

Attitudes to physical activity, nutrition, and barriers to participation.

Abstract

Background

The aim of this study was to discover what the attitudes were to physical activity and nutrition in mature students in south Wales. Physical inactivity among adults appears to transfer to their descendants, which has implications of a pandemic of inactivity (Kohl et al., 2012)

Method

Thematic analysis of semi-structured interviews conducted around the topic of physical activity (PA), nutrition, and barriers to participation in these subjects. Produced and recorded using Microsoft Teams.

Results

The four themes generated in this research were: Awareness, Barriers, Feelings towards PA, and Support.

Conclusion

More investment is needed in education, physical health infrastructure, public transport and the NHS to promote the ideas of a healthy lifestyle and make it a widely accessible possibility.

Introduction

The following report uncovers the attitudes towards physical activity (PA), and nutrition, and aims to discover the barriers that prevent engagement with these subjects. The study conducted was a semi-structured, inductive interview, thematically analysed (Vaismoradi et al., 2013), with two participants from a university in south Wales. PA is often a subjective term (Lee et al., 2016; WHO, 2023), and so the participants were allowed to define which activities they considered PA. With a larger sample size, the definition may have been more rigid, however, to prevent psychological harm and bias (British Psychological Society, 2014, 2018), the participants were encouraged to honestly answer the interview questions with their terminology and definitions. Psychological literature is overwhelmingly in support of participation in PA for the physical and mental health benefits (Hallal et al., 2012; MacIntosh & Law, 2015; WHO, 2023), however, participation in PA is not universal (Barz et al., 2016; MacIntosh & Law, 2015), and so this study aimed to discover the attitudes of a particular subset of university students, mature students (MS). MS were selected because they typically have a different experience of university life to regular undergraduates, and therefore would likely present different attitudes and barriers to those discussed in other reports (Barz et al., 2016). This report will outlay the participants and methodology, show the results and findings, discuss the results and findings whilst critically examining and comparing against other literature, and then will conclude with suggestions for positive methods of intervening towards more healthy behaviours.

Participants

Two participants were selected using a convenience sample to partake in 10-15 minute interviews using Microsoft Teams. Both participants were female, aged in their mid-20s, and live in south Wales. Both participants were selected due to their mature student status. They were given an information sheet, demographic form, consent form, and a full debrief which outlined the research, and maintained their ethical rights. Their data has been anonymised to protect their confidentiality, and all personal data has been stored in accordance with the university's GDPR policy.

Methodology

This study was subject to ethical consultation before commencing. The design of the study was to conduct a semi-structured interview with the participants. An inductive approach was utilised to remove bias from the researcher. The interviews were conducted digitally. Recordings and transcriptions were taken using the Microsoft Teams software. Transcripts were amended when the recording did not transcribe verbatim. Names of the participants (and their family members) were also amended to protect confidentiality. The transcripts were then coded (Appendix), and then similar codes were grouped together to create themes of the interviews for the results section. From the coding and the thematic analysis, four themes were selected as they appear to best represent the data from the interviews. No secondary verification was performed on the data from the interviews, which the researcher acknowledges impacts on the accuracy and validity of the study.

Results

The following four themes arose from the interviews: Awareness, barriers, feelings towards PA, and support. The evidence for each shall be presented below.

Awareness

Both participants showed some awareness about how to be optimally healthy and they did have limited knowledge about general needs to exercise and nutritional planning. Their responses however showed very different attitudes towards PA, with P1 aware of more negative effects of PA, and P2 aware of the benefits of PA and nutrition.

“But I know that it can be, really, like, physically damaging on different parts”

-Participant 1, lines 32, 33, 34

“Yeah. So when I (was younger), I didn't really. I wasn't a physical person... I barely exercised... Now that I'm older that I... researched the benefits myself.”

-Participant 2, lines 67, 68, 69, 70

Barriers

Both participants appeared to feel that the biggest barrier to engaging in PA was convenience, with a lack of accessible facilities and inconvenient public transport to these facilities. Whilst neither stated cost as a factor, both mentioned that free gym membership at their university would aid their participation. They also both stated that the canteen at their university was somewhat unsatisfactory at promoting healthy choices. Both participants stated that bad weather was likely to prevent them from conducting PA.

“I would really benefit from swimming, but there's no swimming pool in my area. And to get a bus takes an hour, and then I've got to walk to the swimming, like, the leisure centre, and then I've got to get the bus back and all and all, it's taking me like 3 hours for a 40 minute swim.”

-Participant 1, lines 90, 91, 92, 93, 94, 95

Feelings towards PA

The participants have very distinct views on their feelings to engage in PA. P1 held predominantly negative views whereas P2 held predominantly positive views about PA. P2

was more likely to overcome a lack of motivation to conduct PA and accomplish goals than P1. P2, along with their family, endeavours to encourage a healthy environment at home including encouraging the children to partake in clubs. P1 stated that their family would not understand why PA was important, and would think it strange if they were to go for a walk.

“...It's just a motivation to actually go out and do it. It's when I'm (doing it) I love it when I'm running and I love it. You know, I'm so... Smashing it. I'm a hero, I'm my own hero. I'm never gonna die.”

-Participant 2, Lines 426, 427, 430, 436

Support

The family support networks for both participants is similarly distinct. Attitudes of the family groups towards PA and nutrition appear to influence the readiness to engage in PA. As both participants do engage in PA, this appears to be something that can also be taken ownership of. Both participants felt that the university they attend does not provide enough resources to inform the students about health-based behaviours, or encourage the participation of students in sports.

“...I think to them. If I told them that I was gonna like, you know, for the next two hours, I'm going for, like, a walk, they, they wouldn't really respect that as much and they would still think you're only going for a walk. That doesn't matter that much.”

-Participant 1, lines 154, 156, 157, 158, 159

Discussion

An obvious critique of this study is the sample size. With only two participants it is difficult to credit a great deal of validity or cultural validity to the overall results (Vaismoradi et al., 2013). The convenience sample was also a poor choice for this study as the participants engage in the same course, are at the same university, are similar ages, and are the same gender. This does not allow for a breadth of understanding that these interviews had the potential to uncover from different demographics (Vaismoradi et al., 2013). Thematic analysis is subjective to the researcher, and ideally a second researcher should have checked the coding and themes (Vaismoradi et al., 2013). The subjective nature of the analysis also allows unconscious bias to affect the interpretation of the comments, which has the potential to lead to misleading themes being presented (Vaismoradi et al., 2013). Additionally, thematic analysis overlaps with other forms of qualitative analysis, and is open to interpretation in its application (Vaismoradi et al., 2013).

The four themes discovered show that to increase positive perceptions of PA, education is increasingly important. Neither participant showed a detailed knowledge of healthy behaviours, and were unaware of simple nutritional planning tools. Whilst it can be shown that one participant was happy to engage in further research to improve their own health behaviours, the other participant has a negative view of PA in general, and is not likely to look further than the knowledge they already possess. Furthermore, barriers exist in south Wales which prevent individuals from engaging in PA, including the proximity of local leisure centres, accessibility restrictions, and these facilities also appear to discriminate against non-drivers, and in the case of P1, female clients. The attitudes of the participants were too polarised to draw any useful general data, however, both of them raised points which would be worth further research, such as how motivation can be increased to engage in PA more effectively. The family support networks of the two participants clearly show a dissimilar environment to each other, and there is a correlation between the amount of support and the volume and intensity of exercise each one participates in, unfortunately, P1 was not asked question 10 in the interview, so a comparison of the types of diet cannot be made. These themes should be beneficial to create quantitative surveys that can more broadly determine the attitudes of individuals to engage in these health behaviours.

These four themes also have implications for the university that the participants attend. Both stated that the information they are given about health behaviours and facilities are below par, and that the healthy food options in the canteen are limited. More broadly, these themes highlight very well, the types of barriers that individuals encounter when seeking to engage in PA. There are intrinsic factors, such as motivation, goals, aesthetics that were displayed

by both participants, although It would be prudent as a society to eliminate some of the external barriers, such as accessibility, public transport, and education about health behaviours. Of course these would be costly policies to implement, and would benefit a majority rather than conservative party donors, so would be difficult to apply in this government's term in parliament.

Consultation of secondary literature appears to relate with the findings of this study.

Accessibility to safe fitness environments was an indicator of long-term gym use (especially for female clients) in Riseth et al.'s 2019 study. This is supported by a large quantitative study, which states that people are more likely to engage in PA if the facilities are closer in proximity (Lee et al., 2016), which is further supported by (Reed & Phillips, 2005). The theme "barriers" in this report could be expanded upon, however, despite the global distance, Gao et al.'s 2022 qualitative study expands upon these barriers effectively, and has similar findings to this report. University students and their health behaviours have often been subject to various inquisitions (deJonge et al., 2020; Deliens et al., 2015; Sigmundová et al., 2013; Story et al., 2002), however, there is a gap in the literature for mature students, and so this study provides some new information, even if it is limited because of the small sample size.

