# STUDENT EXPERIENCES OF THE DIGITAL TRANSFORMATION OF PHYSIOTHERAPY PRE-REGISTRATION EDUCATION

## E-learning **negatively** effects students' **confidence** to **apply** knowledge and skills for **MSK anatomy** and **MSK clinical placements**

**Background:** Since the Covid-19 pandemic, there has been increased delivery of online learning, this is likely to continue in UK physiotherapy education (Chartered Society Physiotherapy, 2022). International research has reported negative effects on student learning and practical skill application (Ng et al., 2021). This study was an initial investigation which aimed explore the specific issues and topics that students felt were affected by online learning. The results will be used to plan further research to understand if virtual reality could enhance and support future physiotherapy education.

## Methods

| Semi-Structured Focus Groups | N=12 Physiotherapy Students | Reflexive Thematic Analysis |

### Theme 1: Reduced Confidence to Apply Skills



*"Once I had a person there, it's like, all right. I know I could list off [anatomical knowledge], but I couldn't necessarily place it on someone. That's when the issues came about."*

### Theme 2: Reduced Opportunities to Use Preferred Learning Strategies



*"The reason why we want to become physio's is because we are more hands-on people, physio is a hands-on job role...Naturally we're more practical people that probably learn better by doing things ."*

### Theme 3: Lower Engagement



*"You just feel less engaged online"*

### Theme 4: Anatomy & MSK Challenges



*"MSK was more of a struggle for me because I can't visualise muscles, origins and insertions. I learned by having my hands on."*

**Implications:**

- Physiotherapy programmes which continue to use e-learning need to develop engaging, innovative, and creative online teaching activities that integrate kinaesthetic learning
- VR could address some of the challenges by providing kinaesthetic, immersive learning which has demonstrated positive outcomes compared to traditional education (Piromchai et al., 2015)
- Immersive VR for skill training linked to authentic scenarios can reduce student anxiety, increase confidence in their abilities and enhance practical ability levels (Locketz et al., 2017; Plotzky et al., 2023)
- Future research should explore the effectiveness of VR on MSK anatomy knowledge and skill development and student confidence

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