

Research in Action

[ECPS5006]

Portfolio of Competencies

Reflective essay

Research has never been a strong suit of mine. In fact, consistently it is an area that I always get low marks in. Personally, I do not think it is from lack of effort. Like many things such as riding a bike or playing chess, I am just not equipped for such a task. However, after taking the Research in Action module, I have enjoyed the process and I am very happy with what my group mates and I got to accomplish. As a person, I never thought that being a researcher was something that I wanted to do but after having such a good experience with this module, I am starting to waver into the thought of becoming one. Obviously such a decision should not be made so rashly however I am willing to see where this excitement will take me in the future with further research assignments back in Malaysia.

The first day I came into campus was my first day ever in class after coming from Malaysia to study here. I did not know whether it was just butterflies in my stomach or nervous jitters but Zoe did a good job reassuring not just me, but my group mates as well. Of course, assimilating into a new culture is never easy but Zoe always gave us the reassurance that we needed, often listening to us and giving feedback, reminding us to take breaks, and always putting up with our stupid ideas whenever we had one. Week after week, experiencing each class and module, this one became my favourite. I really enjoyed bantering and giving out my own ideas and thoughts about the research. My previous experiences with research has always just been looking up articles alone in my bedroom but this module forced me to work together week in, week out and it really made the whole experience enjoyable.

The good I found about the experience was most definitely the knowledge I gained from the module. For example, before this module I have never done a systematic review of the literature I use for my research assignments. I would usually go to Google Scholar and just search for any articles that are remotely close to the topic I am researching. However, learning how to navigate through the UWTSD library really helped in narrowing down our research topic and helped us gain insight further into what we are studying. As a bonus, I even found some articles that I personally find interesting and will definitely find time to read. That in of itself is something that I have never had before, the interest to read a whole research article front to back. Furthermore, I started applying the strategies I learned in Research in Action to my other modules in UWTSD. We often have exercises in the Individual Differences across the Lifespan module and in those exercises, we are to find psychological articles that are relevant to our topic for that week. I used the systematic review method that I learned in this module in those situations and I often come across really interesting articles. Having this knowledge has definitely impacted the way I do research. I am much more relaxed and have more curiosity than I ever have before.

Other than that, I really enjoyed the more relaxed approach that Zoe gave us. She made it clear from the beginning and that helped me and probably also my group mates adjust better and we certainly enjoyed it. I feel because of that, we were able to produce a much more high quality piece of work and one that I am very satisfied with. I had a good time doing everything I contributed to the research and I am glad that Zoe also facilitated my more creative side by approving the trailer for our research intervention. I certainly had a good time editing the video and it seems many of the lecturers enjoyed watching it too, as I have heard.

As I am reflecting on the good and the bad, I cannot really seem to fathom anything I genuinely dislike while taking this module. If anything, the most negative thing is that I cannot

continue taking this module in the future. I doubt I will get the same level of teamwork as I did in this module, as well as the level of tentativeness that Zoe gave us with our lecturers back in Malaysia but I will try to apply everything I have learned from this module and being here in general to my future studies back home.

I feel very grateful to be in this position. Though I have so much left to learn, the knowledge that I have gained from this module is infinitely valuable in my future studies. The path of being a psychologist is not at all easy. I even considered giving up that path entirely and potentially focus on something more creative or going into human resources. I was not really enjoying myself anymore after two years into degree as I felt like this line of work is not really for me. Having experience doing Research in Action here however, I have almost made up my mind. Wherever it takes me, I will continue this path for now and finish my degree with style, hopefully, and from there we will see. Personally, I do not like making plans far into the future just because there are a lot of extraneous factors that are involved in such a plan that I might be disappointed that it might not come true. But my plan for now is to hopefully take my Master's degree somewhere in Wales also. I love staying and it is such a shame that I will be leaving in a month's time. I have enjoyed it thoroughly and I really hope to come back here soon, whether that be in UWTSD however is still a mystery. If all goes well, hopefully I get to see the lecturers who have taught me so well for the little time I was here in the future.

