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THE IMPACT OF COMPUTERIZED WORK ON WORKERS' QUALITY OF LIFE

Zíngarah Májory Tôrres de Arruda, Ruth Losada de Menezes
Programa de Pós-graduação da Faculdade de Medicina da Universidade Federal de Goiás (UFG), Goiânia, GO, Brazil

Background: The intense technological evolution and, more recently, the practices of Artificial Intelligence (AI), have significantly changed labor relations and production processes. Given this scenario, there is a need to analyze the impact of this reality on the lives and health of workers.

Objectives: To assess the quality of life of workers who use computer terminals and to observe the implications of computerized work on the health of these professionals.

Methods: 209 workers over the age of 18 who worked in an institution using a computer for between 4 and 8 hours a day took part in this study. The SF-36 Questionnaire (Short Form Health Survey) was applied, an instrument that contains 36 items encompassed in eight scales: functional capacity, physical aspects, pain, general state of health, vitality, social aspects, emotional aspects, mental health and a question comparing current health conditions with those of a year ago (quantitatively - ranging from 1 to 5; and qualitatively, between excellent, much better, a little better, almost the same, a little worse, much worse). To evaluate the results, a score was given on a scale of 0 to 100, where zero corresponds to a worse state of health and 100 to a better one, and each dimension was analyzed separately.

Results: The weighted average of the domains was as follows: functional capacity (87.27), limitations due to physical aspects (85.76), pain (69.37), general state of health (59.28), vitality (55), social aspects (71.90), limitations due to emotional aspects (74.84), mental health (67.15) and comparative assessment between current health conditions and those of a year ago - quantitative (2.75) and qualitative, in which the majority reported "almost the same" (99; 47.36%).

Conclusion: In the general assessment of quality of life, the scores that obtained the best scores were functional capacity and limitations due to physical aspects. However, the domains pain, general state of health, vitality, social aspects, limitations due to emotional aspects, and mental health were lower than expected.

Implications: The results presented in this research indicate that the concept of quality of life has very important connotations that need to be explored and deepened. Thus, this study provides input for future research into issues related to quality of life and computerized work. Work, when carried out in healthy conditions, promotes a sense of well-being and vitality, results that were contrary to those presented in this study. This data shows that there is a need to improve working conditions and the physical and mental capacity of these workers. In addition, favorable physical and mental health is reflected in improved productivity and efficiency in the services provided by these professionals. Workers in computerized workstations therefore need special attention from health professionals.

Keywords: quality of life, technology, workers' health

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EVALUATION OF MOBILE APPLICATIONS AVAILABLE IN BRAZILIAN ONLINE STORES FOR WORKERS' HEALTH AND WELL-BEING BY POTENTIAL END USERS

Maria Isabel Triches, Beatriz Suelen Ferreira de Faria, Lorena Caligiuri Lemes, Tatiana de Oliveira Sato
Departamento de Fisioterapia (DFisio), Universidade Federal de São Carlos (UFSCar), São Carlos, SP, Brazil

Background: Unfavorable conditions in the workplaces affect the health and well-being of Brazilian workers, whose self-management can be achieved by mobile health (mHealth) technologies. The widespread availability of mHealth makes relevant its quality evaluation.

Objectives: To evaluate the quality of mHealth applications aimed to promote workers' health and well-being available in Brazilian online stores by potential end users.

Methods: Three apps were evaluated in this study, which obtained the highest scores in a previous systematic search recently published. The Laboral Life (LL) by Life PQV - version 1.0 obtained the best score (4.03 ± 1.0). Pausas Ativas (PA) 3.1.0 by Eighteen Code and Exercícios de exercício de escritório - perder peso (EE) 1.0.04 by Home Fit had the same score (3.5 ± 0.9) by trained researchers according to the Mobile App Rating Scale (MARS). The opinion of potential end users was obtained through the Portuguese-Brazil version of the User Mobile App Rating Scale (uMARS). An electronic form with 36 questions, containing a sociodemographic questionnaire and the uMARS that assesses engagement, functionality, aesthetics, information and subjective quality on 5-point scales were used. The sample was composed by Brazilian professors with a workload of more than 20 hours per week and access to a smartphone with Android or iOS operating system. Exclusion criteria were being retired, away from work or on vacation. The app was randomly selected for each participant and tested for at least 10 minutes. Data collection occurred in August-October 2023. Descriptive analysis was performed.

Results: The sample consisted of 30 professors, 50% men, with 51.5 ± 10.4 years, 83% white, 60% married and 87% had PhD. On a scale of 1 to 5, the mean and standard deviation of the quality of the three applications according to the uMARS scale was 3.4 ± 0.6 , with an overall quality score of 3.51 ± 0.78 for PA; 3.43 ± 0.70 for EE; 3.31 ± 0.23 for LL. The overall score of the engagement subscale was 2.7 ± 1.4 ; with a mean of 2.8 for PA; 2.9 for EE and 2.3 for LL. The overall score of the functionality subscale was 4.1 ± 0.6 , with a mean of 4.3 for PA, 4.3 for EE and 3.8 for LL; the overall score of the aesthetics subscale was 3.8 ± 0.5 , with a mean of 3.9 for PA, 3.7 for EE, and 3.8 for LL; and the overall score of the information subscale was 3.0 ± 0.8 , with a mean of 3.0 for PA, 2.8 for EE, and 3.4 for LL.

Conclusion: For users, the apps were of moderate quality. PA was the highest rated app in user reviews but is currently not available in the online store. We recommend the EE app, now renamed to Exercícios Treino Escritório, which is available on the Google Play Store.

Implications: In addition to monitoring by a health professional, mHealth applications can be used as a strategy by workers to promote their health and well-being. Developers need to improve information and incentives for user engagement.

Keywords: Occupational Health, mHealth, Mobile Apps

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