Intrinsic factors and the interventions required to improve motivation for healthy behaviours are less simple to identify, but far more difficult to generalise (Ashton et al., 2015; Barz et al., 2016; Rouse et al., 2010). According to *The Lancet*, around 30% of adults worldwide are defined as physically inactive (Bauman et al., 2012; Hallal et al., 2012; Kohl et al., 2012) and physical vocations have declined whilst social physical exercise has increased. The gaps in their surveillance of global activity levels indicate that approximately a third of the world is not included in this report, and most of the countries in it are developed. Whilst surveillance is improving, especially since the article is reasonably dated now, a follow-up (van Sluijs et al., 2021) has presented three areas where intervention could be implemented to increase global activity levels, this article specifically refers to individuals aged between 10-24. The three areas are education, digital, and, urban zones. All these areas require financial investment, and would require a long-term health plan to be conducted and implemented (Hansen et al., 2014; Kahlmeier et al., 2015; Mendonça et al., 2014; van Sluijs et al., 2021).

Finally, the family environment was highlighted in this research as a driver for engagement in PA, but this has not been studied further in any of the secondary literature consulted, except in passing terms of adolescents (Allender et al., 2006; Crombie et al., 2009; Eriksson et al., 2012; Haase et al., 2004; Vella-Zarb & Elgar, 2009). This implies that intervention can also

be applied within familial settings, to encourage family participation in healthy behaviours, and to provide an example for the next generation.

Conclusion

To conclude this report, a semi-structured, inductive thematic analysis was conducted on two participants from south Wales, and found that participation in physical activity was improved by familial support, and education surrounding healthy behaviours. Local authorities in south Wales should examine how to improve the accessibility of their facilities and towns, to encourage a healthy populace. Safety for gym-goers, especially females, should be placed high on a list of priorities for encouraging participation in PA. Educational institutions, such as universities and schools, as well as community based centres, should provide their students and users with information about the benefits of a healthy lifestyle, if a positive uptake of physical exercise and nutrition is to be observed in the UK. Furthermore, as time and convenience are barriers to engagement, the UK government should investigate the hours of the working week, minimum wage, public transport systems and the NHS to enable a healthier society to grow in the future. The benefits of exercise are important for mental and physical health, and PA acts as a preventative method for health problems. This should be very high on the governments list of items to invest in.

References

- Allender, S., Cowburn, G., & Foster, C. (2006). Understanding participation in sport and physical activity among children and adults: A review of qualitative studies. In *Health Education Research* (Vol. 21, Issue 6, pp. 826–835). <https://doi.org/10.1093/her/cyl063>
- Ashton, L. M., Hutchesson, M. J., Rollo, M. E., Morgan, P. J., Thompson, D. I., & Collins, C. E. (2015). Young adult males' motivators and perceived barriers towards eating healthily and being active: A qualitative study. *International Journal of Behavioral Nutrition and Physical Activity*, 12(1). <https://doi.org/10.1186/s12966-015-0257-6>
- Barz, M., Lange, D., Parschau, L., Lonsdale, C., Knoll, N., & Schwarzer, R. (2016). Self-efficacy, planning, and preparatory behaviours as joint predictors of physical activity: A conditional process analysis. *Psychology and Health*, 31(1), 65–78. <https://doi.org/10.1080/08870446.2015.1070157>
- Bauman, A. E., Reis, R. S., Sallis, J. F., Wells, J. C., Loos, R. J. F., Martin, B. W., Alkandari, J. R., Andersen, L. B., Blair, S. N., Brownson, R. C., Bull, F. C., Craig, C. L., Ekelund, U., Goenka, S., Guthold, R., Hallal, P. C., Haskell, W. L., Heath, G. W., Inoue, S., ... Sarmiento, O. L. (2012). Correlates of physical activity: Why are some people physically active and others not? In *The Lancet* (Vol. 380, Issue 9838, pp. 258–271). Elsevier B.V. [https://doi.org/10.1016/S0140-6736\(12\)60735-1](https://doi.org/10.1016/S0140-6736(12)60735-1)
- British Psychological Society. (2014). *Code of human research ethics*.
- British Psychological Society. (2018). *Code of ethics and conduct* (p. 9). British Psychological Society.
- Crombie, A. P., Ilich, J. Z., Dutton, G. R., Panton, L. B., & Abood, D. A. (2009). The freshman weight gain phenomenon revisited. In *Nutrition Reviews* (Vol. 67, Issue 2, pp. 83–94). <https://doi.org/10.1111/j.1753-4887.2008.00143.x>
- deJonge, M. L., Omran, J., Faulkner, G. E., & Sabiston, C. M. (2020). University students' and clinicians' beliefs and attitudes towards physical activity for mental health. *Mental Health and Physical Activity*, 18. <https://doi.org/10.1016/j.mhpa.2019.100316>
- Deliens, T., Deforche, B., De Bourdeaudhuij, I., & Clarys, P. (2015). Determinants of physical activity and sedentary behaviour in university students: A qualitative study using focus group discussions. *BMC Public Health*, 15(1). <https://doi.org/10.1186/s12889-015-1553-4>
- Eriksson, U., Arvidsson, D., & Sundquist, K. (2012). Availability of exercise facilities and physical activity in 2,037 adults: Cross-sectional results from the Swedish neighborhood and physical activity (SNAP) study. *BMC Public Health*, 12(1). <https://doi.org/10.1186/1471-2458-12-607>
- Gao, W., Feng, W., Xu, Q., Lu, S., & Cao, K. (2022). Barriers associated with the public use of sports facilities in China: a qualitative study. *BMC Public Health*, 22(1). <https://doi.org/10.1186/s12889-022-14441-w>
- Haase, A., Steptoe, A., Sallis, J. F., & Wardle, J. (2004). Leisure-time physical activity in university students from 23 countries: Associations with health beliefs, risk awareness, and national economic development. *Preventive Medicine*, 39(1), 182–190. <https://doi.org/10.1016/j.ypmed.2004.01.028>

- Hallal, P. C., Andersen, L. B., Bull, F. C., Guthold, R., Haskell, W., Ekelund, U., Alkandari, J. R., Bauman, A. E., Blair, S. N., Brownson, R. C., Craig, C. L., Goenka, S., Heath, G. W., Inoue, S., Kahlmeier, S., Katzmarzyk, P. T., Kohl, H. W., Lambert, E. V., Lee, I. M., ... Wells, J. C. (2012). Global physical activity levels: Surveillance progress, pitfalls, and prospects. In *The Lancet* (Vol. 380, Issue 9838, pp. 247–257). Elsevier B.V. [https://doi.org/10.1016/S0140-6736\(12\)60646-1](https://doi.org/10.1016/S0140-6736(12)60646-1)
- Hansen, B. H., Ommundsen, Y., Holme, I., Kolle, E., & Anderssen, S. A. (2014). Correlates of objectively measured physical activity in adults and older people: A cross-sectional study of population-based sample of adults and older people living in Norway. *International Journal of Public Health*, 59(2), 221–230. <https://doi.org/10.1007/s00038-013-0472-3>
- Kahlmeier, S., Wijnhoven, T. M. A., Alpiger, P., Schweizer, C., Breda, J., & Martin, B. W. (2015). National physical activity recommendations: Systematic overview and analysis of the situation in European countries. In *BMC Public Health* (Vol. 15, Issue 1). BioMed Central Ltd. <https://doi.org/10.1186/s12889-015-1412-3>
- Kohl, H. W., Craig, C. L., Lambert, E. V., Inoue, S., Alkandari, J. R., Leetongin, G., Kahlmeier, S., Andersen, L. B., Bauman, A. E., Blair, S. N., Brownson, R. C., Bull, F. C., Ekelund, U., Goenka, S., Guthold, R., Hallal, P. C., Haskell, W. L., Heath, G. W., Katzmarzyk, P. T., ... Wells, J. C. (2012). The pandemic of physical inactivity: Global action for public health. In *The Lancet* (Vol. 380, Issue 9838, pp. 294–305). Elsevier B.V. [https://doi.org/10.1016/S0140-6736\(12\)60898-8](https://doi.org/10.1016/S0140-6736(12)60898-8)
- Lee, S. A., Ju, Y. J., Lee, J. E., Hyun, I. S., Nam, J. Y., Han, K. T., & Park, E. C. (2016). The relationship between sports facility accessibility and physical activity among Korean adults. *BMC Public Health*, 16(1). <https://doi.org/10.1186/s12889-016-3574-z>
- MacIntosh, E., & Law, B. (2015). Should I stay or should I go? Exploring the decision to join, maintain, or cancel a fitness membership. *Managing Sport and Leisure*, 20(3), 191–210. <https://doi.org/10.1080/23750472.2015.1025093>
- Mendonça, G., Cheng, L. A., Mélo, E. N., & De Farias Júnior, J. C. (2014). Physical activity and social support in adolescents: A systematic review. In *Health Education Research* (Vol. 29, Issue 5, pp. 822–839). Oxford University Press. <https://doi.org/10.1093/her/cyu017>
- Reed, J. A., & Phillips, ; D Allen. (2005). Relationships Between Physical Activity and the Proximity of Exercise Facilities and Home Exercise Equipment Used by Undergraduate University Students. *Journal of American College Health*, 53(6), 285–291.
- Riseth, L., Nøst, T. H., Nilsen, T. I. L., & Steinsbekk, A. (2019). Long-term members' use of fitness centers: A qualitative study. *BMC Sports Science, Medicine and Rehabilitation*, 11(1). <https://doi.org/10.1186/s13102-019-0114-z>
- Rouse, P. C., Biddle, S. J. H., & Rouse, P. (2010). An ecological momentary assessment of the physical activity and sedentary behaviour patterns of university students. *Health Education Journal*, 69(1), 116–125.
- Sigmundová, D., Chmelík, F., Sigmund, E., Feltlová, D., & Frömel, K. (2013). Physical activity in the lifestyle of Czech university students: Meeting health recommendations. *European Journal of Sport Science*, 13(6), 744–750. <https://doi.org/10.1080/17461391.2013.776638>

