the questionnaire. A consent form, information sheet was showcased to the participant, as well as a debrief sheet at the end after completion.

For analysis, responses were three pages long, which was A4 printed. A pen and highlighter is needed to make additional notes and locate key information.

Please see appendix 1 for questionnaire (clean).

Please see appendix 2 for questionnaire (edited with codes).

Please see appendix 4 for consent form.

Please see appendix 5 for information sheet.

Please see appendix 9 for debrief sheet.

Procedure

Please see appendix 8 for detailed procedure of the study.

Ethical Considerations

Please see appendix 7 for ethical considerations in this study.

Results/Discussion

My initial views upon reading the responses from the questionnaire is that the participant heavily relies on exercise for a sense of happiness and is a sporty individual. Some aspects of the questionnaire made me feel happy for the participant as they mentioned the gym being a way to escape and a way to express feelings. However, there was further parts that highlighted the difficulties they had faced and why they started exercising, which highlighted they used to heavily compare themselves to others and want to maintain their weight. They are still self-conscious but do not rely on the judgement of others anymore and has a more positive mind-frame about themselves. Furthermore, there was mention of having a excessive routine of having to go to the gym and eating healthy to prevent guiltiness, this could be concerning but seems to be in control to what the responses mention. The participant has grown up with a sport invested family, which showcases they have always been surrounded by this lifestyle and feels accomplished by winning and beating personal bests which entails they are determined, yet they could be always striving for another goal.

Table 1 – Summary Table

A summary table of themes, keywords and page/question numbers as supportive evidence

Theme (Q) and line number	Quote Keywords	Page, Question
1. Escapism	"I refer to the **gym as my therapy**"	Page 1, Q1, Line 1/2
	"**distract** myself from the outside world"	Page 1, Q1, Line 4
	"Stress **relief**"	Page 1, Q2, Line 1
	"mind **at ease**"	Page 2, Q6, Line 3
	"Going to the gym I will simply **feel better**"	Page 2, Q7, Line 4
	"**distacts my mind** from any negative thoughts"	Page 2, Q12,Line 7
2. Responsability	"you let the team **down**"	Page 1, Q3, Line 3
	"you feel **responsible**"	Page 1, Q3, Line 5
	"**representing** my school"	Page 1, Q5, Line 1
	"**represent** my county"	Page 1, Q5, Line 4
	"the smallest mistake, you could potentially **mess up** the entire game"	Page 2/3, Q11,Line 2/3

3. Expressiveness	“I exercise to **express** my feelings”	Page 1,Q1,Line 1
	“I am a very **competitive** person“	Page 1,Q3, Line 1
	“constantly worrying about my weight and appearance”	Page 2, Q6,Line ¾
	“I feel **exhausted** but glad I made myself do it”	Page 2, Q7, Line1/2
	“**feel guilty** for not training”	Page 2, Q9, Line 3
	“ I should be doing more, but it is **not physically possible**”	Page 2, Q9, Line 4
	“I **no longer** hate looking at my body”	Page 3, Q12, Line 4
	“exercise **helps hugely** as a natural way of dealing with mental health”	Page 3, Q12,Line 6/7
	“by having a gym membership and paying in advance I feel that this **motivates** me“	Page 3, Q14, Line 1/2
4. Beneficial	“from a young age, I feel that I **benefitted** from exercise"	Page 1, Q4, Line 6
	“psychological and physical benefits”	Page 2, Q6, Line 1
	“ **benefits** my mental health”	Page 3, Q13, Line 1
	“**benefits** my well-being too”	Page 3, Q13, Line 1
	“makes my life **worth living**”	Page 3, Q13, Line 2
	“it helps to **improve** my mood”	Page 3, Q13, Line 3
	“short-term and long-term"	Page 3,Q13, Line 3

Discussion

1.Escapism

Through question one, on line 1 and 2, the participant details that they refer going to the gym, to gain a better mind-frame "I refer to the gym as my therapy". Mikkelsen et al (2017) highlighted that exercise can be a key factor in the benefit of mental well-being, using exercise as a distraction from posading emotions "distract myself from the outside world" Q1, Line 4 and "distracts my mind from any negative thoughts" Page 2, Q12, Line 7. The participant sees the gym as a safe space and somewhere that isn't linked to daily life. Further supporting this statement, the participant comments page 2, Q7,Line 4 "going to the gym I will simply feel better" and that when leaving the gym it leaves "mind at ease" Page 2.Q6, Line 3 by not focusing on bad elements. The participant also mentions it being a way of "stress relief" supporting studies from Rodrigues et al (2022) and Seaward (2017).

2.Responsibility

Zanin (2018) heightened the affect stress has within team sports, the participant also highlighted that they experienced higher levels of stress and responsibility when others were involved "the smallest mistake, you could potentially mess up the entire game" and displayed feelings of low self-esteem when "you let the team down" and "you feel responsible". Compared to PĂUNESCU & Popescu (2016) who showcased lower stress levels when dependent on yourself in sports and higher levels of self-accomplishment, the participant states that "representing my school" and "represent my county" made them feel fulfilled and happy with themselves. The participant details having a strict exercise routine and preferring individual sports, which makes tracking progress easier to do and benefits the ability to have a control of their actions (Howley & Thompson, 2022).

3.Expressiveness

Throughout the questionnaire responses, the participant was very expressional about how they felt regarding exercise and it's impact "I am a very competitive person" with a clear statement "I exercise to express my feelings" further supporting the study by Mikkelsen et al (2017), they made it clear that they had dealt with body image issues in the past but still "constantly worrying about my weight and appearance" also stating that after doing exercise "I feel exhausted but glad I made myself do it". Power (2020) details the harm gym reliance can have on an individual with it leading to disordered eating and body dysmorphia, the participant sometimes "feel guilty for not training" and often thinks "I should be doing more, but it is not physically possible" which demonstrates they are aware of this dangerous affect reliance could have, also stating "I no longer hate looking at my body" which showcases her self-esteem is a lot better than it once was with "exercise helps hugely as a natural way of dealing with mental health". Furthermore she finds motivation from having a gym membership "by having a gym membership I feel that this motivates me" supporting the study by Whiteman-Sandland et al (2018) highlighting the importance of gym community.

4.Beneficial

The participant finds exercise as a way to escape, enjoyment and an overall positive experience for themselves and has done for a number of years "from a young age, I feel that I benefitted from exercise" suggesting they have always been a sporty individual, they have gained a number of benefits "psychological and physical benefits", "benefits my mental health", "benefits my well-being too" with a strong statement that it "makes my life worth living" suggesting that exercise is a big part of their everyday life. In addition, they highlight "it helps to improve my mood" supporting a study by Mahindru et al (2023) that demonstrates the impact exercise has on mood improvement and improved quality of life, the participant has also gained "short-term and long-term" benefits from exercising.

