

# **Publishing Empirical and Methodological Mixed Methods Research Papers**

MMIRA Webinar July 12, 2016

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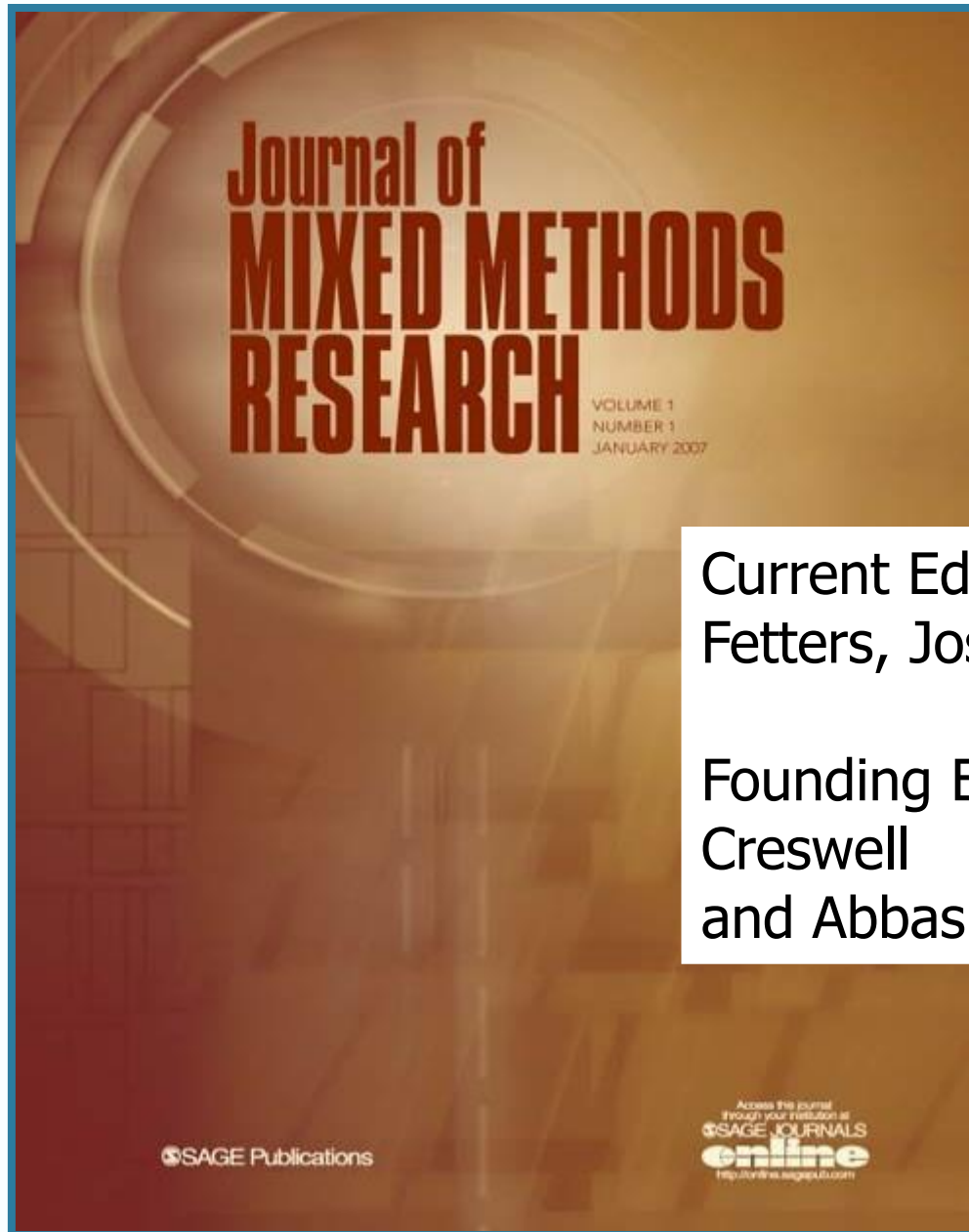
Co-Director, Michigan Mixed Methods Research and Scholarship Program

Editor, Journal of Mixed Methods Research



# Objectives

- (1) understand the overall paper submission process
- (2) understand skills needed to compose a compelling empirical mixed methods study
- (3) understand skills needed to compose a compelling methodological mixed methods paper



Current Editors: Michael Feters, Jose F. Molina

Founding Editors: John W. Creswell and Abbas Tashakkori

Impact Factor: 1.927; Social Sciences, Interdisciplinary 8 out of 83

*Editorial*

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# **Publishing a Methodological Mixed Methods Research Article**

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**Michael D. Fetters<sup>1</sup> and Dawn Freshwater<sup>2</sup>**

JMMR Vol5(3)203-13; 2105

# General steps to successfully publish an article

- Step 1: Identify possible journals, select 3 target journals
- Step 2: Tailor to journal
- Step 3: Compose the paper
- Step 4: Submit
- Step 4b: Deal with rejection decisively
- Step 5: Respond to reviews

# Step 1. Identify possible journals

- What journals publish the papers you cite?
- What journals are cited in papers similar to yours?
- What expertise is on the editorial board?
- Does journal publish articles like yours?  
E.g., Table of Contents
- What is the audience of the journal?