- Story, M., Neumark-Sztainer, D., & French, S. (2002). *Individual and environmental influences on adolescent eating behaviors*.
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. In *Nursing and Health Sciences* (Vol. 15, Issue 3, pp. 398–405). <https://doi.org/10.1111/nhs.12048>
- van Sluijs, E. M. F., Ekelund, U., Crochemore-Silva, I., Guthold, R., Ha, A., Lubans, D., Oyeyemi, A. L., Ding, D., & Katzmarzyk, P. T. (2021). Physical activity behaviours in adolescence: current evidence and opportunities for intervention. In *The Lancet* (Vol. 398, Issue 10298, pp. 429–442). Elsevier B.V. [https://doi.org/10.1016/S0140-6736\(21\)01259-9](https://doi.org/10.1016/S0140-6736(21)01259-9)
- Vella-Zarb, R. A., & Elgar, F. J. (2009). The “Freshman 5”: A Meta-Analysis of Weight Gain in the Freshman Year of College. In *JOURNAL OF AMERICAN COLLEGE HEALTH* (Vol. 58, Issue 2).
- WHO. (2023). *Physical activity*. World Health Organisation. https://www.who.int/health-topics/physical-activity#tab=tab_1

Appendices

Appendix 1 – Information Sheet

Appendix 2 – Consent Form

Appendix 3 – Demographic Form

Appendix 4 – Debrief Form

Appendix 5 – Ethics Form

Appendix 6 – Transcripts

Appendix 7 – Coding Tables

Appendix 8 – Interview Questions

Appendix 1 – Information Sheet



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

Centre for Psychology and Counselling

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:

- Answer a demographics questionnaire
- Answer 12 questions surrounding the topics of physical activity and nutrition

At the end of the study you will be debriefed by the researcher and you will be provided with the study debrief sheet.

If you feel you would be uncomfortable answering personal questions about your anxiety levels, you are advised not to take part in this study.

You must have access to Microsoft Teams, and be aware that the interview will be recorded. All data will be anonymised after the interview takes place.

If you have any questions, please ask the researcher now.

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

Appendix 2 – Consent Form



PRIFYSGOL CYMRU
Y Drindod Dewi Sant
UNIVERSITY OF WALES
Trinity Saint David

School of Psychology
Carmarthen Campus

Study Consent Form

I understand that this research study is being carried out by a 2nd year Psychology Student for their dissertation, and that taking part in this study will involve answering questions on my attitudes towards physical activity and nutrition.

This task will take approximately 10 minutes to complete.

I understand that participation in this study is entirely voluntary and I am free to withdraw participation at any time without giving a reason. I am aware that if I have concerns about the study I can discuss these concerns with the researcher or academic supervisor at any time during or after the study.

I understand that the information provided by me will be held confidentially, with a code assigned in place of my name. These data will be stored indefinitely 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 researchers.

I, _____ (NAME) consent to participate in the study conducted by [student], School of Psychology, University of Wales Trinity Saint David, Carmarthen under the supervision of Dr Stuart Jones

Participant Signature: _____

Date: _____

Name and signature of researcher taking consent

Appendix 3 – Demographic Form

Demographic Form

How would you define your gender? _____

Date of birth _____

Relationship Status _____

Do you have children? _____

Appendix 4 – Debrief Form



PRIFYSGOL CYMRU
Y Drindod Dewi Sant
UNIVERSITY OF WALES
Trinity Saint David

School of Psychology
Carmarthen Campus
Carmarthen

Study Debrief Sheet

Attitudes towards physical activity, nutrition, and barriers to participation

Thank you for taking part in the study.

The aim of this study was to investigate the attitudes and barriers to participation in physical activity and nutritional planning. We wanted to explore ways of removing those barriers in an attempt to increase the likelihood of participation in those behaviours.

If you wish to withdraw your data from the study you must tell the researcher now. After this point, all of your data will remain anonymous 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 07875 107866, 2005850@student.uwtsd.ac.uk or contact the academic supervisor Dr Stuart Jones, stuart.jones@uwtsd.ac.uk.

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

Christopher Bamford

BSc Honours Applied Psychology

University of Wales Trinity Saint David, Carmarthen

Appendix 5 – Ethics Form

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:	Christopher James Bamford			
2	Tick all boxes that apply:	Member of staff:	☐	Honorary research fellow:	☐
	Undergraduate Student	☒	Taught Postgraduate Student	☐	Postgraduate Research Student

3	Institute/Academic Discipline/Centre:	Applied Psychology
4	Campus:	Carmarthen
5	E-mail address:	2005850@student.uwtsd.ac.uk
6	Contact Telephone Number:	07875107866
For students:		
7	Student Number:	2005850
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): Set as research methods module assignment		☒			

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	BPS Code of Ethics	☒

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:	A semi-structured, inductive interview of mature students and their attitudes towards physical health.		
2	Proposed start date:	10/07/2023	Proposed end date:	17/07/2023
	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: <i>Purpose of Research Activity</i> <i>Proposed Research Question</i> <i>Aims of Research Activity</i> <i>Objectives of Research Activity</i> Demonstrate, briefly, how <u>Existing Research</u> has informed the proposed activity and explain <i>What the research activity will add to the body of knowledge</i> <i>How it addresses an area of importance.</i>			
3	Purpose of Research Activity The purpose of this research activity is to find out the attitudes and feelings of mature students towards physical health. The effects of physical exercise are well documented (WHO, 2023), so these interviews will highlight the differences between what is known, and what is perceived. The interviews should also take a cross-sectional view of a general population of mature students, although the perceived number of participants will limit the findings. (this box should expand as you type)			
4	Research Question What are the attitudes of mature students to physical exercise, nutrition and the barriers to participation. (this box should expand as you type)			
5	Aims of Research Activity To find thematic responses from the participants to better influence policy (Hallal et al., 2012), by discovering biases and barriers to participation but without influencing their decision to participate in physical activities. As a secondary finding, the expectation is that types of exercise will be discussed, and the discovery of what is preferable (Gao et al., 2022; Riseth et al., 2019), however, the sample size restricts this, so will not be valid or generalisable.			

	(this box should expand as you type)
6	Objectives of Research Activity By conducting semi-structured interviews based on several researchers previous questions (Hansen et al., 2014; Kahlmeier et al., 2015; Rouse et al., 2010), the main objective of the research will be to uncover the attitudes towards participation in physical exercise, with the premise that by discovering the root causes and motivations this can be utilised to withdraw barriers to exercise (Ashton et al., 2015; Barz et al., 2016). The semi structured nature of the interview will allow participants to reveal their experiences and barriers (Ashton et al., 2015; Barz et al., 2016). One downside of this is the small sample size, which may not produce enough themes to become scientifically useful. (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	The method will be a semi structured interview comprising of 10-15 questions, conducted using Microsoft Teams and it's recording and caption software. The interviews will be transcribed verbatim, and then pre-read to get a feel for the literature. Using Clark and Braun's (2022) thematic analysis, coding of the words will take place to generate sub themes, and then themes will be generated using these codes to create a results section, discussion section, and a conclusion for the report. (this box should expand as you type)
	Location of research activity Identify all locations where research activity will take place.
8	The research activity will take place at a location of the participant's choosing, via Microsoft Teams. (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	N/A <i>(this box should expand as you type)</i>

10	Use of documentation not in the public domain: Are any documents <u>NOT</u> 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. <i>(this box should expand as you type)</i>		