Implications, Limitations and Future research

This analysis detailed the positive affect exercise has on an individual, supporting the study by Rodrigues et al (2022). The implications of this analysis was that exercise can have a range of different positive affects, from the sense of gym community (Whiteman-Sandland et al, 2018).This was stated by the participant that they had attended the same gym for a number of years, since a young age and was aware of everyone who went to that gym and that it was a friendly environment, highlighting they would feel more anxious in a place not similar. Furthermore, the participant also highlights the ability to develop a gym routine (Kaushal & Rhodes, 2015) and its importance, however, it was mentioned that if they were to not attend the gym, that guilt would be felt, suggesting that it could be a strict routine that they have. Moreover, this analysis showcased that exercise gives the ability to set goals and targets to work towards (Jeong et al, 2023). The participant highlights that this was useful as they had the ability to control what they were doing, to document their progress or what needed to be removed or even reworked. There was evidence of exercise promoting the participants mental health and well-being, supporting the statement of (Mahindru et al, 2023) with evidence of higher levels of happiness displayed (Garvey et al, 2023). Its ability to cater towards stress reduction was also significant (Seaward, 2017). The participant mentions the importance of aerobic exercises when it comes to stress relief, which is also supported by the literature (Bernstein et al, 2017). This analysis has successfully showcased several different aspects in which exercise can contribute to wellbeing, but due to a small population of participants it is difficult to cater for future research.

Limitations include that this questionnaire was only emailed to one participant giving only a one person's opinion to the fifteen questions asked, which is a small sample size and there is no other responses to compare to. These responses could easily be different by various participants, as everyone has a different experience with exercise, meaning this study would be difficult to use to make a big statement as the evidence is very sparse and can't necessarily be everyone's opinion. However, prior research articles in the public domain catered for a bigger population of participants. Some question's gained greater detail than others which made some harder to analyse. Furthermore, if this questionnaire was given to someone who disliked exercise or didn't at-all, responses may be hard to gather. In aid of future research, this study will help gain an insight to the benefits that exercise has on well-being from an individual's perspective. However, careful consideration is needed to the participant type and background for ethical reasons, regarding trigger content. The age and gender of the participant is not stated.

Conclusion

In conclusion, exercise can have a wide range of different impacts on an individual both physically and psychologically. The current research apposed towards sports and exercise and the benefit it has towards mental well-being is diverse and there is wider understanding of it used as a treatment towards mental health. The participant relies on exercise as an escape from reality but not to a point of damaging state. However, they have demonstrated they control what they do in their actions in the gym and through specific food intake. This could be concerning but there is no damaging content mentioned through the responses and it seems under safe control and understood by the participant, with higher engagement with exercise in aid of overall positivity and body-image. This analysis successfully answered the research question by exercise supporting an individuals overall well-being.

References

Bernstein, E. E., & McNally, R. J. (2017). Acute aerobic exercise helps overcome emotion regulation deficits. *Cognition and emotion*, *31*(4), 834-843.

Barley, E., & Lawson, V. (2016). Using health psychology to help patients: Promoting wellbeing. *British Journal of Nursing*, *25*(15), 852-855.

Crego, A., Yela, J. R., Gómez-Martínez, M. Á., & Karim, A. A. (2020). The contribution of meaningfulness and mindfulness to psychological well-being and mental health: A structural equation model. *Journal of Happiness Studies*, *21*(8), 2827-2850.

Corbin, C. B., Pangrazi, R. P., & Franks, B. D. (2000). Definitions: Health, fitness, and physical activity. *President's Council on Physical Fitness and Sports Research Digest*.

Cleland, J. A. (2017). The qualitative orientation in medical education research. *Korean journal of medical education*, *29*(2), 61.

Caspersen, C. J., Powell, K. E., & Christenson, G. M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public health reports*, *100*(2), 126.

Devi, P. C. B., Reddy, M. A., Zahan, O., & Sharma, J. V. C. (2019). The effect of stress on human life. *Adalya Journal*, *8*(9), 792-811.

Gennings, E. K., Brown, H., & Hewlett, D. (2021). Constructing a definition: Adolescent wellbeing from the perspective of the child and expert. *International journal of wellbeing*, *11*(1), 69-88.

Gaetano, A. L. T. A. V. I. L. L. A. (2016). Relationship between physical inactivity and effects on individual health status. *Journal of Physical Education and Sport*, *16*(2), 1069-1074.

Garvey, L., Benson, A. C., Benger, D., Short, T., Banyard, H., & Edward, K. L. (2023). The perceptions of mental health clinicians integrating exercise as an adjunct to routine treatment of depression and anxiety. *International Journal of Mental Health Nursing*, *32*(2), 502-512.

Harman, A. (2016). Exercising moral authority: The power of guilt in health and fitness discourses. *IJFAB: International Journal of Feminist Approaches to Bioethics*, *9*(2), 12-45.

Howley, E. T., & Thompson, D. L. (2022). *Fitness professional's handbook*. Human Kinetics.

Jeong, Y. H., Healy, L. C., & McEwan, D. (2023). The application of goal setting theory to goal setting interventions in sport: A systematic review. *International review of sport and exercise psychology*, *16*(1), 474-499.

Kohl III, H., Murray, T., & Salvo, D. (2019). *Foundations of physical activity and public health*. Human Kinetics Publishers.

Kisner, C., Colby, L. A., & Borstad, J. (2017). *Therapeutic exercise: foundations and techniques*. Fa Davis.

Kaushal, N., & Rhodes, R. E. (2015). Exercise habit formation in new gym members: a longitudinal study. *Journal of behavioral medicine*, *38*, 652-663.

Mikkelsen, K., Stojanovska, L., Polenakovic, M., Bosevski, M., & Apostolopoulos, V. (2017). Exercise and mental health. *Maturitas*, *106*, 48-56.

Mahindru, A., Patil, P., & Agrawal, V. (2023). Role of physical activity on mental health and well-being: A review. *Cureus*, *15*(1)

Prilleltensky, I., Dietz, S., Prilleltensky, O., Myers, N. D., Rubenstein, C. L., Jin, Y., & McMahon, A. (2015). Assessing multidimensional well−being: Development and validation of the I COPPE scale. *Journal of Community Psychology*, *43*(2), 199-226.

Power, K. (2020). *Disordered Eating and Compulsive Exercise in Collegiate Athletes*. Temple University.

PĂUNESCU, M., & Popescu, L. (2016). COPING IN TEAM SPORTS VERSUS INDIVIDUAL SPORTS. *Discobolul-Physical Education, Sport & Kinetotherapy Journal*, (44).

Redín, C. I., & Erro-Garcés, A. (2020). Stress in teaching professionals across Europe. *International Journal of Educational Research*, *103*, 101623.

Rodrigues, F., Faustino, T., Santos, A., Teixeira, E., Cid, L., & Monteiro, D. (2022). How does exercising make you feel? The associations between positive and negative affect, life satisfaction, self-esteem, and vitality. *International Journal of Sport and Exercise Psychology*, *20*(3), 813-827.

Sharon-David, H., & Tenenbaum, G. (2017). The effectiveness of exercise interventions on coping with stress: Research synthesis. *Studies in Sport Humanities*, *22*, 19-29.

Sirois, F. M., & Pychyl, T. A. (Eds.). (2016). *Procrastination, health, and well-being*. Academic Press.

Seaward, B. L. (2017). *Managing stress*. Jones & Bartlett Learning.

Sharon-David, H., & Tenenbaum, G. (2017). The effectiveness of exercise interventions on coping with stress: Research synthesis. *Studies in Sport Humanities*, *22*, 19-29.

