

# Postgraduate Research School Conference

'Celebrating and Inspiring research at York St John University'

Wednesday 9 October 2024

9am to 5pm

The Citadel, Gillygate, York, YO31 7EA



Est.  
1841

YORK  
ST JOHN  
UNIVERSITY

Postgraduate  
Research  
School



# Welcome to the Annual Postgraduate Research School Conference 2024

An annual conference for the research community at York St John University.

Our annual PGR School Conference has developed and grown over the last six years, and we are delighted to continue it this year, showcasing the diverse amount of research happening across York St John.

After the success of our alumni speakers for last year's conference, we're delighted to welcome back some more Alumni, who will discuss a range of different topics related to the PhD journey.



A warm welcome to our annual PGR conference. We're excited you have been able to join us to share and celebrate research. Get ready to engage with like-minded peers, share your research and ideas, and use the opportunity to foster new and meaningful connections with others in a friendly and collaborative environment.

**Professor Andrew Hill**  
**Head of the Postgraduate Research School**  
**Conference Chair**

## Order of Events

### Wednesday 9 October 2024

Programme times and speaker details	
9.00	<b>Networking</b> Hot drinks and pastries available The Citadel
9.00	<b>Registration Opens</b> Programme and name badge collection
9.45	<b>Conference Starts</b> Welcome to the Annual Postgraduate Research School Conference 2024 Professor Andrew Hill, Head of the Postgraduate Research School, Conference Chair
9.55	<b>Alumni Speakers</b> 9.55am - Charlotte Haines Lyon 10.05am - Helgi Clayton McClure 10.15am - George Wardell 10.25am - Question Panel
10.45	<b>Break</b>
11.00	<b>Medusa? A monster? Yeah, right!</b> Isabelle Berrow
11.15	<b>A Critical Commentary of my novel: taking it apart and putting it together again. A discussion of archive, elements within the novel, and narrative strategies</b> Steven Keay
11.30	<b>An Examination of the Psychosocial Determinants Influencing Asylum-Seeking Parents in the UK</b> Gurujosh Roth
11.40	<b>Break</b>
11.50	<b>Extreme visualisation: making sense of Bronfenbrenner's Bioecological Theory</b> Jan Hanson
12.05	<b>Over-Caffeinated: Pitfalls In Understanding Power And Methodology</b> Jack Patterson
12.20	<b>Materialising Parental Suicide through Practice Led Research</b> Siân Highwood
Lunch and poster presentations	



Programme times and speaker details	
13.30	<b>What are the effects of pre- and inter-conception lifestyle factors (diet and exercise) for women with an existing body mass index (BMI) &gt; 25 kg/m2 on maternal, fetal, and neonatal outcomes? A systematic review</b> Clare Panaser
13.45	<b>Are you now the elite? How populism reframes elitism to demonise Higher Education</b> Kate Pritchard
14.00	<b>Procurement, Profligacy and Power</b> Paul Revell
14.15	<b>The role of the circular economy strategies in creating resilient SMEs toward building internationalisation in conflict zones: The case of SMEs in Palestine.</b> Bassem Abudagga
14.30	Break
14.45	<b>A systematic review exploring physical activity and sedentary behaviours of an osteoarthritic population</b> Zoe Dawson
14.55	<b>Investigating the implementation of maturity-based correction factors on sprint performance testing measures</b> Luke Walsh
15.10	<b>Application of Head-related Policies in Boys Professional Football Academy: A Figurational Analysis</b> Bright Nduka
15.20	<b>An Investigation into the Relationship Between Physical Fitness Parameters and Injury in Male Academy Football Player</b> Emma Palmer
15.30	Break
15.45	<b>Optimising Large File Transmission in IoT: Improving Multiprotocol LPWAN Gateways with AI-Driven Techniques</b> Viacheslav Shkuratskyy
15.55	<b>Safe at home? Older people’s use of Artificial Intelligence at home, with occupational therapists in Adult Social Care.</b> Alicia Ridout

Programme times and speaker details	
16.05	<b>Perceptions of utopia in Fahrenheit 451</b> Zoe Keating
16.20	<b>Socialisation and Meaning-Making Practices in Online Video Games</b> Caitlin Veal
16.35	Conference Close
17.30	<b>PGR School Launch Event – Holgate Dining Room Extension, York St John University</b>





# Keynote Speakers

The importance of sulking: grown up conversations within the supervisory relationship.

**Charlotte Haines-Lyon**

Charlotte started her PhD at York St John in 2012, and through the 7 years experienced for supervisors. Having worked in a range of roles prior to her PhD she didn't see how managing her supervisor could be that difficult but quickly learnt the supervisor relationship is quite 'special'. Thanks to her different supervisors' pedagogies, and relational approaches, Charlotte quickly learnt how to navigate not only a PhD but also working well with others and the need to talk about emotions at different times. This has led to a relational approach to her supervision of 9 PGRs in the last 5 years. Charlotte will share tips for PGRs and supervisors alike, to ensure an open and positive supervisory relationship.

