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Translation and cultural adaptation of Lithuanian version of the anterior cruciate ligament return to sport after injury (ACL-RSI) scale [↗](#)

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1 Works for me [dx.doi.org/10.17504/protocols.io.3z7gp9n](https://doi.org/10.17504/protocols.io.3z7gp9n)



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ABSTRACT

Purpose

To translate, cross-culturally adapt and validate the scale to Lithuanian.

Methods

The process of translation and cultural adaptation followed the recommendations of international guidelines. All included patients were after unilateral ACL reconstruction. Study participants completed IKDC, Tegner and ACL-RSI-Lt questionnaires. Reliability, construct validity and internal consistency were measured.

Results

Study included 65 patients after ACL reconstruction: mean age 25.55 ± 6.77 , mean height 180.91 ± 11.78 cm, mean weight 79.12 ± 14.88 kg and mean BMI 24.01 ± 2.90 . The ACL-RSI-Lt showed excellent internal consistency (Cronbach's alpha 0.94). Scale scores were correlated with IKDC score ($r = 0.637$, $p < 0.001$) and IKDC subscales ($r = 0.530$ - 0.581 , $p < 0.001$) and Tegner activity score ($r = 0.303$ - 0.493 , $p < 0.001$). Tegner activity score before injury was significantly higher than after ACLR (6.95 ± 1.49 vs. 6.1 ± 1.37 , $p < 0.001$).

Conclusions

The ACL-RSI is successfully translated into Lithuanian (ACL-RSI-Lt). It is valid and reliable scale to evaluate the psychological impact of returning to sports in Lithuanian patients after ACLR surgery.

EXTERNAL LINK

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THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

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Permission

- 1 Received the authors' agreement to use and translate ACL-RSI scale.
- 1.1 Ethical approval was obtained from the Lithuanian Bioethics Committee (no BE-2-24).

Translation

- 2 Scale was translated by physical therapist and translator who were all native Lithuanian speakers and fluent in English.

- 2.1 Translators discussed about translations.
- 2.2 A common Lithuanian version was created.
- 2.3 Translated scale was retranslated into English by two independent native English speakers.
- 2.4 Two versions of the ACL-RSI-Lt scale were compared to the original version of ACL-RSI.
- 2.5 10 patients with ACL injury were asked to answer the scale and comment if they have any difficulty in answering the questions.

Participants

- 3 In study were involved 65 patients.
 - 3.1 Inclusion criteria: older than 18 years, minimum 6 months after ACLR surgery, unilateral lesion of ACL.
Exclusion criteria: revision surgery, multiligament surgery, meniscectomy, other leg injuries/surgeries.
 - 3.2 All patients received consent form, activity rating scale Tegner, IKDC 2000 questionnaire and ACL-RSI scale.
 - 3.3 Patients completed the forms separately.

Statistics

- 4 Internal consistency was measured using the Cronbach's alpha.
 - 4.1 To confirm uni-dimensionality of the scale, principal component analysis was performed.
 - 4.2 Construct validity was evaluated by correlating ACL-RSI-Lt with IKDC, IKDC subscales and Tegner activity scale.
 - 4.3 Content validity was assessed by analyzing score distribution and the occurrence of ceiling and floor effects.
 - 4.4
 - All analyzes were performed with IBM SPSS Statistics 22.0 software.



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