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KEY WORD VALIDITY RATIO (KWVR); A TOOL FOR VALIDITY OF KEYWORDS FOR BUILDING AN ACCURATE LITERATURE SEARCH STRATEGY

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Background and aims: Construction of a genuine Search Strategy for specific topics is almost challenging issue for accuracy of set of extracted literature. Search strategy includes multitude of fixed and relevant terms that moves in from other concepts nested in different categories. Building a pure set of all related words is dependent upon the terminology of topics, search engine algorithms of the specific database, the real information need and formation of search strategy. Without

validation of the search strategy and the selection of eligible words set of extracted data will be objective for heterogeneity, especially in systematic reviews of evidence and scientometrics studies which require comprehensive and precise results. The aim of this study was to develop a tool for validation of selected keywords for systematic literature search.

Methods: Based on CVI and CVR tools used for validity of contents in questionnaire building, the Key Word Validity (KWV) form was built. Semi structured Delphi with a small group discussion panel of experts was performed to validate the measures, items and contents of KWV tool. The KWV primary version was applied to assess the applicability and reliability of tool. The pilot study was conducted for identifying the best match words for retrieving the literatures for “evidence based librarianship”. Based on a literature review eligible terms and phrases were extracted.

All the words, terms and phrases were inverted into the descriptive concepts after steaming that made the check list. The identified terms nested in the KWV form and were submitted to panel of 5 expert searcher and subject specialists for library and information science. KWV form was built of three criteria including essential, related but needs modification, irrelevant/nonessential. Each term was scored by experts with the three criteria. The scores were then compared with Lawshe’s CVR table to confirm the validity of terms.

Results: Number of five selected terms was validated for study with $KWVR=1>0/99$. The search was once performed with the validated terms, which were scored essential and relevant but need modification and the results were imported to EndNote; once again the search was performed with terms which was scored irrelevant and no necessary and the results were imported to EndNote to compare the number of related hits. The result showed that the search results with the KWVR identified terms would give more relevant and more comprehensive results.

Conclusion: KWVR can be used as a valid tool for validating eligible terms for literature search strategy construction especially for systematic reviews and scientometrics studies.