	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:		
	By promoting physical and mental health the research should encourage individuals to engage in physical activity, if not directly, but indirectly referring to the benefits of physical exercise. If physical exercise is being pursued, then this should either lead to more cohesive communities and/or a community within the physical exercise being established. (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?	Two (this box should expand as you type)
11	Who will the participants be?	A convenience sample of Applied Psychology students on the Carmarthen campus will be used. (this box should expand as you type)
12	How will you identify the participants?	Volunteers will be selected from the class. (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			
	(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: Emotional distress	How you will mitigate the risk to participants:	

	Sensitive Information handling	Allow participants to omit their responses if they do not want to answer a question. Conduct study in line with UWTSD GDPR policy. <i>(this box should expand as you type)</i>
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 <i>(this box should expand as you type)</i>	
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: Risk of accusation <i>(this box should expand as you type)</i>	<i>How you will mitigate the risk to the investigator:</i> Conduct study with safeguarding measures in place, record interview with participants. <i>(this box should expand as you type)</i>
5	University/institutional risks For example: adverse publicity, financial loss, data protection	
	Risk to the University: GDPR breach <i>(this box should expand as you type)</i>	<i>How you will mitigate the risk to the University:</i> Conduct study in line with UWTSD GDPR policy <i>(this box should expand as you type)</i>
6	Environmental risks For example: accidental spillage of pollutants, damage to local ecosystems	
	Risk to the environment:	<i>How you will mitigate the risk to environment:</i>

	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?
	A debrief form will be emailed to participants as soon as the study has concluded, this will include reminders of their rights under the BPS Code of Ethics, and an outlay of 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.
	An information sheet and consent form will be emailed to participants prior to the study commencing, for their completion. Study will not take place without this in place. (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.
	Participants will be pseudonymised for transcripts, and therefore this will protect their anonymity. <i>(this box should expand as you type)</i>

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.	Yes ☐	☐
	If YES, provide a description of the data and explain why this data needs to be collected:		
2	Audio/video recordings will need to be made for transcription. <i>(this box should expand as you type)</i>		
	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),	Yes ☐	☐
	If YES, provide a description of the special category data and explain why this data needs to be collected:		
4	(e) The study is specifically about mental and physical health. <i>(this box should expand as you type)</i>		

	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:		
	Pass word protection on all devices and storage devices, permission to hold that data, deletion of data once assignment is completed. <i>(this box should expand as you type)</i>		

	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 data will not be transferred outside of the cloud until the assignment is handed in, however, the password protection will comply with the GDPR protocol. <i>(this box should expand as you type)</i>		
22	List all who will have access to the data generated by the research activity:		
	Christopher James Bamford Dr Stuart Jones Second Marker. The data will be anonymous at hand in.		

	<i>(this box should expand as you type)</i>		
23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	Dr Stuart Jones Christopher James Bamford <i>(this box should expand as you type)</i>		
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.		
	Data will be stored on a password protected laptop, in a password protected folder. After completion of the assignment, this data will be deleted to prevent the data being retained for too long and prevent a data breach. The consent sheets will be electronically sent to Dr Stuart Jones, who after verifying them, will store them in the UWTSD archive. <i>(this box should expand as you type)</i>		
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. <i>(Most relevant to academic staff)</i>		
	<i>(this box should expand as you type)</i>		
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.

References:

- Ashton, L. M., Hutchesson, M. J., Rollo, M. E., Morgan, P. J., Thompson, D. I., & Collins, C. E. (2015). Young adult males' motivators and perceived barriers towards eating healthily and being active: A qualitative study. *International Journal of Behavioral Nutrition and Physical Activity*, 12(1). <https://doi.org/10.1186/s12966-015-0257-6>
- Barz, M., Lange, D., Parschau, L., Lonsdale, C., Knoll, N., & Schwarzer, R. (2016). Self-efficacy, planning, and preparatory behaviours as joint predictors of physical activity: A conditional process analysis. *Psychology and Health*, 31(1), 65–78. <https://doi.org/10.1080/08870446.2015.1070157>
- Gao, W., Feng, W., Xu, Q., Lu, S., & Cao, K. (2022). Barriers associated with the public use of sports facilities in China: a qualitative study. *BMC Public Health*, 22(1). <https://doi.org/10.1186/s12889-022-14441-w>
- Hallal, P. C., Andersen, L. B., Bull, F. C., Guthold, R., Haskell, W., Ekelund, U., Alkandari, J. R., Bauman, A. E., Blair, S. N., Brownson, R. C., Craig, C. L., Goenka, S., Heath, G. W., Inoue, S., Kahlmeier, S., Katzmarzyk, P. T., Kohl, H. W., Lambert, E. V., Lee, I. M., ... Wells, J. C. (2012). Global physical activity levels: Surveillance progress, pitfalls, and prospects. In *The Lancet* (Vol. 380, Issue 9838, pp. 247–257). Elsevier B.V. [https://doi.org/10.1016/S0140-6736\(12\)60646-1](https://doi.org/10.1016/S0140-6736(12)60646-1)
- Hansen, B. H., Ommundsen, Y., Holme, I., Kolle, E., & Anderssen, S. A. (2014). Correlates of objectively measured physical activity in adults and older people: A cross-sectional study of population-based sample of adults and older people living in Norway. *International Journal of Public Health*, 59(2), 221–230. <https://doi.org/10.1007/s00038-013-0472-3>
- Kahlmeier, S., Wijnhoven, T. M. A., Alpiger, P., Schweizer, C., Breda, J., & Martin, B. W. (2015). National physical activity recommendations: Systematic overview and analysis of the situation in European countries. In *BMC Public Health* (Vol. 15, Issue 1). BioMed Central Ltd. <https://doi.org/10.1186/s12889-015-1412-3>

- Riseth, L., Nøst, T. H., Nilsen, T. I. L., & Steinsbekk, A. (2019). Long-term members' use of fitness centers: A qualitative study. *BMC Sports Science, Medicine and Rehabilitation*, 11(1). <https://doi.org/10.1186/s13102-019-0114-z>
- Rouse, P. C., Biddle, S. J. H., & Rouse, P. (2010). An ecological momentary assessment of the physical activity and sedentary behaviour patterns of university students. *Health Education Journal*, 69(1), 116–125.
- WHO. (2023). *Physical activity*. World Health Organisation. https://www.who.int/health-topics/physical-activity#tab=tab_1

Appendix 6 – Transcripts

New channel meeting-20230712_084633-Meeting Recording

July 12, 2023, 7:46AM

11m 57s

🎤 **Researcher** started transcription

👤 **Participant (1)** joined the meeting

Researcher 0:35

1. Ohh hello. Was just saying I've sorted that.

Participant (1) 0:40

2. Ohh hello.

Researcher 0:41

3. Right. So the, the meetings being transcribed.

4. Um, and recorded already.

Participant (1) 0:46

5. OK.

Researcher 0:47

6. So what I'm going to do is introduce what the questionnaires about and then just

7. encourage you to answer as honestly as you can the questions.

8. Okay so this should take, roughly,

9. 10 minutes or so.

Researcher 2:01

11. Okay so.

- 12. The questions are based on the attitudes of mature students to physical exercise,
- 13. nutrition and the barriers to participation in engaging in these activities.
- 14. So, um, if you're ready to start, I will.
- 15. Okay question one if you're happy.

Participant (1) 2:21

- 16. Bonnie and get it going.

Researcher 2:23

- 17. OK. Are you aware of the effects of physical exercise?
- 18. And could you elaborate on?

Researcher 2:30

- 19. What your knowledge is?

Participant (1) 2:32

- 20. Um.
- 21. As in physical.
- 22. Activity on like mental health or physical health or just health in general.

Researcher 2:42

- 23. Anything.
- 24. Just anything at all. So um, if you're engaging in physical exercise, what are the
- 25. effects of that that has, are there any positives or negatives or just?

Participant (1) 2:55

- 26. Ohh I think.
- 27. Ohh, see physical health.
- 28. But really benefits you mental health because of all of the endorphins that are
- 29. released.

Researcher 3:06

30. Hmm.

Participant (1) 3:08

31. And how long those endorphins actually last?

32. But I know that it can be.

33. Really like.

34. Physically damaging on different parts so you know you're a runner that really

35. affects your knee is and then.

36. Or really affects your lower back and then I think does that cause like?

37. Worse issues down the line? Because your knees don't work and you're not able

38. to.

39. I don't know walk the same length as someone your age because you spent 25

40. years running and they haven't.

Researcher 3:46

41. Yeah, okay.

42. And how do you feel about participating in physical exercise?

Participant (1) 3:53

43. Ohh.

44. I can't say I really enjoy it. I wouldn't be inclined to just join someone that's

45. exercising, and you know it's gotta be something that I really, really enjoy doing.

