Bringing Sport Psychology into Physiotherapy

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Bringing Sport Psychology into Physiotherapy

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Background

- Gap between knowing and doing evident
- Is a lack of training and education a barrier to sports injury rehabilitation professionals (e.g. physiotherapists) integrating more sport psychology into their work?
- Programme of research to investigate this question

The Study

Purpose:
- To measure the impact of an online sport psychology education module on the sport psychology related attitudes and behaviours of qualified sports physiotherapists in the UK

Previous research:
- Limited previous research directly measuring the impact of a sport psychology education intervention (e.g. Clement & Shannon, 2009; Stiller-Ostrowski et al., 2009)
- The existing research exclusively examines US athletic trainer populations (predominantly student populations)
- These studies typically have relatively short follow-up periods

Key gaps:
- Those already qualified
- Longitudinal impact
- Distance learning

Method

- 95 physiotherapists working in sport
- Intervention group
  - 23 males & 21 females
  - Mean age = 33.70 years (SD = 8.16)
  - Studied an online module titled ‘Sport psychology for physiotherapists’
  - Module content (as recommended by Heaney et al., 2015):
    - Understanding the psychological impact of injury
    - Interventions and psychological skills/techniques
    - Referral and professional boundaries
- Control group
  - 26 males & 25 females
  - Mean age = 36.11 years (SD = 8.78)
  - Studied an online module titled ‘Strength & conditioning for physiotherapists’
  - Both modules were split into three units requiring approximately 12 hours of study spread over 3 weeks (1 unit per week)

Method - Attitude

- Hypothesis = There will be a significant difference in physiotherapists’ attitudes towards sport psychology before and after (immediately, three-months and six-months) studying a sport psychology education module
- Acceptable - AAS (total scores changed significantly over time for those who studied the sport psychology module
- Hypothesis = There will be a significant difference in attitudes towards sport psychology between the control group and the intervention group
- Acceptable - Physiotherapists in the intervention group demonstrated significantly higher attitude towards sport psychology (AAS total) scores than physiotherapists in the control group immediately following the completion of the module

Findings - Attitude

- Hypothesis = There will be a significant difference in physiotherapists’ attitudes towards sport psychology before and after (immediately, three-months and six-months) studying a sport psychology education module
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Findings - Attitude

- A 2 x 4 (group x time) ANOVA conducted on the AAIS total score data revealed:
  - no significant interaction between time and group (F(3, 91) = 1.398, p = 0.269, partial η² = 0.013)
  - significant main effect for time (F(3, 91) = 12.271, p < 0.001, partial η² = 0.287)
  - no significant main effect for group (F(3, 91) = 2.51, p = 0.043, partial η² = 0.085)

- Follow-up significant effect analyses revealed:
  - AAIS total scores changed significantly over time for the intervention (sport psychology) group (F(3, 91) = 9.71, p < 0.001), but not for the control group (F(3, 91) = 1.49, p = 0.219).
  - There was a significant difference between the two groups immediately following the completion of the modules (POST1) (F(1, 93) = 4.44, p = 0.038).
- 2 x 4 ANOVAs conducted on each of the subscales revealed significant interactions between group and time on the 'imagery' and 'self-talk' subscales, but not on the 'goal-setting' and 'pain tolerance' subscales.

Physiotherapists more familiar with motivational strategies such as goal-setting so less room for improvement?

Findings - Behaviour (usage)

- A 2 x 4 (group x time) ANOVA conducted on the PIUS total score data revealed:
  - Significant main effect for time (F(3, 91) = 48.874, p < 0.001, partial η² = 0.057)
  - No significant main effect for group (F = 1.592, p = 0.210, partial η² = 0.030)
  - No significant interaction between time and group (F(3, 91) = 1.832, p = 0.147, partial η² = 0.045)
  - Significant main effect for time (F(3, 91) = 34.193, p < 0.001, partial η² = 0.148)
  - No significant interaction between time and group (F(3, 91) = 5.256, p = 0.002, partial η² = 0.148)
  - No significant main effect for time (F(3, 91) = 2.306, p = 0.090, partial η² = 0.050)

- Follow-up significant effect analyses revealed:
  - Significant interaction between time and group (F(3, 91) = 5.256, p = 0.002, partial η² = 0.148)
  - Significant main effect for time (F(3, 91) = 34.193, p < 0.001, partial η² = 0.148)
  - Significant main effect for time (F(3, 91) = 19.68, p = 0.001)
  - Significant main effect for time (F(3, 91) = 19.68, p = 0.001)

- Of the four data collection points there was a significant difference between the two groups at one point – three months after the completion of the modules (POST2) (F(1, 93) = 6.83, p = 0.009).

Conclusions

- Hypothesis 1 – There will be a significant difference in physiotherapists’ sport psychology related behaviours before and after (immediately, three-months and six-months) studying a sport psychology education module.
  - Accepted – PIUS total scores changed significantly over time for the physiotherapists who studied the sport psychology module.
  - In contrast to attitude scores PIUS scores increased at each data collection point – possibly indicative of a period of assimilation being required to absorb the information and gain confidence in applying it in their practice.

- Hypothesis 2 – There will be a significant difference in sport psychology related behaviours between the control group and the intervention group.
  - Rejected – although the intervention group showed greater levels of improvement than the control group they were not statistically significant on the questionnaire.
  - Control group exposed to sport psychology through the questionnaire?
  - High baseline scores?
  - However, significant differences were seen between the groups on the sport psychology subscale – possibly ceiling effect on the other subscales which were more familiar (e.g. motivation) – module content most strongly related to this subscales.

Thank you for listening…

Any questions?
References


