Abstract

Background: Mobile applications are an innovative tool for solving the problem of substance abuse and its consequences. Various applications are available on the market, the final quality has not yet been evaluated in any way. The MARS and uMARS Mobile App Rating Scale provide a common method for evaluating the quality of mobile health (mHealth) apps.

Objectives: The main objective of the research was to evaluate the addiction mobile application Adiquit using the MARS (*Mobile App Rating Scale*) and uMARS (*User Version Mobile App Rating Scale*) questionnaires.

Methods: The study was conducted online in the spring of 2024 using a quantitative questionnaire survey method. The collection tool was the MARS questionnaire and the uMARS questionnaire. After the end of the investigation, both questionnaires were checked, and data was cleaned. The data were the transferred to MS Excel, analyzed using descriptive statistics, and the results were displayed using graphs and tables.

Research file: Addiction professionals and Adiquit users. The selection was purposeful, when specific experts in the field of addiction and users of the application were addressed via email. The criteria for selection into the group of experts was only orientation in the field of addictionology, and into the group of users only the use of tobacco or nicotine products and the use of the Adiquit application. A total of 141 respondents were included in the research, of which 82 were women and 59 were men.

Results: The average quality score according to the MARS assessment was 4.4 and according to uMARS 4.05. Specific results for individual sections of the MARS questionnaire were 4.4 for engagement, 4.6 for functionality, 4.4 for appearance and 4.2 for information in the application. According to uMARS, it was 3.7 for engagement, 4.2 for functionality, 4.1 for appearance and 4.2 for information. The overall quality score was 84.25 points (88.7 %) from experts and 64.32 points (80.4 %) from users. The subjective quality of the application was rated 4 and 3.6 points.

Conclusion and recommendations: This study provides an unique assessment of the quality of the Adiquit application using the MARS and uMARS questionnaires. The overall results of the application were very favorable, both from the experts and from direct users of the application. Certain deviations are noticeable from both groups, but on average their evaluations almost correspond. The study could be followed up by further investigations that would look at broader contexts on the user side of the application, or the application could be compared with another similarly functioning on based on the same quality assessment method.

Keywords: mobile application, MARS questionnaire, uMARS questionnaire, mHealth, addictions