Are we nearly there yet? Managing (very) long-term goals as a PhD researcher

**Helgi Clayton McClure**

Undertaking a PhD places unique pressures on the student to develop original ideas and define themselves in relation to these, making every decision with careful deliberation. As a result, it is the ultimate test of delayed gratification; progress can feel very slow, and for years the end can seem hardly in sight. This talk will reflect on personal strategies for managing yourself and your work during those years, including appreciating small wins, balancing your work with other valuable experiences, and retaining flexibility in your plans. For me, having another reason to be on campus in the form of the Academic Associate role – with its more clearly defined proximal goals and interpersonal aspects – was a great antidote to feeling swamped and overwhelmed by the research itself.

Helgi began his PhD in cognitive psychology at YSJ in September 2018, with a Graduate Teaching Assistant (now Academic Associate) post, finishing in 2022. He is now a lecturer in psychology, with research interests revolving around future thinking – the human capacity to simulate first-person future events – and its links with memory, motivation and emotion. His most recent publications are available open access in Cognition

‘Spinning Plates in the Dark: Balancing Life, Mental Wellbeing, and a Research Degree’

**George Wardell**

George Wardell enrolled at York St John in 2013 and went on to study History at BA, MA, and PhD levels, receiving his doctorate from YSJ in 2023. His thesis focused on perpetrator behaviours during the Holocaust and explores the decisions, processes, and situational triggers which led normal Germans to commit atrocities in concentration camps. George has previously delivered papers at the British Commission for Military History New Researchers' Conference and the Children's History Society Conference in 2023 and 2024. He is currently focusing on improving his foreign language skills and exploring career options with the intention of returning to academia in the future. George's interests include playing rugby, spending time with his dog, exercising, and video gaming. He believes that these pastimes each played crucial roles in supporting his mental health through his studies.



Medusa? A monster?  
Yeah, right!

**Isabelle Berrow**



This section of my project focuses on how Natalie Haynes' contemporary retelling, *Stone Blind*, challenges and retells the story of Medusa. Largely known across the literary canon as the Gorgoneion monster, Haynes rewrites the potential of Medusa, presenting her as a witty, emotional and fiercely strong female character. I am focusing specifically on Medusa's gaze and how this exists whilst she is alive, but also, after her decapitation. Her exhibition of the female gaze enables her to be a female personage with power, killing anyone she makes eye contact with, or gazes upon. I am exploring how, in every moment that we see Medusa gazing at another we are also gazing back at Medusa, as a further act of looking. She retains the ability to control a part of her body, her gaze, even if she has no body. Haynes is not only celebrating the power of Medusa's gaze, but also her importance as a symbol for empowered women, as is core to my thesis. Through investigating Medusa and her gaze, it is clear that the assaults against Medusa did not entirely limit her agency, as she retains incredible power through the act of looking. Even in moments where this female figure cannot exercise her voice, or physically react, her gaze lives on.

A Critical Commentary of my novel: taking it apart and putting it together again. A discussion of archive, elements within the novel, and narrative strategies

**Steven Keay**

My practice research PhD comprises an historical fiction novel regarding the life of Mabel Normand, and a supporting critical commentary upon its composition: both are iterative.

In readiness for my submission, let me share with you the journey of my critical commentary, that sits alongside the completed novel. Beginning with the archive and its synthesis, to the adoption of narrative strategies, through to an examination of the elements of fiction in support of the novel.



# An Examination of the Psychosocial Determinants Influencing Asylum-Seeking Parents in the UK

Gurujosh Roth

This study investigates the psychosocial factors affecting immigrants, migrants, and asylum seekers entering the United Kingdom and the concept of “crimmigration,” which amalgamates crime control and immigration control.

The research takes a comprehensive approach, examining the psychosocial determinants influencing asylum-seeking parents in the UK. It focuses on the specific challenges they encounter in adapting to a new environment while ensuring the well-being of their families. By analysing factors such as mental health, social support networks, cultural adaptation, and legal uncertainties, the study elucidates how these determinants impact the psychological and social experiences of asylum-seeking parents. Through a combination of qualitative interviews and quantitative data analysis, the findings provide a robust understanding of the complex interplay of these factors, offering recommendations for policy interventions aimed at improving support systems for this vulnerable population.

The primary objective of my research is to clarify complex issues pertaining to the immigrant experience in the UK to promote a more nuanced understanding of the subject, with a particular focus on the psychosocial factors that may influence mental health. Furthermore, it aims to challenge the negative stereotypes and misconceptions commonly associated with immigration and crime.

# Extreme visualisation: making sense of Bronfenbrenners Bioecological Theory

Jan Hanson



This presentation describes the journey from my supervisor’s suggestion to investigate a potentially useful theory to actually being able to apply it to my research.

Bronfenbrenner’s Ecological Theory, (1993, 1996)

conceptualises that in qualitative research, participant’s transitions are influenced in four ways – microsystem, mesosystem, exosystem and macrosystem, typically represented in flat, two-dimensional diagrams. Later revisions introduced the chronosystem proximal processes and bidirectionality as influences, and he renamed the theory Bioecological (Bronfenbrenner and Morris, 2007) again, typically represented in two-dimensional diagrams.

To my holistic-thinking neurodivergent mind, representing this plethora of influences in two-dimensions did not make sense. Additionally, as revealed in wider reading, the Bioecological Theory did not address the influences deriving from the virtual, post COVID Pandemic world which we all now inhabit, as identified in Navarro & Tudge’s, Neo-ecological Theory, (2023).