# Step 1. Identify possible journals (contd.)

- What are the article categories?
- What is the fit? E.g., format and word count
- How is the journal published? Paper, online, both?
- Option for multiple manuscripts?
- Exclusive submission rules?
- Contact/network with the editors

Insert your title and/or abstract here: (or, click [here](#) to search using keywords)

**Purpose:** Despite interest in using virtual human (VH) agents for assessing healthcare communication, evidence of validity is scant. We evaluated a VH application, MPathic-VR, for assessing performance-based competence in breaking bad news (BBN) to a VH patient.

**Materials and methods.** We used a two-group quasi-experimental design with residents participating in a three-hour seminar on BBN. Group A (n=15) completed the VH simulation before and after the seminar, and Group B (n=12) completed the VH simulation only after the BBN seminar in case testing alone affected performance. Pre- and post-seminar differences for Group A were analysed with a paired t-test, and comparison between Group A and B were analysed with an independent t-test.

**Results:** Compared to pre-seminar, Group A's post-seminar scores improved significantly, indicating the VH program was sensitive to differences in assessing performance-based competence in BBN. Post-seminar scores of Group A and Group B were not significantly different, indicating that both groups performed similarly on the VH program.

**Conclusion:** Improved pre-post scores demonstrate acquisition of skills in BBN to a VH patient. Pretest sensitization did not appear to influence posttest assessment. These results provide evidence that the VH program was effective for assessing BBN performance-based communication competence.

Scramble Clear Show extra options

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These journals have articles most similar to your input:

"Purpose: Despite interest in using virtual human (VH) agents for assessing healthcare communication,..."

Confidence	Journal	Article Influence <sup>?</sup>	Articles
	Journal of surgical education		Show articles
	Journal of medical Internet research <b>Open access</b> <b>PubMed Central: after 0 months</b>	1.33551	Show articles
	American journal of obstetrics and gynecology	1.1157	Show articles
	BMC medical education <b>Open access</b> <b>PubMed Central: after 0 months</b>		Hide articles

The confidence score for **BMC medical education** is based on these articles:

#### Similarity

#### Citation

[Yang KT, Yang JH](#)

**A study of the effect of a visual arts-based program on the scores of Jefferson Scale for Physician Empathy.**  
BMC medical education. 2013

[Barchi FH, Kasimatis-Singleton M, Kasule M, Khulumani P, Merz JF](#)

**Building research capacity in Botswana: a randomized trial comparing training methodologies in the Botswana ethics training initiative.**  
BMC medical education. 2013

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	Academic emergency medicine : official journal of the Society for Academic Emergency Medicine	0.79248	Show articles
	American journal of pharmaceutical education <b>PubMed Central: after 0 months</b>	0.09841	Show articles
	The American surgeon	0.45805	Show articles
	World journal of emergency medicine <b>PubMed Central: Immediately</b>		Show articles
	Medical teacher	0.42122	Show articles

# Step 1. Select at least 3 target Journals

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“Stretch Journal”

Top tier journal, hard to get acceptance (probability 10-30%)

---

“Good Fit Journal”

Good journal, less hard to get in, feel you have good chance (probability 40-60%)

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“Safety Journal”

Lower rank, least hard to acceptance, feel you have very good chance (probability 70+%)

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Knowing where to go next helps minimize the emotions of rejection, and gives you clear plan for next step

*If you never submit to top tier journals, you will never publish in top tier journals*



# Journals Publishing Mixed Methods

## Methodological

- *Journal of Mixed Methods Research*
- *Field Methods*
- *International Journal of Social Research Methodology*
- *International Journal of Multiple Research Approaches*
- *Quality and Quantity*
- *Special Issues*
  - *Health Services Research*
  - *Qualitative Health Research*

## Empirical

- *Annals of Family Medicine*
- *BMJ*
- *J Gen Intern Med*
- *Journal of Interpersonal Violence*
- *Qualitative Inquiry*
- *Qualitative Health Research*
- *Social Science and Medicine*

# Step 2: Tailor to the Journal

- Frame for the readership
- Format to journal specifications
- Study the structure of articles

