

MUSIC AND DANCE IN CLINICAL SKILLS

A Teaching and Learning Perspective



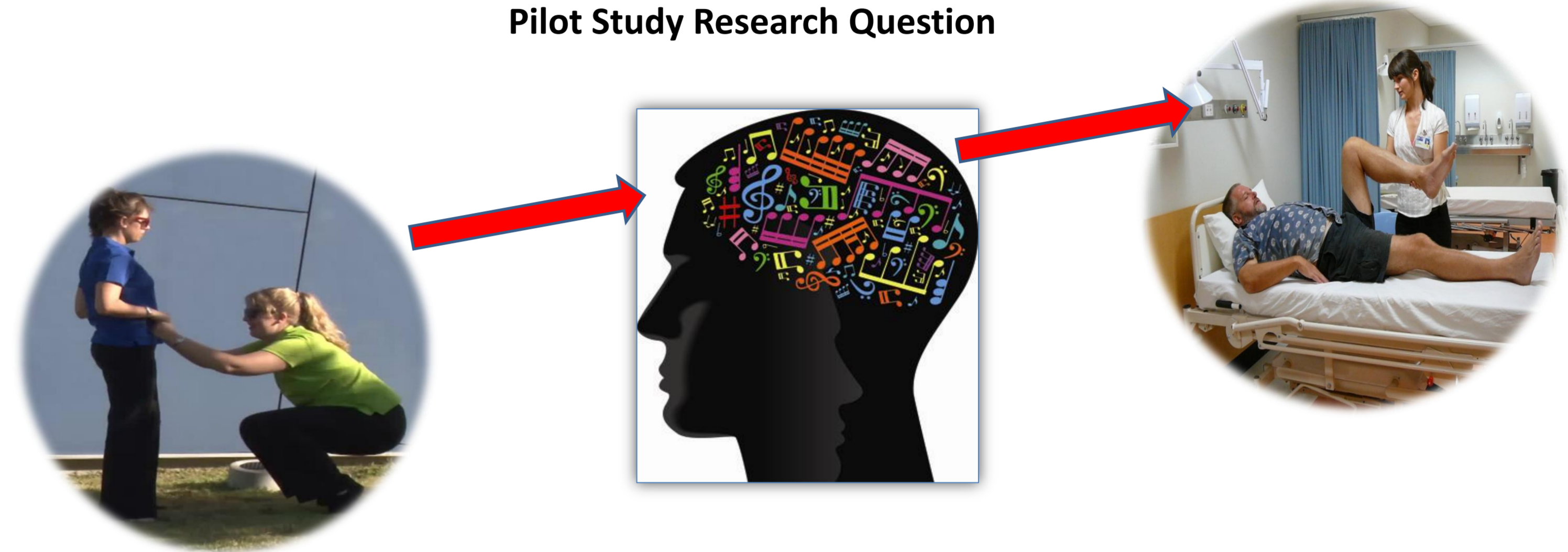
Since 2008, the Gait, Arms, Legs and Spine (GALS) Screening Tool is taught to year one undergraduate medicine students at James Cook University (JCU), as part of the clinical skills Musculoskeletal (MSK) examination. 'GALS' is a sequence of concise movements that assesses the range of motion of the major joints of the body.

The strategies of small group teaching, instructional video, practical demonstration and simulated volunteer patients are utilised to teach 'GALS' in the two hour workshops. Written and audio visual resources are available to the students on JCU's online learning platform. Post workshops, students are assessed in an OSCE style assessment.

With the dual intention to enhance student learning, and improve short and long term recall, educators created a 'GALS music and dance' video.

Does music and dance improve short and long term recall?

Pilot Study Research Question



Principles and Processes

Hear the music 'Moves like Jagger' Remember the Dance 'GALS' sequence

MUSIC

Rhythm and melody trigger memory. The left side of the brain processes rhythm and sequence while the right side stores melody (Berk, 2008).

Principles and processes:

