



# Systematic Literature Review – Enhancing methodology competences of young researchers

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# Economic and Management Library (DBWM)



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- special library of the Faculty of Economics and Management since 1968
- second largest library at Technische Universität Berlin
- students, teachers, and researchers of the faculty are the primary target group
- first academic library in Germany awarded as „Ausgezeichnete Bibliothek“ (distinguished library) in 2013
- library staff: 11,5 + library student assistants



# A systematic literature review is an independent academic method...

## SYSTEMATIC LITERATURE REVIEW METHOD (SLR)

- independent academic method
- replicable, scientific and transparent process
- predefined inclusion and exclusion criteria
- literature selection by at least two persons



...that aims to minimize bias and redundancies in research

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## SLR OBJECTIVES

- identify and evaluate all relevant literature on a topic
- minimize bias through a formalized approach
- avoid research redundancies
- identify research areas, gaps and methods
- identify links between different areas of research
- support evidence-based management



# Background and objectives of SLR services offered at DBWM

- methodology competency gaps regarding searches in Economic databases
- increasing requests for SLR consultations
- adaptation of SLR method to the Economic context was needed as it originated from health science
- practically no support for Economic researchers regarding SLR method



**Closing the SLR service  
offering gap for researchers  
in Economics**



# Method & approach

- detailed description of SLR process adapted to Economics on the library's website (2019)
- learning videos like e.g. "Understanding retrieval bias"
- discussion of selected articles that applied SLR method along SLR process
- SLR consultations
- support as SLR reviewer for publications



# Method & approach



Differences between an „ordinary“ literature review and a systematic literature review		
PROPERTY	Systematic Literature Review	Literature Review
Independent research method	yes	no
Explicit formulation of the objective of the search	yes	no
Identification of all publications on a topic	yes	no
Criteria for inclusion and exclusion defined ex-ante	yes	no
Description of search procedure	yes	no
Traceable extraction of information	yes	no
Information extracted by several authors	yes	no
Transparent quality evaluation of publications	yes	no

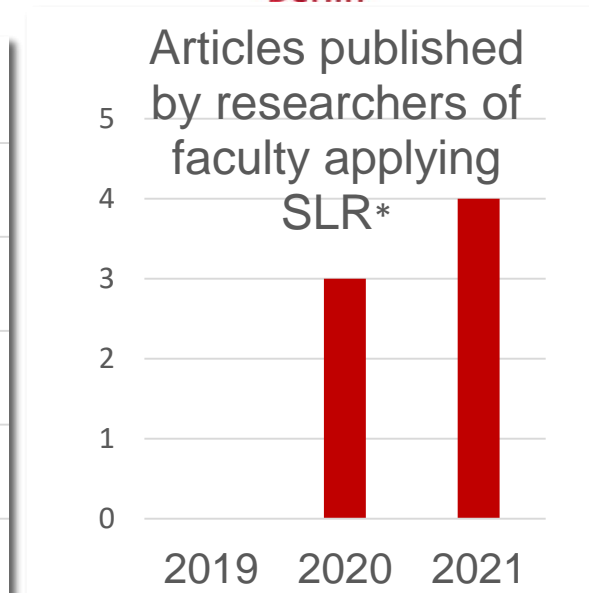
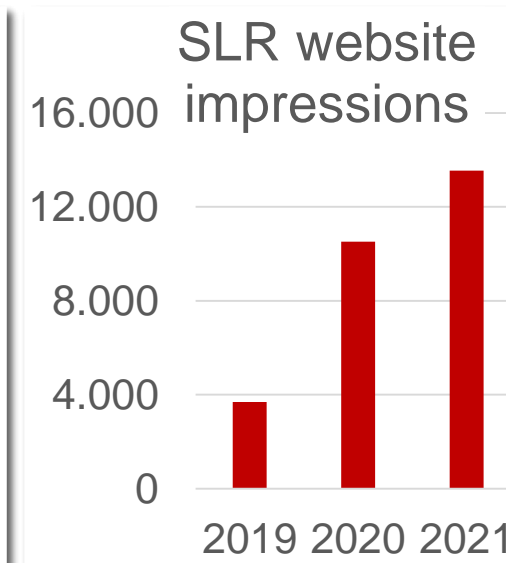
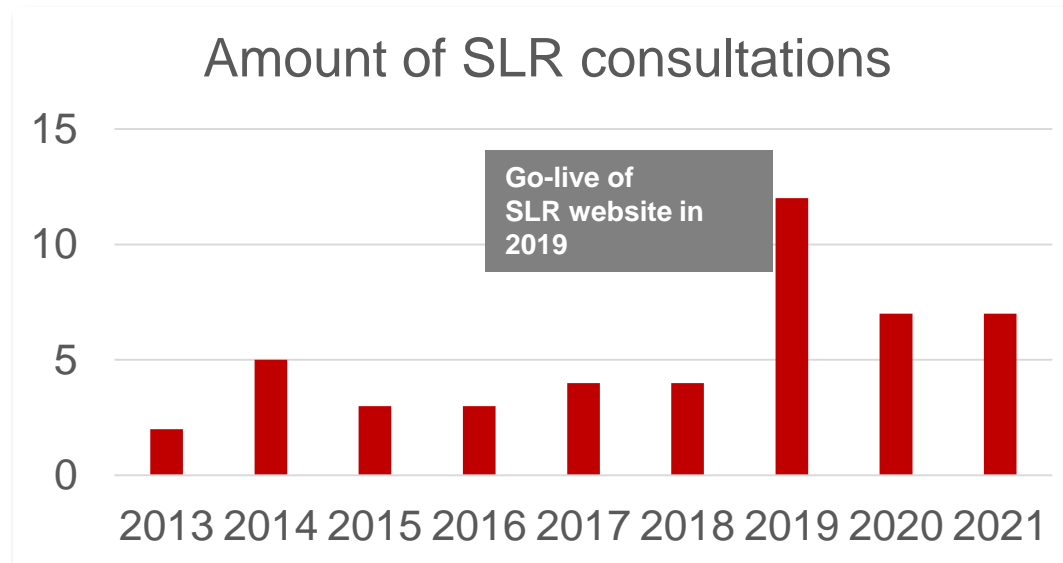
## SLR differences to ordinary reviews