Researcher 4:08

46. And do you feel that looking slim or athletic is an incentive for exercise above any other reason?

Participant (1) 4:15

47. Yes, to be honest.

Researcher 4:19

48. And.

49. So would you engage in more exercise as a result of that goal?

Participant (1) 4:25

50. Yeah, definitely.

Researcher 4:28

51. Um.

52. Is there anything sort of socially or environmentally or family wise that

53. encourages your participation in sports, or physical exercise?

Participant (1) 4:40

53. Ohh.

54. Not really, I think like.

55. Environmentally.

56. It is that like attitude of doing physical education (exercise) that is like

57. something that's gonna make you lose weight. And you gonna be like, skinny. I

58. think there's always thought that in the back of your mind like I need to work out

59. because I need to be slim.

60. But I wouldn't say my like family have ever like.

61. Pushed me, I I, but.

62. It's hard to do think about like.

63. Different health issues. My grandparents have health issues and if they maybe if

64. they exercise a little bit more they wouldn't be so like.

65. Illness prone now, I don't know. I think that crossed my mind.

Researcher 5:31

66. OK, Um and and are you a member of the gym or Sports Club at the minute?

Participant (1) 5:36

67. No.

Researcher 5:38

68. Um.

69. What kind of physical exercise would you say you engage in on a regular basis

70. that can be anything from walking to, working out or anything?

Participant (1) 5:50

71. Ohh.

72. I do a lot of walking, but I've also.

73. In the last two weeks started, it's like beginners yoga.

Researcher 6:00

74. Okay cool.

75. And and do you feel that you exercise enough for you?

Participant (1) 6:07

76. I do.

Researcher 6:10

77. Cool.

78. Do you feel like you were restricted with how often you can participate in

79. exercise?

Participant (1) 6:16

80. Yeah, no.

Researcher 6:17

81. What, what are those restrictions to (engaging in physical activity)?

Participant (1) 6:22

82. I'm just things like.

83. I don't drive and.

84. I've got scoliosis so.

85. To in like.

86. Um.

87. Doing things in the gym that others might be able to do, like lifting weight.

88. I can't do that because it causes too much compression on my spine, but that's

89. what the gyms in "Local Town" especially are, like, targeted at, you know, weight

90. training and lifting weights, whereas I can't do that. I would really benefit from

91. swimming, but there's no swimming pool in my area. And to get a bus takes an

92. hour.

93. And then I've got to walk to the swimming, like the leisure centre, and then I've

94. got to get the bus back and all and all. It's taking me like 3 hours for a 40 minutes

95. swim.

Researcher 7:09

96. Yeah.

97. OK.

98. And do you feel that the physical exercise you engage in helps you to socialise

99. with others?

Participant (1) 7:19

100. No, no, not necessarily.

Researcher 7:23

101. And is that something that you would seek if you were to engage in more

102. exercise?

Participant (1) 7:29

103. Yeah, the yeah, definitely. There's a part of me that wants to join a club, so I can

104. just sort of meet more like minded people. Well, I wouldn't say like minded, but

105. maybe have that common ground with other people.

Researcher 7:41

106. So similar goals.

Participant (1) 7:43

107. Yeah.

Researcher 7:45

108. Okay.

109. Um, I think you've already touched on it, but then do you feel that the sporting

110. facilities near to you are convenient to use?

Participant (1) 7:54

111. No.

112. At all.

Researcher 7:56

113. And um.

114. And so you said about it being so, the pool's quite a long way away. And are

115. there any other factors that affect the convenience of it? So obviously you're not

116. close to the facilities that you want to use, but would you consider that the

117. atmosphere as welcoming enough that you feel safe enough in those facilities?

Participant (1) 8:17

118. No.

119. I don't I I as a female not to make this a, you know, gender argument, but as a

120. female I wouldn't feel.

121. Comfortable going into.

122. Yeah, every gym in my area. But because it is very.

123. Male dominated, which again is not problem. I know that the demographic of

124. weight trainers are generally men not women, but just because I I know a lot of
125. the owners around here and I think ohh there's no, I just would feel quite
126. uncomfortable going on my own.

Researcher 8:54

127. Okay.
128. Uh.
129. Would you feel more supported if a family member went with you or a a friend?
130. Yeah, so?

Participant (1) 9:00

131. Yeah.
132. Yes. No.

Researcher 9:03

133. Sorry I didn't get you? Yeah.
134. Um. And do you feel supported by your family in the university to try new sports
135. or to exercise?

Participant (1) 9:13

136. Not necessarily, no.

Researcher 9:16

137. OK. Do you think that the that your family and the university do enough to
138. encourage a healthy environment including things like nutrition advice, meal
139. selections?
140. Discussions about exercise with you?

Participant (1) 9:30

141. I think I think that I think maybe the uni could do a little bit more.

142. In the sense of like.

143. Give their students free gym memberships or something for at least term time.

Researcher 9:44

144. Hmm.

Participant (1) 9:45

145. Ohh.

146. Just have more.

147. I'm not gonna say like there are no healthy options in the canteen and I'm not

148. disputing that, but just more fresh food and more variety of healthy options as

149. opposed to it being like.

150. You know, here's one meal and then the other meal down is burger and chips

151. and.

Researcher 10:04

152. Yeah.

Participant (1) 10:04

153. But in terms of like family.

154. Yeah. I think to them because we're not very.

Researcher 10:11

155. The.

Participant (1) 10:11

156. Physical activity family. I think to them.

157. If I told them that I was gonna write, you know, for the next two hours, I'm going

158. for, like, a walk, they, they wouldn't really respect that as much and they would

159. still think you're only going for a walk. That doesn't matter that much.

Researcher 10:29

160. Okay.

161. And.

162. OK.

163. So this one's a little bit different to the other questions, but it touches on the

164. first question.

165. We asked about the effects of physical exercise. So are you aware of your

166. metabolic rate, calorie intake macros and how these will affect your nutritional

167. goals?

Participant (1) 10:47

168. Yep.

169. I'm aware of all of those things in like myself, most of those things, but I can't

170. really tell you how it affects my nutrition.

Researcher 11:03

171. Okie dokie.

172. And then the final question.

173. Is anything else affect your participation in exercise, such as the weather or the

174. time of year?

Participant (1) 11:14

175. Um.

176. The time of, well, the weather, yeah, definitely cause again, I like doing walk in,

177. so if it's like really, you know, the weather's really bad, then I won't go. Ohh.

178. But my medication does stop me from exercising.

Researcher 11:31

179. Hmm.

180. OK.

181. And do you feel that you exercise less during the winter months?

Participant (1) 11:39

182. Yeah, definitely.

Researcher 11:41

183. OK.

184. Um.

185. That's all the questions I've got for you.

186. So if I just stop the recording.

● **Researcher** stopped transcription

New channel meeting-20230713_122235-Meeting Recording

July 13, 2023, 11:22AM

16m 33s

Participant 2 0:16

Yeah.

Researcher 0:18

Hello.

Participant 2 0:19

Hello I am not with it today researcher, don't know if you can tell.

Researcher 0:24

Perfect.

Looking forward to it.

Participant 2 0:27

What?

Researcher 0:29

Right. So you're already being recorded?

Participant 2 0:31

Fab, OK.

Researcher 0:32

And transcribed.

Um, so I've got a 12 questions and it should take around about 10 minutes.

You've got the right to withdraw whenever you want and you don't have to

answer anything that you don't want to.

Um.

In line with the information sheet that I've sent you.

Participant 2 0:52

Okay.

Researcher 0:55

So if you're ready, I'll just go straight into.

Participant 2 0:58

Yep, that's fine. You may hear some of that in the background. Is that OK?

(Alludes to background noises of children)

Researcher 0:59

Yeah.

Yeah, that's fine.

Ohh bless.

Participant 2 1:06

OK.

Researcher 1:08

I'm so question one. Are you aware of the effects of physical exercise?

Participant 2 1:14

Yes, but im more aware now, than when I was,

When I was younger.

It's like I've researched it myself, whereas when I was younger we didn't really know much about it.

Researcher 1:26

OK, so is your attitude towards it changed?

Participant 2 1:28

Yeah. So when I (was younger), I didn't really.

I wasn't a physical person.

Like I didn't. I barely exercised, but so.

Now that I'm older that I saw researched the benefits myself.

Researcher 1:44

Hmm.

Participant 2 1:45

But now I know the benefits, that's due to research rather than.

Information of data.

Researcher 1:53

Okay.

Um, how do you feel about participating in physical exercise?

Participant 2 2:01

It depends what physical exercise I started running.

God, just find it a burden and I'm talking like.

Can't be arsed, I don't want to go, but then when I'm running, I'm like, yeah, I got this. I can do this. Look at me go. You know, I'm like, I'm smashing it. Then I get back and I'm like, yeah, I've done my personal best then I'm like.

Ohh but like go when I'm like, don't go. Then you'll go when I'm like. Ohh yeah.