Frontera, W. R., & Ochala, J. (2015). Skeletal muscle: a brief review of structure and function. *Calcified tissue international*, *96*, 183-195.

Whiteman-Sandland, J., Hawkins, J., & Clayton, D. (2018). The role of social capital and community belongingness for exercise adherence: An exploratory study of the CrossFit gym model. *Journal of health psychology*, *23*(12), 1545-1556.

Zanin, N. R. J. (2018). *The impact of leadership on virtual team satisfaction and viability: the role of performance monitoring and team work engagement* (Doctoral dissertation).

Appendices

Contents

Appendix 1..... **Questionnaire questions clean version**

Appendix 2.....**Questionnaire questions after analyse with codes**

Appendix 3.....**Hand written code list**

Appendix 4.....**Consent form**

Appendix 5.....**Information Sheet**

Appendix 6.....**Application for ethical approval**

Appendix 7.....**Ethical Considerations**

Appendix 8.....**Procedure**

Appendix 9.....**Debrief Sheet**

Appendix 1 - Questionnaire questions clean version

An investigation into an individual's experiences and perception regarding the impact of Exercise and Well-Being (Physiological and Psychological).

Z1. Why do you exercise?

Z2. When you hear the word 'exercise' what is the first thing that comes to your mind?

Z3. Do you have any negative experience with exercise?

Z4. Why did you start to exercise?

Z5. Can you describe an experience with exercise that had a great impact on you?

A6. What benefits do you gain from exercising?

A7. How do you feel after exercising?

A8. Is self-perception a big aspect in taking part in exercise?

A9. Does seeing other people exercise, make you feel the need to participate also?

A10. Do you think an exercise routine is important?

C11. Do you prefer to participate in team sports or individual sports-why?

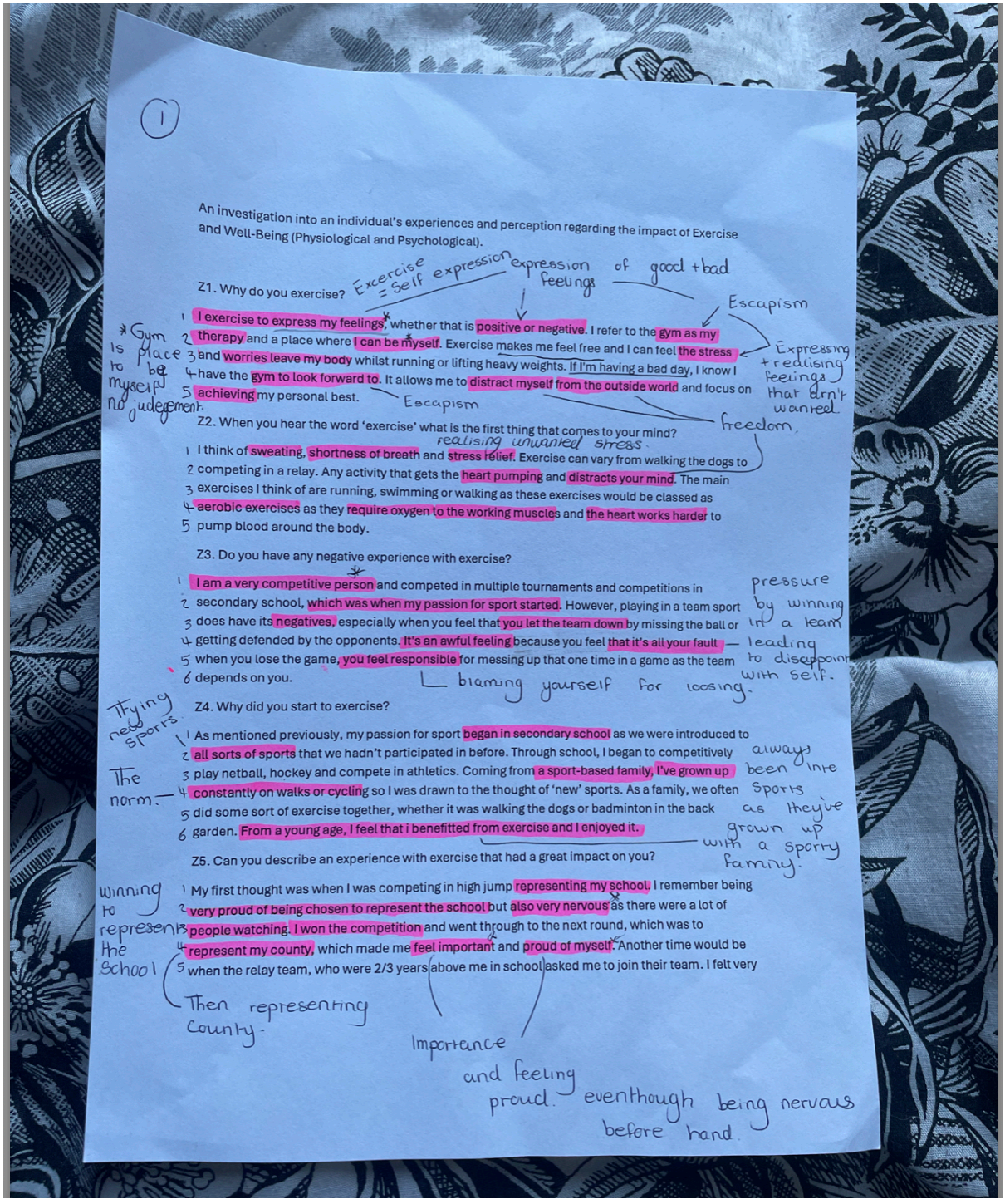
C12. Do you feel that exercise impacts on your mental health? If so, how do you feel it does and can you give examples.

C13. How does exercise affect your well-being?

C14. How do you motivate yourself to participant in exercise?

C15. When you are active, how do you feel about other people seeing you?

Appendix 2 - Questionnaire questions after analyse with codes



(1)

An investigation into an individual's experiences and perception regarding the impact of Exercise and Well-Being (Physiological and Psychological).

Z1. Why do you exercise?

I exercise to express my feelings, whether that is positive or negative. I refer to the gym as my therapy and a place where I can be myself. Exercise makes me feel free and I can feel the stress and worries leave my body whilst running or lifting heavy weights. If I'm having a bad day, I know I have the gym to look forward to. It allows me to distract myself from the outside world and focus on achieving my personal best.

Z2. When you hear the word 'exercise' what is the first thing that comes to your mind?

I think of sweating, shortness of breath and stress relief. Exercise can vary from walking the dogs to competing in a relay. Any activity that gets the heart pumping and distracts your mind. The main exercises I think of are running, swimming or walking as these exercises would be classed as aerobic exercises as they require oxygen to the working muscles and the heart works harder to pump blood around the body.

Z3. Do you have any negative experience with exercise?

I am a very competitive person and competed in multiple tournaments and competitions in secondary school, which was when my passion for sport started. However, playing in a team sport does have its negatives, especially when you feel that you let the team down by missing the ball or getting defended by the opponents. It's an awful feeling because you feel that it's all your fault when you lose the game, you feel responsible for messing up that one time in a game as the team depends on you.

Z4. Why did you start to exercise?

