

James L. Fozard's research impact scores, in particular for gerontechnology

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J.L. Fozard (co)authored at least 185 papers in the last 40 years, of which 57 belong to the domain of gerontechnology. In total 17 of Fozard's publications are cited more than 100x. This impact increases far behind regular retirement age. The h-index of his complete oeuvre ranges from 32 to 42, and 32 of his gerontechnology publications were cited 1-44 times in other academic publications.

Keywords: researcher impact, gerontology, gerontechnology, J.L. Fozard

A researcher has a many-fold impact, through his/her inspiring personality, his/her enthusiastic collaboration, the publishing of research results, and through teaching. Impact scores have been devised that may give an indication of the impact an academic has in his/her field. In this short report we show the statistics of the researcher output of James Leonard Fozard.

METHOD

James L. Fozard supplied a list of 183 of his publications to the author. 50 were classified by him in the gerontechnology domain, including human factors and person-environment interaction. Web-of-Science (WoS)¹ together with ResearcherID² has been used to analyse citations in February 2010. In addition the word 'Fozard' was employed to collect publications and cites in Google Scholar with the aid of Publish or Perish (PoP)³. More than 800 publications were found, of which 175 proved to be (co)authored by Jim Fozard. In this process an extra 7 publications pertaining to the broad definition of gerontechnology were discovered.

RESULTS

147 publications (co)authored by Fozard were found cited in PoP and 78 in WoS. Taking into account the overlap over the two databases a total of 155 publications are

cited. Of these, 17 publications, appearing in 1972⁴ or in the time period 1990 to 2000⁵⁻²⁰, have been cited more than 100 times in other academic publications. The two most often cited publications with Fozard as first author concerned vision and hearing (1990: 132 [PoP] cites)⁵ and reaction time (1994: 24 [WoS] and 109 [PoP] cites)¹⁰.

Interestingly, Fozard's yearly citation score in Web-of-Science saw a steady increase after his 60th birthday and has been on the 200+/year level in most of the 21st century²¹. Viewing the number of cites/publication makes clear that this trend started at the beginning of his career.

Of the 57 publications devoted to gerontechnology (*Figure 1*), 37 are available in the Google Scholar search with PoP, while only 6 appeared in WoS. Total number of cites is 268. Highest number of cites for gerontechnology publications (more than 20x in one of the databases) concern 4 articles. The lower number of citations of publications of the last 5 years may be attributed to the usual time lag between publication and citing in engineering and the social sciences^{22,23}.

In 1978, about 2 decades before the definition of gerontechnology, Fozard suggested that an applied psychology of aging should

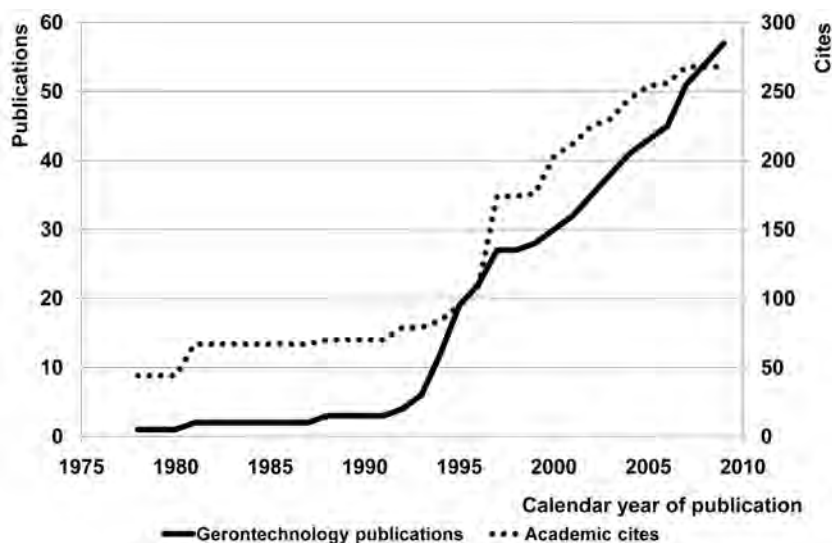


Figure 1. Cumulative number of gerontechnology publications (co)authored by James L. Fozard from 1978 until 2009, and the cumulative number of cites each of those publications had acquired by February 2010 in Thomson-Reuter's Web-of-Science¹ and Google Scholar as researched by Publish or Perish³

include environmental interventions, in short 'technology'²⁴ (44 [PoP] and 33 [WoS] cites). Three years later he stressed the changes in the person-(technical) environment relationship²⁵ (23 [PoP] and 17 [WoS] cites).

A 3rd highly cited gerontechnology publication (from 1997) concerns user interfaces for young and old²⁶ (45 [PoP] cites, not included in WoS). The last highly cited gerontechnology publication was published in 2000. It focuses on enabling environments²⁷ (25 [PoP] and 6 [WoS] cites). Gerontechnology publications in the 21st century are only covered by PoP.

Another representation of the scientific lifetime achievement of a scientist is his h-index²⁸.

For Fozard's total oeuvre it ranges from 32 in WoS to 42 in PoP, meaning that 32 or 42 publications, respectively, are cited at least 32 or 42 times, respectively, in other academic publications. A value of 18 is considered a good level for a full professorship²⁸.

DISCUSSION AND CONCLUSION

James L. Fozard is a highly successful researcher. Starting from gerontology, he turned to gerontechnology in the second half of his career and beyond. However, even before this turn, the key issues of gerontechnology, for instance, user interfaces and enabling environments are present in his work. The impact of his work rose with time and remains high. He is a true grandmaster in Gerontechnology!

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