Translation and validation of the Dutch System Usability Scale

Gepubliceerd: 05-01-2021 Laatst bijgewerkt: 18-08-2022

We hypothesize that the Dutch version of the System Usability Scale is a valid and reliable tool to measure usability of rehabilitation technology.

Ethische beoordeling	Positief advies
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON27796

Bron
NTR

Verkorte titel
Translation and validation of the Dutch System Usability Scale

Aandoening

Not relevant

Ondersteuning

Primaire sponsor: Sint Maartenskliniek
Overige ondersteuning: Interreg (2 Seas Mers Zeeën)

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

The main study parameter is the construct validity of the D-SUS according to the definition of the COSMIN Criteria. Correlations between D-SUS, D-QUEST, and the general usability question (‘Overall, how would you rate the application on a scale from 0 to 10?’) will be

assessed by the Spearman Correlation Coefficient (level of significance $p<0.05$, correlation coefficient>0.8) as a measure of construct validity.

Toelichting onderzoek

Achtergrond van het onderzoek

Rationale: Development of technology occurs at fast speed and new healthcare innovations find their way to modern hospitals and rehabilitation centers. The likeliness that these new innovations will actually be used in clinical practice increases when the intended users are positive about the use of the developed innovation. Therefore, assessment of the system usability is important both during and after development to improve and optimize the design, development processes, and implementation of such innovations. The System Usability Scale (SUS) is the international standard for measuring usability and can quickly be filled out within both the developing and evaluation phase for a certain (healthcare) innovation. However, the SUS is not yet available in Dutch. In order to use the SUS in rehabilitation care in the Netherlands, it is thus recommended to develop a Dutch version of the SUS.
Objective: The primary aim of this research is to develop a Dutch version of the SUS (D-SUS), and to determine the construct validity and test-retest reliability of the D-SUS in rehabilitation care.
Study design: Validity and reliability study.
Study population: Adults (18 years and older) who are familiar with rehabilitation innovations and understand the Dutch language.
Intervention: Participants are asked to fill out two questionnaires (D-SUS and D-QUEST) and a general usability question twice.
Main study parameters/endpoints: The main study parameter is the construct validity and test-retest reliability of the D-SUS.
Nature and extent of the burden and risks associated with participation, benefit and group relatedness: We will only include patients and therapist who already use the rehabilitation innovation in clinical practice. The questionnaires address general usability of these devices. Therefore, no risks are identified and no burden is associated with participation. Patients do not directly benefit from participating but participation contributes to the availability of a reliable, validated Dutch questionnaire regarding usability of future rehabilitation innovations.

Doel van het onderzoek

We hypothesize that the Dutch version of the System Usability Scale is a valid and reliable tool to measure usability of rehabilitation technology.

Onderzoeksopzet

Baseline (T0) and 2-3 weeks after the baseline measurement (T1)

Contactpersonen

Publiek

Sint Maartenskliniek
Carmen Ensink

024-365 9140

Wetenschappelijk

Sint Maartenskliniek
Carmen Ensink

024-365 9140

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Adult patient or therapist (18 years or older).
- Able to understand the Dutch language.
- Experience (for at least 4 different moments in time) with either walking assistance devices (ankle-foot orthosis, Rewalk), eHealth applications (Dr. Bart App) or training devices (GRAIL, C-Mill, Zero-G, Lokomat).

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

None

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen

Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blindering:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland

Status:	Werving nog niet gestart
(Verwachte) startdatum:	10-01-2021
Aantal proefpersonen:	60
Type:	Verwachte startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

Ethische beoordeling

Positief advies

Datum:	05-01-2021
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL9169

Register	ID
Ander register	CMO regio Arnhem-Nijmegen : 2020-6848

Resultaten