I'm gonna do yoga. Yeah, let's do this. And then halfway through. I'm like, I regret this.

Hey.

Researcher 2:37

Do you feel that looking slim or athletic is an incentive for exercise above any other reason?

Participant 2 2:43

It was when I was younger.

I don't need don't need to do physical exercise if issue with that. I had a flat belly, so I'd like to crunches and.

Sit ups and saying.

But now with more.

For health reasons, then.

Trying to be healthy for the kids.

And promote health and physical exercise for the kids so they.

Keep doing that.

Researcher 3:10

Um.

Do your immediate family regularly engage in sports together? Like is your environment and social?

Social circle, pretty exercise driven or not?

Participant 2 3:24

Um.

Kind of yes, cause Participant's spouse runs. He does love running. He's.

Very athletic like that and we try and get the. We try and tell the kids. So you know we're running in today. Exercising is good for you.

And then I Participant's child has got, like, little yoga book and we go through the yoga stuff and things, and when we're out and about, we try to get the kids to.

We go, we do a lot of walking we go on a lot of walks on the weekends and sometimes after school and things.

We do a lot of walking but that.

The extent of it really with the kids and we go through men as our library at the

weekend, but Participant's child .

My daughter, she's in gymnastics Saturday, so she does that. I will sign Participant's second child when he is old enough.

Researcher 4:14

Okay.

Participant 2 4:14

Do we have have? Yeah.

Given day.

Researcher 4:17

Are you currently a member of the gym or sports Club?

Participant 2 4:22

No.

Researcher 4:24

Okay.

Participant 2 4:25

I find you need one, do you remember?

By just I can forget and go get my number. I do so I don't know if they still allowed anymore.

Researcher 4:36

You've tried.

Participant 2 4:37

That's right, I've thought of it.

Researcher 4:40

I am I think you touched on the next question already. Um, so it was. What types of exercise do you engage in on a regular basis? But if I could just reconfirm it's running walking and yoga.

Participant 2 4:53

Yeah.

Researcher 4:54

Um and you encourage the children to do gymnastics.

Participant 2 4:57

Yeah, it was. So participant's child has gymnastics on Saturdays.

Ohh.

I just know they do free swimming for kids on Saturday mornings. It's like 8 in the morning.

So we go there every other weekend and then participant's child goes to gymnastics for. Yeah, just after then.

Researcher 5:18

OK.

Participant 2 5:18

There's not runny.

Researcher 5:21

Is it? There's a lot of what, sorry.

Participant 2 5:23

Running.

We run.

Researcher 5:29

Do you feel that you exercise enough for you?

Participant 2 5:33

And I would say no.

Only because.

Maybe the last week really cause I haven't been well, I haven't gone running at all like I went Sunday and that's it.

And I do need to start going more.

I don't think I'm doing it as often as I should be.

Researcher 5:55

So. So do you so which restrictions to exercise do you think there are?

Participant 2 6:02

Well obviously the kids and.

Participant's spouse working in settings because he works quite early.

So I have I have to get up early.

To run and that's.

Puts me off. It puts me off quite a bit because I'm like ohh, I don't want to get up at 6:00 to go for a run. You know, and when we've had a rough night with the kids and they've been er...

They've been up all night and I I can't think of anything worse than getting up early.

And then you.

As in the night? Then you just don't want to cause it's all like it's being now.

You're just.

Today's gone tired.

Researcher 6:44

Okay.

Participant 2 6:46

So so.

Researcher 6:47

So, so energy and motivation.

Participant 2 6:50

Yeah, that's right.

Researcher 6:52

Okay um. Do you think that the physical exercise you engage in helps you to socialise with others? And how has this occurred?

Participant 2 7:02

Uh.

I think no, only because I do actually go running on my own and the only person I run with is Participant's spouse.

But that doesn't.

I have no interaction with anyone else. Sometimes I pass people I give little *wave*.

Researcher 7:26

Fair enough,

Um.

Participant 2 7:27

I'm.

Researcher 7:28

Do you feel that the sporting facilities near to you are convenient to use if there are any?

Participant 2 7:34

Uh.

Yes and no. The closest one I would say is the leisure centre, but because I don't drive, it's quite difficult to get there.

And it's awkward times and things as well. So it's difficult for me to.

Access then.

It's hard for me to do exercise when I have the kids.

And that's until 6:00 o'clock when Participant's spouse gets home, so it's hard for me to do that, but then exercise for the kids.

are at awkward times as well, so it's trying to juggle.

Dropping participant's second child at school.

Doing stuff that's making sure you have his nap. Participant's child coming home from school and then.

There's closed without the weekend's. I'm so bad. You know, she's got gymnastics on Saturday.

We go swimming but then also, you don't really wanna spend the whole weekend.

Do an activities like that because you wanna go out and do stuff as a family and. Yeah, it's quite difficult.

Researcher 8:36

Um, so do you feel that the the sporting facilities near to you like they've got a welcoming atmosphere that you feel safe enough to go into them?

Participant 2 8:45

I think so. Yeah, the one. The leisure centre now they've gone quite *inaudible from recording*, you have this little tag.

And you don't even have to really speak to anyone going in anymore. So if you're

quite shy and self-conscious, you can just go in and swipe yourself in and then. What have you got to do then?

Researcher 9:04

Okay.

Participant 2 9:05

Yeah.

Researcher 9:05

Do you feel supported by your family in the university to try new sports or to exercise?

Participant 2 9:11

I thought they do by my family. Participant's spouse especially.

He's very "just get it done". "Just do it".

"Just run". "What's wrong with you?" "Why aren't you running?"

The Internet see it. The gym thing was good. The Free gym membership thing, but I think that's kind of like.

All they've done this year.

Researcher 9:34

Hmm.

Participant 2 9:34

Good.

I struggle to find information as to the opening times of the gym in the university. I don't know if it was 24 hours or not. I didn't. I couldn't find the facilities they had to offer that like I knew it was a gym.

And I knew there was swimming, but that wasn't from the university. That was from my brother learning to swim there.

But then I'm not sure where. What's actually there at all.
Done.

Researcher 10:05

OK.

Do you feel that your family and the university do enough to encourage a healthy environment, including nutrition advice, meal selections, etcetera?

Participant 2 10:17

I think the university is tryin.

The definitely try it and.

I don't think they're doing enough per se because.

For the meals I have.

The sale as I have the healthy meals are more expensive than chicken Nuggets and chips, which is ridiculous. You know, if you're promoting healthy food, the healthier food should be cheaper.

I think that should be more healthy food options.

Um.

And I think maybe they should send them more advice on.

The band says of healthy there may be a nutrition and things or maybe do seminars because they have all these seminars and free courses and things.

Maybe they should do more.

Towards nutrition.

And my family.

Kind of.

Participant's spouse comes home with chocolates and.

Brand new ice cream from work and things so.

Researcher 11:23

I don't know.

Participant 2 11:23

Yeah, kind of. You and he does stuff like that, you know.

Researcher 11:29

Thinking about your diet, do you feel that it is healthy? Um.

To what kind of typically?

Do you make for the what kind of things do you typically?

Participant 2 11:41

I tell you.

Mainly healthy food. Yeah. Because I wanna get the kids to eat healthily.

And then I'm just eating the same as them anyway because it's easier.

But I do a lot of hidden veggie sauces.

Just so I know, cause I sure won't eat anything green.

But he leaked a green cheese sauce.

So yeah, like broccoli cheese sauce and I like puree the broccoli and then I just eat it with them. So and the bolognaise I put, I blend all the vegetables up as well and make like a veggie sauce for them.

So we do it fairly right, uh, healthy. We eat a lot of fruit and veg.

Uh, it's just the snacking I think it's a bit of an issue.

Researcher 12:30

Um.

Are you aware of your metabolic rate, calorie intake macros and how these will affect you on nutritional goals?

Participant 2 12:43

No.

Researcher 12:45

Okay.

Participant 2 12:45

I did the calorie count before.

But I thought it was a bit too much effort, you know.

Researcher 12:53

That's fine.

Yeah.

Participant 2 12:56

Ohh.

Researcher 12:56

Um and the final question, does anything else affect your participation in exercise, such as the weather or the time of year or equipment? Anything to?

Participant 2 13:06

Why?

This directly.

Weather is definitely,

Yeah, if it's raining then.

And I'll say I'm running and I'm so back. I just don't wanna go. I don't run in it.

Weather you know, I think of you as well. Like I feel.

Researcher 14:59

If you need a reminder to question.

Participant 2 14:59

I no, I went out and summer.

I feel like in summer and the sunshine. You just want to be healthy and you know you're in that frame of mind and you're happy and you're like ohh, it's sunny woo. Was I do find in winter because it's cold and dark and depressing and I'm sort of like.

Hey.

