

# Contents

What is the Welsh Institute of Physical Activity, Health and Sport?	3
Overview of WIPAHS activity during 2022	5
History of WIPAHS	6
Strategic Theme Leads	<b>7</b>
Examples of Recent Projects	8
Active Education Beyond the School Day	
Evaluation of the 'Active Education Beyond the School Day' Programme	11
An Evaluation of the Sport Wales 60+ Active Leisure Scheme in 2022	
Mixed-Methods Systematic Review to Identify Facilitators and Barriers	15
An Exploration into Perceptions of the Effectiveness of Sport as a Tool to Address Youth Crime	
A Scoping Audit of the Use of Sport and Physical Activity as a Crime Prevention Tool	
Nordic Walking and the Adolescent Population	
Actif North Wales Evaluation Outcomes	
WIPAHS Roadshow	24
Other Examples of WIPAHS Activity	26
Welsh Government - National Physical Activity Group	26
Welsh Crucible	
Media Presence	
Evidence Informing Policy	
International Society for Physical Activity and Health (ISPAH) Conference	
Example Projects Underway	
Evaluation of the British Inspirational Trust Challenge	
Barriers and Facilitators to Physical Activity in Youth with Chronic Pain Body Image Esteem in Influencing Health Behaviours of those Living with Cystic Fibrosis	
Internship Placement Summary	
Experience of Collaborating with WIPAHS	
Case Study: Actif North Wales	32
Can WIPAHS help you?	33
Academics	33
Appendix A – Organisational Structure as of December 2022	34
Strategic Management Board	
Research Steering Group	35
Strategic Theme Leads	
WIPAHS Researchers	
Higher Education Institutions Panel	36
Funders and Contact Details	38

# What is the Welsh Institute of Physical Activity, Health and Sport?

The Welsh Institute of Physical Activity, Health and Sport (WIPAHS), established in 2019, is a pan-Wales network of all eight Welsh Universities and Sport Wales. With members based across Wales, WIPAHS capitalises on the nation's unique culture and its remarkable range of expertise and industry.

WIPAHS brings together world-leading academics, with representatives from Sport Wales and Welsh Government, who are driven to answer practice-based questions, identify fundamental research questions, and ensure that findings are reflected in Welsh policy and practice.





# **Purpose Statement:**

The purpose of **WIPAHS** facilitate is the active to involvement of key audiences in the identification of important research questions related to health and well-being of the nation's future generations and to co-design research strategies to address them.



University of Wales
Trinity Saint David

University of South Wales

Swansea
University

Cardiff Metropolitan University

#### **Mission Statement:**

Aberystwyth

University

The mission of WIPAHS is to build capacity across Wales, training future scientists and increasing strategic collaborations between Sport Wales, academics, businesses, and stakeholders.

As a practice-driven organisation, WIPAHS seeks to answer the questions raised by partners working in the field, as well as widely disseminate knowledge across a range of audiences. Using the transformative power of physical activity and sport, WIPAHS aims to improve the lives of people in Wales.

WIPAHS addresses these objectives following six primary value-driven actions, which were devised following consultation with key partners at the establishment of WIPAHS:



# An overview of WIPAHS activity during 2022

This is the third WIPAHS Annual Report; previous versions can be accessed via our website (Annual Report 2020 and Annual Report 2021). This report provides an overview of WIPAHS, the work undertaken during 2022, and sets out how stakeholders can engage with WIPAHS to address their research evaluation needs. An overview of our organisational structure and the current members of the WIPAHS team is provided in Appendix A.

## **Examples of research from 2022:**

# **Topics**

- Active Education Beyond the School Day
- Engaging Pre-school Children in Community-Based Opportunities to be Physically Active
- Effectiveness of Sport as a Tool to Address Youth Crime
- Nordic Walking and the Adolescent Population
- 60+ Active Leisure Scheme

## Methods Used

- Literature reviews
- Surveys
- Focus groups
- Interviews
- Learning events

# Outputs

- Journal articles
- Review papers
- Presentations to key stakeholders
- Reports delivered to key stakeholders
- MSc Dissertation

# Other activity

- Stakeholder Engagement: WIPAHS Roadshow attended by over 70 people from a variety of roles.
- Informing Policy: Contributed to two Senedd enquiries, presented evidence to the Culture, Communications, Welsh Language, Sport and International Relations Committee, presentations to the National Physical Activity Group
- Media Presence: three radio interviews, one television interview, one podcast
- Conferences: International Society for Physical Activity and Health (ISPAH) Conference, United Arab Emirates; Health-Enhancing Physical Activity (HEPA) Europe Conference, France

9 funding
applications –
75% success
rate with one still
under review

£280,000 income secured

Over 15 new stakeholders engaged with and supported

# History of WIPAHS

July 2019

Initial meeting between Sport Wales, a range of institutions and Welsh Government Officials under the working title of Sport and Academia in Wales group.

Early 2020

Welsh Institution of Physical Activity, Health and Sport (WIPAHS) named and Sport Wales provided financial support to facilitate its development.

> March 2021

First WIPAHS Annual Report was published. Strategic theme leads were appointed following a competitive application process.

October 2019

Further meetings with formal higher education institution leads emerging across the group.

March 2020

Terms of reference formalised and adopted. All of the higher education institutions in Wales joined WIPAHS with official Higher Education Institution leads.

July 2022

The first WIPAHS Roadshow took place, with visits to Bangor, Aberystwyth, and Cardiff.

# Strategic Theme Leads

As outlined in the inaugural WIPAHS Annual Report in 2020, six strategic themes have been identified and appointed. A central tenet to all six themes is the promotion of mental and physical health across the age, health and fitness span, and the consideration of how to implement and scale interventions. As reported in the 2021 Annual Report, the Strategic Theme Leads were appointed in March 2021 through a competitive process and asked whether they wished to renew their term in Summer 2022. The role of strategic theme leads is to seek and support projects with their academic expertise, to facilitate and enhance collaboration across organisations in Wales, and raise awareness of WIPAHS.

#### The Theme Leads below are all as of December 31st, 2022.



### **Healthy Lifestyles**

Dr. Britt Hallingberg

- Cardiff Metropolitan University

The Healthy Lifestyles Theme focuses on understanding how behaviours important for health occur together, alongside physical activity and how they might present in different contexts.



# Health, Sport, and Physical Activity Economics

Katherine Cullen

– Swansea University

The Health, Sport and Physical Activity Economics Theme is focussed on understanding the economic impacts of improving access and engagement with health, sport and physical activity in Wales.



## **Moving for Health**

Dr Richard Metcalfe

– Swansea University

The Moving for Health Theme is focused on investigating the effects of different types and amounts of physical activity on different aspects of physical and mental health across the lifespan.



# Mental Health and Well-being

Paul Sellars

Cardiff Metropolitan University

The Mental Health and Well-being Theme is focussed on improving the state of people's well-being. This involves improving how people feel and their behaviour and their ability to achieve their goals.



# **Population Level Change**

Dr Kelly Morgan

Cardiff University

The Population Level Change Theme focusses on helping to understand how factors such as a physical activity levels, sport and exercise participation and health inequalities change over time.



## **Behaviour Change**

Professor Joanne Hudson

- Swansea University

The Behaviour Change Theme is focused on helping to understand how to optimise people's engagement in healthy behaviours and to minimise people's engagement in unhealthy behaviours.