# Step 3. Compose the article

- Need a lead person
- Follow journal specifications
- Attend to structure
- Involve other authors up-front
- English/grammar check

# Step 4a: Submit

- Compose cover letter
- Prepare all documents
- De-identify/blind if required
- Check the submission on-line

# Step 4b: Deal with rejection decisively

If rejected,

- Go to next journal on list immediately
- Make easy changes/corrections
- Substantive changes only if perceive as critical
- Hit resubmit



# Review original 3 target journals

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“Stretch Journal”

Top tier journal, hard to get acceptance (probability 10-30%)

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# Step 5: Respond to reviews

- Draft the response letter first to develop revision strategy
- Re-write as needed
- Respond to all *EDITOR* comments
- Use reviewer comments to make manuscript better
- Highlight changes
- Cross-check revisions and letter
- Submit within deadline

# Formats of response letter

- Synthesized narrative
- Line-by-line narrative
- Table format

# Cover Letter

Editor ¶

Journal of Mixed Research ¶

¶

Dear Dr. Smith ¶

¶

Thank you for the thoughtful review of our paper JMR-15-001 titled *Analysis mixed care in Idaho*. We have taken the reviewer's comments into consideration and have revised the manuscript accordingly. We have highlighted the major changes in the manuscript while refraining from highlighting minor wording changes. Please find below a point-by-point listing of the editorial and reviewer concerns and our responses to each item. ¶

¶

We hope this revised paper meets your expectations for publication, but if not, we would be happy to revise again until it is deemed a useful contribution. We believe this paper adds to the literature in a unique way to the understanding of mixed methods use in health services research. ¶

¶

Thank you for your consideration. ¶

¶

Sincerely, ¶

¶

¶

# Synthesized Narrative

The editors, reviewers 1 and 3 all asked us to provide greater clarity regarding our mixed methods purpose statement.

*Response: We have provided a clear mixed methods purpose statement in the paper. We have included the explicit statement, “While joint displays illustrating data integration are increasingly being used, joint displays illustrating findings from mixed methods case studies have been lacking. Thus, our purpose was to illustrate the use of a joint display based on our research introducing a novel instructional program in a family medicine residency in Japan.*

The editors and reviewer 3 advised us to include the mixed methods purpose statement in the abstract.

*Response: Done. See above illustrating the purpose statement.*

The editors and Reviewer 2 indicated the need for us to re-structure the paper by setting up the methodological problem first, and then introducing our studies as a means to address the methodological problem.

*Response: We have now identified the need to illustrate the use of joint displays in case study mixed methods papers. We have reviewed the literature on joint displays, and the results of a literature review illustrating a lack of examples of case study joint displays.*

# Line-by-line narrative

## Reviewer: 1

☐

This study is very interesting and well organized. The diagrams and research design are good. The major suggestion that I will give is about the design since the JMR is a methodology journal.

*Response: Thank you! No changes.*

☐

The convergent mixed methods research design with data transformation is not a strong mixed methods research design and even conversal. Thus, I suggest the author(s) provide a separate part to discuss the rationales and benefits of data transformation, and how this type of transformation helps with the research.

*Response: While the reviewer feels as though this may be the case, convergent designs are used extensively and are a well-recognized design (see reference Creswell and Plano Clark, 2011 on page 13). The issue of data transformation is an important and consistent one within the reviewer comments. We have addressed this issue in detail. Please see reviewer #3, comment 4 for the explanation of revisions related to data transformation.*

☐

Moreover, the author(s) should discuss about the limitations and provide suggestions for improvement in terms of the design for the future Health Sciences researchers to use mixed methods.

*Response: A discussion of limitations and suggestions for improvement has been added to the Discussion section, second to last paragraph.*

☐

## Reviewer: 2

☐

Thank you for this manuscript. This manuscript covered many important concepts and I acknowledge the tremendous efforts made by the authors to conduct this study. However, it is difficult to understand the linkage between the concepts presented. There is an order in which these concepts should be brought into the manuscript and some of the concepts may not need to be mentioned. For instance, from what I can interpret - this is a study where the authors would like to investigate the implementation of care management in primary care using mix methods; thus it may not be so relevant to discuss concepts of health services research in so much detail. The rationale and the novelty of investigating 'care management' have not been strongly argued for in its current form of presentation. Additional details are required for why, as a 'complex invention', care management is worthwhile investing in primary care, and what is