**COMPETENCY ONE:
APPLIED RESEARCH -
COMPLETION OF RESEARCH
PROPOSAL**

Research Proposal

Research proposal (1,000 words overall)

Student Name and University ID number:	
Proposed Supervisor's name:	

Psychology Research Area (tick all that apply)

Social Psychology ☒	Developmental Psychology	Biological Psychology	Forensic Psychology
Health Psychology ☒	Individual Differences	Educational Psychology	Political Psychology
Cognitive Psychology	Clinical Psychology	Counselling Psychology	Occupational Psychology

Other: indicate briefly (not included in word count)

Proposed Study Design (tick all that apply)

Quantitative ☒	Experimental ☒	Applied UWTSD students	
Qualitative	Quasi Experimental	Focus G	
Mixed Methods	Applied (with external organisation)	Interviews	Lab-based study

If Applied, and involving an external organisation, please indicate your plans for gaining appropriate approvals from the organisation: (not included in the word count)

Other study design: indicate briefly (not included in word count)

We as a group decided on what area of research and the study design were. After some comments from Zoe, these were our final choices.

We also decided on the research title as a collective

Suggested Research Title/Area: (between 10-15 words and must reflect the essence of your proposed research question, study design and study population and should be more specific than a broad topic area).

The Effects of Physical Activity Intervention on Student Mental Well-being in UWTSD, Swansea: A Quantitative Study using the WEMWBS.

Background: 250 words

Why is your study important? What theory and empirical research evidence supports your research question? (Please provide a rationale for your study including a brief review of relevant psychological literature and theory and a minimum of five references).

Students' mental health is a vital concern since it affects their ability to succeed. Research has demonstrated the potential of physical activity interventions to significantly improve mental health in a variety of population groups (Lock et al., 2018; Zusková, 2021). Therefore, it is critical to look into how physical activity interventions affect students' mental health in order to impact educational practices that aim to improve student outcomes. Self-Determination Theory (SDT) presents a relevant framework to examine the probable mechanisms that underlie the association between physical activity and mental well-being. SDT holds that people have basic psychological needs for relatedness, competence, and autonomy; engaging in behaviours that meet these needs is linked to improved physical and mental well-being (Lock et al., 2018). Studies have also shown correlations between leisure time physical activity and improved symptoms of anxiety and depression (Siefken et al., 2019), as well as enhanced mental health perception in cancer patients (Kim et al., 2020). Caregivers who stay physically active while looking after those with mental illnesses tend to experience better mental well-being (Zacharis et al., 2020). Despite the mounting evidence, further research is required to focus on these impacts in student populations. Establishing supportive and productive classrooms requires an understanding of how physical activity interventions can be customised to meet the specific requirements of students and enhance their mental health. Thus, the purpose of this study is to investigate how physical activity intervention affects the mental health of students at the University of Wales Trinity Saint David (UWTSD).

We conducted the systematic literature review as a group, we used those articles that we found and that became the basis for our background which Myura wrote the entirety of.

Reference List: (Not included in

Kim, J., & Han, A. (2020). The impact of leisure time physical activity on mental health and health perception among people with cancer. *Health Promotion Perspectives*, 10(2), 116–122. <https://doi.org/10.34172/hpp.2020.19>

M., Post, D., Dollman, J., & Parfitt, G. (2018). Development of a self-determination theory-based physical activity intervention for Aged Care Workers: Protocol for the activity for well-being program. *Frontiers in Public Health*, 6. <https://doi.org/10.3389/fpubh.2018.00341>

n, K., Junge, A., & Laemmle, L. (2019). How does sport affect mental health? an investigation into the relationship of leisure-time physical activity with depression and anxiety. *Human Movement*, 20(1), 62–74. <https://doi.org/10.5114/hm.2019.78539>

vá, K. (2021). Some beneficial psychological aspects of physical activity in nature – questions arising from the Narrative Review. *Health Problems of Civilization*. <https://doi.org/10.5114/hpc.2021.104859>

ris, T., Lyrakos, G., & Zisi, V. Z. (2020). Physical activity and mental health in caregivers of mental ill patients in Greece. *Journal of Human Sport and Exercise - 2020 - Spring Conferences of Sports Science*. <https://doi.org/10.14198/jhse.2020.15.proc3.36>

Please state the main research question(s) or hypotheses(s): (100 words max)

RQ:

1. How does engaging in physical activity intervention affect students' mental well-being?

Based on relevant and contemporary literature, it is well-documented that physical activity improves mental well-being (Siefken et al., 2019; Pressman et al., 2020; Kim et al., 2020). The study will novelly gauge the effectiveness of students engaging in physical activity intervention in their daily life on their mental well-being. By incorporating such physical activities into breaks during regular lectures, both accessibility and routine is effectively achieved. It is hypothesised that the intervention will encourage students to engage with simple physical activities consistently in daily life and that will improve students' mental well-being.

