



RESEARCH QUESTIONS & SEARCH STRATEGY

MICHAEL KALU ©

LECTURE 3

LEARNING OBJECTIVES

At the end of this lecture, you should be able to:

- Develop research questions
- Explain why you would conduct a literature review, as well as where and how to search for literature
- Describe how to conduct and organize a search for efficiency and usefulness for practice
- Describe why you would complete a literature review and how to go about doing so



- Developing research questions:

- Quantitative

Population – Intervention/Exposure – Comparison – Outcome –Time (PICOT; Riva et al., 2012)

- Qualitative

Emphasis - Purposeful Sampling - Phenomenon of Interest – Context (EPPiC; Kalu, 2019)

FORMULATING THE PROBLEM

FORMULATING RESEARCH USING PICOT

Title: Association between physical factors and mobility outcomes among older adults in Nigeria.

Population = older adults, 65 years older;

exposure = physical factors,

outcome = mobility ,

Context = Nigeria

Research question: What is the association between physical factors and mobility outcomes among older adults in Nigeria.

EACH GROUP:15-20MINS

- Population or patient problem
- Intervention or issue of interest
- Comparison or exposure or issue of interest
- Outcome



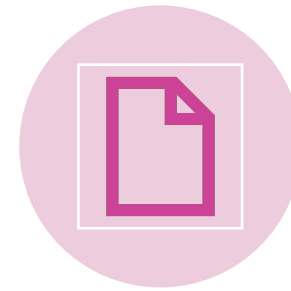


BREAK -15MINS

MAIN GOALS OF THE SEARCH



Specificity – To retrieve only those papers that are relevant to the search question



Sensitivity – Not to miss any of those papers

STAGES OF LITERATURE REVIEW

Problem Formulation	Deciding the topic to be examined and its sub-topics
Literature research	Finding materials relevant to the topic being explored
Data evaluation	Determining which literature makes a significant contribution to understanding the topic
Analysis and interpretation	Discussing the findings and conclusions in a formal, scientific and structured manner

TYPES OF SCHOLARLY PUBLICATIONS

Type	Description
Research/Empirical	Papers reporting on the results of one or more studies or experiments, written by the individuals who conducted the research
Case study	Detailed accounts of clinically important cases of common and rare conditions
Review	Summarizes the findings of other studies or experiments and attempts to identify trends or draw broader conclusions
Systematic reviews	Summaries of evidence on a particular research question that use a rigorous process to identify, appraise, and synthesize studies to answer the question and come to a conclusion
Meta-analysis	A specific kind of review paper—one with a mathematical synthesis of the results of two or more primary studies that addressed the same hypothesis in the same way.

TYPES OF SCHOLARLY PUBLICATIONS

Type	Description
Meta-synthesis	Analyzes the findings for a research question from across the synthesis of qualitative studies
Letters or communications	Short descriptions of important latest study or research findings, which are usually considered urgent for immediate publication
Theoretical	A paper containing or referring to a set of abstract principles related to a specific field of knowledge
Applied	Describes technique, workflow, management, or human resources issue
Professional communications, book reviews, letters to the editor	Papers that pertain to the workings of the profession that are not scholarly in nature—expert-opinion pieces.