# **Examples of Recent Projects**

In accordance with the work described in the 2021 Annual Report, WIPAHS has continued to proactively lead, and contribute to, both local and national scale projects throughout 2022. This work has ranged from conducting desk reviews of current international evidence to evaluating national interventions aimed at increasing physical activity opportunities for school communities or the 60+ years population. We have also been working in close collaboration with a wide range of stakeholders, including the Welsh Government, Public Health Wales, National Governing Bodies, Local Authorities, Police and Crime Commissioners, local and national Sport Governing Bodies, and charities. This has been enabled by securing funding from national organisations and research councils, with Sport Wales continuing to provide financial input. Through this financial support, we have been able to provide expertise and guidance pro bono as necessary to ensure that organisations are not prohibited from engaging with WIPAHS.

The following section provides further details on some of the projects that we have been working on over the last year, many of which are ongoing in 2023. If you would like any further information about any of these projects, or how we could help support a similar project with your organisation, club or practice, please get in touch with us via the website or email us directly.

#### Box A: An overview of WIPAHS activity during 2022



9 funding applications - 75% success rate (1 still under review)



£280,000 income secured



Over 15 new stakeholders engaged with and supported



Contributed to two Senedd enquiries, three radio and one television interview and one podcast



One undergraduate summer internship



Four WIPAHS Research Assistants



Presentations in three countries (United Kingdom, France, United Arab Emirates)



# Active Education Beyond the School Day: A Research Paper of Policy and Practice from Welsh, UK and International Contexts

Tessa Marshall<sup>1</sup>, Amy Rees<sup>2</sup>, Clare Roberts<sup>1</sup> \*Sport Wales, \*\*Cardiff Metropolitan University\*

#### 1. What is the problem being addressed?

In line with the Welsh Government's Programme for Government 2021-26, which prioritises exploring the extension and reform of the school day, Sport Wales conducted an evidence review to inform policy and practice of key components and influences, including enablers and barriers. There is currently no standardised approach to opening school facilities to the public. There is a disparity in provision, with local schools leading their own programmes, local authorities running programmes or national governing bodies supporting programmes. Moreover, in some parts of Wales, schools currently have no community offering.



#### 2. What research was conducted?

The research explored the use of school facilities to provide sport and physical activity 'beyond the school day' through a desk-based literature review of Welsh, United Kingdom (UK) and international contexts. The researchers sought to identify

good practice, enablers, and challenges that schools experience when opening their facilities to local communities. In addition, the research sought to identify themes and the possibilities available when schools open their facilities to the community.

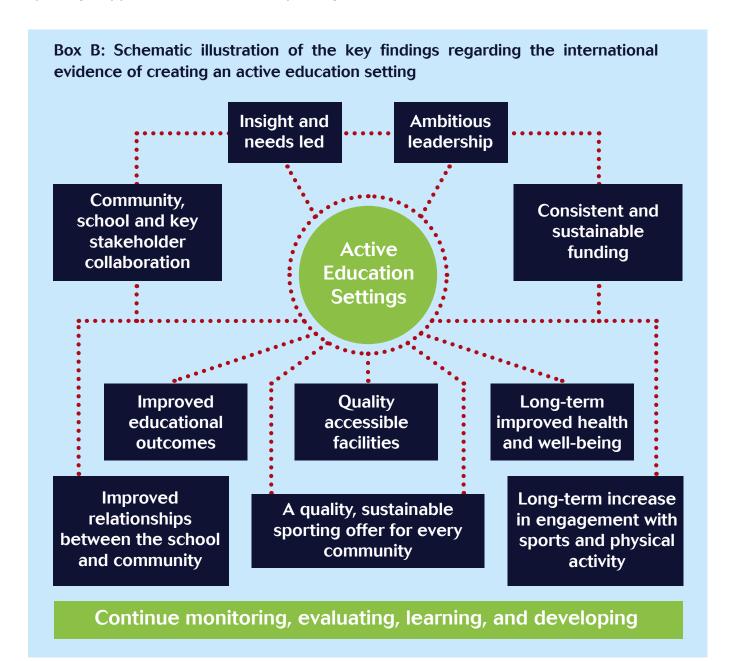
#### 3. What was identified?

The research identified that the opening of school facilities outside of the traditional school day can make sporting opportunities more accessible. This is particularly important when delivered in collaboration with key stakeholders, based on insight into pupil and community need, being implemented by ambitious leaders, and supported with consistent and sustainable funding. Box B provides a visual description of the key findings. This research shows that this policy initiative can build positive and sustainable relationships between the school and community and increase engagement in sport and physical activity.

In all cases, innovative and engaging activities were provided to pupils and community members, which were reported to have been associated with improvements in community cohesion and educational outcomes; high quality and sustainable sporting offers; accessible facilities; an improvement in health and well-being; and long-term increases in engagement with sport and physical activity. The challenges benefits found by each school varied, but the demonstrable increase in engagement with sport and physical activity was consistent. Opening school facilities to create active education settings could

remove a key barrier to engagement by providing communities an accessible and varied sporting offer on their doorstep. Evidence demonstrates the positive impact opening school facilities has on individuals and communities, despite challenges such as COVID-19. An accessible and collaborative sporting offer in a school setting provides a sustainable, long-term opportunity for communities to engage in sporting opportunities, whilst improving

health and well-being. Overall, the beneficial role of active education settings to address the needs of pupils, parents, and the community is evident. By developing a sustainable, collaborative programme, schools can increase capacity and provide accessible, effective, and engaging sporting offers beyond the school day. Placing community and pupils' needs at the heart of any active education setting will support secure success for schools.



## **Example outputs from the work:**

A publicly available research review: Active Education Beyond the School Day | Sport Wales

# Evaluation of the 'Active Education Beyond the School Day' Programme

Catherine Sharp<sup>1</sup>, Amie B. Richards<sup>2</sup>, Kelly A. Mackintosh<sup>2</sup>, Clare Roberts<sup>3</sup>, Amy Caterson<sup>3</sup>, Becca Mattingley<sup>3</sup>, Amy Rees<sup>4</sup>, Gareth Stratton<sup>1</sup>, Nalda Wainwright<sup>5</sup>, Melitta A. McNarry<sup>1</sup>

\*\*Welsh Institute of Physical Activity, Health and Sport, \*\*Swansea University, \*\*Sport Wales, \*\*Cardiff Metropolitan University, \*\*Suniversity of Wales Trinity Saint David's\*\*

#### 1. What is the problem being addressed?

The aforementioned literature review provided the basis for this evaluation, for which a competitive tender was released by **Sport Wales** in early 2022. In response to the 2021 Welsh Labour Manifesto, and to explore Active Educations Settings in a Welsh context, Sport Wales established the 'Active Education Beyond the School Day' (AEBSD) programme. The AEBSD programme sought to address the following research questions:

- What enables a school to become an active education setting?
- What is the impact of a school becoming an active education setting (e.g. vision for sport, physical activity levels, educational priorities)?
- What can ensure the active education approach becomes sustainable and embedded into school development plans?

#### 2. What research was conducted?

WIPAHS was commissioned by Sport Wales to support the evaluation of the AEBSD programme and draw insight from the data collected to provide recommendations for future implementation. A total of 13 individual schools and one federation from across Wales took part in the pilot. A range of data collection methods were used, including the analysis

of Expression of interest forms, learning logs and attendance registers; and conduct and analyses of school forums, child focus groups, staff

structured and semi-structured interviews, and a child-level survey.

