Technostress: A Technology-Enhanced Literature Review

Ariana Anamaria CORDOŞ^{a,*}, Ciprian-Viorel STUPINEAN^b, and Sorana D. BOLBOACĂ^c

^a Independent researcher, Pastorului Str. no. 4, 400338 Cluj-Napoca, Romania

^b Cipristupi Soft., Zefirului Str., no. 1, app. 12, 420135 Bistrița Năsăud, Romania

^c Department of Medical Informatics and Biostatistics, "Iuliu Hațieganu" University of Medicine and

Pharmacy Cluj-Napoca, Louis Pasteur Str., No. 6, 400349 Cluj-Napoca, Romania

E-mails: ariana.cordos@gmail.com; sbolboaca@umfcluj.ro

* Author to whom correspondence should be addressed

Abstract

Technostress is defined as stress or psychosomatic illness caused by working with computer technology on a daily basis. The worldwide COVID-19 pandemic restrictions and measures as computer-based working and computer-assisted education provided the frame and conditions towards technostress. The aim of the study was to evaluate the trends in reporting results on technostress using a computer-assisted method. Three bibliographic databases were the source of the data: PubMed, Web of Science (WoS), and Scopus. Only one keyword was used in searching, 'technostress', any type of article, but limited to humans, and manuscripts in English. The search was done on 8th July 2021, in the same day for all three databases. A web crawler was created in C#, to scan the articles' titles and abstracts and investigate whether technostress is the topic. The crawler performed a DOI-based search (DOI = digital object identifier). For each DOI, a request was made in PubMed. If found, one of the following terms was searched in the title and the abstract: "technology stress", "stress", "techno-stress", "technostress". If a match was found, the result was placed in the ArticleFoundAndMatchingCriterias file. If did not match, the result was placed in the ArticleFoundAnd-Not-MatchingCriterias file. If the DOI was not found, the DOI and the URL were placed in the ArticlesNotFound file. The DOI and the URL were placed in the ArticlesInconsistantData file for any other scenarios to be checked manually. A total of 2.924 items were retrieved (179 PubMed, 930 Scopus, and 1815 WoS). Almost 35% (1.035) of identified manuscripts were duplicates and were removed along with 54 additional items (48 books or books chapters, 4 erratum, 1 editorial, and 1 letter). The 1.836 remaining articles were screened by the crawler. The crawler retrieved 344 articles, out of which 260 were considered to be relevant.

Keywords: Stress disorders; Technostress; Web Crawler