As mentioned previously, my passion for sport began in secondary school as we were introduced to all sorts of sports that we hadn't participated in before. Through school, I began to competitively play netball, hockey and compete in athletics. Coming from a sport-based family, I've grown up constantly on walks or cycling so I was drawn to the thought of 'new' sports. As a family, we often did some sort of exercise together, whether it was walking the dogs or badminton in the back garden. From a young age, I feel that i benefitted from exercise and I enjoyed it.

Z5. Can you describe an experience with exercise that had a great impact on you?

My first thought was when I was competing in high jump representing my school. I remember being very proud of being chosen to represent the school but also very nervous as there were a lot of people watching. I won the competition and went through to the next round, which was to represent my county, which made me feel important and proud of myself. Another time would be when the relay team, who were 2/3 years above me in school asked me to join their team. I felt very

(2) Acceptance from 'idols' made them feel higher and they acknowledged their skills.

honored as they were older than me and I looked up to them. Both experiences made me feel good about myself and made me realize that i doubted my capability and talent at the time.

didnt believe in themselves

A6. What benefits do you gain from exercising?

I would say that i gain both psychological and physical benefits. I do exercise to release stress, boost my mood or simply to make myself happy by releasing endorphins. By exercising, I get to maintain my weight, which puts my mind at ease as I'm constantly worrying about my weight and appearance. — A constant worry? Is this bought on by the norm? pressure to excercise?

expression — feeling happier.

A7. How do you feel after exercising?

pressuring self.

Depending on the exercise and how hard I pushed myself. But most of the time, I feel exhausted but glad I made myself do it. Sometimes motivation prevents me from doing exercise, but I constantly tell myself how happy I'll be with myself from going to the gym. If I go to the gym in a 'down' mood or had a stressful day, I know by going to the gym I will simply feel better just from lifting weights or cycling on the bike.

pressuring even though they are held?

relying on gym to feel good.

gym helps bad day — resolving to gym?

constant self image.

A8. Is self-perception a big aspect in taking part in exercise?

For me, I would say it is quite important as I rely on my appearance to see my gains and to see if I'm making any progress. As previously mentioned, I am contious about my weight and like to maintain it in a healthy way by eating healthy and going to the gym 4 days a week. If I feel rubbish by looking at my appearance it motivates me to work harder towards my goals in the gym and up my protein intake to increase my muscle mass.

If not happy with appearence pressure to work harder?

* gym 4 Days * watching weight?

A9. Does seeing other people exercise, make you feel the need to participate also?

I would say it does. As a powerlifter you need time to allow your body to rest and adapt to changes made but sometimes if I watch short videos on tiktok or on instagram of people training it makes me feel guilty for not training. However, I know by over training this puts the body at risk from injury, but it does cross my mind that I should be doing more but it is not physically possible without injury.

motivation by other people can lead to guilty

Their thinking of costs to body which is good.

injury is in mind.

A10. Do you think an exercise routine is important? Yes

routine is beneficial but can be excessive.

A routine in your sport is very important. Again, from my perspective, it allows you to track your progress and to slowly increase your weight when you're ready to. I feel that it motivates you when you have a routine that you enjoy participating in. For example, I know I train legs and hamstrings on Fridays, and I look forward to it all week. I perform the same exercises each week and know what to expect next in my routine, which allows me to track my progress but also change the weight if it's too easy/hard that day.

good. no pressure

Track progress or if weights need to get heavier or lighter.

C11. Do you prefer to participate in team sports or individual sports-why?

I much prefer to participate in individual sports as I feel there's too much pressure when playing in a team sport. There's too many people relying on you and by making the smallest mistake, you

people pressure others in team sports.

3

more pressure with teams?

responsability!

No responsability for others in individual sports, you work for yourself, to please yourself, any mistakes can be learnt from.

at your own pace, no pressure.

could potentially mess up the whole game and you'd feel responsible. Whereas, participating individually, you can push yourself at your own pace and only have yourself to blame for anything that goes wrong. For example, in the gym, if i don't hit my personal best when i attempt a certain weight but fail to I can only blame myself. — learn from mistakes

C12. Do you feel that exercise impacts on your mental health? If so, how do you feel it does and can you give examples.

benefit

benefit

It definitely helps with mental health and makes a massive difference to your well-being. Being self-conscious about my weight gave me anxiety as I constantly felt huge compared to everyone else. But by losing weight and maintaining a healthy weight it impacts your everyday mood as well as I no longer hate looking at my body, If anything I'm proud. I'm proud of the progress I'm making as I have an ideal image in my head of what I want my body to look like and I'm slowly getting there. Similarly, from suffering with mild depression, exercise helps hugely as a natural way of dealing with mental health by releasing endorphins. It also helps to distract my mind from any negatives thoughts I get.

self-conscious.

gym helped mental health

gym helped self perception?

however working toward ideal image.

self-pressure?

exercise helped with depression.

C13. How does exercise affect your well-being?

benefit.

Exercise benefits my mental health, this links with the benefits of my well-being too. By having targets and goals in the gym, it gives me something to aim for and makes my life worth living and by achieving my goals it helps to improve my mood, short term and long-term. Short term as I'm happy to be at the gym, happy to achieve my goal and happy to due to the release of endorphins. Long term, I can see my hard work paying off and can see progress in both my physique and performance.

goal setting

long T vs short T

Short + long term benefits

C14. How do you motivate yourself to participant in exercise?

Some days it's harder than others to find motivation. By having a gym membership and paying in advance I feel that this motivates me as I know I've already paid so if i dont go, i would have wasted money. Another aspect of motivation would be knowing how I feel after going to the gym, just having that thought alone makes me want to go to have that buzz and freedom that i feel from exercising. Before going to the gym, I tend to watch videos of people performing different weight exercises, which gives me new ideas to include in my routine and motivates me to go try them.

gym membership

by not going wasting money, is this an excuse to have to go to the gym?

watching videos

new routines

gym new ideas

C15. When you are active, how do you feel about other people seeing you?

It depends on the location. For example, I've been going to the same gym for years, so it tends to be the same faces. My gym community is a friendly and non-judgmental place where I feel comfortable as I know I can have small chats with regular people between sets and they'd help if I needed it. However, I would feel anxious going to a new gym to train as I wouldn't know anyone or where any of the equipment was. My anxiety is bad when it comes to new situations, I don't like change. Therefore, if i was to go to a new gym to do my everyday routine, I would feel self-conscious and feel that everyone was staring at me.