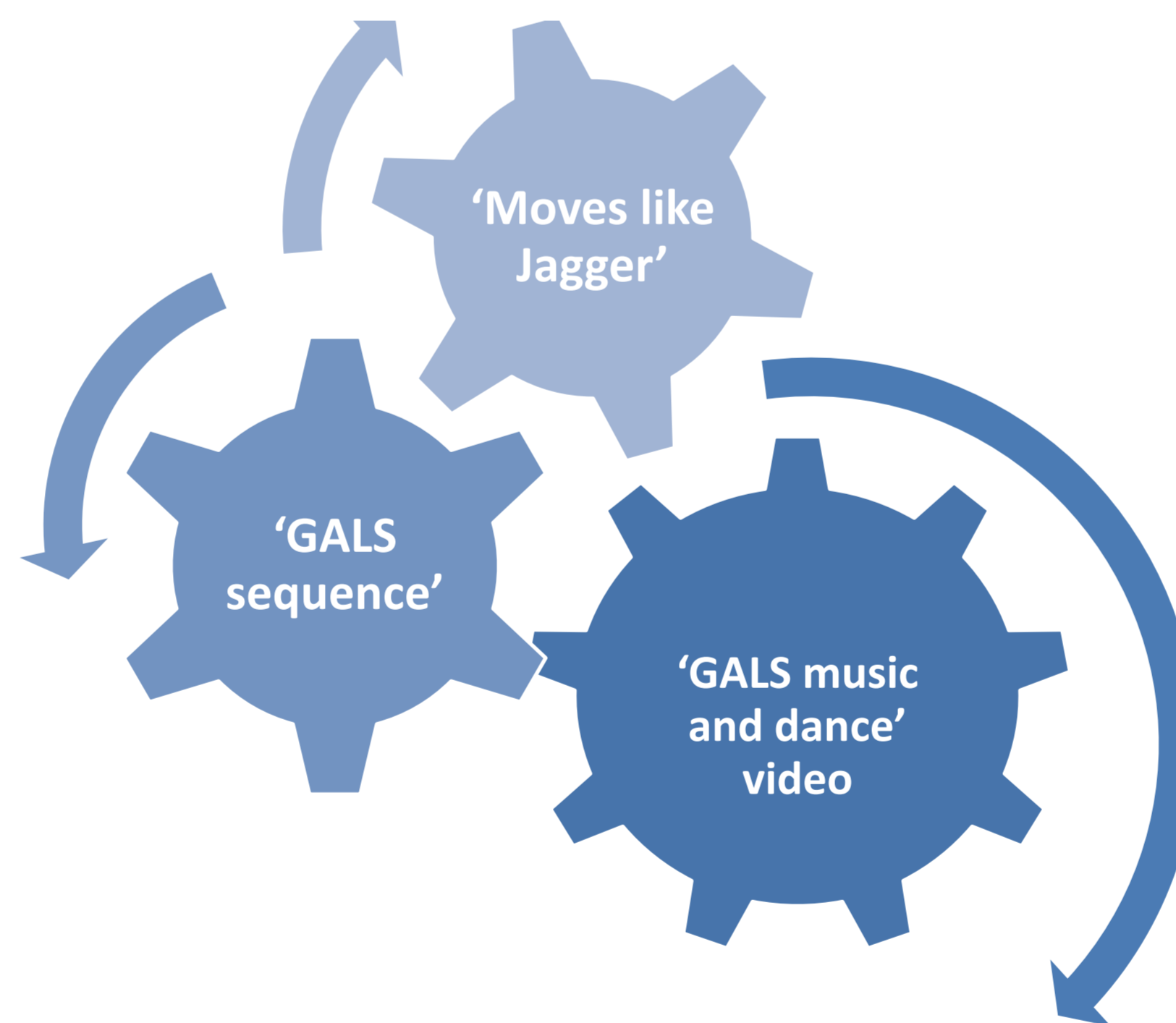
- Music must be meaningful and appealing (Berk, 2008)
Students consulted with music choice
- Rhythm and melody must match GALS sequence (Matlock, 2008, Berk, 2008)
'Moves like Jagger'
- Song choice must not be offensive
Offensive content inhibits learning (Berk, 2008)
- Copyright permission is essential
Consent obtained from 'Octone' via email

DANCE

Movement is an effective cognitive strategy to improve recall (Jensen, 2005).

Principles and processes:

- Student ownership enhances learning
Students assisted with choreography and video production
- Repetition makes permanent
Multiple rehearsals occurred prior to video production
'GALS music and dance' video made readily available to students to access when and where they wish



VIDEO PRODUCTION

Auditory, visual and kinesthetic pathways are engaged to strengthen memory (Brewer, 1995).

Principles:

- Keep it short and novel*
- Focus on details of 'GALS' sequence*

Processes:

Pre Production

- Resources – multiple cameras, sound system, extension cords, film crew*
- Lighting and location*
- Costumes and makeup*
- Choreography*

Production

- Enlist Information Technology staff for recording and editing*
- Consider different camera techniques and composition when filming*
- Frame location to optimise effect*

Post Production

- Create narratives, graphics, titles*
- Final editing*
- Review by peers*
- Ensure approval from Head of Department*

Outcomes and Future Directions

Longitudinal Study – Two Years

Comparing results obtained from Control Group (Year 1 Cohort 2010) and Intervention Group (Year 1 Cohort 2012)

Short Term Recall Results (2012 cohort)

- Watching **EITHER** the instructional video or the 'GALS music and dance' video increased the likelihood of passing the OSCE assessment.

Interim Long Term Recall Results (2010 Cohort)

- On average, students documented half of the possible elements of the 'GALS' sequence.
- 58% reported less confident in their knowledge two years post teaching compared to immediately post workshop.

FUTURE DIRECTIONS

- Continue reflection and modify teaching
- Continue data collection
- Evoke emotions- students dance the 'GALS' sequence in the workshop