# Table format

Concern	Response
<b>Editors</b>	
Framing of this work as a systematic review	As suggested, revised the language “systematic review” and explained that we have included journals that publish high quality, state-of-the-art mixed methods research. (p. 5)
Use of jargon	Reviewed for use of jargon, changed “MMR” to “mixed methods.” (Throughout manuscript)
Edit to ensure the manuscript is clear, concise, and easy to follow	Reviewed for clarity and flow. (Throughout manuscript)
Review the title to ensure it reflects manuscript content	The title still reflects the content appropriately.
Conflict of interest statement	Stated no conflict of interests on the title page
Manuscript agreement form	All authors have completed this form.
Supply written permissions to use illustrations	I have sent the permissions.
<b>Reviewer 1</b>	
Introduction-Applicability of mixed methods, joint displays, and when they should be utilized.	Expanded to several sentences as suggested to explain applicability of mixed methods and joint displays for integration. (p. 3)
Methods-choice of journals	Removed reference to “systematic review.” Explained that we have included journals that publish high quality, state-of-the-art mixed

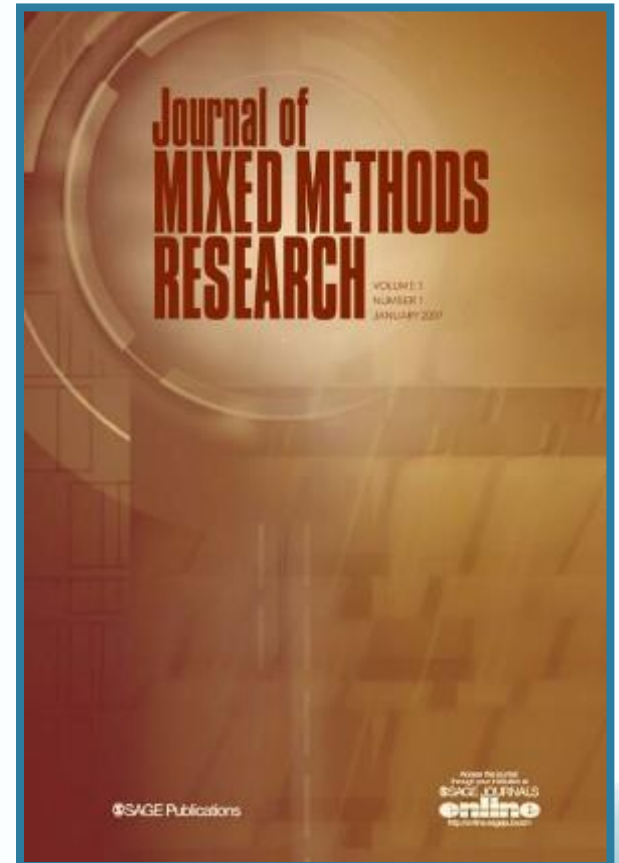
# Composing a Compelling Mixed Methods Paper





# JMMR publishes methodology Articles

- *Theoretical articles* – conceptual articles on timely topics in mixed methods
- *Empirical articles* – report of research studies in content areas (e.g., business, education, family medicine, sociology, etc.)
- *Book/software reviews*



# Well-Written Mixed Methods Articles have these features:

- Persuasively identifies the relevant literature
- Identifies a gap in the field
- Follows appropriate structure
- Extensively uses headers and sub-headers
- Speaks to the multidisciplinary audience
- Written for the **understanding of the reader**, and not the ego of the author

# The format of Well-Written Methodological/Theoretical Articles have these features

## To write persuasive essay you:

- State the problem quickly and clearly
- State a clear purpose
- Argue/Illustrate 3-5 points
- Write in order laid out
- Use illustrative/persuasive examples
- Discusses limitations
- Discuss future implications

# Features of Well-Written Empirical Articles

- Authors provide rationale for content importance in own field
- Researchers rigorously collect both quantitative and qualitative data
- There is explicit integration at design, methods, interpretation and reporting levels
- Researchers suggest implications for the content field, and for field of mixed methods

# Features of Well-Written Empirical Articles

- Persuasively reviews previous topic specific literature
  - See JMMR Website on top published studies
- Provide persuasive rationale as to why a mixed methods study is needed
  - one data source is insufficient
  - a need exists to explain results
  - a need exists to explore first
  - a need exists to augment one database with another
- Use a figure of methods (required for empirical studies at JMMR)

# Elements of Well-Written Mixed Methods “Title/Abstract”

- **Title:** Use words “mixed methods.” Also, create neutral title words that do not tip into qual or quan approach. Tip the words if the design calls for a strong priority for qual or quan.
- **Abstract:** Include information about the type of mixed methods design and integration approaches used.