EXAMPLE	
•	Supply chain robustness
?	<ul style="list-style-type: none"> <li>How is the construct "robustness of supply chains" defined?</li> <li>What are antecedents, dimensions and moderators of supply chain robustness?</li> </ul>
🔍	<ul style="list-style-type: none"> <li>Databases: Business Source Complete (1264 articles), Social Science Citation Index Web of Knowledge (238 articles)</li> <li>Definition of the search terms with the help of eight experts from research and practice and eight essential articles, adaptation of the terms by Information specialists from the Economics &amp; Management Library of Technische Universität Berlin</li> </ul>
☰	<ul style="list-style-type: none"> <li>EBSCO (robust* OR continuity OR vulnerability OR resilient OR perturbation OR (risk driver*) OR mitigation) AND ((DE "SUPPLY chains") OR ("supply chain") OR (DE "SUPPLY chain management") OR (DE "SUPPLIERS") OR (DE "REVERSE logistics"))</li> <li>ISI (TS=(robust* OR continuity OR vulnerability OR resilient OR perturbation OR (risk driver*) OR mitigation) AND TI=((supply chain*) OR (supply network*) OR (logistical network) OR (demand chain) OR (supply management) OR SCM OR (production and inventory) OR (supply risk) OR (reverse logistics)))</li> <li>Abbreviations, DE: Descriptors, TI: Title Search, TS: Topic Search</li> <li>A advice from DBWM: In the Web of Knowledge (ISI) the default setting is "Topic search" - "Title search" is already a restriction and restrictions must always be justified</li> </ul>
➡	<ul style="list-style-type: none"> <li>Use of the literature management software Citavi</li> </ul>
✖️	<ul style="list-style-type: none"> <li>Summary must demonstrate the supply chain as the clear focus/object of the research</li> <li>A construct is mentioned that can be called "supply chain robustness," as it describes a supply chain's ability to maintain performance during times of change, through proactively implemented measures</li> <li>Summary must show clear indication of dimension and antecedents or moderators of supply chain robustness</li> <li>Article must be written in English</li> <li>Selection was carried out by three researchers working independently of one another</li> <li>94 articles remain following the application of the criteria for inclusion and exclusion</li> </ul>
✍️	<ul style="list-style-type: none"> <li>2 rounds of reading</li> <li>63 variables identified</li> </ul>
🌐	<ul style="list-style-type: none"> <li>Applying Q-method for construction of higher order constructs</li> <li>Following the compression, 20 variables and one moderator remain</li> <li>Derivation of a framework for, and definition and explanation of, each individual variable, as well as derivation of corresponding hypotheses</li> </ul>

## Discussion of SLR examples



# Findings & lessons learned



Increased SLR consultations, website impressions and publications as well as quality of search strategy

\*not all publications of the faculty researchers have been accessible due to a relaunch of TU Berlin websites', only articles that use SLR in the title considered



# Findings & lessons learned

- Intensive consultation along SLR process required → at least two employees necessary
- Good entry point for enhancing required research skills of researchers since they are often not fully aware of lacking these skills (database search, content analysis)





# Implications



- SLR service offerings helpful to support methodology competences of young researchers at Faculty for Economics and Management
- openness: SLR information available to everyone via DBWM website
- next step: creating SLR open educational resources (OER)
- opportunity: Establishing SLR network today!



# Q & As





# Thank you for your attention!



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