

DYSCALCULIA IN THE SCIENTIFIC LITERATURE: A SYSTEMATIC REVIEW

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Dyscalculia is a learning disorder that affects the correct acquisition of arithmetic skills. Despite having an estimated prevalence of approximately 5% among the school population, it is an unknown disorder in society and it has received much less attention than others disorders, or learning disabilities, such as dyslexia. The objective of this research is to examine the main features of the most influential literature on dyscalculia.

We conducted a systematic literature review of the term *dyscalculia* focusing on titles and abstracts in the publications of the Web of Science and Scopus databases between 1970 and 2020. We followed the main lines of the systematic review methodology used by García-Peñalvo (2017). English and Spanish publications were included and publications with less than 20 citations and with adults were excluded. We obtained 502 documents in WoS and 1220 in Scopus and after four screenings in the review process, applying the inclusion and exclusion criteria and removing the duplicates, we retained 102 publications. We read and coded them by number of citations, bibliographic reference, topic, type of research and aim and contributions research. Paying attention to the topics developed by the studies, the results indicate that an evaluative or diagnostic tendency is the most dominant, where the researchers evaluate the mathematics skills of children with dyscalculia, who present a lower math performance than typical achievers. The second tendency is related with the neurological alterations involved in this disorder, followed by a theoretical tendency where the publications offer a review of the most relevant evidences of dyscalculia. Finally, in order, stand out studies about the comorbidity of dyscalculia with other disorders and learning disabilities, the intervention or treatment, its classification and the relation with math anxiety. To conclude, although the diagnosis of dyscalculia has evolved considerably, incorporating more and better detection techniques and instruments, there is still the need of more research on the intervention.

Acknowledgments

Research made possible through the financial support of the Ministry of Education of Castilla y León and other aids for predoctoral researchers, co-financed by the European Social Fund.

References

García-Peñalvo, F. J. (2017). *Revisión sistemática de literatura en los Trabajos de Final de Máster y en las Tesis Doctorales*. University of Salamanca. Repository of the InterAcción and eLearning Research Group. <https://bit.ly/3u2AfTd>