We developed this research question after going through the relevant articles after doing systematic review.

Reference

- Kim, J., Kim, J., & Han, A. (2020). The impact of leisure time physical activity on mental health and health perception among people with cancer. *Health Promotion Perspectives*, 10(2), 116-122. <https://doi.org/10.34172/hpp.2020.19>
- Pressman, S. D., Petrie, K. J., & Sivertsen, B. (2020). How strongly connected are positive affect and physical exercise? Results from a large general population study of young adults. *Clinical Psychology in Europe*, 2(4). <https://doi.org/10.32872/cpe.v2i4.3103>
- Siefken, K., Junge, A., & Laemmle, L. (2019). How does sport affect mental health? An investigation into the relationship of leisure-time physical activity with depression and anxiety. *Human Movement*, 20(1), 62-74. <https://doi.org/10.5114/hm.2019.78539>

Methodological Details (500 words)

Please summarise the key methodological approach: (you can include copies of proposed study materials as appendices if you wish). You must include details of the following:

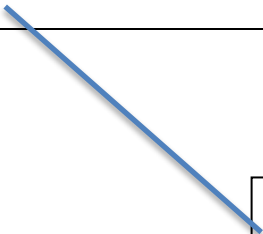
- **Participants:** Participants will include undergraduate students over the age of 18 studying at UWTSD, Swansea who sign up using the department's Experimental Management System (EMS) in exchange for course credit. The study will target one participant group, reporting a questionnaire before their engagement in the physical activity intervention offered and after engaging in it. The study will require approximately 20 participants.

- **Design:** A quantitative experimental design. The independent variable will be the engagement of the students in the physical activities. The dependent variable will be the mental well-being of the students based on Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS). WEMWBS consists of 14 questions measured in 5-scale response categories: satisfaction, affect, competence, relatedness and autonomy. The values obtained from these subscales are used to derive a single mean score. The mean score of each of the 2 sets of WEMWBS is compared to understand the perceived range of students' mental-wellbeing. Paired t-test is used to analyse the statistical difference between the two sets.
- **Materials:** Warwick-Edinburgh Mental Well-being scale, printed booklet (demographic questions, WEMWB scale x2, feedback form), pens, Youtube, empty room/exercise room, consent forms, supervisor
- **Procedure:**
 1. After a time and date is set for the study to take place, students recruited via EMS to participate in the study.
 2. Upon signing up, students will be given an introductory statement form and what they may expect from participating in the study.
 3. On the day of the study, students will be given an informed consent form and briefed through the purpose of the study and possible risks before signing the form.
 4. Printed booklets containing a demographic questionnaire, the WEMWB scale and the feedback form will be distributed for the participants to fill in the first two sections and then collected back.
 5. A short warm-up session of 5-minutes with the supervisor would be carried out to reduce risk of injury.
 6. Participants will be shown a 10-minute exercise video focused on stretching with the supervisor mirroring the exercises to follow along.
 7. Each stretch will be held for around 1 minute, with revisions for the physical capacity of the participants.
 8. Upon completing the session, there will be a 5-minute warm down session and debrief with the supervisor to ensure participants do not injure themselves after stretching.
 9. The distributed booklets will then be returned to participants to fill in the WEMWB scale post-exercise and the feedback form.
 10. Upon completing and returning the booklet, participants may leave in their own time.
 11. Mean scores of the WEMWBS pre and post intervention will be recorded.
 12. Statistics will be analysed using paired t-test via Statistical Package for the Social Sciences (SPSS).

After going through a couple of different scales, we eventually landed on the Warwick-Edinburgh Mental Wellbeing Scale as our unit of measurement in the study.

In this section you are required to briefly outline any specific ethical considerations for your project. All projects will be expected to adhere to the BPS code of human research ethics, and you will need to submit a full ethics form which will document your specific processes for informed consent, debriefing, and data protection. Here you need to briefly note additional or specific key ethical considerations for your particular project e.g. potential for distress or discomfort, any deception, research with vulnerable populations or sensitive topic areas, and briefly outline how you expect to manage these risks within your project.