Same Surroundings

Same people

Same friend ships

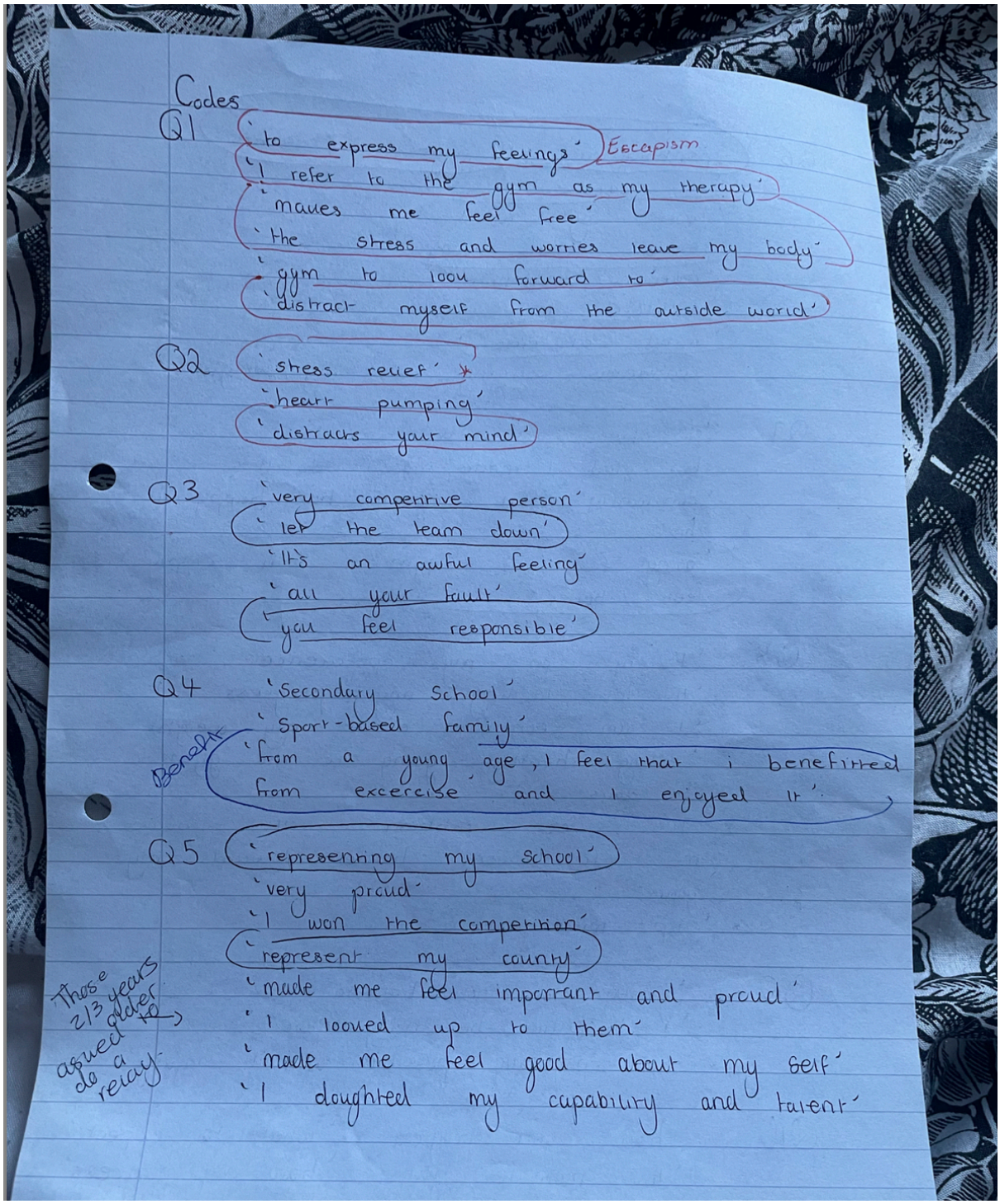
pressure games - also mind self-conscious.

but change influences self-conciousness and not being aware of where everything is.

non-judgemental place

gym community benefit.

Appendix 3 - Hand written code list



Q6. Benefits

'psychological and physical benefits'
'to release stress'
'boost my mood'
'make myself happy'
'releasing endorphins'
'maintain my weight'
'mind at ease'
'constantly worrying about my weight'

Q7 'I feel exhausted'
'but glad I made myself do it'
'constantly tell myself how happy i'll be'
'going to the gym i will simply feel better'

Q8 'I rely on my appearence'
'If Im making any progress'
'I am conticus about my weight'
'eating healthy - going to the gym 4 days a week'
* 'If I feel rubbish ... it motivates me to work harder towards my goals'
* 'up my protein'

Q9 'guilty for not training'
'I should be doing more'
* 'not physically possible without injury'

Q10 'track your progress' 'what to expect'
'It motivates you' 'track my progress'
'enjoy participating in'
'Same exercises each week.
* 'change the weight if its too easy/hard'

Q11

'too much pressure when playing in a team sport'

'too many people relying on you'

'smallest mistake you caused potentially mess up the whole game'

'you'd feel responsible'

'individually, you can push yourself at your own pace'

'only have yourself to blame'

Q12.

'helps with mental health'

'massive difference to your well-being'

'being self concious about my weight gave me anxiety as I constantly felt huge compared to everyone else'

'maintaining a healthy weight it impacts your everyday mood'

'I no longer hate my body, if anything I'm proud'

'a natural way of dealing with mental health.'

'distracts my mind'

Q13

Benefit

'benefits my mental health'

'benefits my well-being too'

'targets and goals'

'something to aim for'

Benefit

'makes my life worth living'

'improve my mood'

'short term and long term'

'happy to achieve my goal'

'see progress in both my physique and performance'

Q14

'Some days its harder'
'having a gym membership'
'motivates me'
'I know I've already paid so if I dont go, I would have wasted money'.
'how I feel after going to the gym'
'buzz and freedom'.
'watch videos'
'new ideas to include in my routine' 'motivates me to go try them'.

Q15

'depends on the location'
'the same gym for years'
'the same faces'.
'gym community is a friendly and non-judgemental place'.
'comfortable'
'I would feel anxious going to a new gym'
'I wouldnt know anyone'.
'My anxiety is bad when it comes to new situations, I dont like change'
'new gym' = 'self-conscious'
'feel that everyone was staring at me'.

Appendix 4 - Consent form

Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Centre for Psychology and Counselling

Study Consent Form

I understand that this research study is being carried out by a level 5 Applied Psychology Student for their assessment and that taking part in this study will involve filling out a questionnaire and sending it back to the researcher by email.

This questionnaire will take approximately 30 minutes to complete.

I understand that participation in this study is voluntary and I am free to withdraw participation during or at the end of the study without giving a reason. I understand that once I send the questionnaire back I will have 24 hours to withdraw my data. I am aware that if I have concerns about the study, I can discuss these concerns with the researcher at any time during or after the study. I understand that I will be provided with the contact details of the research supervisor at the end of the study, should I have any concerns.

I understand that the information I provide will be held confidentially and anonymously. These data will be stored till the researcher finishes writing up their report in accordance with the Data Protection Act.

I also understand that at the end of the study, I will be provided with a debrief form and the opportunity to discuss any issues with the researcher.

I understand that by filling out the questionnaire and sending it back to the researcher I give consent to the researcher to use the data provided by me.

Appendix 5 – Information sheet

Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Study Information Sheet

This document provides key information regarding the study and provides details about what will be expected of you as a participant. Therefore, please read this information carefully before providing consent to take part.

During this study you will be required to do the following:

- Complete a demographics form detailing your age and gender

- You will be taking part in a questionnaire study, focusing on the psychological and psychlogical impact excericise may have on a person
- Further instructions on how to complete this will be provided at the top of the questionnaire

- You will be emailed the questionnaire, once consent is given to the researcher

- Once consent is given, you will be presented with a list of 15 open-ended questions regarding the psychological and psychiological impact of excercise

- You will be expected to give strong reasoning behind your answers to the questions, which will then be analysed through the process of thematic analysis

- Once all the questions are answered in full, it will be emailed back to the researcher

At the end of the study, a debrief sheet will be emailed to you after the compliation of the quesstionaire.

