# Validation of patient reported outcome measures by the PREP2 questionnaire and clinical application in a population of myopic Danish children.

We are looking for one undergraduate research student for this project

## We want you…

If you want to explore the researcher within you and be part of a great research group this might be for you! If you want to gain broad knowledge of how to validate and analyze patient reported outcome (PRO) measures this project is for YOU. PRO instruments are extremely important in today’s clinical and research-based medicine and applicable in all medical specialties because PRO instruments can contribute to knowledge that no other type of clinical measure can. However, in order to use PRO instruments, they need to be applicable to the population of interest and valid. During this project you will gain valuable skills on how to validate and analyze PRO measures. You will be able to join the excellent PhD courses “Basic course in questionnaire technique and clinimetrics” and “Advanced course in questionnaire technique and clinimetrics”. We expect that you become the 1st author of two to three publications.

## Background

The prevalence of nearsightedness in children is increasing worldwide. Because of increased risk of sight-threatening complications associated to high myopia, management of myopia is a priority of World Health Organization, WHO. A randomized clinical trial has been conducted at the Ophthalmologic Department at Vejle Hospital, investigating the efficacy of orthokeratology lenses on the progression of myopia. The results showed that the progression of nearsightedness was reduced by 60% in the intervention group using orthokeratology lenses compared to the control group using single-vision spectacles. During the study the questionnaire Pediatric Refractive Error Profile 2 (PREP2) was translated from English to Danish and applied on the study population at 12-month follow-up and at 30-month follow-up. When the questionnaire was applied the first time a test-retest was assessed.

## Aim

To investigate the quality of the questionnaire PREP2 based on

1. measurement invariance between American and Danish children (translation-DIF and population-DIF)

2. test-retest results in a Danish population

To investigate vision-related quality of life in Danish nearsighted children using orthokeratology lenses and single-vision spectacles.

## Method

Data has been collected and is stored in a RedCap database.

Data will be analyzed by Rash analysis using Windsteps software.

## Mentors

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