# Elements of Well-Written Mixed Methods “Background”

- **Statement of the Problem:** Consider the reason for using mixed methods, and hint at this reason as a deficiency in past research.
- **Write a good mixed methods purpose statement (study aims):** Use script to write so that it includes a) general intent b) quan and qual purpose, data collection and analysis c) specific reason for mixing and how mixing occurred in the study.
- **If you include research questions:** State quan question (or hypotheses), qualitative question, and a mixed methods question.

# Elements of Well-Written “Design”

- **Mixed methods design:** Identify the type of design used, and define the design-type. Include references to recent mixed methods literature.
- **Quan and Qual methods:** Include detailed description of separate quan and qual methods to include: specific forms of quan and qual designs (e.g., correlational, grounded theory), recruitment procedures, sample selection, sample size, forms of data collection, topics related to data collection (e.g., validity, reliability of scores on instruments), types of data analysis
- **Visual:** Uses a figure/table/matrix to illustrate methods with clear indication of the qualitative and quantitative data sources



# Integration at the Design Level

Level	Types
3 Basic Designs	<ul style="list-style-type: none"><li>• Exploratory Sequential</li><li>• Explanatory Sequential</li><li>• Convergent</li></ul>
4 Advanced Frameworks	<ul style="list-style-type: none"><li>• Multistage</li><li>• Intervention</li><li>• Case Study</li><li>• Participatory Designs</li><li>• Instrument/App development designs</li></ul>

# Data Integration During Data Collection

<b>Approach</b>	<b>Description</b>
Connecting	One database links to the other through sampling
Building	One database informs the data collection approach of the other
Matching	The two data collection approaches target data collection about similar domains
Embedding	Data collection and analysis link at multiple points

# Elements of Well-Written Mixed Methods “Results”

- Report quan and qual results separately or concurrently. Make sure that results are consistent with the flow of the design and the priority given to the quan and qual sections.
- This section will be organized to reflect the type of design used in the study.
- Uses Figures, Tables, Matrices to summarize data.
- Uses joint display of qualitative and quantitative data.

# Integration at Reporting Level through Narrative

Type	Description
Weaving	Involves writing both qualitative and quantitative findings together on a theme-by theme, or concept-by-concept basis
Contiguous	Involves the presentation of findings within a single report But the qualitative and quantitative findings are reported in different sections
Staged	Researchers describe the qualitative and quantitative findings in series of reports

# Elements of Well-Written Mixed Methods “Discussion”

- “Before this research we thought XXX. Now, because of this research we think YYY.”
- Reports general quan and qual results for the study. Usually discussion mirrors the flow.
- **Limitations:** Among the limitations identify any challenges that arose during the mixed methods design.
- **Future research:** Talk about how the study adds to the mixed methods literature and opens up further lines for investigation.

# Writing strategy

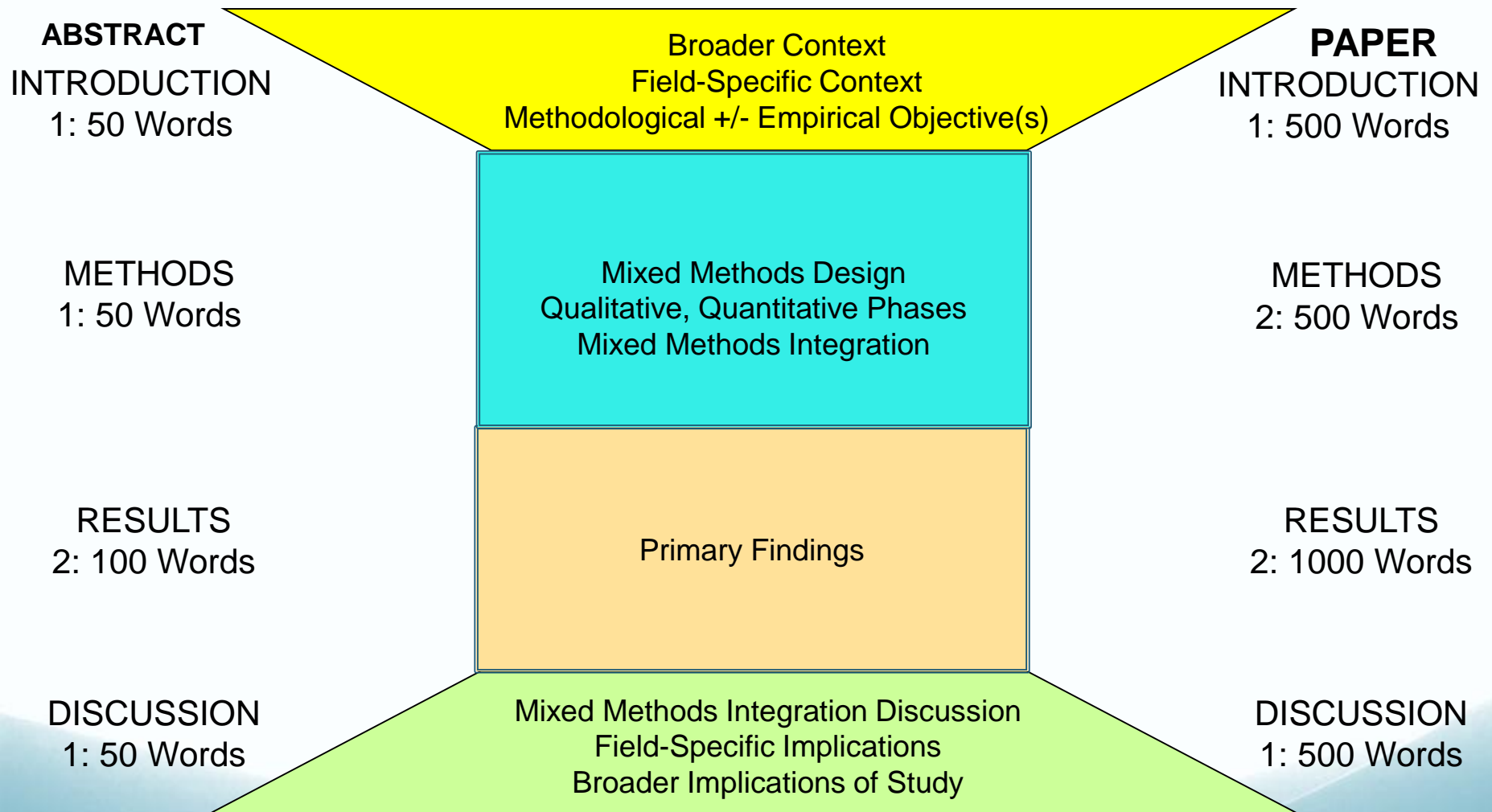
One view...