If you feel uncomfortable about any questioning of this subject surrounding excercise, you are advised not to take part in this study.

If you have any questions surrounding the study, please ask the researcher prior to taking part.

If you are happy to take part in this study, please continue to the consent form and read carefully.

Appendix 6 – Ethics

APPLICATION FOR ETHICAL APPROVAL

RESEARCH STUDENTS

This form is to be completed by the student within **SIX** months for full-time students and **TWELVE** months for part time students, after the commencement of the research degree or following progression to Part Two of your course.

Once complete, submit this form via the ***MyTSD Doctoral College Portal*** at (https://mytsd.uwtsd.ac.uk).

This document is also available in Welsh.

RESEARCH STAFF ONLY
All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk , with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity.
Please see Checklist for details of process for different categories of application.

SECTION A: About You (Principal Researcher)

1	Full Name:					
2	Tick all boxes that apply:		Member of staff:	☐	Honorary research fellow:	☐
	Undergraduate Student	☒	Taught Postgraduate	☐	Postgraduate Research Student	☐

3	Institute/Academic Discipline/Centre:	Psychology and Counselling
4	Campus:	Carmarthen
5	E-mail address:	
6	Contact Telephone Number:	
	For students:	
7	Student Number:	
8	Programme of Study:	Bsc Applied Psychology
9	Director of Studies/ Supervisor:	Dr Stuart Jones

SECTION B: Approval for Research Activity

1	Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)		**YES** ☐	**NO** ☐	
				Date	
2	If Yes, please indicate source of approval (and date where known): ***Approval in principle must be obtained from the relevant source prior to seeking ethical approval***	Research Degrees Committee	☐		
		Institute Research Committee	☐		
		Other (write in)	☐		

SECTION C: Internal and External Ethical Guidance Materials

	Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.	
1	**UWTSD Research Ethics & Integrity Code of Practice**	☒
2	**UWTSD Research Data Management Policy**	☒
3	*[List any other relevant documents here]*	☐

SECTION D: External Collaborative Research Activity

If there are external collaborators then you should gain consent from the contact persons to share their personal data with the university. If there are no external collaborators then leave this section blank and continue to section E.

1	Institution					
2	Contact person name					
3	Contact person e-mail address					
4	Is your research externally funded?		**YES**	☐	**NO**	☐
5	Are you in receipt of a KESS scholarship?		**YES**	☐	**NO**	☐
6	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary	**YES**	☐	**NO**	☐
7		Employed	**YES**	☐	**NO**	☐
8	Is the research being undertaken within an existing UWTSD Athrofa Professional Learning Partnership (APLP)?	If YES then the permission question below does not need to be answered.	**YES**	☐	**NO**	☐
9	Has permission to undertake the research has been provided by the partner organisation?	(If YES attach copy) If NO the application cannot continue	**YES**	☐	**NO**	☐

Where research activity is carried out in collaboration with an external organisation

10	Does this organisation have its own ethics approval system?	**YES**	□	**NO**	□
	If Yes, please attach a copy of any final approval (or interim approval) from the organisation (this may be a copy of an email if appropriate).				

SECTION E: Details of Research Activity

1	Indicative title:	An investigation into an individual's experiences and perception regarding the impact of Exercise and Well-Being (Physiological and Psychological).		
2	Proposed start date:	26/02/2024	Proposed end date:	03/03/2024
	Introduction to the Research (maximum 300 words per section) **Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the points below:** • *Purpose of Research Activity* • *Proposed Research Question* • *Aims of Research Activity* • *Objectives of Research Activity* Demonstrate, briefly, how **<u>Existing Research</u>** has informed the proposed activity and explain • *What the research activity will add to the body of knowledge* • *How it addresses an area of importance.*			

3	**Purpose of Research Activity** For Level Five Applied Psychology students to complete a qualitative report as part of their assessment for the Sports and Health module. This will be an online questionnaire where one participant from the class will participate. Following participation in the task students will run a thematic analysis, analyse the data and write up the results using the APA report writing format. The study is based on the following literature. Trajković et al. (2023) review highlighted several studies that explored the experiences of individual's impacts of exercise and the benefits they gained from participation (Trajković et al., 2023). Jan Freddy Hovland et al (2023) conducted a study that explored how physical activity affects young adults with serious mental illness (SMI) and how these experiences affect how they perceive their own health and well-being. Their results suggested that engaging in physical activity is mostly seen by those with SMI as a meaningful activity that enhances their sense of wellbeing and improves their health. In continuation, this study demonstrates the value of adapted physical exercise as a resistive resource that can support enhanced mental health, social engagement, and a stronger sense of self, all of which can lead to a better capacity to handle stress (Jan Freddy Hovland et al., 2023). In relation to self-perception regarding exercise, Edwards et al., (2005) examined the physical and mental well-being of individuals who participate in sports, exercise, and other physical activities on a regular basis with a control group of non-participants. The main conclusions were that people who regularly exercised felt more in control of their own purpose, personal development, environmental mastery, positive interpersonal relationships, acceptance of who they are, proficiency in their sport, and conditioning than people who did not exercise. Compared to non-exercisers, regular exercisers also placed a higher value on strength, conditioning, sport, and physical appearance (Edwards et al., 2005). There is a large range of research within this topic, however, it does focus more on the psychological benefits rather than self-perceptions and how exercise makes people feel as a person. Consequently, the aim of the research is for the students to participate in someone from their class' study and independently analyse that individual's data from the questionnaire.

4	**Research Question** What are the positive and negative impacts of exercise on physical and psychological well-being? (this box should expand as you type)
5	**Aims of Research Activity** For a level 5 Applied Psychology student to carry out a study as part of their assessment with the aim to investigate the effects of exercise on physical and psychological well-being. (this box should expand as you type)
6	**Objectives of Research Activity** As part of their assessment level 5 Applied psychology student required to write up a qualitative report. The students will participate in another student's study and analyse the data independently. Through the study the student will analyse the data and explore the effects of exercise on physical and psychological well-being. (this box should expand as you type)
	Proposed methods (maximum 600 words) Provide a brief summary of all the methods that **may** be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here, but should instead describe how you intend to collect the data necessary for you to complete your project.