Participants' information will be kept confidential as to comply with the BPS code of human research ethics unless they consent to otherwise. Contents of the printed booklet, specifically the WEMWBS scale, may contain sensitive information on the participants' well-being and mental health. Participants will be informed about these issues prior to consenting. Briefings will be held and cautionary measures will be put in place as to reduce injury or risk of injury towards the participants. As mentioned previously, each stretch will be held for one minute according to a participant's physical capacity so as not to harm their health. If any participant starts to feel uncomfortable during the program, they may choose to forgo the rest of the program thus making their participation void for the research. Supervisors will be there to assist any participant struggling with the program or to answer any question the participant may have.



I completed the entirety of the key ethical considerations section in the proposal. I followed the guidelines provided in the BPS code of human ethics and amended some parts after feedback from Calvin.

**COMPETENCY TWO:
IDENTIFYING APPROPRIATE
RESEARCH MATERIALS**

Search results for exercises

exercises



[Fitness Studio exercise videos](#)

NHS Fitness Studio: free online fitness videos, aerobics videos, strength and resistance videos, pilates and yoga videos and more.

[Strength and resistance exercise videos](#)

Exercises to help your get stronger and more tones, including **exercises** for arms and waist.

[Pilates and yoga exercise videos](#)

Pilates and yoga **exercises**, including **exercises** for beginners and **exercises** with problems such as back pain and arthritis.

[Aerobic exercise videos](#)

Exercises to raise your heart rate, including aerobics for beginners, dancing and a work out to start your day.

[Type 1 diabetes – Exercise and sport](#)

Read about what **exercise** and sport you can enjoy if you have type 1 diabetes.

[La Bomba dance exercise video](#)

Boost your mood and your fitness levels with this fun dance-based home workout video from the NHS Fitness Studio, where you can find a range of workout routines to suit you, whether your aim is to lose weight, improve your overall fitness, or de-

We began our search for an appropriate exercise video by looking up the exercises that the NHS recommends. After looking at a few, we realised that we should find a exercise that also facilitates people who are wheelchair-bound as to make the intervention more inclusive.

Chair-based pilates video workout

Video: Pilates – standing and chair-based exercises

This pilates-inspired workout video is suitable for people who have difficulty getting down on the floor and prefer the support of a chair. Some exercises are solely chair-based which is suitable for people unable to stand.

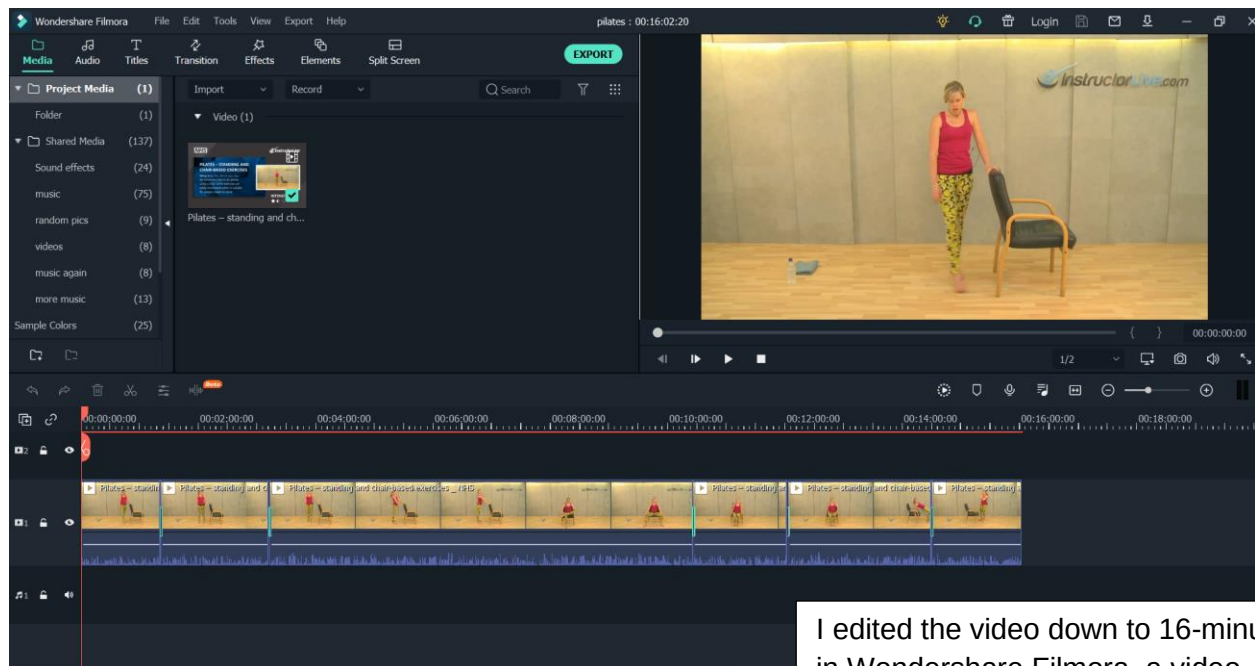
We eventually landed on this 30-minute video of chair-based Pilates. The only issue is that the video itself is a bit too long and we were worried that would affect participation. So, I took the liberty to cut down this video down to 16-minutes.

