

Mari Lundberg: Kinesiophobia - Various Aspects of Moving with Musculoskeletal Pain

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Aim: The overall aim of this thesis was to investigate various aspects of the phenomenon of kinesiophobia among patients with musculoskeletal pain.

Study population: For the purpose of this thesis 1304 patients, with musculoskeletal pain, were asked to participate. Of the 1304 patients, 714 (55%) chose to participate. This study population constitutes eight subgroups.

Methods and Results: In order to be able to assess kinesiophobia, a reliable and valid measure was needed. Study I evaluated the psychometric properties of the Swedish language version of the Tampa Scale for Kinesiophobia (TSK-SV) questionnaire. The reliability test included stability over time, internal consistency and homogeneity. The test of validity included face validity, content validity and construct validity. The TSK-SV was found to be reliable and evidence supported its validity, although the results indicated a lack of construct validity. An exploratory factor analysis was performed in Study II to explore the conceptual dimensions of the TSK-SV questionnaire based on a large Swedish sample. The findings showed that the TSK-SV measured five different dimensions of kinesiophobia. The aims of Study III were to describe the occurrence of kinesiophobia and to investigate the association between kinesiophobia and pain variables, physical exercise measures and psychological characteristics in patients with musculoskeletal pain. A multiple logistic regression model was performed to identify associations. Kinesiophobia was a commonly (70%) identified phenomenon in patients with musculoskeletal pain. The results further indicated that kinesiophobia was associated with pain variables, physical exercise measures and psychological characteristics. Study IV explored how patients with persistent musculoskeletal pain experienced *moving with pain*. The interviews were analyzed according to a qualitative method called the Empirical Phenomenological Psychological (EPP) method. The results were described in three typologies called *Failed adaptation*, *Identity restoration* and *Finding the way out*.

Conclusions: In conclusion, TSK-SV can be used prior to the start of a rehabilitation process in order to assess to what extent the patient fears physical movement. It is, however, important to stress that TSK-SV cannot be used as a single measure of diagnosis, but simply gives a rough indication of the level of pain-related fear. This thesis also shows that moving with pain has a deep existential impact on the individual, which needs to be taken into account when treating patients with persistent musculoskeletal pain.

Keywords: fear of movement, kinesiophobia, persistent pain, physical therapy, phenomenology, psychometric properties, reliability, validity.

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Kinesiophobia

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- I. Lundberg MKE, Styf J, Carlsson S. **A psychometric evaluation of the Swedish version of the Tampa Scale for Kinesiophobia (TSK) from a physiotherapeutic perspective.** *Physiotherapy Theory and Practice* 2004; 20: 121-130.
- II. Lundberg M, Jansson B, Styf J. **The multidimensionality of the Swedish version of the Tampa Scale for Kinesiophobia.** Submitted for publication in *European Journal of Pain*, 2005.
- III. Lundberg M, Larsson M, Östlund H, Styf J. **Kinesiophobia among patients with musculoskeletal pain in primary health care.** *Journal of Rehabilitation Medicine* 2006; 1: 37-43
- IV. Lundberg M, Styf J, Bullington J. **Moving with chronic pain- a qualitative study from a patient perspective.** Submitted for publication in *Physiotherapy Theory and Practice* 2005



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