During a writing retreat, the ‘penny dropped’ and I was able to conceptualise, describe in writing and hand movements a three-dimensional representation of the Neo-ecological Theory. All that it remained to do was to find a physical version of that representation.

In this presentation I share how I found that physical version and, using it as a visual aid, demonstrate how it represents the multiple dimensions, multiple influences, multiple directionalities and multiple worlds (real and virtual) in which my participants experience their transition from Higher Education to the workplace.

## References

Bronfenbrenner, U. (1993) ‘The ecology of cognitive development: Research models and fugitive findings’, in Development in Context: Acting and Thinking in Specific Environments. Hillsdale, NJ: Erlbaum, pp. 3–44.

Bronfenbrenner, U. (1996) The ecology of human development: experiments by nature and design. Cambridge, Mass: Harvard University Press.

Bronfenbrenner, U. and Morris, P.A. (2007) ‘The Bioecological Model of Human Development’, in W. Damon and R.M. Lerner (eds) Handbook of Child Psychology. 1st edn. Wiley. Available at: <https://doi.org/10.1002/9780470147658.chpsy0114>.

Navarro, J.L. and Tudge, J.R.H. (2023) ‘Technologizing Bronfenbrenner: Neo-ecological Theory’, Current Psychology, 42(22), pp. 19338–19354. Available at: <https://doi.org/10.1007/s12144-022-02738-3>.



# Over-Caffeinated: Pitfalls In Understanding Power And Methodology

Jack Patterson



Planned as an action research project, the research initially intended to evaluate children’s perspectives on the introduction of Therapeutic Classrooms and investigate what children would have in their ‘dream classroom’. Working with children (ages 8 – 9) in a large primary school on the East Yorkshire coast, the project showed children examples of Therapeutic Classrooms and asked them to use drawings to create visual responses, outlining their ‘dream classroom’. Having taken inspiration from Clark’s Mosaic Approach (2017), commonalities and themes from the pictorial responses were then identified and analysed – with the intention of applying these to decisions made in the school.

Findings from the analysed drawings highlighted numerous errors in the research process, including: failure to recognise the power disbalance between the researcher and the children, caused by the class teacher also being the lead researcher; gaps in the methodological process, which aimed to heavily influence and steer the children’s responses to meet a pre-set agenda; a reluctance to engage in the participatory nature of action research, with the participating children being viewed as an afterthought in process design.

This paper acts as a precautionary example of the need to recognise the influence of power within the research project, and how this may fit within a robust methodology. Analysis of the children’s drawings identifies the corrupting influence of the power imbalance and the negative effect on results. Concluding statements from this paper identify ways in which the mistakes made previously could be avoided in future studies.

# Materialising Parental Suicide through Practice Led Research

Sian Highwood

What is the response by a teenager to a parental suicide? The vast majority of research in this field is the study of the response within five years of the death. This research project, now in its fourth year, looks at the very long term response through an auto-ethnographic, practice led research project. The artworks are of an installation format using primarily textiles with the addition of other materials and found items.



# What are the effects of pre- and inter-conception lifestyle factors (diet and exercise) for women with an existing body mass index (BMI) > 25 kg/m2 on maternal, fetal, and neonatal outcomes? A systematic review

Clare Panaser

It is well established that obesity and overweight are associated with non-communicable diseases and increased medical and economical costs (World Health Organisation (WHO) 2021, Larsson and Burgess, 2021; Mususzak, 2024). Effective strategies that interrupt the growing epidemic and cycle of obesity are a global health imperative WHO, Reichetzeder, 2021. Pregnancy has been cited as an opportune time for health care messages, and diet and lifestyle intervention during pregnancy has demonstrated short and long-term benefits to both the gestational parent and offspring. (Langley-Evans 2022, Matuszak 2024) It has been suggested that the same interventions could have an increased impact if implemented in the pre or inter pregnancy period. (Schoenaker et al., 2022)

This paper explores current policy in England around pre-pregnancy diet and exercise intervention and limitations to existing guidelines and barriers to engagement .This is followed by a systematic review of 14 controlled trials and 2 cohort studies. An analysis of the current evidence aims to assess the quality of the data for implementation into policy and/or to highlight research gaps.

Results. Diet and lifestyle intervention in obese women pre-pregnancy leads to significant weightloss, increased pregnancy and a trend towards increased pregnancy rates and live birth rates increased spontaneous conceptions.

Conclusion. Diet and exercise intervention to reduce obesity pre-pregnancy improves maternal and fetal outcomes. However, more research is needed to standardise and optimise the type and timing for intervention. This needs to be alongside a systems approach of understanding the pressures and psychological burden of obesity throughout the pregnancy continuum, reducing food poverty, decreasing accessibility to ‘junk food’, while improving healthy food availability and cost, alongside urban planning to encourage activity.

And lastly, please can we change Zoe Dawson’s abstract to the below:

Objective: To explore physical activity (PA) and sedentary behaviors (SB) in individuals with lower limb (LL) Osteoarthritis (OA) and the influence of age, sex, and body mass index (BMI) on these behaviors.

Design: Systematic review

Search: PubMed, Cochrane Library, ScienceDirect, and CINAHL databases were searched from inception until July 2023.