Ohh big Jumper is on anyway. Who is gonna know.

Researcher 15:31

That's fine. Um, is there anything else that affects your participation that we haven't touched on?

Participant 2 15:40

I don't think so. No, I think you know the weather is definitely one. And the kids, and sleep and things.

I'm more of a sleeper, but then an exercise that I'd rather just get my sleep than you know.

Researcher 15:52

That's how you grow.

Participant 2 15:54

Definitely It's better for you.

It's not that bad really.

It's when I'm (doing it) I love it when I'm running and I love it. You know, I'm so...

Participant 2 16:06

Smashing it. I'm a hero I'm my own hero. I'm never gonna die.

Researcher 16:12

But.

Participant 2 16:13

This is me living forever. It's just a motivation to actually go out and do it.

Researcher 16:20

Yeah. No, that's fine. So that's the final question. I'll stop the recording now and then.

● **Researcher** stopped transcription

Appendix 7 – Coding Tables

Participant 1.			
Quest ion	Line Num ber	Quote	Code
1	27	see physical health.	Unsure of the benefits
	28, 29	But really benefits you mental health because of all of the endorphins that are released.	Unsure of the benefits
	31	And how long those endorphins actually last?	Clear on some negatives
	32, 33, 34	But I know that it can be, really, like, physically damaging on different parts Worse issues down the line? Because your knees don't work and you're not able to, I don't know walk the same length as someone your age because you spent 25 years running and they haven't.	Trepidation about participation
2	36, 37, 38, 39, 40		Trepidation about participation Attitude about PA is negative
	44	I can't say I really enjoy it. I wouldn't be inclined to just join someone that's exercising, and you know it's gotta be something that I really, really enjoy doing.	Motivation is enjoyment/comfort
2b	44, 45 47	Yes, to be honest.	Motivation to be slim
2c	50	Yeah, definitely	Motivation to be slim Aware that PA can lead to weight loss,
	54	Not really, I think like.	

	56, 57, 58, 59, 60, 61	It is that like attitude of doing physical education (exercise) that is like something that's gonna make you lose weight. And you gonna be like, skinny. I think there's always thought in the back of your mind like I need to work out because I need to be slim. But I wouldn't say my family have ever like, pushed me,	not a strong motivator Aware that PA can lead to weight loss, not a strong motivator Little family support for PA
2d	62, 63, 64, 65, 67	It's hard to think about like, different health issues. My grandparents have health issues and if they maybe, if they exercise a little bit more they wouldn't be so like, illness prone now, I don't know, I think that crossed my mind. No	Aware of PA being physically helpful, laments elders not participating, not a strong motivator for participation Not a member of sports club or gym
3	72, 73	I do a lot of walking, but I've also in the last two weeks started, it's like beginners yoga.	PA is low effort, fits with enjoyment, comfort Believes that they are doing enough Doesn't see restrictions immediately, potentially hasn't sought facilities out
4	76	I do.	
5	80	Yeah, no.	
5a	83, 84, 87, 88	I don't drive and I've got scoliosis so	Inconvenient facilities in local town Injury prevents participation
	89, 90	what the gyms in "local town" especially are, like, targeted at, you know, weight training and lifting weights, whereas I can't do that.	Injury prevents participation

	90, 91, 92, 93, 94, 95	I would really benefit from swimming, but there's no swimming pool in my area. And to get a bus takes an hour, and then I've got to walk to the swimming, like, the leisure centre, and then I've got to get the bus back and all and all, it's taking me like 3 hours for a 40 minute swim.	Inconvenient facilities in local town
6	100	No, no, not necessarily.	Participates in solitary exercise
6a	103, 104, 105	Yeah, the yeah, definitely. There's a part of me that wants to join a club, so I can just sort of meet more like minded people. Well, I wouldn't say like minded, but maybe have that common ground with other people.	Potentially seeks external motivation
7	111, 112	No. At all.	Aware that facilities are inconvenient
7a	118, 119, 120, 121, 122, 123, 124, 125, 126	No. I don't I I as a female not to make this a, you know, gender argument, but as a female I wouldn't feel. Comfortable going into. Yeah, every gym in my area. But because it is very Male dominated, which again is not problem. I know that the demographic of weight trainers are generally men not women, but just because I I know a lot of the owners around here and I think ohh there's no, I just would feel quite uncomfortable going on my own.	Feels unsafe in male dominated environments Feels that external help would be required to engage with local facilities
7b	131, 132	Yeah. Yes. No.	
8	136	Not necessarily, no	Feels like university and family have not encouraged participation. Feels like the university could do more for promoting a healthy environment, interestingly, does not mention family, despite referring to
9	141	I think, I think, that I think the uni could do a little bit more.	

			this when asked directly.
	143	Give their students free gym memberships or something for at least term-time	Cost barrier, does not state would increase personal attendance
	148, 149, 150	but just more fresh food and more variety of healthy options as opposed to it being like, you know, here's one meal and then the other meal down is burger and chips	Laments a lack of healthy choices in canteen at university, interestingly, does not mention family despite highlighting previously the environment
11	154, 156, 157, 158, 159 168, 169, 170	Physical activity family. I think to them. If I told them that I was gonna write, you know, for the next two hours, I'm going for, like, a walk, they, they wouldn't really respect that as much and they would still think you're only going for a walk. That doesn't matter that much. Yep. I'm aware of all of those things in like myself, most of those things, but I can't really tell you how it affects my nutrition.	PA not deemed important to family Unaware how health can be impacted by diet
12	176, 177, 178	The time of, well, the weather, yeah, definitely cause again, I like doing walking, so if it's like really, you know, the weather's really bad, then I won't go. Ohh. But my medication does stop me from exercising.	Weather is a barrier to PA. as is the temperature.
	182		

Participant 2.			
Quest ion	Line Num ber	Quote	Code
1	58, 59	Yes, but I'm more aware now than when I was younger.	Had to gain own knowledge
	60, 61	It's like I've researched it myself, whereas when I was younger we didn't really know much about it. Yeah. So when I (was younger), I didn't really. I wasn't a physical person. Like I didn't. I barely exercised, but so.	Researches how PA can effect physical health
1a	67, 68, 69, 70	Now that I'm older that I saw researched the benefits myself.	Has taken part in more PA since research highlighted the benefits
1a	76, 77	But now I know the benefits, that's due to research rather than.	
2	84	It depends what physical exercise I started running.	Engages in slightly strenuous PA
	85, 86	God, just find it a burden and I'm talking like. Can't be arsed, I don't want to go, but then when I'm running, I'm like, yeah, I got this this. I can do this. Look at me go. You know, I'm like, I'm smashing it. Then I get back and I'm like, yeah, I've done my personal best then I'm like. Ohh but like go when I'm like, don't go. Then you'll go when I'm like. Ohh yeah. I'm gonna do yoga.	Struggles to find motivation until participating
	87, 88, 89, 90, 91	Yeah, let's do this. And then halfway through. I'm like, I regret this.	Positive reaction to completing goals, participation in PA
	99, 100, 101, 102, 103, 104, 105, 106, 107,	It was when I was younger. I don't need don't need to do physical exercise if issue with that. I had a flat belly, so I'd like to crunches and. Sit ups and saying. But now with more. For health reasons, then. Trying to be healthy for the kids. And promote health and physical exercise for the kids so they. Keep doing that	See's PA as more important than just aesthetically.
2b			

		Kind of yes, cause Participant's spouse runs. He does love running. He's. Very athletic like that and we try and get the. We try and tell the kids. So you know we're running in today. Exercising is good for you. And then I Participant's child has got, like, little yoga book and we go through the yoga stuff and things, and when we're out and about, we try to get the kids to. We go, we do a lot of walking we go on a lot of walks on the weekends and sometimes after school and things. We do a lot of walking but that. The extent of it really with the kids and we go through men as our library at the weekend, but Participant's child . My daughter, she's in gymnastics Saturday, so she does that. I will sign Participant's second child when he is old enough.	See's PA as having additional benefits, encourages children and spouse to participate in PA for their (the children's) benefit
2c	117, 128		
2d	141	No	Not a gym member
2d	148, 149, 155	By just I can forget and go get my number. I do so I don't know if they still allowed anymore. That's right, I've thought of it.	Attempted to join gym but found the process difficult.
3	163	Yeah. Yeah, it was. So participant's child has gymnastics on Saturdays. Ohh.	
3a	169, 170, 171, 172, 173, 174	I just know they do free swimming for kids on Saturday mornings. It's like 8 in the morning. So we go there every other weekend and then participant's child goes to gymnastics for. Yeah, just after then.	Engages in PA and encourages children to do the same
3a	186, 187	Running, we run. And I would say no. Only because.	Engages in slightly strenuous PA
4	194, 195, 196, 197, 198, 199	Maybe the last week really cause I haven't been well, I haven't gone running at all like I went Sunday and that's it. And I do need to start going more. I don't think I'm doing it as often as I should be.	Feels that more PA should be conducted, feels guilty for not participating in regular PA
5	205, 206, 207, 208,	Well obviously the kids and. Participant's spouse working in settings, because he works quite early, so I have to get up early to run and	Busy home life acts as a barrier to participation