# In what order do you write the sections of IMRD-organized paper?

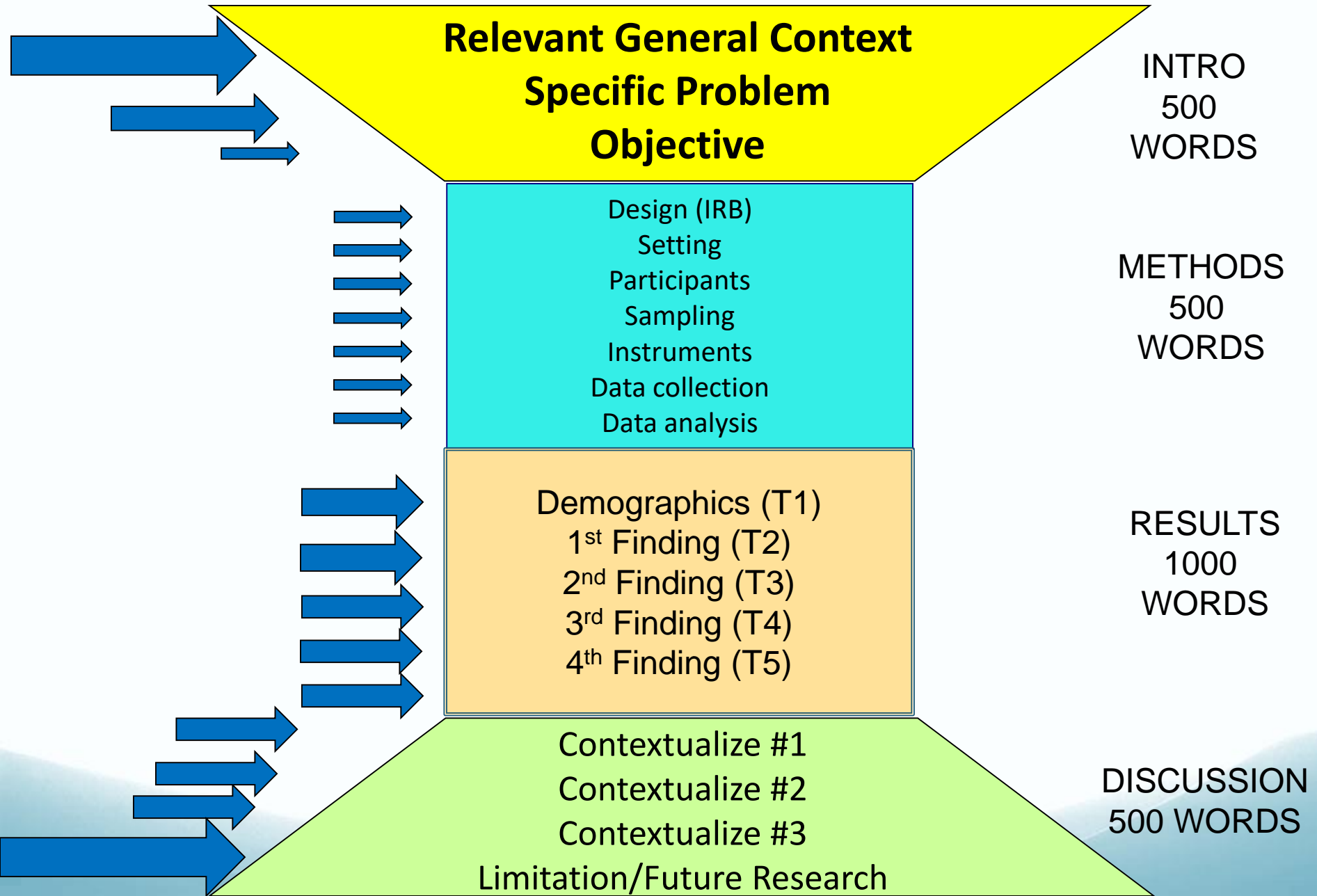
- Introduction
  - Methods
  - Results
  - Discussion
1. Methods
  2. Results
  3. Introduction/Discussion
  4. Revise Title