#### 3. What was identified?

Schools proposed and administered their own version of the AEBSD programme, each with a specific focus relevant to their school and wider community. These included developing inclusive offers for different groups of the community (e.g. LGBTQ+ community, pupils with additional learning needs, disengaged girls), upskilling school staff, increasing community cohesion and reducing anti-social behaviour.

All pupils were likely to recommend these sessions to someone (100%), whilst most rated the overall experience of the sessions as good (99%), felt confident when attending the sessions

(99%) and were likely to continue attending the sessions (95%). Around 8 in 10 pupils in three of the four schools who completed the pupil survey reported increases in their physical activity levels. Three factors that schools wanted the AEBSD programme to improve were educational priorities, sport and physical activity offerings and community cohesion.



### **Educational Priorities**

Schools recorded a positive impact on pupil behaviour. Organised after-school activities provided a safe space for pupils to go to, often where there was little else available for young people in the neighbourhood. In addition, the programme became an effective tool to teach pupils to manage their emotions and learn self-control. Staff perceived pupils improved their confidence, self-esteem, and resilience. The programme helped deliver cross-curriculum benefits as well as collaborative learning between schools.



## **Sport and Physical Activity**

All schools highlighted that the pilot project had, in their anecdotal opinion, resulted in increased levels of physical activity and sports participation. Schools reported increased participation in dance by boys, and the re-engagement of disengaged girls back into physical education. As a result of the opportunities, physical skills were developing and schools observed a better standard of performance, equipping pupils with the foundations that could lead them to exit routes of community-based provision.



## **Community Cohesion**

One benefit of the pilot project has been the ability to offer new opportunities for private providers, local authority teams, and National Governing Bodies to connect with potential participants. The programme has improved many of the schools' relationships with parents, as well as potentially contributing to reduced anti-social behaviour.



With an outcome of the pilot being to create active education settings, schools were asked to select the key reasons as to why becoming such a setting was important to them. The top three reasons identified were: to improve pupils' health and well-being, to give pupils access to active opportunities and to develop pupils' knowledge and understanding of being physically active because it is an important part of their educational experience and development. Five key recommendations were made based on the project findings:

#### Box C: The key recommendations based on the project findings

- Develop a clear message on the purpose of the AEBSD programme, taking into consideration the evidence presented in the evaluation as to why pupils attended (e.g. learn new skills).
- 2 Undertake continued evaluation of the AEBSD programme
- 3 Develop a systems approach to the national implementation of the AEBSD programme
- 4 Develop an AEBSD toolkit for schools
- 5 Develop a sustainable funding model to support schools to initiate and continue the programme

#### **Example outputs from the work:**

- Evaluation of the 'Active Education Beyond the School Day' Programme Report
- The Report will be disseminated to Welsh Government, Sport Wales board, internal colleagues, local authorities and colleagues across the home nations (Sport England etc).



# An Evaluation of the Sport Wales 60+ Active Leisure Scheme in 2022

Marco Arkesteijn<sup>1</sup>, Emily Smith<sup>2</sup>, Coleen Nolan<sup>1,3</sup>, Kelly A. Mackintosh<sup>3</sup> Joanne Hudson<sup>3</sup>, Jacob Simmons<sup>1</sup>, Richard Metcalfe<sup>3</sup>, and Melitta A. McNarry<sup>3</sup>

<sup>1</sup>Aberwystwyth University, <sup>2</sup>Welsh Institute of Physical Activity, Health and Sport, <sup>3</sup>Swansea University

#### 1. What is the problem being addressed?

Being active at an older age is beneficial for health and well-being. Leisure centres typically offer activities for any age; the primary focus is often perceived to be children and young adults. This has meant that older people have felt left out and isolated when it comes to opportunities to be active. Sport Wales instigated the 60+ Active Leisure Scheme (ALS) to encourage all local authorities (LA's) in Wales to proactively consider the opportunities available to those over 60 years. This could include the promotion of specific sessions, development of new offers and/or ensuring that older people can have a good, enjoyable time whilst benefitting from being active. A key feature of the scheme is that people can join in the activity for free, or at a minimal cost, for the first 8 to 16 weeks.

#### 2. What research was conducted?

The evaluation of this initiative is ongoing. To date, focus groups with LA's have been conducted to gain an insight into participation numbers and the type of activity on offer, with key differences between LA's being explored. The current implementation and uptake of 60+ ALS has also been explored via learning events with LA's, surveys, and interviews.

#### 3. What was identified?

At this interim stage, all LA's have been successful in embedding the scheme in their leisure services. Some LA's reported participation rates of over 100 people between April- September 2022. A wide range of activities are being offered, with one notable activity being the National Exercise Referral Scheme . This shows how being active in leisure centres can progress from health initiatives and was identified as a major benefit of the scheme. A key anecdotal benefit which was highlighted was that people valued the social side of being active. Various examples of people meeting outside of activities were identified. Many LA's are actively encouraging socialising, with many offering free, or reduced-priced, coffee; providing another incentive to join, whilst also benefitting from being active. More specific targeting of sub-populations, and better sharing of good practice across LA's could be key steps to keep developing the scheme.

## **Example outputs from the work:**

- An interim report was delivered in November 2022 and provided to Sport Wales and LA's.
   Recommendations were made to continue to develop the scheme's engagement, reach and impact.
- A full report is due in March 2023, together with a national event showcasing the scheme.

# Mixed-Methods Systematic Review to Identify Facilitators and Barriers for Parents/Carers to Engage Pre-school Children in Community-Based Opportunities to be Physically Active

Rachel L. Knight<sup>1</sup>, Catherine Sharp<sup>2</sup>, Britt Hallingberg<sup>3</sup>, Kelly A. Mackintosh<sup>1</sup> and Melitta A. McNarry<sup>1</sup> Swansea University, <sup>2</sup>Welsh Institute of Physical Activity, Health and Sport, <sup>3</sup>Cardiff Metropolitan University

#### 1. What is the problem being addressed?

Actif North Wales Foundation Subgroup, who are co-ordinated by Sport Wales, identified a need to understand what the barriers and facilitators are to parents engaging their pre-schoolers (aged 0-5 years) in community-based opportunities to be physically active. In Wales, participation rates within community sport and physical activity in young children paints a concerning picture. For children aged 0-5 years, engagement with opportunities to be physically active are often driven by the adults responsible for the child's care.

#### 2. What research was conducted?

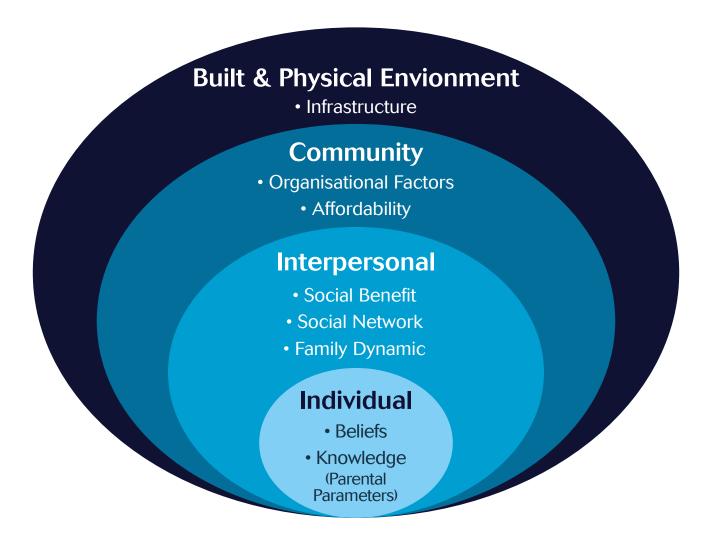
To address the insight gap, a systematic literature review was conducted to explore facilitators and barriers influencing parents/carers engaging their pre-school children in community-based physical activity opportunities. A total of 16 articles met the criteria for inclusion in the final review analysis. To help frame the findings, a socioecological approach was used to explore the interactions between the individual and their social and physical environments. Eight core themes (and one minor theme) were identified (Figure 1).