Study criteria: Studies that reported quantifiable device-based or self-reported data for PA and SB variables in adults clinically diagnosed with LL OA were included.

Data synthesis: A synthesis of PA and SB levels for those diagnosed with LL OA and the influence age, sex, and BMI have on these behaviors.

Results: From the 1930 studies identified through the electronic search process, 48 met the inclusion

criteria. PA guidelines were met by 33%of the sample population that measured moderate and moderate to vigorous PA. No studies reported 75 minutes per week or more of vigorous PA. Additionally, 58% of the population reporting SB were sedentary for 8 hours per day or more. Also, increasing age, BMI, and the female sex were identified as negative influences on PA levels. There were

numerous methodological inconsistencies in how data were collected and reported, such as various activity monitor cut points for PA and SB bout duration.

Conclusion: Adults with LL OA may be at an increased risk of noncommunicable diseases due to low PA and high SB levels. It is important to consider age, sex, and BMI when investigating behavior patterns in those with LL OA.



## Are you now the elite? How populism reframes elitism to demonise Higher Education

Kate Pritchard

The rise of populism has become increasingly more prevalent in political conversations and research. Despite this, there are ongoing contested debates on what populism entails and the implications that this emerging concept has on key democratic functions. Misunderstandings and misinformation are a fundamental basis of how populism has managed to develop into the influential political force that has led to outcomes such as Brexit and the far-right party Reform winning seats in the latest parliamentary election. The research that I am conducting aims to unpick the fundamental principles of populism, the political climate which has allowed populism to emerge and focuses on how education relates to populism. Education is an ideological force which plays a key role in drawing individuals towards either a populist or anti-populist logic. There is substantial evidence of populist leaders using education to mobilise subjects who are less educated to their cause, such in the case that individuals without a university level of education were much more likely to vote for Brexit. The main focus of the research is to examine the relationship between education and populist rhetoric and assesses the complication that this has on increasing polarisation in society and perpetuating an anti-academic narrative. The effects of this narrative can already be seen within the political sphere in the shift towards emotive reactions in policy over knowledge and reasoning and my research contribution will aim to highlight this shift and it’s implications.

## Procurement, Profligacy and Power

Paul Revell



This presentation will explore the intricate and occasionally contentious relationship between public procurement practices and the management of taxpayer’s money in Britain from 1974 - 2024. It takes a somewhat autobiographical stance, coming from a procurement practitioner

of 25 years across multiple sectors. Focusing on the intersection of government policy, economic efficiency, and accountability, the discussion will analyse how successive governments have utilised procurement as a strategic tool, but also the blurring of boundaries that occurs when private sector entities are entrusted to deliver public services.

This early-stage research highlights instances of mismanagement and inefficiency, suggesting a misalignment between the intentions of policymakers and the practical outcomes for citizens. Particular emphasis will be placed on the under-examined role of public procurement professionals — or the lack thereof — in shaping policy outcomes, and the resulting impact on public trust and resource allocation. The presentation will assess key historical and contemporary case studies, blended with personal insights into the systemic issues that continue to challenge the effective use of public money in modern Britain.



## The role of the circular economy strategies in creating resilient SMEs toward building internationalisation in conflict zones: The case of SMEs in Palestine

**Bassem Abudagga**



This research explores how Circular Economy (CE) strategies can enhance the resilience and internationalisation of Small and Medium Enterprises (SMEs) in conflict zones, with a specific focus on the West Bank, Palestine. SMEs in these regions face significant challenges, such as political

instability, resource scarcity, and economic disruptions, which threaten their survival and growth. Despite these difficulties, there is a lack of research examining how CE strategies—centred on reducing, reusing, and recycling resources—can be operationalised to improve SME resilience and facilitate internationalisation in such volatile environments.

The primary aim of this research is to investigate the potential of CE strategies to build resilient SMEs capable of internationalising their operations despite the constraints of conflict zones. The study addresses key research questions, including: How are CE strategies operationalised by Palestinian SMEs? To what extent do these strategies contribute to resilience? And how does resilience, in turn, support internationalisation efforts? The research also examines the role of contextual factors, such as political and economic instability, in shaping the effectiveness of CE strategies in this setting.

By filling the existing research gap, this study seeks to contribute to the broader understanding of sustainable business practices in conflict-affected areas. The findings aim to provide practical insights for SMEs striving to achieve resilience and international growth under challenging conditions and offer policy recommendations to support economic development in conflict zones globally.

## A systematic review exploring physical activity and sedentary behaviours of an osteoarthritic population

**Zoe Dawson**



**Objective:** To explore physical activity (PA) and sedentary behaviours (SB) of an osteoarthritic population and the influence of known risk factors on these behaviours.

**Design:** Systematic review

**Search:** PubMed, Cochrane Library, ScienceDirect and EBSCO host were searched up to April 2022.

**Study criteria:** Studies reporting quantifiable data for PA and SB variables in adults clinically diagnosed with lower limb osteoarthritis (OA) were included. Studies including rheumatoid arthritis were excluded.

**Data synthesis:** A synthesis of PA and SB levels for an OA population and the influence OA risk factors have on these behaviours.