7	This study is done through a qualitative method of a questionnaire which is emailed to the participant to be completed, The participant will receive the information sheet, containing all information needed surrounding the study and consent form, at this stage the participant will make the researcher aware if they would like to take part or not, if not, the choice to withdraw is available. These will then be sent back to the researcher, the documents will be stored on a password protected computer in aid of confidentiality. If consent is given, the participant will have access to the questionnaire. The quesstionnaire involves answering fifteen open ended questions about the psychological and physiological impact exercise may have on a person. Once the questionnaire is completed, and results are sent to the researcher. Results will be analysed through a thematic analysis. Firstly, through this process, familiarisation with the transcripts of the questionnaire will be done, followed by coding the text to identify patterns in the data in order to group familiar responses together, continued by searching for themes in the text which is done by clustering key codes together to create key patterns in the data, once that stage is completed the review of the themes is done, this is completed by the researcher assessing the themes in the text to assure that they fit with the coded and entire data set. Once themes are identified, they are named and defined within a thematic analysis report (Clarke et al 2016) the report will highlight all the key processess through out the analyse and key themes and codes will be prominant. Reference list Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. *Routledge handbook of qualitative research in sport and exercise*, *1*, 191-205. (this box should expand as you type)
	Location of research activity Identify all locations where research activity will take place.
8	All research activity needed for this study will be done online. (this box should expand as you type)

	Research activity outside of the UK If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or vulnerabilities of participants. If you live in the country where you will do the research then please state this.
9	*(this box should expand as you type)*

10	Use of documentation not in the public domain: Are any documents **NOT** publicly available?	**NO**	☒
		YES	☐
11	If Yes, please provide details here of how you will gain access to specific documentation that is not in the public domain and that this is in accordance with the current data protection law of the country in question and that of England and Wales. *(this box should expand as you type)*		

	Does your research relate to one or more of the seven aims of the Well-being of Future Generations (Wales) Act 2015?	**YES**	**NO**
12	A prosperous Wales	☐	☐
13	A resilient Wales	☐	☐
14	A healthier Wales	☐	☐
15	A more equal Wales	☐	☐
16	A Wales of cohesive communities	☐	☐
17	A Wales of vibrant culture and thriving Welsh language	☐	☐
18	A globally responsible Wales	☐	☐
19	If YES to any of the above, please give details:		

	(this box should expand as you type)

SECTION F: Scope of Research Activity

	Will the research activity include:	**YES**	**NO**
1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☐	☒
3	Use of focus groups?	☐	☒
4	Use of participant diaries?	☐	☒
5	Use of video or audio recording?	☐	☒
6	Use of computer-generated log files?	☐	☒
7	Participant observation with their knowledge?	☐	☒
8	Participant observation without their knowledge?	☐	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.		
	Details of any other primary data collection method: (this box should expand as you type)	☐	☒

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

If there are no participants then do not complete this section, but go directly to section H.

	Who are the intended participants:	**YES**	**NO**
1	Students or staff at the University?	☒	☐
2	Adults (over the age of 18 and competent to give consent)?	☒	☐
3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	☒
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒
7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.		
	Details of any other participant groups: (this box should expand as you type)	☐	☒

	Participant numbers and source Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?	
10	How many participants are expected?	One participant. *(this box should expand as you type)*
11	Who will the participants be?	The participant will be a level 5 Bsc Applied Psychology student from University of Wales Trinity Saint David. *(this box should expand as you type)*

12	How will you identify the participants?	A random level 5 Bsc Applied Psychology student will be asked to take part in the study. As there will be only one participant no further identification needed. *(this box should expand as you type)*

	Information for participants:	**YES**	**NO**	**N/A**
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☐	☒	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
17	If the research is observational, will you ask participants for their consent to being observed?	☐	☐	☒
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			
	No written consent will be obtained as the questionnaire will be sent out by email along with the information sheet and consent form that will state that filling out the questionnaire and sending it back to the researcher means the participant gives consent. *(this box should expand as you type)*			

	Information for participants:	YES	NO	N/A
24	Will participants be paid?	☐	☒	☐
25	Is specialist electrical or other equipment to be used with participants?	☐	☒	☐
26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☐
28	If YES to any question, please provide full details			
	(this box should expand as you type)			

SECTION H: Anticipated Risks

	Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them. If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.		
1	**Full risk assessment completed and appended?**	**Yes**	☐
		No	☐
2	**Risks to participants** For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information		

	Risk to participants: 1. Participant may be concerned with having to complete a questionnaire on their experience with exercise and well-being. 2. The participant disclosing information about their well being and experience with exercise might trigger a negative emotion if they had a negative experience before (e.g. been bullied in a gym) 3. Due to the nature of the task the participant might feel they have no choice but to take part in the study. *(this box should expand as you type)*	*How you will mitigate the risk to participants:* 1. The participant will be made aware of the nature of the study and that it involves completing a questionnaire on their experience with exercise and their wellbeing. This will happen before agreeing to take part in the study. The researcher will also inform the participant that the data will be anonymised and no identifying features will be stored. 2. The participant will be made aware of the nature of the study and that it involves completing a questionnaire on their experience with exercise and their wellbeing. This will happen before agreeing to take part in the study. The researcher will also inform the participant that the data will be anonymised and no identifying features will be stored. 3. The researcher will clearly verbalise information prior to the collection of the data to reassure that no coercion is involved. The student will be informed that taking part in the study will have no effect on their academic progress and there is no right or wrong answers to the questions. This will be also noted in the debrief form. *(this box should expand as you type)*
3	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities	

	N/A - See point 2. *(this box should expand as you type)*	
4	**Risks to the investigator** For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest	
	Risk to the investigator: 1. Risks to the investigator could be emotional distress while reading the answers (e.g. negative experience with exercise). *(this box should expand as you type)*	*How you will mitigate the risk to the investigator:* 1. The researcher has options to choose from for the topic of their study. The researcher will choose a topic they feel comfortable working on, and they will be fully aware it can have answers that shows negative experience. *(this box should expand as you type)*
5	**University/institutional risks** For example: adverse publicity, financial loss, data protection	

	Risk to the University: 1. The reputation and integrity of UWTSD and the discipline of Psychology and Counselling could be endangered if the researcher or the participant do not adhere to codes of ethics and research protocols. 2. The data could be exposed, leaked or used for other purposes. *(this box should expand as you type)*	*How you will mitigate the risk to the University:* 1. The University Ethics and Integrity Code of Practice and the BPS Code of Ethics and Conduct and the Code of Human Research Ethics will be followed by both the researcher and participant at every stage of the study. 2. The collected data will be stored in an anonymised format in accordance with UWTSD Research Data Management rules and only used for the purpose of the proposed study. The data will be stored securely by the researcher. *(this box should expand as you type)*
6	**Environmental risks** For example: accidental spillage of pollutants, damage to local ecosystems	
	Risk to the environment: N/A *(this box should expand as you type)*	*How you will mitigate the risk to environment:* N/A *(this box should expand as you type)*

	Disclosure and Barring Service			
	If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	**YES**	**NO**	**N/A**
7	Does your research require you to hold a current DBS Certificate?	☐	☐	☒
8	If YES, please give the certificate number. If the certificate number is not available please write “Pending”; in this case any ethical approval will be subject to providing the appropriate certificate number.			