#### 3. What was identified?

Parental **beliefs** about the value they place on physical activity, the wider benefits they think it could bring, and the prior **knowledge** (or lack of) they have about physical activity, appear to be at the centre of their decision-making processes. Key drivers for parents, particularly mothers, attending community-based activities, such as playgroups and parks, are the **social benefits** and opportunities they provide. Parental **social networks** often provide a platform for peer support and influence, and the **family dynamic** can also drive participation. However, both can also give rise to challenges that can negatively impact pre-schoolers' engagement with community-based physical activity opportunities.

Going forward, the unique requirements of pre-schoolers and their parents may have to be acknowledged at an **organisational** level when physical activity is being targeted. **Affordability** of community-based opportunities presents a major barrier; whilst adequate access to parks, open spaces, general resources, their quality, and how easy it is to travel to them (**infrastructure**), are important facilitators of play, and therefore physical activity for pre-schoolers.



**Figure 1.** Socio-ecological model of factors that influence parental engagement of pre-school children in community-based opportunities for physical activity

#### Box D: The key recommendations based on the project findings

- 1 Facilities like play groups and parks provide opportunities for mothers to socialise: the perspectives of fathers need to be explored further. Dual advertising campaigns may be needed to target both parenting roles at the same time.
- In areas of higher deprivation, affordability and access barriers present the greatest challenge, where cost is not an issue, influencing factors appear to be more focused on beliefs and social opportunities: the impact of socioeconomic and geographical differences needs to be compared in greater depth. Policy implementation strategies and opportunity provision, whilst provided to all, may need to be graded depending on need.
- For many years, it has been perceived within society that pre-schoolers are sufficiently active already, just by taking part in their normal everyday activities where on the spectrum of importance parents place engaging pre-school-aged children with physical activity needs to be established. Strategies that educate parents on the value of physical activity and challenge beliefs and knowledge need to be considered.

#### **Example outputs from the work:**

- Actif North Wales Foundation Subgroup report
- Knight, R. L., Sharp, C. A., Hallingberg, B., Mackintosh, K. A., & McNarry, M. A. (2022).
   Mixed-Methods Systematic Review to Identify Facilitators and Barriers for Parents/Carers to Engage Pre-School Children in Community-Based Opportunities to Be Physically Active. Children, 9(11), 1727
- Actif North Wales report has been disseminated to LA's across all regions.
- The Report will be shared with Play Wales and Early Years Wales.



# An Exploration into Perceptions of the Effectiveness of Sport as a Tool to Address Youth Crime and a pan-Wales Comparison of the Sports-Based Programmes Funded by the Police and Crime Commissioners' Offices in Wales.

Cleo Fish<sup>1</sup>, Joanne Hudson<sup>1</sup>, Katherine Cullen<sup>1</sup>, Simon Moore<sup>2</sup>, Liba Sheeran<sup>2</sup>

\*Swansea University, \*2Cardiff University\*

### 1. What is the problem being addressed?

The promotion of sport and physical activity can help deliver against many of the objectives or pillars within Commissioners' Police & Crime Plans, particularly in relation to youth crime, serious crime and for those who are most at risk of involvement in the Criminal Justice System. Thus, the Policing in Wales Board (comprising the four Chief Constables and four Police and Crime Commissioners in Wales) has recently (March, 2021) proposed a Strategy for Sport and Physical Activity be developed. Commissioners and Forces already invest in local sports programmes and initiatives. There are various strategic areas where sport is being used as a prevention tool, such as violence prevention units and youth crime (criminal justice system). However, initiatives vary across different policing regions of Wales. Holistically, no comprehensive pan Wales picture is available that captures these initiatives, which are also yet to be rigorously evaluated for their effectiveness.

#### 2. What research was conducted?

Following a literature review to explore the theories underpinning the topic, 13 semistructured interviews were conducted with programme deliverers, members of the Police and Crime Commissioner Offices (PCCOs) across Wales, and Youth Justice Service staff. The interview discussions centred around sport as a crime prevention tool, the feasibility of collaboration between the PCCOs, outcome measures, facilitating factors and barriers to effective outcomes, the key roles within the delivery of the programmes, referral pathways, and transport. The interviews were analysed by implementing inductive thematic analysis.

#### 3. What was identified?

The main findings included the significance of case studies in demonstrating the impact of the programmes. There is a perception that whilst sport is an effective crime prevention tool, it is not for everyone and thus an array of diverse tools should be used in conjunction with sport to address youth crime and anti-social behaviour.

The nuances between the different regions and communities in Wales make local delivery important. Coaches and Police Community Support Officers have an invaluable role in contributing to the effectiveness of a programme.

## **Example outputs from the work:**

- MSc by Research
- Presentation to Policing in Wales Group (Commissioners and Chief Constables)

# A Scoping Audit of the Use of Sport and Physical Activity as a Crime Prevention Tool Across Police Forces and Police and Crime Commissioners in Wales

Francesca Murphy<sup>1</sup>, Jamie McDonald<sup>2</sup>, Owen Thomas<sup>3</sup>, Melitta A. McNarry<sup>1</sup> and Joanne Hudson<sup>1</sup> Swansea University, <sup>2</sup>Bangor University, <sup>3</sup>Cardiff Metropolitan University

#### 1. What is the problem being addressed?

An audit was conducted to gain an understanding of how each Police Force and the Police and Crime Commissioners' Offices fund and deliver various physical activity and/or programmes to prevent young people from offending, participating in criminal activity and entering the criminal justice system. Additionally, in regions where no physical activity-based interventions are in place, the audit identified whether any alternative activities (e.g., crafts, group community projects) are currently, or have been previously, delivered.

Specifically, the three main objectives of the research were to: (1)
Conduct an audit of investments made by the Police Forces and Police
and Crime Commissioners in Wales that focus on physical activity and
sport initiatives as a prevention method to keep young people from
entering the criminal justice system; (2) Gather best practices across all
Forces and, (3) Interpret this insight and its relevant value to communities in
Wales with the use of the RE-AIM framework to achieve these objectives, to establish
the Reach, Effectiveness, Adoption, Implementation and Maintenance of the programmes.

#### 2. What research was conducted?

This study offered a cross case analysis of the current practises in Wales and identified areas for improvement and good practise that can be shared and is the first study to complete a research audit of the physical activity-based programmes to prevent youth crime in Wales. A pragmatic philosophical approach was taken to conduct the study to understand the current investments and provision for the young people throughout Wales. Conversations were held with various individuals with roles in or related to programmes and with their financial investors to understand what is done in each programme and how the programme(s) are delivered, including the frequency

of sessions, duration, locations, types of activities, how many volunteers, how many participants (including their sex and age).