**Results:** From 974 studies identified through the electronic search process, 44 met the inclusion criteria. World Health Organisation aerobic PA guidelines (150-300 mins/week) were met in 4 studies that measured moderate PA and 11 studies that measured moderate to vigorous PA. No studies reported 75 mins/week or more of vigorous PA. Additionally, 16 articles reported 8 hrs/day or more of SB. Furthermore, the range of PA and SB levels was large. Additionally, increasing age, obesity and the female sex were identified as negative influences on PA levels, furthermore, obesity and the male sex increased SB time. There were numerous methodological inconsistencies in how data were collected and reported.

**Conclusion:** There is a great range in the PA and SB levels reported. It is important to consider age, sex and BMI when investigating behaviour patterns in an OA population. Further research is needed to explore habitual activity and its impact on the health of this population.

## Investigating the implementation of maturity-based correction factors on sprint performance testing measures

**Luke Walsh**

Talent identification involves teams identifying young talented players, often investing vast resources to provide the highest quality training and coaching conditions (Ford et al., 2020). Academy football is commonly split into chronological age groups (e.g., U12s, U13s), however this approach fails to consider the large differences seen within biological maturity (Hogan et al., 2022). For example, maturation is highly variable between individuals throughout adolescence, leading to large variations in anthropometric measures in body mass (~50%) and stature (~17%; Hannon et al., 2020). These maturity associated differences have often benefitted early maturing players who display superior power, speed, strength and endurance (Towlson et al., 2022), resulting in enhanced performances often associated with the maturation selection bias (Hogan et al., 2022). Physical performance testing favours early maturing players, with previous research reporting significant associations between maturation and sprint performance (Fink et al., 2023). Therefore, the present study aimed to; a) identify the association between maturity status and 30m sprint performance across two elite EPL academy football teams, b) develop and apply a correction factor to raw performances to account for individual maturation. Maturation status (expressed using maturity offset in days) had a significant strong correlation with sprint performance in U13 and U15s age groups, and a moderate significant correlation in U14s. Following the correction procedure (based on regression coefficients) a new sprint time was calculated which successfully removed the maturity associated differences in performance. This procedure has the potential to improve player evaluation and improve coach decision making regarding player (de)selections.

## Application of Head-related Policies in Boys Professional Football Academy: A Figurational Analysis

**Bright Nduka**



Professional football has been recognized as a hazardous occupation, with injury rates surpassing those of other industries (Roderick et al., 2000). Among these injuries, concussions have notably risen among athletes in recent years, prompting increased research attention

(Liston et al., 2016). There have been various lay narratives and research speculations suggesting a causal link between heading the ball and brain injuries such as concussion, dementia etc. This has led to the development of various policies prioritizing athlete safety and well-being (Malcolm, 2021).

This study explores the content of head-related policies in football, the extent of their application, as well as the impact of these policies on the health and welfare of young boys in professional football academies. It examines factors that have facilitated or impeded policy implementation and investigates how these policies have shaped the attitudes of these boys toward football.

Using a methodological triangulation approach, data will be collected through documentary analysis, observation, semi-structured interviews, and focus groups, lending greater credibility to the gathered data and the ensuing findings (Bryman, 2012). The sample comprises three purposively selected U-16 football academies in the UK, involving players, coaches, parents/guardians, club doctors, and physiotherapists.

Initial documentary analysis reveals that the formulation of these policies primarily focused on children/teenagers, are informed by research conducted on adults. Thus, the study aims to assess the suitability and effectiveness of these policies in safeguarding the health and safety of boys in professional football academies, with other data collection methods further exploring this objective.

## An Investigation into the Relationship Between Physical Fitness Parameters and Injury in Male Academy Football Player

**Emma Palmer**

Injuries are a constant issue in football at any level, however the players in the Performance Development Phase (players aged 16-19) are potentially at a high level of injury risk due to the psychological, physiological and cultural changes they experience in the transition from the Youth Development Phase (YDP) to senior sport. PDP players are at high risk of injury having recently finished Peak Height Velocity (PHV), and experiencing higher levels of training load and exposure. This study aims to investigate the influence of physical fitness parameters on injury burden in the PDP in a non-league football academy, where there is minimal funding to explore this relationship. Eccentric Hamstring Strength (EHS), Countermovement Jump Height (CMJH), 20m Sprint Times and Anaerobic Speed Reserve (ASR) were assessed as parameters of physical fitness. Also observed was the influence of these variables on injury incidence, injury burden, training availability and match availability in the PDP. This study was a prospective cohort study, following 20 male footballers (aged 16-19) across a full playing season, inclusive of pre-season, in a non-league academy. Injury incidence was found to be lower than found in previous literature, whilst burden matched current findings. Only change in ASR from pre-season to mid-season was found to significantly influence injury severity, with no other significant effects found related to change in physical factors. Availability was not influenced by any variables tested. Hamstring injuries were the most common, due to large between limb dissymmetry which formed across the season, despite EHS being higher than found previously. Physical fitness factors decreased across a playing season due to potential increases in load and exposure, needing further research and examination in a wider population.

