



**Ms Danielle Mountain**

**Grant title:** “One and the same?”: An in-depth investigation into the complexities of pain experiences of children and young people with inflammatory and non-inflammatory conditions

**Original award holders:** Dr Lis Cordingley, Dr Rebecca Lee, Prof Wendy Thomson

The award holders have changed during the course of the PhD due to retirements. The current holders include Dr Rebecca Lee, Dr Daniela Ghio (Health Psychologist at The University of Manchester), Prof Sarah Peters (Health Psychologist at The University of Manchester), Dr Janet McDonagh (Honorary contract), and Dr Lis Cordingley (Honorary contract).

This report describes the previous 12 months progress of the PhD studentship. The original award duration was 01/10/2020 to 01/10/2023. Ms Mountain changed from full-time to part-time in December 2024 and entered her one-year submission pending period. Her PhD end-date is now 28/02/2025 and we expect she will complete ahead of this time (End of 2024).

**Background and aims of project:**

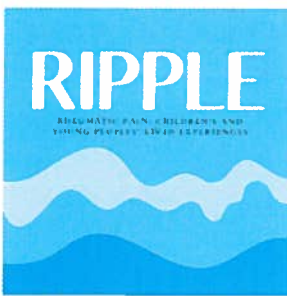
Studies on the prevalence of musculoskeletal pain in children and young people estimates that between 11-40% are affected by this type of pain specifically. The causes of this pain vary (e.g. it can be primary pain or it can be secondary to another underlying condition). In paediatric rheumatology where much of this pain will be referred and managed, there is evidence suggesting that pain is treated differently depending upon whether children and young people are believed to have an inflammatory or non-inflammatory musculoskeletal condition. Those with inflammatory conditions may be more likely to receive pharmacologically focused treatment whilst those with non-inflammatory conditions are predominantly provided with psychological management techniques. Currently, however, the rationale for the different approaches is unclear as all pain is biopsychosocial in nature and medications can still be valuable for those with non-inflammatory conditions, as can psychological support for those with inflammatory conditions. Little is known about the similarities and differences of pain experiences between these groups and whether the apparent differences in approaches to pain management is justified or not.

This PhD explores and compares chronic pain experiences in children and young people with musculoskeletal conditions with different underlying pathologies/diagnoses (inflammatory and non-inflammatory) and identifies discrepancies in their management pathways.

**Progress to date:**

The student has achieved all postgraduate research progression milestones provided by The University of Manchester. Examples of the progress made are provided below:

1. The student successfully published her first publication which was a scoping review exploring healthcare professionals' beliefs about pain in children/young people diagnosed with chronic inflammatory and non-inflammatory musculoskeletal conditions in the Journal of Pediatric Psychology in September 2023.
2. The student is finalising two original research articles from an online questionnaire that explored paediatric rheumatology healthcare professionals' beliefs about children's/young people's pain experiences and decisions about pain assessment and management prioritisation. The student plans to submit these to the 1. The Journal of Pain and 2. Rheumatology, in the summer of 2024.



3. The student is finalising an original research article for their final two research studies from the RIPPLE project (Rheumatologic Pain: children's and young People's Lived Experiences). This project explores and compares children's/young people's perspectives on how they make sense of and experience chronic musculoskeletal pain experiences in inflammatory or non-inflammatory conditions. The student plans to submit this to The Journal of Pain at the end of 2024.
4. The student presented findings from her final PhD study in a poster presentation at the world-leading Paediatric Pain Psychology conference (SPPAC) in New Orleans, USA in April 2024.
5. She has successfully presented posters previously at four national and international conferences: The International Symposium of Pediatric Pain, 24-27 March 2022 (online), The Division of Health Psychology Conference, 28-29 June 2022 (Bristol, UK), The European Health Psychology Society conference, 23-27 August 2022 (Bratislava, Slovakia), and The International Association for the Study of Pain conference, 19-23 September 2022 (Toronto, Canada).
6. The student has been establishing and developing their international collaborations. Ms Mountain visited Dr Jen Stinson, a world-leading Nurse Clinician-Scientist with expertise in managing and improving paediatric chronic pain, during a research visit to Dr Stinson's iOUCH lab in Toronto, Canada (September 2022). Ms Mountain is collaborating with Dr Alex Neville, a postdoctoral fellow in Clinical Psychology at Stanford, USA, on Danielle's final PhD research article. Dr Neville has published widely about diagnostic uncertainty and the clinical encounter in paediatric chronic

pain. Ms Mountain arranged and coordinated an international visit and collaboration meeting for a PhD student from Guelph, Canada (Delane Linkiewich).

7. The student continues to be a committee member for two prestigious UK and International professional organisations in psychology and paediatric pain since August and September 2022. These include being a Psychology Postgraduate Affairs (PsyPAG) North-West Representative within the British Psychological Society (BPS) and as a Trainee Representative for the Pain in Child Health (PICH) group who include international world-leading pain researchers and clinicians.
8. Ms Mountain successfully applied for and was awarded Higher Education Teaching status in May 2023 in recognition of her role in supporting and teaching in higher education: Associate Fellow of the Higher Education Academy (AFHEA).
9. The student led the coordination of The Centre for Epidemiology Versus Arthritis PhD journal club (April 2022-April 2023), including organising speakers and chairing sessions to develop PhD students' epidemiology skills.
10. Ms Mountain has been invited to contribute to multiple publications with colleagues at the University of Manchester. She contributed to a research article published in the Journal of Pain exploring young people's experiences of pain communication with healthcare professionals in paediatric rheumatology. Ms Mountain has collaborated on a systematic review of digital pain health tools, the article of which is currently under preparation. Ms Mountain is contributing to a research article exploring beliefs about pain in young people with Juvenile Idiopathic Arthritis which is anticipated to be submitted to the Journal of Pediatric Psychology in summer 2024.
11. The student has assisted with and been invited to be a peer reviewer for two journals: Acta Psychologica and Pediatric Rheumatology.
12. Ms Mountain has been having meetings and discussions with supervisors and potential collaborators about her post-PhD plans, including young investigator grants and post-doctoral fellowships. She previously applied for a grant and is currently submitting another grant for research in Duchenne Muscular Dystrophy, an area which she is working in as part of her postdoctoral Research Assistant role at Edge Hill University.