Optimisation and Evaluation from the User's Perspective of the Software EPPA! For Automated Posturographic Assessment in the Standing Position

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Abstract. Based on the development of the EPPA! Software (v2023), this work complemented the inter-rater validation process. The objective of the present research was to detect the difficulties of the software from the user's perspective and to detect opportunities for improvement.

An anonymous survey was designed, using the online platform Google Forms, which facilitated data collection and processing. The survey was developed in 5 main areas: (I) data related to profession, age and previous experience in using posturography software; (II) evaluated the interface dedicated to marker capture; (III) inquired about the measurement interface of each view and (IV) was devoted to evaluate general aspects of the software; and, (V) aimed at suggestions for optimisation of the software. A 5-level Likert scale was adopted to quantify the results. The sample consisted of 8 expert evaluators who used the software repeatedly on different days or weeks. Throughout the survey, 43 responses could be quantified for each evaluator. The responses were statistically processed to compare their averages and deviations and to draw objectively validated conclusions from the user's perspective. It is observed that 95.8% of the opinions correspond to the two highest values of the scale in the area (I); in the area (II) and (III) percentages between 70.8% and 93.5% and area (IV) at 85% were the highest scores. Also, it was possible to identify critical or vulnerable areas of the system. Some aspects for the optimisation of the software were implemented in order to achieve an improved version.

Keywords: Postural Assessment Software · Survey User · Software Optimisation

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