University of Wales
Trinity Saint David
LONDON

Research Proposal Form

MSc Public Health and Social Care in Practice Dissertation(CHS7004)

Fill in this form after discussions with your tutor.

The information will be formally submitted to your supervisor for approval.

Student Name	**Student ID**
Anjaliben Tusharbhai Vora	2221529

**Please adapt the text boxes accordingly*

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Proposed Research Topic:

Analysing the Long-Term Impact of Wearable Fitness Tracker users on Public Health Metrics for healthcare professionals and household fitness seekers (Age Group 20-65 years old)

Research question:

- What is the advent of wearable in significant advancement of tracking and fitness-related data?
- How effective is wearable fitness tracker users on public health metrics for exercising, nutrition, and stress management?
- Why is the wearable fitness tracker users in the data gathered from wearable activity trackers with user general physical health as well as cardiovascular health status?
- Which areas of scope are evident from the utilisation of monitor human basic physiological signals in medical areas of expertise?

Research methodology:

The research will be utilising secondary qualitative research methodology for gaining insight into utilisation of appropriate qualitative data with the appropriation of research question.

A brief overview(14-20 sentences, including 5 references)

Please provide a brief overview of the topic you intend to research in a lay public language, that is for a non-scientific audience:

Artificial intelligence is driven to a long way with the ways of leveraging wearable scientific discourse of stress management, nutrition, and exercising. As argued by Shin *et al*. (2019), advancements in wearable technology draw attention towards the enhancement of patient well-being and healthcare. In this aspect, healthcare progress is evident from wearable devices to promote monitoring vital signs, physical activity, and supporting wellness for healthcare approaches in self-care and personal fitness. On a contradictory note, Moore *et al*. (2021) counter-argued and claimed that

wearable devices are subjected to make advanced sensors with stress level management and calorie expenditure. In this context, there has been integration in wearable devices to have real time guidance in the optimisation of prevention injuries and exercising routines. Further, Shei *et al*. 2022) argued and stated that fashion forward designs are integrated with the preference of wearable technology to make fitness track as well as monitor the seamless lifestyle sense. Counter-arguably, Creaser *et al*. (2021) noted that wearable technologies are significant towards the advancement with the wearable fitness tracker users on public health metrics for exercising, nutrition, and stress management. In this aspect, Kao *et al*. (2019) in transmitting the real-time data to the healthcare providers, and enabled the timely interventions, with early detection of health issues, and superior patient outcomes.

Aim (a broad statement capturing the overall purpose of this research)

Please provide the aim of the topic you intend to research:

The aim of the research is to shed light on the significance of the implementation of wearable fitness tracker users on public health metrics and its long-term impact on increased exposure to wellness and fitness in core healthcare processes.

Objectives (outline 3-5 using bullet points)

Please provide the objectives of the intended research:
● To analyse the advent of wearable in significant advancement of tracking and fitness-related data ● To assess the effectiveness of wearable fitness tracker users on public health metrics for exercising, nutrition, and stress management
● To evaluate the wearable fitness tracker users in the data gathered from wearable activity trackers with user general physical health as well as cardiovascular health status ● To identify the areas of scope are evident from the utilisation of monitor human basic physiological signals in medical areas of expertise

Ethical considerations(indicate ethical issues that are relevant to your research)

Collecting primary data from human participants requires you to address these issues. *Using primary data sources still requires how you will address these issues.*	
I will submit my research proposal and the UWTSD ethics form to my supervisor to receive ethical approval.	Yes/No
I will develop a research information letter and consent form to be handed to each participant.	Yes/No
Voluntary informed Consent will be asked of each participant:	Yes/No
I will ensure participants will not be subjected to coercion, intimidation, and undue influence to participate in this research.	Yes/No
I will ensure participants will be informed they have the right to withdraw and their data from this research.	Yes/No
I will ensure to store the obtained signed consent forms securely and anonymously.	Yes/No

I will ensure the collected data will be protected and stored and deleted after ending this study program. I confirm that I have discussed and agreed every supervisor and will only conduct my research agreed in this document Signature……Anjaliben Date:…….. **<u>Supervisor:</u>** Signature……. Date:…….. **<u>Appendix:</u>** **A.Participant research information form** **B.Consent form** **C.List of Questions / Interview schedule**	**securely** section of this form with my in line with what has been Vora…… ….	Yes/No

Reference List add here below

A systematic literature review. *Journal of biomedical informatics*, *93*, p.103153.

2) Moore, K., O'Shea, E., Kenny, L., Barton, J., Tedesco, S., Sica, M., Crowe, C., Alamäki, A., Condell, J., Nordström, A. and Timmons, S., 2021. Older adults' experiences with using wearable devices: qualitative systematic review and meta-synthesis. *JMIR mHealth and uHealth*, *9*(6), p.e23832.

3) Shei, R.J., Holder, I.G., Oumsang, A.S., Paris, B.A. and Paris, H.L., 2022. Wearable activity trackers–advanced technology or advanced marketing?. *European Journal of Applied Physiology*, *122*(9), pp.1975-1990.

4) Creaser, A.V., Clemes, S.A., Costa, S., Hall, J., Ridgers, N.D., Barber, S.E. and Bingham, D.D., 2021. The acceptability, feasibility, and effectiveness of wearable activity trackers for increasing physical activity in children and adolescents: a systematic review. *International journal of environmental research and public health*, *18*(12), p.6211.

5) Kao, Y.S., Nawata, K. and Huang, C.Y., 2019. An exploration and confirmation of the factors influencing adoption of IoT-based wearable fitness trackers. *International journal of environmental research and public health*, *16*(18), p.3227.