Previous shoulder and low back injury, kinesiophobia, and fear-avoidance in young adult asymptomatic participant groups

Heather Johnston¹, & Janessa Drake¹

¹School of Kinesiology & Health Science, York University, Toronto, ON

BACKGROUND
• The low back & shoulder regions remain some of the most common work-related MSD

• Participant recruitment does not always account for potential covariates or sub-categories related to previous injuries & subsequent psychological factors

OBJECTIVES
1. Report previous shoulder & low back pain injuries in asymptomatic young adults
2. Measure Kinesiophobia and fear-avoidance beliefs

RESULTS
• Range of time since injury:
  • 13 to 94 months
• 11/134 reported work-related injury
• Previous injury = High TSK score
• Previous injury ≠ High FABQ score
• Previous work-related injury = High FABQw score
• No relationship between time since injury and TSK (r = 0.04, p=0.890) or FABQw score (r = 0.001, p=0.987)

DISCUSSION
• TSK suggests that the fear of reinjury may be an important consideration for classifying asymptomatic participants
• Highlights a continued psychotherapeutic gap in rehabilitation and return to activity/work for shoulder and low back MSD
• Future motivation: Determine how these factors may impact movement patterns or behaviour in MSD research and physical capacity evaluations

IMPLICATIONS:
• Samples of convenience (young adults) for MSD research should be screened for all previous injuries and work-related injuries
• TSK might be a potential questionnaire for participant classification
• Cross-sectional study, etiology of injury unknown
• There may be other more potentially relevant psychological screening questionnaires

KEY FINDINGS
Back injuries > shoulder injuries = High Kinesiophobia
Previous work-related injury = High fear-avoidance (work)

IMPLICATIONS:
- Samples of convenience (young adults) for MSD research should be screened for all previous injuries and work-related injuries
- TSK might be a potential questionnaire for participant classification

CAUTIONS
- Cross-sectional study, etiology of injury unknown
- There may be other more potentially relevant psychological screening questionnaires

METHODS
• Cross-sectional design
• Recruitment: sample of convenience 170 young adults, no injuries in last 12 months
• Participants:
  • Response Rate 87.6% (n=153)
  • Age: 21 (6) years
  • Female: n=87; Male: n=47
  • Injury data: Self-report
  • Fear-Avoidance data
  • TSK-17¹, FABQ²

RESULTS
- Range of time since injury:
  • 13 to 94 months
- 11/134 reported work-related injury
- Previous injury = High TSK score
- Previous injury ≠ High FABQ score
- Previous work-related injury = High FABQw score
- No relationship between time since injury and TSK (r = 0.04, p=0.890) or FABQw score (r = 0.001, p=0.987)

DISCUSSION
- TSK suggests that the fear of reinjury may be an important consideration for classifying asymptomatic participants
- Highlights a continued psychotherapeutic gap in rehabilitation and return to activity/work for shoulder and low back MSD
- Future motivation: Determine how these factors may impact movement patterns or behaviour in MSD research and physical capacity evaluations

KEY FINDINGS
Back injuries > shoulder injuries = High Kinesiophobia
Previous work-related injury = High fear-avoidance (work)

40.3% of participants had a previous injury