## Optimising Large File Transmission in IoT: Improving Multiprotocol LPWAN Gateways with AI-Driven Techniques

**Viacheslav Shkuratsky**

In the evolving landscape of Internet of Things (IoT), Low Power Wide Area Networks such as LoRa/LoRaWAN or ZigBee have emerged as pivotal technologies, enabling long-range communication with minimal power consumption. While these networks excel in transmitting small amounts of data over large distances, the challenge of efficiently transmitting large files remains a significant hurdle. This research explores the feasibility of leveraging LPWAN protocols for large file transmission by utilising a multiprotocol gateway combined with AI-driven optimisation techniques. The proposed approach involves the use of a multiprotocol gateway to enable seamless data transmission across different LPWAN protocols, thereby optimising the use of available bandwidth and power resources. By integrating AI, the system can intelligently manage data packets, predict network congestion, and choose the optimal routing strategy, ensuring more efficient and reliable file transfer. The study will also address the challenges of packet loss, latency, and data integrity in low-bandwidth environments, proposing solutions that leverage the strengths of each protocol.

## Safe at home? Older peoples use of Artificial Intelligence at home, with occupational therapists in Adult Social Care



**Alicia Ridout**

Older people have been identified as more at risk from ageism and bias from Artificial Intelligence (AI) based technologies (WHO, 2022). This doctoral research study explored

the safe use of AI by older people living at home, digitally active but facing the need for/potential entry into adult social care occupational therapy services.

Older people were asked to complete a survey, co-created with older adults and occupational therapists and in response to findings from a review of international literature. The survey sought to provide a better understanding of the safety needs of older people and occupational therapists, to build better conversations about home safety using complex configurations of AI by older people. Issues arising from the literature review indicated a lack of trickle down of international guidance to front line occupational therapy practice in England.

The survey results demonstrated a low level of engagement with AI technology by the occupational therapy respondents. The older respondents self-identified as 'older' and shared insights into their views of AI, safety and their requirements for its safe use in their care. A set of 1 statements demonstrated a broad alignment with occupational therapists' views of priorities for further research.

The research is adding new insights to the occupational therapy evidence base, providing the basis of the second doctoral research study, using experience based codesign to develop practice-based tools to improve safety conversations.

World Health Organisation (2022) Ageism in artificial intelligence for health: WHO policy brief. Geneva: World Health Organisation, p. 15. Available at: <https://apps.who.int/iris/handle/10665/351503>.

## Perceptions of utopia in Fahrenheit 451

**Zoe Keating**



I will be conducting analysis of Bradbury's definition and exposition of utopia in his novel Fahrenheit 451, through the character of Montag at first. Montag discovers the intentions of the 'utopia' and questions his active position within. Initially, for Montag dystopia is elsewhere, he actively rejects the realisation that they are living in a dystopia.

Later Montag sees utopia as elsewhere, he is optimistic for the future of culture and society via the Brotherhood. Next, will be analysis of this through the character of Mildred. She exists in her context with a wilful ignorance to an extreme degree, to the detriment of her relationships with Montag and reality at large. She plays into the role of the false narrative of the intentional community building of the 50's neoliberalist utopia as escapism. Another point of analysis will be through the character of Beatty. His desperation to maintain the status quo despite his obvious distress in his position of power, especially from the perspective of Montag. Beatty is the ultimate goal of his career path, but Beatty is threading the line between authority figure with the burden of knowledge and his desire for a wilfully ignorant vessel to vicariously live through. Bradbury successfully leads the reader to a point of view that is resolutely optimistic about the state of humanity and the ways in which we rely on and interact with each other, here utopia exists as simultaneously somewhere and nowhere.

## Socialisation and Meaning-Making Practices in Online Video Games

**Caitlin Veal**

Findings from a paper written during my time in the investigate. games research group (Veal et al, 2024) outlines how players perceive and understand the sociality afforded by online social video games (OSGs), framed by the COVID-19 pandemic. Utilizing data from 20 semi-structured interviews, Blumer's concept of symbolic interactionism is applied to explore how OSGs take on new meanings in co-constructed, collaborative and contributory digital spaces. The findings are then outlined in terms of how they led me to my current PhD project which explores how gaming spaces are socially constructed in terms of interaction, inequality, and identity.

Veal, C. Coward-Gibbs, M. Denham, J. Spokes, M. (2024). "You Feel Like You've Found a Place Where You Belong": Symbolic Interactionism and Online Social Video Games in the Age of COVID-19. Games and Culture.



# What to expect on the day and key timings

## Venue

This year’s conference is not taking place at our York Campus but will be taking place across the road from campus at the Citadel on Gillygate. It is the large building with the ‘Salvation Army’ sign.

If you’re unsure where to go, please head to the De Grey Reception on Campus, where either a member of our team or the reception team will be able to direct you.

Getting to the Citadel: The Citadel is around a 20-minute walk from the train station, and the number 1 bus route also stops right outside. If you’re driving, there is Union Terrace car park a few doors down including disabled parking bays (unfortunately there are no disabled parking bays directly on site).



## Networking and Breakfast

There will be refreshments such as tea and coffee, and pastries and fruit available before the conference start in the entrance to the Citadel. You are welcome to network and enjoy what is available.

## Registration

We ask all delegates and speakers to register their attendance, collect their name tag, and grab a programme with us from 9.00am. Registration will close when the conference starts at 9.45am.