This information, along with identifying how the young children who participated in the programmes were referred to the programme and engaged with it, were analysed using the RE-AIM Framework (Holtrop et al., 2021). Through implementation of the RE-AIM framework to analyse quantitative and qualitative data, this research aims to contribute to optimising future sporting programmes in Wales to help reduce the incidence of young people's involvement in criminal activity.

#### 3. What was identified?

The overall findings indicate that the physical activity programmes that are provided vary considerably throughout the country, as does the amount of funding allocated to each programme. The data suggest that there is preliminary evidence that physical activity can be used as a positive intervention tool to help prevent young people in Wales from entering the criminal justice system. Nevertheless, this evidence is mostly anecdotal and is in varied formats across different Forces, making direct comparison difficult.

In relation to objective 1, the audit of investments identified collectively four programmes supporting 3,985 young people across the whole of Wales with variations in delivery format between Forces. In relation to objective 2, best practices were identified from across all the regions, including working collaboratively, providing regular sessions, and additional learning opportunities, as well as sporting provision. In relation to objective 3, based on the findings, key recommendations are made such as improving consistency of data reporting (e.g., criminal offence rates for the participants before and after the programme to enable accurate measurement of effectiveness) and communication between Forces to share ideas and recommendations about what is working in their programmes and what is not.

Amongst other findings, analysis using the RE-AIM framework highlighted the need to clearly identify target participants (Reach) and methods of defining programme success (Effectiveness). There was clear acknowledgement of the need for preventative

programmes for young people (Adoption) and clarity on delivery details of the programmes, such as, number of sessions delivered by whom (Implementation). However, there was insufficient evidence of long-term delivery and effects of programmes (Maintenance).

To improve the programmes that are available throughout Wales it would be beneficial if the Forces could communicate with each other to share practices and lessons learnt especially if there are geographical areas that overlap, for example, Dyfed Powys Swans Kicks uses Swansea City AFC which is based in South Wales Police Force. The adoption of the RE-AIM framework as a way of planning provision, reporting data and statistics, and evaluating the provision would be useful.

## **Example outputs from the work:**

- Bangor University Meeting of Behavioural Sciences, Science Research in Policing, 30th June, 2022, School of Human and Behavioural Sciences (SHBS), Bangor University.
- Linking Police Data with Health and Social Data to Inform Policy and Practice Workshop, 1st December 2021, Holiday Inn, Cardiff City Centre, The National Centre for Population Health & Well-being Research.
- MSc by Research
- Presentation to Policing in Wales Group (Commissioners and Chief Constables)

# Celtic Nordic Walking and the Adolescent Population

Kelly Morgan<sup>1</sup>, Britt Hallingberg<sup>2</sup>, Sian Williams<sup>1</sup>, Jaiden Denney<sup>2</sup>, Richard Metcalfe<sup>3</sup>, Jamie Macdonald<sup>4</sup>, Katherine Cullen<sup>3</sup>, Catherine Sharp<sup>5</sup>, Kelly A. Mackintosh<sup>3</sup> and Melitta A. McNarry<sup>3</sup>

<sup>1</sup>Cardiff University, <sup>2</sup>Cardiff Metropolitan University, <sup>3</sup>Swansea University, <sup>4</sup>Bangor University, <sup>5</sup>Welsh Institute of Physical Activity, Health and Sport

#### 1. What is the problem being addressed?

The role of physical activity in supporting mental health is well documented among adolescents yet most young people worldwide are insufficiently active. There is growing interest in the use of Nordic Walking among young people to improve both physical and mental health outcomes. Typically, Nordic Walking is associated with older adults and most literature to date focuses on older populations and condition-specific diseases.

The current project aimed to explore i) the existing literature surrounding the benefits of Nordic Walking on mental health outcomes and ii) young people's views of participating in a school-based Nordic Walking taster session. The project was linked to the delivery of the Nordic Walking taster sessions in Secondary Schools delivered by Nordic Walking Training instructor, Carol Ross.

#### 2. What research was conducted?

A scoping review was undertaken to gather the available evidence on the impacts of Nordic Walking on mental health. A survey was conducted with 25 pupils who participated in a Nordic Walking taster session at school. Two focus groups were conducted with Year 9 students (n=10) following the delivery of a taster session at school. Discussions lasted between 10-15 minutes and both groups involved females only.

#### 3. What was identified?

The scoping review identified eight studies published between 2015-2021. All studies were found to focus on the adult population (aged 45-82 years) and study designs comprised a randomised control trial (RCT; n=3), non-RCT (n=3) and quasi-experiments (n=2). Interventions varied in duration, from a single 50-minute session to a 52-week programme. Study outcomes mainly focused on quality-of-life (n=5) with various measurement tools adopted across studies.

Overall, review findings highlighted positive impacts across several domains of quality-of-life indicators among adults (including mental health). Effectiveness studies among young people are evidently lacking, reflecting the historical use of Nordic Walking among adults and recently emerging popularity among young people.

Survey data revealed that most pupils (65%) had no knowledge of Nordic Walking before the taster session, and only one student had prior experience. Mean session enjoyment rating was 5.6 (2.5 SD) on a scale of 1 (no enjoyment) to 10 (a lot of enjoyment) and 20% of students said they would like to participate again in the future. Regarding resources needed for sessions, students identified the provision of waterproof clothing (44%) and walking poles (84%) as most needed.

Focus group data revealed perceptions of uncertainty or dislike towards Nordic Walking (Group 1) or favourable views (Group 2). When expressing a dislike, students often compared the activity to walking and motioned that they would prefer to walk without poles. A perception that Nordic Walking was for older people was also expressed. More students in group two expressed a desire to take part in future sessions. The most enjoyable elements discussed were the competitive aspect, teacher involvement and being outdoors. Suggestions for improving future sessions involved; the use of music, providing poles for everyone and reducing the waiting time at the start of the session.

### Anticipated example outputs from the work:

- A submitted master's dissertation project
- A one-page summary for the practitioner
- A draft journal article for publication



### **Actif North Wales Evaluation Outcomes**

Catherine Sharp<sup>1</sup>, Britt Hallingberg<sup>2</sup>, Katherine Cullen<sup>3</sup>, Kelly A. Mackintosh<sup>3</sup>, Melitta A. McNarry<sup>3</sup>

<sup>1</sup>Welsh Institute of Physical Activity, Health and Sport, <sup>2</sup>Cardiff Metropolitan University,

<sup>3</sup>Swansea University

#### 1. What is the problem being addressed?

Actif North Wales is a regional partnership comprising of 18 organisations (e.g. local authorities, universities, health boards, education, and housing organisations) seeking to address key health inequalities and physical activity challenges identified in North Wales. The project was developed following Actif North Wales identifying a need to monitor and evaluate the impact of the transition of the regional investment model from Sport Wales to Actif North Wales. The evaluation was designed to focus on two parameters: i) 'the region' and thereby the partners and areas involved in Actif North Wales; and ii) on 'local areas', thus encompassing the specific country areas within each organisation's remit.

#### 2. What research was conducted?

A survey was developed through an iterative consultation process between WIPAHS and Actif North Wales between February and March 2022. This included a draft of the survey being reviewed by the regional partnership Specialist Adviser with a view that the survey delivered in North Wales could also be administered amongst the other regional partnerships as part of the establishment process. Six of the 18 organisations were selected to complete the questionnaire as current recipients of Sport Wales (previously) and Actif North Wales (currently) funding.