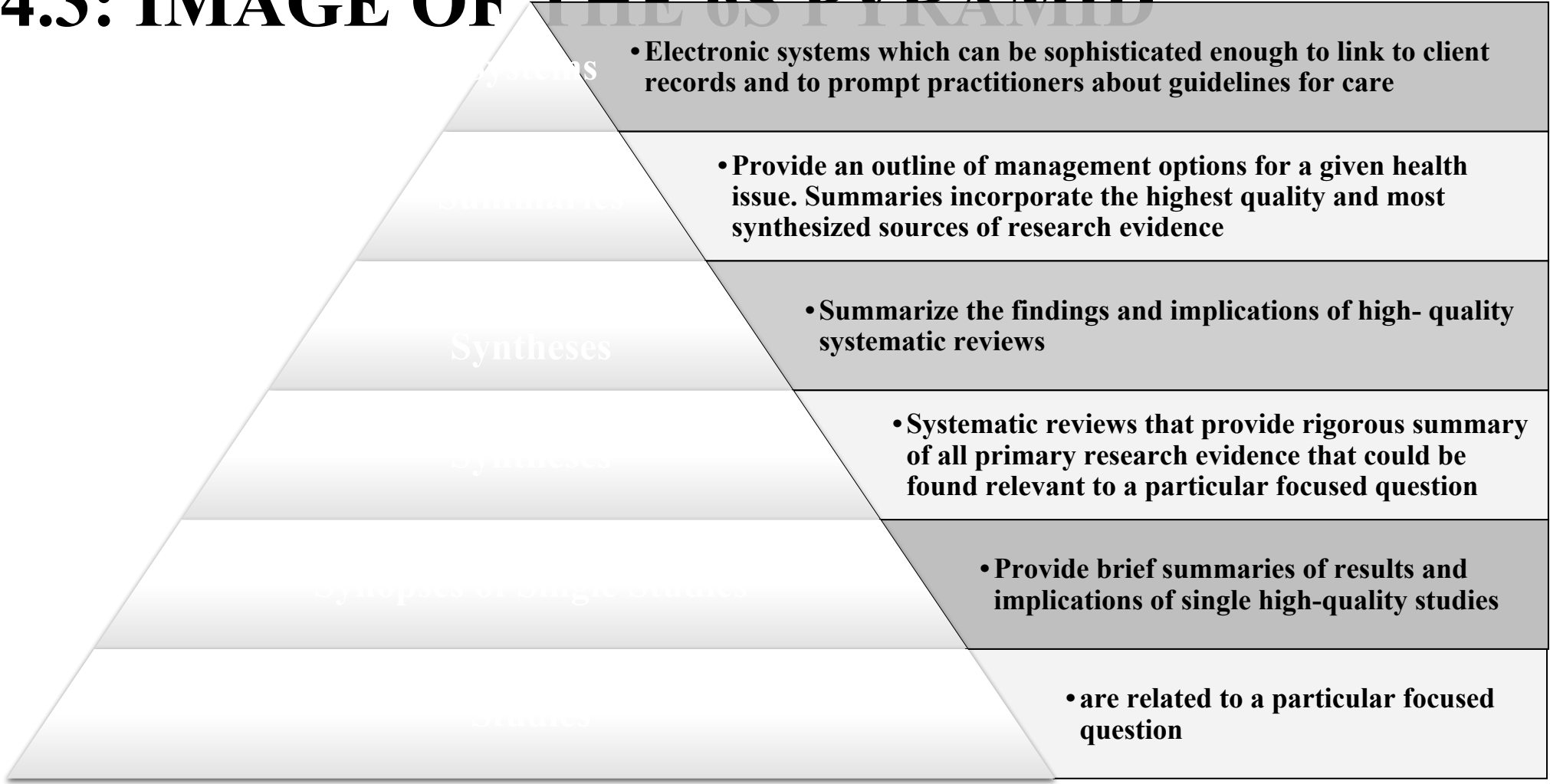
EXAMPLES OF EACH STUDY TYPE

Types	Examples
Empirical research	Olayinka Akinrolie, Augustine C Okoh & Michael E Kalu (2020) Intergenerational Support between Older Adults and Adult Children in Nigeria: The Role of Reciprocity, Journal of Gerontological Social Work, 63:5, 478-498, DOI: 10.1080/01634372.2020.1768459
Case study	Otsuka, K., Matsuo, T., Ishimatsu, T., Fukae, A., Hamamoto, T., Oku, K., & Ito, M. (2022). A case of BNT162b2 COVID-19 vaccine-associated fulminant myocarditis in a very elderly woman. Clinical case reports, 10(9), e6161.
Review	Kalu, M. E., Oyinlola, O., Ibekaku, M. C., Adandom, I. I., Iwuagwu, A. O., Ezulike, C., ... & Uduonu, E. (2022). A Mapping Review on the Uptake of the COVID-19 Vaccine among Adults in Africa Using the 5A's Vaccine Taxonomy. The American Journal of Tropical Medicine and Hygiene, 1(aop).
Systematic reviews	Lunt, C., Dowrick, C., & Lloyd-Williams, M. (2021). What is the impact of day care on older people with long-term conditions: A systematic review. Health & Social Care in the Community, 29(5), 1201-1221.
Meta-analysis	Folkerts, A. K., Roheger, M., Franklin, J., Middelstaedt, J., & Kalbe, E. (2017). Cognitive interventions in patients with dementia living in long-term care facilities: Systematic review and meta-analysis. Archives of Gerontology and Geriatrics, 73, 204-221.