## Welcome

The conference will start with a welcome from our conference chair, Professor Andrew Hill, at 9.45am. Please make sure you are seated by this time. There isn’t a seating plan so please feel free to sit wherever suits you best.

## Breaks

There will be scheduled 10-to-15-minute breaks throughout the day. Refreshments will be provided in the foyer of the Citadel.

## Lunch

Lunch will be provided at 12.30pm in the foyer of the Citadel. Please take this time to eat, network and browse the range of posters on display.

## Conference end and networking

The conference will close with a celebration of the launch of the PGR School. Taking place in the Holgate Dining Room Extension from 5.30pm, the event will feature speeches from our Vice Chancellor, Professor Karen Bryan, and the Head of the Postgraduate Research School, Professor Andrew Hill, alongside presentations of research by current research students. There will also be the chance to network with researchers and academics from across the institution. The event will include nibbles and wine.



## Further information

### Fire alarms and fire exits

There are no fire drills expected today. Therefore, if the fire alarm sounds, please make your way to the nearest fire exit.

### Refreshments

Coffee, tea and water will be available throughout the day in the foyer of the Citadel.

### Social Media

You can find the PGR School on social media:  
X @YSJPGRSchool  
Instagram @ysj\_pgrschool  
Share your pictures and tweets from the day with us by using the hashtag #APGRSC2024

### Accident Reporting

In the event of an accident, call for a First Aider to treat the injured person if needed:

1. Call Security Office on 01904 876 444  
All officers are First Aid trained and the Security Office is open 24 hours a day.  
Between 8.00am and 5.00pm, Monday to Friday, the Security Office can alert a member of staff as we have a dedicated cohort of staff who are all First Aid trained
2. Or call Reception by dialling 0. Reception is open 8.00am to 5.00pm, Monday to Friday  
Automatic External Defibrillators (‘AEDs’ or ‘defibrillators’) are available at the Foss Reception, the Security Office and at York St John University Sports Park.

Please visit our website for more information on health and safety: [yorks.ac.uk/staff/health-and-safety](https://yorks.ac.uk/staff/health-and-safety)

### Accessibility

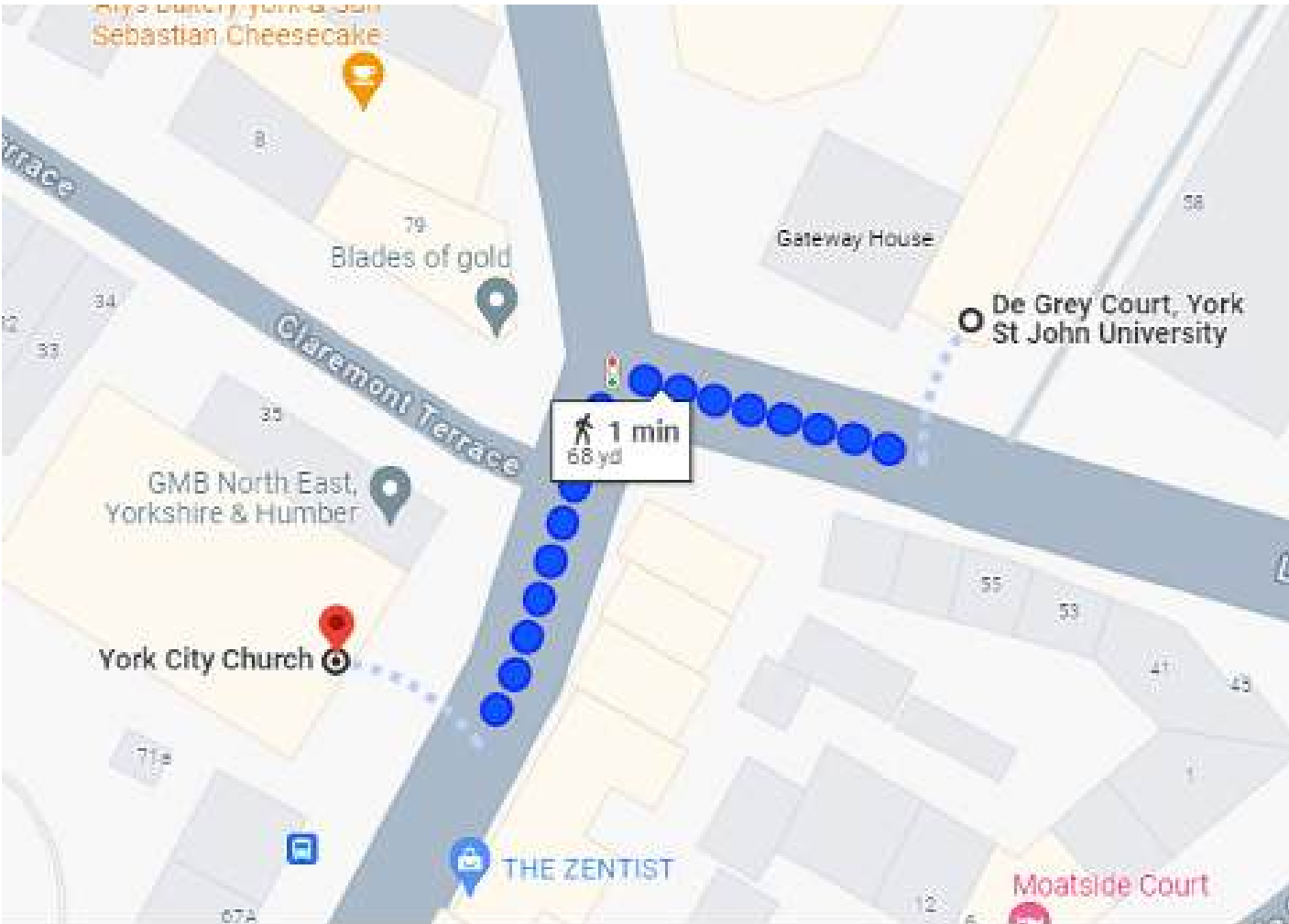
All rooms for the conference and toilets are located on the ground floor of the Citadel. Please do get in touch with the PGR School team if you have any accessibility requirements that we need to be aware of.