#### 3. What was identified?

Of the six organisations, five allocated money to staff and programme costs; two allocated money to target schools and communities, and one allocated money to digital transformation. One organisation reported using local and national data to identify demand and needs. It was identified that the reporting mechanisms, frequency, and method were not consistent across organisations, making it difficult to draw comparisons against investment models. Four of the six organisations felt that additional impact measures that they did not currently collect would be helpful to inform their investments/priorities/initiatives in the future. Actif North Wales has four pillars driving its strategic agenda. Three of six

organisations reported that the four pillars of the Actif North Wales Strategic Framework drive their organisation's local priority areas, with the remaining organisations reporting that they were somewhat driven by the four pillars. Organisations were asked what physical activity related policies informed their action. The most influential policy was the 'Well-being of Future Generations (Wales) Act 2015'. Policies focused on natural resources were underutilised. Following a review of the results, WIPAHS proposed a series of suggested actions to further understand the context of investment in North Wales as well as proactive steps to put systems in place to enable consistent data collection and reporting mechanisms.

# **WIPAHS** Roadshow

WIPAHS received funding from Swansea University Faculty of Science and Engineering to organise a WIPAHS Roadshow in Summer 2022.

Additional support to arrange and host the Roadshows was provided by Bangor University, Aberystwyth University and Sport Wales.

#### The purpose of the Roadshow was to:

- Increase awareness of WIPAHS
- Highlight the role of WIPAHS in translating research to impact to a wider range of organisations and stakeholders
- Showcase projects and existing relationships with geographically dispersed stakeholders
- Outline to stakeholders how they could work with WIPAHS
- Facilitate the generation of new research questions that WIPAHS can support organisations and stakeholders to answer

#### Three locations were selected to host the Roadshow:



Over 70 people attended the Roadshow, from a variety of roles:

Practitioners (Health)

Practitioners (Management)

Professional Services

Public Sector

Charities

Academics/Researchers

Students

10.00am-2.30pm

Roadshow 2022

Funding for travel is available upon request

Book your space

### Motivations for attending the Roadshow included:

- · To represent their organisation
- To collaborate with others
- To network with others
- To gain knowledge of the network
- To understand how WIPAHS operates
- An interest in research



Huw Evans, Conwy County Council, explained his positive experience of working

with WIPAHS, which is available to watch on our website **here**.



Further feedback from a short evaluation survey on their experience of the Roadshow revealed that:

The case studies highlighted how WIPAHS could help a variety of organisations.

Understanding the purpose of the network.

Have more representatives from WIPAHS to get to know the team.

The opportunity to network.

44

Name card stands/ badges to help improve identify people if in the future it is a larger group.



90%

of attendees said they would likely work with WIPAHS in the future because of attending the event.

Clear information, networking and meeting the team from WIPAHS.

100%

of attendees said they would likely to recommend WIPAHS to a colleague



More information needed of funding options.

More information about how HEI's could collaborate.

Structured opportunity to share ideas.

Passion of the presenters.

# Other Examples of WIPAHS Activity

# Welsh Government - National Physical Activity Group



In April, Professor Kelly Mackintosh and Dr Catherine Sharp provided an overview of the mission and purpose of WIPAHS in the first National Physical Activity Group. The team's paper on physical activity policy in Wales was circulated amongst attendees and Catherine provided a presentation sharing key findings and recommendations from the paper.

Professor Diane Crone and Professor Gareth Stratton are shortly presenting to the National Physical Activity Sub-Group on 'Whole Systems Approaches to Physical Activity in Wales – a WIPAHS overview'.

WIPAHS has also been included in the NPAG's physical activity mapping exercise.

#### **Media Presence**

Following the publication of WIPAHS' Annual Report 2021, Professor Melitta McNarry and Dr Catherine Sharp described the work of WIPAHS on TV and radio interviews, respectively.

## Welsh Crucible



Dr Catherine Sharp was selected to attend Welsh Crucible, an award-winning programme of personal, professional and leadership development for the future research leaders of Wales.



This was a great opportunity to raise awareness of WIPAHS amongst future researcher leaders across Wales from a broad range of disciplines, as well as with invited guests, such as Prof Helen Griffiths, Pro-Vice Chancellor of Swansea University.





## **Evidence Informing Policy**

Professor Melitta McNarry presented evidence to the Culture, Communications, Welsh Language, Sport and International Relations Committee on participation in sport and physical activity in disadvantaged areas. The evidence was document in the **report** published by Welsh Parliament in August 2022.

# International Society for Physical Activity and Health (ISPAH) Conference



Dr Kelly Morgan and Amie Richards attended the ISPAH Conference in Abu Dhabi, United Arab Emirates. Kelly's abstract was accepted for an oral presentation; whilst Amie produced a **Poster Presentation** for the Active Healthy Kids Wales Project to which members of the WIPAHS team contributed.



#### Health-Enhancing Physical Activity (HEPA) Europe Conference - Nice, France 2022

Dr Catherine Sharp and Professor Diane Crone attended HEPA Europe. Catherine had two abstracts from WIPAHS projects accepted for poster presentations. The abstracts have been published in a new supplement of papers on physical activity in the European Journal of Public Health:

National Policy Response to the Sustainable Development Goals: A Physical Activity Case Study of Wales

"I miss a normal life. It's gone on so long": A Qualitative Interpretation of Youth's Perceptions of a Third National COVID-19 Lockdown on their Well-being and Physical Activity



Diane presented Jack Walklett's PhD research on a systems-based approach to physical activity promotion, which included an international scoping of the early adopters of the World Health Organizations' Global Action Plan for Physical Activity. This presentation, which represented one part of Jack's doctoral research, provided lessons learnt from those early adopters for others planning on implementing the Action Plan. Jack's thesis is due for completion early 2023. Jack is a PhD student at Cardiff Metropolitan University, and his supervisory team is Professor Diane Crone (Director of Studies) and Professor Nicola Bolton. Another notable HEPA mention for PhD Student Vasiliki Kolovou who won the early career award, which is a great accolade for Wales. Vasiliki is a PhD student at Cardiff Metropolitan University, and her supervisory team is Professor Nicola Bolton (Director of Studies) and Professor Diane Crone. Vasiliki is supported with a KESS2 funded studentship with industry partners of Sport Wales, Public Health Wales and Natural Resources Wales.







# **Example Projects Underway**

We are currently supporting partners to address important research questions and produce resources to support increasing physical activity levels. More information on these projects will be available in our next annual report; however, short summaries are provided below to provide a flavour of the projects we will be working on in the coming year.

#### **Evaluation of the British Inspirational Trust Challenge**

Melitta McNarry, Nicola Gray, Joanne Hudson, Paul Sellars, Amie Richards, Kelly Mackintosh

Well-being is a key part of overall health, with better well-being associated with a number of positive outcomes including, but not limited to, improved physical health, longevity, more effective learning, prosocial behaviours and positive relationships. However, mental health and well-being levels across the UK population are alarmingly low, especially amongst University-based young adults for whom the last few years have caused unprecedented disruptions to their learning, recreation and social opportunities. There is an urgent need to address this dire situation and to provide University students with support to increase their engagement and interactions. The British Inspirational Trust (BRIT) is a charity organisation supported by high profile sporting ambassadors which aims to raise awareness and funds to enhance and destigmatise mental health in young adults and students through the completion of an annual, collaborative challenge. Specifically, the BRIT Challenge 2023 will involve moving (in any form possible and in teams or as individuals) 2,023 miles between January 23rd and March 23rd 2023. The BRIT Challenge is currently participated in by over 250 universities across the UK and is supported by Universities UK, a collective of 140 UK university Vice Chancellors. The BRIT Challenge has the potential to significantly impact mental health and well-being in University populations; WIPAHS is providing an independent evaluation of this potential. Initially, we will conduct a pilot evaluation of participant's perceptions and experiences of and motivations for participating in the BRIT Challenge across Wales. If supported by this preliminary investigation, we will seek to roll this evaluation out across the UK in the following year.



