Bringing Sport Psychology into Physiotherapy

Conference or Workshop Item

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Bringing Sport Psychology into Physiotherapy

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Background

“I don’t really integrate much sport psychology into my practice”

“I need more training in sport psychology”

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

Method

Online questionnaire package completed 4 times:
- Pre-study
- Immediately post-study
- Three months post-study
- Six months post-study

Questionnaire package measured:
- Attitudes toward sport psychology
- Attitudes about imagery survey (AAS, Hanson-Logeley et al., 2008) – 6 subscales (communication, social support, motivation, attentiveness, relationship & sport psychology)
- Sport psychology related behaviour (use of sport psychology related strategies)
- Psychology of injury usage survey (PIUS, Stiller-Ostrowski et al., 2009) – 4 subscales (imagery, positive self-talk, goal-setting and pain tolerance)
- Perceived use of sport psychology
- Sport psychological referral
- Perceptions of module (rating, likes/dislikes)
- Motivation for further study

Module engagement was also measured
- Completion of module assessments (1 per unit)
- Participation in module forum (embedded within module activities)

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

- Accepted - 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

- Accepted - 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

- 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) = 1.831, p = 0.147, partial η² = 0.057)
  - A significant main effect for group (F(3, 91) = 1.417, p = 0.269, partial η² = 0.037)
  - A significant main effect for time (F(3, 91) = 12.210, p < 0.001, partial η² = 0.287)

- Follow-up significant effect analyses revealed:
  - AAIS total scores changed significantly over time for the intervention (sport psychology) group (F(3, 279) = 9.71, p < 0.001), but not for the control group (F(3, 279) = 1.60, 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:
  - No significant interaction between time and group (F(3, 91) = 1.831, p = 0.147, partial η² = 0.057)
  - No significant main effect for group (F(3, 91) = 0.026, p = 0.890, partial η² < 0.001)
  - A significant main effect for time (F(3, 91) = 34.193, p < 0.001, partial η² = 0.530)

- A 2 x 4 ANOVA conducted on the ‘sport psychology’ subscale revealed:
  - A significant interaction between time and group (F(3, 91) = 5.256, p = 0.002, partial η² = 0.148)
  - No significant main effect for group (F(3, 91) = 1.592, p = 0.210, partial η² = 0.017)
  - A significant main effect for time (F(3, 91) = 48.874, p < 0.001, partial η² = 0.617)

- Follow-up significant effect analyses revealed:
  - PIUS sport psychology subscale scores changed significantly over time for both the intervention group (F(1, 279) = 57.80, p < 0.001) and the control group (F(3, 279) = 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) = 8.83, p = 0.009)

Conclusions

- Hypothesis = 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 = 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.
  - 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.
  - - possible ceiling effect on the other subscales which were more familiar (e.g. motivation)
  - - module content most strongly related to this subscale

Any questions?

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References