[Transcript](#) | [Audio Description](#)



Media last reviewed: 5 August 2022

Media review due: 5 August 2025



I edited the video down to 16-minutes in Wondershare Filmora, a video editing software. Overall, the edit took about two hours as I had to watch the video multiple times to better decide which stretches should end up in the final video as I wanted variety between them in the time frame that we decided on.



Zoe suggested that we make a trailer for the intervention, so I made this movie trailer style video with some help from Calvin. It consists of some clips from the exercise video with accompanying texts.

PILATES - CHAIR BASED EXERCISE

**COMPETENCY THREE:
INTERVIEWING/FOCUS GROUPS
– COMPLETION OF CODE BOOK**

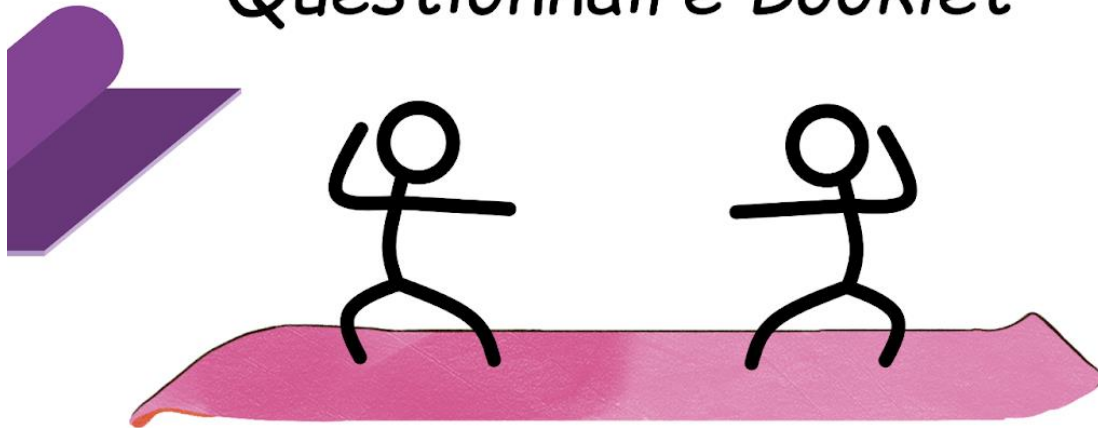


Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

**The Effects of a Physical Activity
Student Mental Well-being in U
A Quantitative Study using t**

Near the end of the process, we split up into groups to do the Information sheet, Debrief form and the Questionnaire Booklet. Calvin and I opted to do the questionnaire booklet. I created this beautiful front page of the booklet.

Questionnaire Booklet



If found, please contact
2226265@student.uwtsd.ac.uk (Calvin Phang,
Researcher)

Section A: Demographic Information

Age	☐ . 18-21 years old ☐ . 22-25 years old ☐ . 26-29 years old ☐ . 30 years old and above
Gender	☐ . Female ☐ . Male



.

Don't have a gender



.

Gender queer



.

Prefer not to say

Section B: Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) before intervention

Statements	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3		
I've been feeling relaxed	1	2	3		
I've been feeling interested in other people	1	2	3		
I've had energy to spare	1	2	3		
I've been dealing with problems well	1	2	3		
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Calvin and I used Google Docs to create the tables here. The two tables are the same scale that is to be filled twice by the participant, once before the intervention and once after.

Warwick–Edinburgh Mental Well-being Scale (WEMWBS)

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Section C: Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) after intervention

Statements	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Warwick–Edinburgh Mental Well-being Scale (WEMWBS)

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