## **Barriers and Facilitators to Physical Activity in Youth with Chronic Pain** Melitta McNarry, Kelly Mackintosh, Amie

Richards, Nick Wilkinson, Sarah Jones

Paediatric chronic pain is a significant problem, with conservative estimates suggesting that 20 - 35% of children and adolescents worldwide are affected.

Whilst the majority of youth experiencing chronic pain are not disabled by it, approximately 3% of chronic pain patients require intensive rehabilitation and intervention. Persistent pain in many adults (~20%) begins in childhood or adolescence and early engagement and supportive care may reduce the lifelong impact of pain. In 2016, it was estimated that the treatment of moderate to severe chronic pain cost \$19.5 billion annually in the USA alone. Exercise and physical activity are primary treatment strategies for young people experiencing chronic pain but there are considerable barriers to participation in such activities for this population.

Whilst there is a wealth of evidence now available regarding the barriers and facilitators to being physically active and engaging in exercise in "healthy" youth, little is known about the specific barriers and facilitators for those with chronic pain and their parents/carers.

The purpose of this collaboration is therefore to conduct a series of workshops with experts in the area to explore these potential barriers and facilitators for youth with chronic pain and to seek mitigation strategies to enable greater uptake of physical activity and exercise in this population.

#### A Literature Review of Body Image Influencing Esteem in Behaviours of those Living with **Cystic Fibrosis**

Gareth Hall, Jamie Duckers, Rhiannon Phillips, Melitta McNarry, Kelly Mackintosh, Mayara Silveria Bianchim

The role of body esteem in influencing health behaviours is well documented in non-clinical populations, but body esteem is only now being considered an important social and individual variable for health enhancing and impairing behaviours within clinical populations. In those living with Cystic Fibrosis (CF), their body esteem can significantly influence their health outcomes.

For example, body image ideals are currently socially gendered towards thinner frames in those identifying as female and larger and/ or muscular frames in those identifying as males. However, CF illness typically produces smaller body frames resulting in psychologically different interpretations in some CF populations. Indeed, some female CF patients tend to be satisfied with their smaller body frames and resist adopting recommended habits to manage their illness to keep their body weight low. In contrast, some males have been reported to exercise more, manipulate their weight with steroids, and be unhappy with their body image.

The purpose of this academic collaboration enabled by the WIPAHS network is to examine the role of body esteem in influencing health behaviours of those living with CF and how this has been altered by Kaftrio which has dramatically changed the body morphology of many with CF. The systematic review is currently underway with the literature search nearly completed, ready for data extraction and interpretation.

# **Internship Placement Summary**

In the summer of 2022, WIPAHS supported a funded internship for a recent graduate. Following a competitive application process, Alice Verrier of Swansea University was successful in securing the position.

#### Written by Alice Verrier

Funded: Faculty of Science and Engineering, Swansea University



# What were your expectations before starting the internship?

I was looking forward to working on the provision of health interventions for Wales and challenging my current skills and promoting my personal development.



## Why did you want to undertake an internship?

I had a particular interest in this role because it promotes the healthy active lifestyle for children through activity, an area which I have experience in. It would also give me the opportunity to work on innovative research regarding COVID-19 and its impacts on youth physical activity.



## Were your expectations of the internship met?

Yes, I have thoroughly enjoyed my internship with WIPAHS. Working on the provision of health interventions for Wales was an exciting and important task and I was delighted to be part of it.



## How did the internship help you develop?

I have continued to develop my analytical skills in this role. I have also enjoyed summarising their 2021 Annual Report and designing infographics from this information.

I have also been analysing data in excel from the 'Active Education Beyond the School Day' Programme which is something that I had not done before. I also welcomed being part of a team with my teamwork skills further strengthened in this role.



# Did the internship extend your professional network and improve your employability and if so, how?

I am undertaking a Masters in Advanced Sport Performance Science at Swansea this forthcoming academic year and would be more than happy to undertake any further internships or opportunities with WIPAHS should they arise.



# What was your overall view of the internship programme, and what would you say to other individuals considering internships?

I thoroughly enjoyed the programme; I was able to improve on the key skills I already possessed and learn new skills which will be transferrable whatever career path I choose whether it be in sport or health. I would highly recommend an internship to gain invaluable experience.



# **Experience of Collaborating with WIPAHS**

#### Case Study: Actif North Wales

The Sport Wales National Foundations Steering Group has been working over the past 24 months to take a closer look at the foundations of physical activity and sport and a person's first involvement in organised physical activity and sport. Through this group, we had an opportunity to work with WIPAHS on an investigation into the barriers and facilitators for parents/carers to engage pre-school aged children in community-based physical activity opportunities. This, along with other data, insight and evidence sources, will help inform the new Actif North Wales strategic plan.

For Actif North Wales to meet the needs of the population, our regional approach must be evidence-driven and informed by the latest data and insight. Working with academic partners is a key aspect of this, and we look forward to working with WIPAHS and the universities it encompasses moving forward.

Following a Road Show from WIPAHS to Aberystwyth University, I was able to learn more about the team to identify projects that overlapped with WIPAHS' goals and objectives. Since meeting the team, we have been able to discuss and develop the foundations for research and future project development about the influence of body image upon those living with Cystic Fibrosis. Moreover, WIPAHS have made it easy to deal with and help me bring a project that was stuck into something with a more tangible end goal by setting milestones with me and identifying a team with relevant skills to get these projects towards a finish line.

**Gareth Hall** 



Actif North Wales is a collaboration of a number of disparate organisations, all with the aim of making a long-term difference to the engagement in physical activity and sport in North Wales, supporting and enabling more active lives for all. We are still early in our regional partnership journey and our engagement with the WIPAHS network, but already, we recognise the value and expertise they bring to the table and we look forward to continuing to work with them in the future.

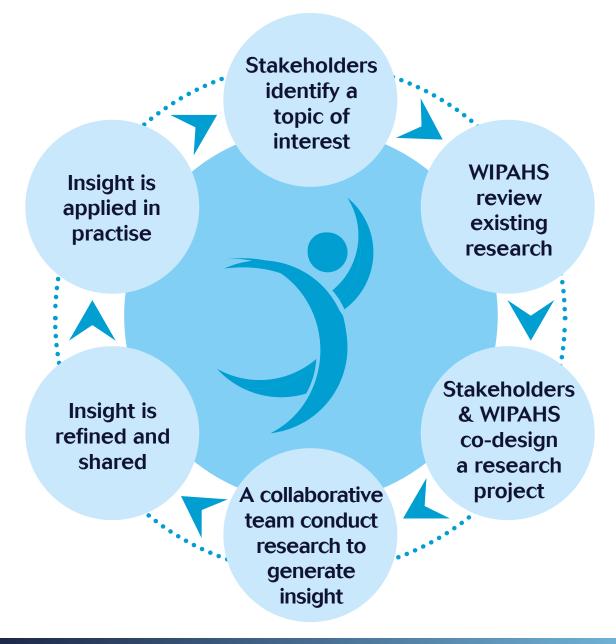
Manon Rees-O'Brien Regional Director



# Can WIPAHS help you?

WIPAHS is a proactive and reactive research and evaluation network, which means that we are required to operate in different ways depending on the specific project and associated timescales.