EXAMPLES OF EACH STUDY TYPE

Type	Description
Meta-synthesis	Allen, J., Hutchinson, A. M., Brown, R., & Livingston, P. M. (2017). User experience and care integration in transitional care for older people from hospital to home: a meta-synthesis. <i>Qualitative Health Research</i> , 27(1), 24-36.
Letters or communications	Anthony Obinna Iwuagwu & Michael Ebe Kalu (2021) A Promising Approach to Reducing Social Loneliness among Older Adults in Nigeria during COVID-19 Pandemic, <i>Journal of Gerontological Social Work</i> , 64:5, 449-451, DOI: 10.1080/01634372.2021.1901818
Theoretical	Wigfield, A., Turner, R., Alden, S., & Al, E. (2020). Developing a new conceptual framework of meaningful interaction for understanding social isolation and loneliness. <i>Social Policy and Society</i> , 21(2), 172–193. https://doi.org/10.1017/S147474642000055X
Applied	Kalu, M. E., & Norman, K. E. (2018). Step by step process from logic model to case study method as an approach to educational programme evaluation. <i>Global Journal of Educational Research</i> , 17(1), 73-85.

FIGURE 4.3: IMAGE OF THE 6S PYRAMID



FINDING MATERIALS – THE SEARCH

- Developing the search strategy
- Testing the search strategy using a database
- Conducting the full search
- Downloading the search into a reference manager



DEVELOPING THE SEARCH

	State your	Synonyms
Population of interest		
Intervention or exposure		
Comparison		
Outcome		
Context		

Concepts	Key or MeSH terms
Loneliness	MH “Social Contact (Omaha)” OR “social contact” OR “social connection” OR “social connectedness” OR (MH “Interpersonal Relations”) OR (MH “Social Participation”) OR (MH “Social Inclusion”) OR “Being alone” OR “lonely” OR (MH “Loneliness”) OR (MH “Social Isolation”)
Older adults	“Older adults” OR “Older people” OR “Older persons” OR “Seniors” OR “ag*ing” OR (MH “Aging”) OR (MH “Aged”) OR “elder*” OR “elderly”
Black	“African American” OR “Afro Caribbean” OR “African*” OR (MH “West Indies”) OR (MH “Cuba”) OR “Caribbean*” OR (MH “Black Persons”) OR “Black*”

For all the database searches, the symbol * will be used to allow the inclusion of varied word endings.

EXAMPLE OF SEARCH STRATEGY

Ojembe et al., (2022)

DATA BASES TO SEARCH

- Scopus
 - Medline/PubMed
 - ERIC
 - EMBASE
 - Sociological Abstract Database
 - Web of Science
 - Director of Open Access Journals
 - PsychINFO
 - AgeLine
 - Allied Complementary Medicine Database (AMED)
- <https://paperpile.com/g/academic-research-databases/>