### Contact us

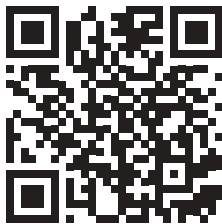
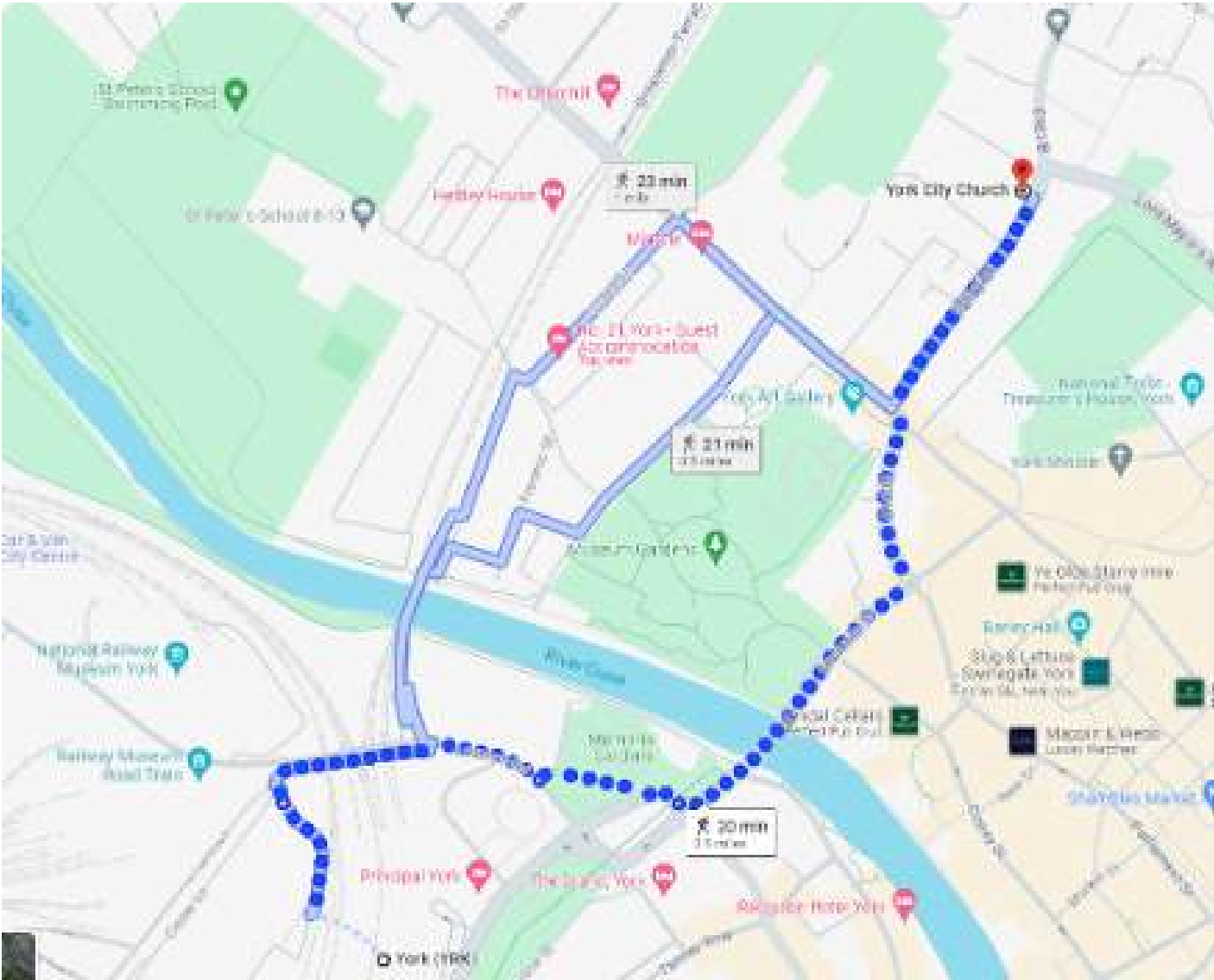
[pgr.school@yorks.ac.uk](mailto:pgr.school@yorks.ac.uk)



Getting to the Citadel from Campus:



Getting to the Citadel from the train station:



<https://maps.app.goo.gl/LbY6B9EA4LsudC6r5>