# Hourglass Model of Empirical Mixed Methods Research Papers



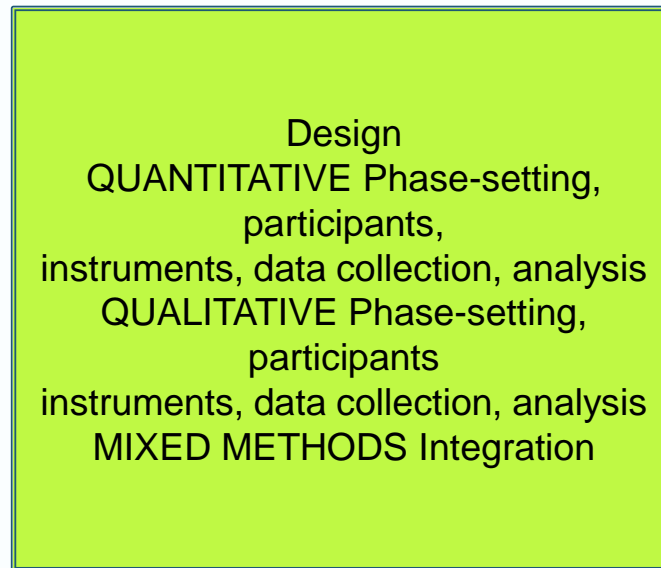


# Hour Glass model of Empirical Research



# Variations in the Methods Section for Empirical Mixed Methods Paper

- Explanatory Sequential Mixed Methods Design
- Quantitatively driven Convergent MM Design



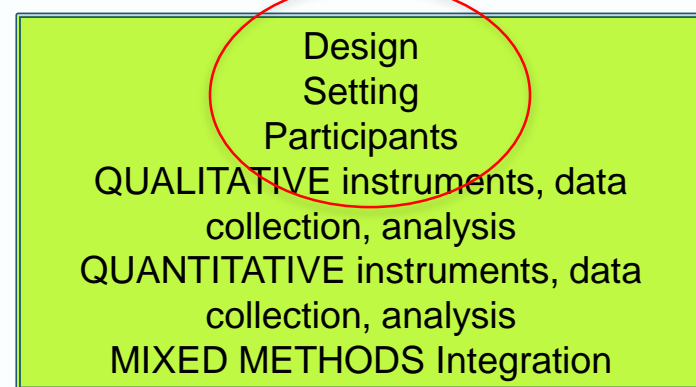
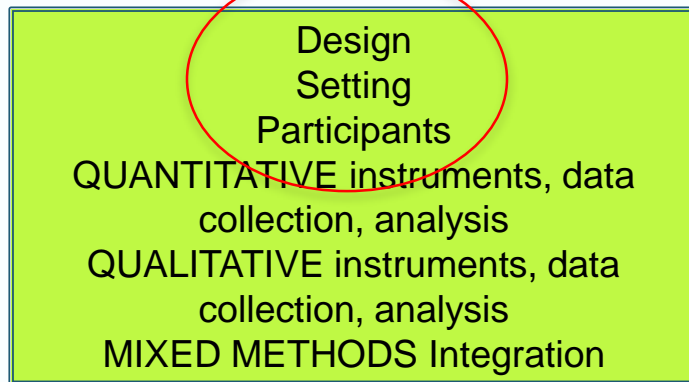
# Variations in the Methods Section for Empirical Mixed Methods Paper