LET'S DO THE SEARCH

EXAMPLE OF SEARCH DONE IN AGELINE



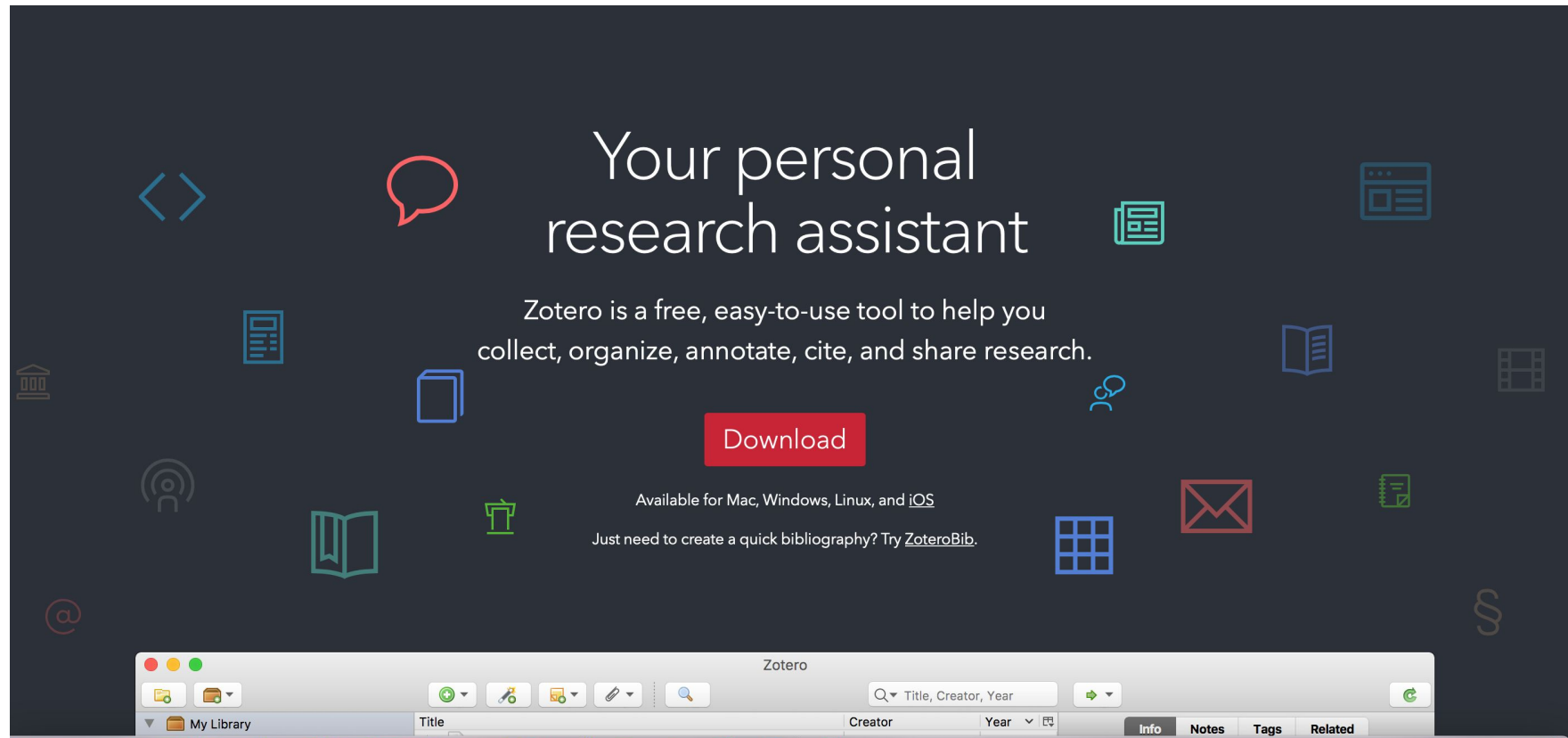
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#	Query	Limiters/Expanders	Last Run Via	Results
S4	(Black American OR African American OR Black Caribbean* OR Afro Caribbean* OR Black person* OR Black* OR West Indies OR African*) AND (S1 AND S2 AND S3)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - AgeLine	759
S3	Black American OR African American OR Black Caribbean* OR Afro Caribbean* OR Black person* OR Black* OR West Indies OR African*	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - AgeLine	11,941
S2	ag*ing OR older adult* OR older people OR older person* OR senior* OR Aged OR elder* AND elderly	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - AgeLine	164,043
S1	loneliness OR social contact OR social isolation OR social connection OR social support OR social connectedness OR Being alone OR Lonely	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - AgeLine	9,139

Ojembe et al (2022)

EXPORTING TO REFERENCE MANAGERS

- [Mendeley-Most Popular Reference Management Tool](#)
- [EndNote](#)
- [Zotero-Free Citation Management Software](#)
- [Docear](#)
- [Citavi – Powerful Thematic Knowledge Organization Tool](#)
- [Wizfolio](#)
- [Paperpile](#)
- [RefWorks](#)
- [Papers](#)



ZOTERO -[HTTPS://WWW.ZOTERO.ORG](https://www.zotero.org)

HTTPV



LET'S EXPORT TO ZOTERO

REFERENCES

- Kalu, M. E. (2019). Using emphasis-purposeful sampling-phenomenon of interest–context (EPPiC) framework to reflect on two qualitative research designs and questions: A reflective process. *The Qualitative Report*, 24(10), 2524-2535.
- Ojembe, B. U., Kalu, M. E., Donatus Ezulike, C., Iwuagwu, A. O., Ekoh, P. C., Oyinlola, O., ... & Kafiriri, L. (2022). Understanding Social and Emotional Loneliness among Black Older Adults: A Scoping Review. *Journal of Applied Gerontology*, 07334648221118357.
- Riva, J. J., Malik, K. M., Burnie, S. J., Endicott, A. R., & Busse, J. W. (2012). What is your research question? An introduction to the PICOT format for clinicians. *The Journal of the Canadian Chiropractic Association*, 56(3), 167