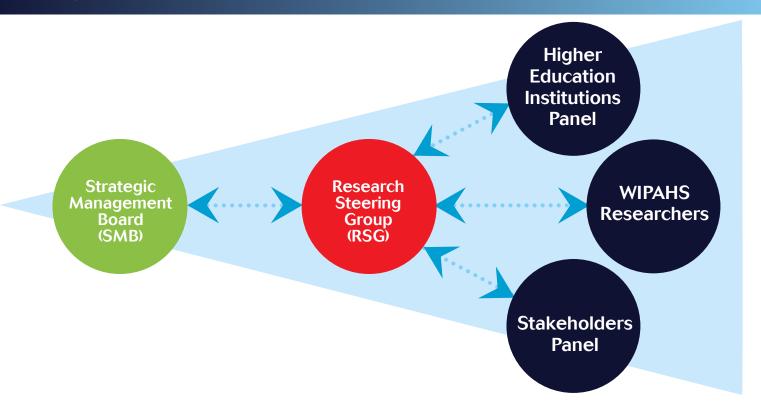
To illustrate one approach WIPAHS might apply to a project, we have presented the following diagram. The closed loop nature of the diagram is to illustrate that WIPAHS also learns from itself, and knowledge from one project can inform other projects.



# Academics

For academics wishing to work with WIPAHS, please see example from Gareth Hall of Aberystwyth University on Page 32. If you need help with identifying collaborators or wish to discuss and develop research projects in the area of physical activity, health and sport please get in touch.

# Appendix A -Organisational Structure as of December 2022



## Strategic Management Board (SMB)

Role: To provide overall strategic direction for WIPAHS in line with Sport Wales' Strategy



**Prof Kelly Mackintosh** Co-Director of **WIPAHS** Co-Chair of SMB **Swansea University** 



Co-Chair of SMB **Sport Wales** 







**Prof Melitta McNarry** Co-Director of **WIPAHS** Chair of RSG **Swansea University** 





**Prof Liam Kilduff** Chair of Welsh Institute of Performance Sport **Swansea University** 

## Research Steering Group (RSG)

Role: To provide leadership and oversight of projects undertaken by WIPAHS



**Prof Melitta McNarry** Co-Director of WIPAHS and Chair of RSG **Swansea University** 



Mr. Steffan Berrow **Sport Wales Representative Sport Wales** 

# **Strategic Theme Leads**





**Katherine Cullen** Health, Sport, and Physical **Activity Economics Swansea University** 





**Dr Richard Metcalfe** Moving for Health **Swansea University** 





**Professor Joanne Hudson Behaviour Change Cardiff University** 





**Dr. Britt Hallingberg Healthy Lifestyles Cardiff Metropolitan University** 



**Paul Sellars** Mental Health and Well-being





**Dr Kelly Morgan** Population Level Change **Cardiff University** 

## WIPAHS Researchers

**Cardiff Metropolitan University** 

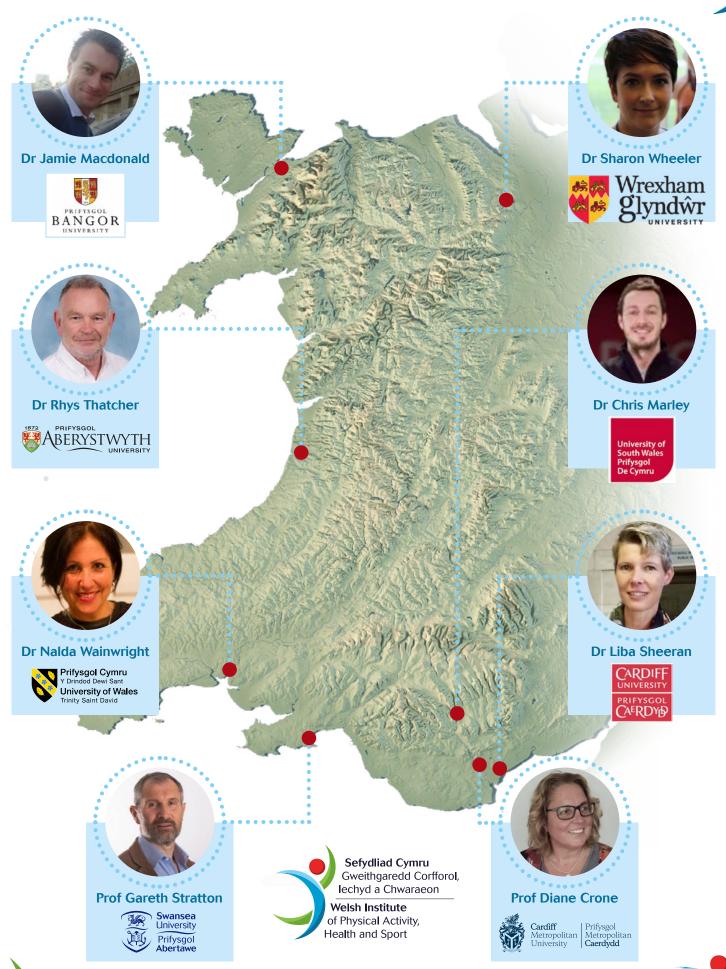






**Emily Smith** 

# **Higher Education Institutions Panel**



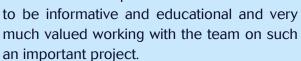
# Testimonials from previous WIPAHS Members

Working with the WIPAHS team was very rewarding, especially as everyone's goal was to improve health outcomes of the population of Wales (and beyond). Being able to work as part of a multi-disciplinary team where you can draw on a breadth of expertise from different disciplines added strength and depth to the work as people looked at problems we were addressing through different lenses and that contributed to my development as a researcher in terms of how I approach and address problems. A key highlight of my experience was undertaking research and evaluation which had immediate translation into practice. This was highly motivating for me,

with example projects such as the 'Active Education Beyond the School Day'.



I have very much enjoyed my time working as the Mental Health theme lead for WIPAHS. I found the experience



The diversity of the expertise within WIPAHS and the high level of skill is unparalleled, and I feel privileged to have been able to be part of the beginning of this project.

I am hoping that I can continue to work with WIPAHS in the future on projects relevant to the interaction and association between mental health and physical activity.

Professor Nicola Gray
Mental Health & Well-being Theme Lead

It was a really rewarding experience being involved in WIPAHS, connecting with fellow academics around Welsh Universities,



all with similar interests and ambition and really refreshing to discuss and implement initiatives to support the development of physical activity in Wales.

The University of Wales is proud of its involvement with WIPAHS and the collective impact that Higher Education across Wales is contributing to the physical activity of individuals across the lifespan.

Paul Rainer - Institutional Lead University of South Wales

WIPAHS would also like to thank Colleen Nolan who worked as a Research Assistant during 2021.



# WIPAHS Collaborators











































If you are interested in finding out how the Welsh Institute of Physical Activity, Health and Sport (WIPAHS) can help your organisation to answer important research and evaluation questions, or help provide your organisation with important insight, please do get in touch to discuss.





www.swansea.ac.uk/sports-science/astem/wipahs





www.linkedin.com/in/wipahs