SECTION I: Feedback, Consent and Confidentiality

1	**Feedback** What de-briefing and feedback will be provided to participants, how will this be done and when?
	In line with the BPS ethics guidelines the participant will receive a debrief form after completing the questionnaire. This will provide more information about the study including the aims and the research question. The researcher and supervisor's contact details will be included if the participants have any concerns or questions after participating in the study. *(this box should expand as you type)*
2	**Informed consent** Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.
	As the study is part of a module assessment the students have been advised to participate in each other studies. The researcher will ask for verbal consent beforehand and will also provide the participant with a consent form that states that filling out the questionnaire and sending it to back to the researcher means the participant consent to take part of the study. The researcher will verbalise that participating in the study has no impact on the participant's academic progress, they have the right to withdraw their data in the next 24 hours after completing the study. *(this box should expand as you type)*
3	**Confidentiality / Anonymity** Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.
	The participant will not be asked to provide their names or any other personal information that could identify them. *(this box should expand as you type)*

SECTION J: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 “GDPR” and the Data Protection Act 2018 “DPA”)?	**YES**	**NO**
1	***“Personal data”*** *means any information relating to an identified or identifiable natural person (‘data subject’). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.*	☐	x
	If YES, provide a description of the data and explain why this data needs to be collected:		
2	*(this box should expand as you type)*		
	Does it involve special category data (as defined by the GDPR)?	**YES**	**NO**
3	***“Special category data”*** *means sensitive personal data consisting of information as to the data subjects’ –* *(a) racial or ethnic origin,* *(b) political opinions,* *(c) religious beliefs or other beliefs of a similar nature,* *(d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992),* *(e) physical or mental health or condition,* *(f) sexual life,* *(g) genetics,* *(h) biometric data (as used for ID purposes),*	☐	x
	If YES, provide a description of the special category data and explain why this data needs to be collected:		
4	*(this box should expand as you type)*		

	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	**YES**	**NO**
5	Manual files (i.e. in paper form)?	☐	☒

6	University computers?	☐	☒
7	Private company computers?	☐	☒
8	Home or other personal computers?	☐	☒
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☒	☐
10	“Cloud” storage or websites?	☒	☐
11	Other – specify:	☐	☒
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation:		
	Data collection will happen via a questionnaire in a word document. No names or any other identifying data will be collected therefore the data will be anonymous. The document will be stored on a personal laptop that is password protected and only the researcher has access to. The report will be stored on a personal laptop and on One Drive. The laptop and the One Drive account are both password protected and only the researcher has access to them. *(this box should expand as you type)*		

	Data Protection		
	Will the research activity involve any of the following activities:	**YES**	**NO**
13	Electronic transfer of data in any form?	☒	☐
14	Sharing of data with others at the University outside of the immediate research team?	☐	☒
15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☐	☒
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☐	☒
18	Publication of data that might allow identification of individuals?	☐	☒
19	Use of data management system?	☐	☒
20	Data archiving?	☐	☒
21	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and any international equivalents, where appropriate):		

	The participant will be required to send the completed questionnaire back to the researcher via email. The document will be saved under the name 'completed questionnaire' to the researcher's personal laptop and their Student One Drive account. It will have no indication about any of the participant's personal data. No name or any other demographic information will be recorded. *(this box should expand as you type)*		
22	List all who will have access to the data generated by the research activity:		
	Only the researcher will have access to the data. *(this box should expand as you type)*		
23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	The researcher. *(this box should expand as you type)*		
24	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		
	The researcher will store the data on a password protected laptop and password protected One Drive account. *(this box should expand as you type)*		
25	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtsd.ac.uk/). If so please explain. (*Most relevant to academic staff)*		
	(this box should expand as you type)		
26	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	**YES**	☒
27	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	**YES**	☒

SECTION K: Declaration

	The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants**.** In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	**Signature of applicant:**		**Date:**

For STUDENT Submissions:

2	Director of Studies/ Supervisor:		**Date:**
3	Signature:		

For STAFF Submissions:

4	Academic Director/ Assistant Dean:		**Date:**
5	Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☒	I have read the guidance notes supplied before completing the form.
☒	I have completed **ALL RELEVANT** sections of the form in full.
☒	I confirm that the research activity has received approval in principle
☐	I have attached a copy of final/interim approval from external organisation (**where appropriate**)

☐	I have attached a full risk assessment (where appropriate) *ONLY TICK IF YOU HAVE **ATTACHED A FULL RISK ASSESSMENT***
☒	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.
☒	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Academic Director.

RESEARCH STUDENTS ONLY

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (https://mytsd.uwtsd.ac.uk).

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk , with the title 'Ethical Approval' followed by your name.

~~**STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES**~~ should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

Appendix 7 – Ethical Considerations for this study

Ethical Considerations

The ethical considerations of this study needed to be carefully read prior to taking part in the questionnaire. Difficult subjects to discuss for the participant needed to be considered, anything of a sensitive or triggering nature needed to be closely acknowledged. Participants were encouraged to not complete the questionnaire if they find subjects surrounding exercise and well-being difficult to discuss, and to not take part in this study. No deception was involved in the study and the participant was able to read an information sheet (see appendix 5) and consent form (see appendix 4) prior to taking part, the right to withdraw was heightened prior to the beginning of the study. Once the study was completed, the participant was debriefed on the contents of the study and detailed that their responses could be withdrawn if they pleased, contact details of researcher were given also.

Appendix 8 - Procedure

Procedure

To begin, prior to the participant taking part, they were emailed a consent form and information sheet if they followed on to complete the questionnaire after reading the consent form and information sheet, this was confirmation of their consent (please see appendix 6 for ethical explanations) the questionnaire consisted of a fifteen question open-ended questionnaire, which detailed questions ranging from the perceptions, benefits and good and bad experiences of the participant surrounding exercise and it's impact on well-being (please see appendix 1 for questions).

Responses from the questionnaire were printed, which totalled to three pieces of A4 paper. The responses were read and the familiarisation stage of the thematic analysis began. This was completed by scanning the answers given by the participant five times prior to writing any notes on the questionnaire. When the contents of the fifteen responses were familiar, the text was then analysed again and additional notes were written on all pieces of paper, to the left and right of the text. This included beneath and above key phrases, sentences and key words were also highlighted using a pink highlighter pen during the process of initial familiarisation analyse. Once key text was highlighted, codes were conducted by classifying similarities in the responses. This is the time that notes were categorised in the text, this involved deep engagement with the responses and was demonstrated by semantic and latent codes. Displaying what the participant has stated followed by testing those to evolve underlying ideas, this process took three times of thorough review.

Once codes were conducted, the ability to gain themes was enabled (stage 3 in thematic analyse). This also needed to be a very thorough stage, it was completed by emerging relevant codes and encouraged those that were more complex. Confirming that those themes captured the data needed. Once the themes were successfully finalised and reviewed three times, phase 4 of thematic analyse began, by assessing the themes and making sure that they were suited to the codes and importantly if they worked well together, and that they showcased the initial point of research, this took five attempts as it is a very crucial step within this thematic analyse. Once the themes were concluded, this continued to the stage of interpreting and labelling them started. The names of the themes had to capture all the codes that they involved and importantly showcased the study aims. Once themes were named and suited well for the study, the beginning of inputting them into a table which clearly displays the theme, the definition and relevant evidence. Finally, to complete the analysis, it was concluded with the write up of the overall report.

Appendix 9 – Debrief sheet

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Y Drindod Dewi Sant
UNIVERSITY OF WALES
Trinity Saint David

Study Debrief Sheet

Study title: An investigation into an individual's experiences and perception regarding the impact of exercise and well-being?

Thank you for taking part in the study.

The aim of this study was to explore the experiences and perceptions of individuals regarding the impact of exercise and well-being. We specifically wanted to find out the effects of exercise on psycial and psychological well-being.

If you wish to withdraw your data from the study, you must tell the researcher now. After this, all your data will remain confidential, and we will not trace it back to you.

If taking part in this study has raised any questions, please speak to the researchers on or contact the academic supervisor – Stuart Jones s.a.jones@uwtsd.ac.uk

Thank you once again for taking time to participate in this study.

Student name

BSc Honours Applied Psychology