	209, 210	that's. Puts me off. It puts me off quite a bit because I'm like ohh, I don't want to get up at 6:00 to go for a run. You know, and when we've had a rough night with the kids and they've been er...	
	211, 212, 213, 214, 215, 216, 217	They've been up all night and I I can't think of anything worse than getting up early. And then you. As in the night? Then you just don't want to cause it's all like it's being now. You're just. Today's gone tired.	Busy home life acts as a barrier to participation Due to energy being depleted in handling day to day stresses PA is not top priority
5a	229	Yeah, that's right (in response to "Energy and motivation") I think no, only because I do actually go running on my own and the only person I run with is Participant's spouse.	
	237, 238, 239, 240, 241	But that doesn't. I have no interaction with anyone else. Sometimes I pass people I give little *wave*.	Not participating in PA for social reasons
6a		Yes and no. The closest one I would say is the leisure centre, but because I don't drive, it's quite difficult to get there.	
7	256, 257		Access to leisure facilities is limited
	258, 259	And it's awkward times and things as well. So it's difficult for me to. Access then. It's hard for me to do exercise when I have the kids.	Access to leisure facilities is limited by class times
7a	260, 261, 262	And that's until 6:00 o'clock when Participant's spouse gets home, so it's hard for me to do that, but then exercise for the kids. are at awkward times as well, so it's trying to juggle.	Busy home life acts as a barrier to participation
	262, 263, 264, 265, 266	Dropping participant's second child at school. Doing stuff that's making sure you have his nap. Participant's child coming home from school and then.	Children's participation in PA directly impacts upon PA participation
7a	267, 268, 269, 269, 270, 271, 272	There's closed without the weekend's. I'm so bad. You know, she's got gymnastics on Saturday. We go swimming but then also, you don't really wanna spend the whole weekend. Do an activities like that because you wanna go out and do stuff as a family	Children's participation in PA directly impacts upon PA participation Engagement in PA is limited due to spending time with family as a higher priority

		and. Yeah, it's quite difficult.	
7b	279, 280, 281, 282, 283	I think so. Yeah, the one. The leisure centre now they've gone quite *inaudible from recording*, you have this little tag. And you don't even have to really speak to anyone going in anymore. So if you're quite shy and self-conscious, you can just go in and swipe yourself in and then. What have you got to do then?	Finds the leisure facilities easy to use, doesn't have to rely on a worker as key fob available, also doesn't feel embarrassed by turning up and having to interact socially
8	296, 297, 298	I thought they do by my family. Participant's spouse especially. He's very "just get it done". "Just do it". "Just run". "What's wrong with you?" "Why aren't you running?"	Participation in PA strongly supported by family Participation in PA not strongly supported by university, feels like free gym membership offer was the only event they have performed to encourage participation in PA
8a	299, 300, 301	The Internet see it. The gym thing was good. The Free gym membership thing, but I think that's kind of like. All they've done this year. I struggle to find information as to the opening times of the gym in the university.	
8b	308, 309, 310	I don't know if it was 24 hours or not. I didn't. I couldn't find the facilities they had to offer that like I knew it was a gym. And I knew there was swimming, but that wasn't from the university. That was from my brother learning to swim there.	Finds the university gym facilities difficult to access, difficult to find information on
8b	311, 312, 313	But then I'm not sure where. What's actually there at all.	Past experience rather than university advertisements have informed about certain facilities Feels the university is doing something to promote a healthy environment
9	322, 323	I think the university is tryin. The definitely try it and. I don't think they're doing enough per se because. For the meals I have. The sale as I have the healthy meals are more expensive than chicken Nuggets and chips, which is ridiculous.	
9	324, 325, 326, 327, 328, 329	You know, if you're promoting healthy food, the healthier food should be cheaper. I think that should be more healthy food options.	Feels the university should subsidise healthy meals to cater for the "healthy choice" as often the alternatives are cheaper, and therefore cost acts as a barrier to students wanting to eat healthily.

9	331, 332, 333, 334, 335	And I think maybe they should send them more advice on. The band says of healthy there may be a nutrition and things or maybe do seminars because they have all these seminars and free courses and things. Maybe they should do more. Towards nutrition. And my family. Kind of.	Feels nutrition courses and seminars would improve how much the university was prompting a healthy environment.
9	336, 337, 338, 339	Participant's spouse comes home with chocolates and. Brand new ice cream from work and things so.	Feels family nutrition is not as good as it could be.
10	354, 355, 356, 357, 358, 359, 360, 361, 362	Mainly healthy food. Yeah. Because I wanna get the kids to eat healthily. And then I'm just eating the same as them anyway because it's easier. But I do a lot of hidden veggie sauces. Just so I know, cause I sure won't eat anything green. But he leaked a green cheese sauce. So yeah, like broccoli cheese sauce and I like puree the broccoli and then I just eat it with them. So and the bolognaise I put, I blend all the vegetables up as well and make like a veggie sauce for them. So we do it fairly right, uh, healthy. We eat a lot of fruit and veg.	Feels family nutrition for main meals is good, encourages healthy choices and "hides" vegetables to ensure they are eaten. Feels snacking is a habit that the family engages in which detracts from the healthy environment. Sees snacking as the main contributor to family environment being less nutritionally good as it could be.
10a	363	Uh, it's just the snacking I think it's a bit of an issue.	Not aware of how nutrition could be affected by these items.
11	371	No.	Finds calorie counting arduous and time consuming.
11a	377, 378	I did the calorie count before. But I thought it was a bit too much effort, you know.	Weather affects participation in PA
12	394	Weather is definitely.	Bad weather diminishes motivation to participate in PA
12	395, 396	Yeah, if it's raining then. And I'll say I'm running and I'm so back. I just don't wanna go. I don't run in it. I no, I went out and summer. I feel like in summer and the sunshine. You just want to be healthy and you know you're in that frame of mind and you're happy and you're like ohh, it's sunny woo.	Good weather encourages participation in PA
12	403, 404, 405		

12	406, 407, 408, 409	Was I do find in winter because it's cold and dark and depressing and I'm sort of like. Hey. Ohh big Jump is on anyway. Who is gonna know. I don't think so. No, I think you know the weather is definitely one. And the kids, and sleep and things.	Bad weather diminishes motivation to participate in PA, feels that nobody can tell, which implies aesthetics are a at least subconsciously a factor for engagement.
12	416, 417, 418, 419	I'm more of a sleeper, but then an exercise that I'd rather just get my sleep than you know. It's not that bad really. This is me living forever. It's just a motivation to actually go out and do it.	Feels participation in PA is limited by time constraints, energy levels and the motivation to engage.
12	426, 427, 430, 436	It's when I'm (doing it) I love it when I'm running and I love it. You know, I'm so... Smashing it. I'm a hero I'm my own hero. I'm never gonna die.	Feels participation in PA is good due to the thoughts that engagement brings on.

Appendix 8 – Interview Questions

What are the attitudes of mature students to physical exercise, nutrition and the barriers to participation?

1. Are you aware of the effects of physical exercise?
 - a. Allow participant to elaborate on positives/negatives, encourage thinking about it.
2. How do you feel about participating in physical exercise?
 - a. Allow time to encourage deeper introspection
 - b. Do you feel that looking slim or athletic is an incentive for exercise, above any other reason?
 - c. Ask about socially/environmentally/family wise. Ask if, for example, the immediate family regularly engage in sports together.
 - d. Ask whether or not they are members of a gym or sports club.
3. What types of exercise do you engage in on a regular basis?
4. Do you feel that you exercise enough for you?
5. Do you feel like you are restricted with how often you can participate in exercise?
 - a. Ask what those restrictions are (if any).
6. Do you think that physical exercise helps you to socialise with others?
 - a. Ask how this has occurred (if it has)
7. Do you feel that sporting facilities near to you (if any) are convenient to use?
 - a. Which factors affect the convenience? Ask about parking, proximity, atmosphere, safety.
8. Do you feel supported by your family and the university to try new sports or to exercise?
9. Do you feel that your family and the university does enough to encourage a healthy environment, including nutrition advice, meal selections etc.?
10. Thinking about your diet, do you feel that it is healthy?
 - a. Ask for examples of meals to gauge the attitude to the reality. Encourage discussion about the meal selection and why those meals are chosen/consumed.
11. Are you aware of your metabolic rate, calorie intake, macros, and how these will affect your nutritional goals?
12. Does anything else effect your participation in exercise, such as the weather or the time of year?
 - a. Allow participant to dwell on factors such as winter being shorter days.