- Exploratory Sequential Mixed Methods Design
- Qualitatively driven Convergent MM Design



# Variations in the Methods Section for Empirical Mixed Methods Paper

## Convergent Mixed Methods Design



# Notes on Methodological Empirical Studies

- Results
  - Contiguous-one component then the next, integration may occur in discussion
  - *JMMR Don't need all results*

## Contiguous Approach

1<sup>st</sup> Qual Findings  
2<sup>nd</sup> Quan Finding  
+/-3<sup>rd</sup> MM Findings

# Notes on Methodological Empirical Studies

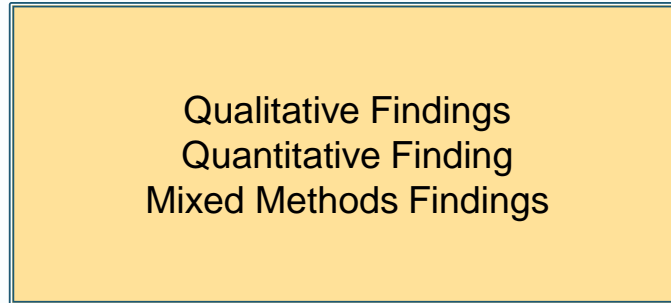
- Results
  - Weaving-theme-by-theme presentation of both, some findings may have only qual or quan results
  - *JMMR Don't need all results*

## Weaving Approach

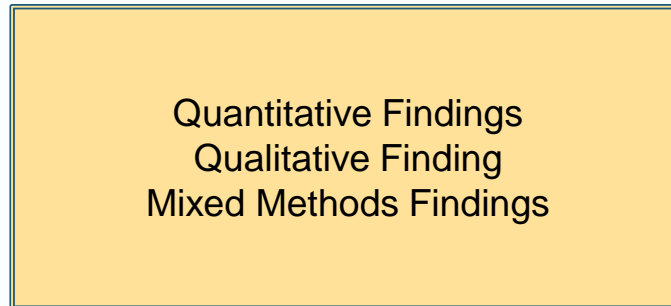
1<sup>st</sup> Finding qual +/- quan  
2<sup>nd</sup> Finding qual +/- quan  
3<sup>rd</sup> Finding qual +/- quan  
4<sup>th</sup> Finding qual +/- quan

## Figure 4. Common variations in the Results Section for Empirical Mixed Methods Paper

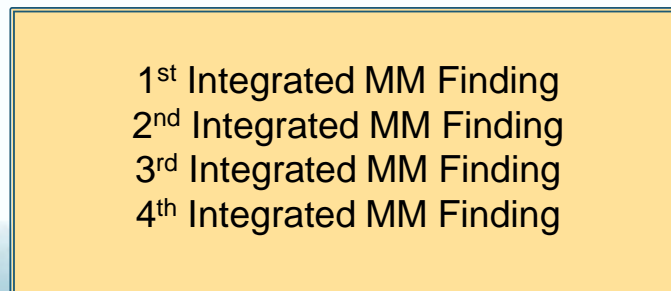
Contiguous Approach, Exploratory Sequential or Qualitatively Driven Convergent Designs



Contiguous Approach, Explanatory Sequential or Quantitatively Driven Convergent Designs



Weaving Approach in Convergent or Sequential Designs



# Notes on Empirical MM Studies

- Background
  - Start with context for broader field
  - Identify topic specific content
  - Paper objectives using/hinting at what MM procedures you are using



**Broader field-Context**  
**Topic-Specific Context**  
**MM Paper Objective(s)**



# Notes on Empirical MM Studies

- Discussion
  - Based on this research we now know XXXX
  - Ideally will emphasize how  $1+1=3$ , i.e., MM study lead to more than doing them separately



Contextualize #1, 2, 3 **Field-Specific**  
Contextualize #4 **Methodological**  
Limitation/Future Research

# Variations in Staged Publication

1. Publish an integrated single article that describes both methods and findings and draws overarching lessons (with/w/o details in appendices)
2. Publish quan and qual papers in separate journals, but with clear references and links to the other article(s).
3. Publish concurrent or sequential quantitative and qualitative papers in the same journal.
4. Co-publish separate qualitative and quantitative papers accompanied by a third paper that draws overarching lessons from analyses across the two methods.
5. Develop an online discussion of readers and invited commentators to foster cross-disciplinary communities of knowledge.

Stange KC, Crabtree BF, Miller W.L. Publishing multimethod research. *Ann Fam Med.* 2006; 4:292-294.

# Conclusions

- Choose target journals thoughtfully
- Match writing structure to paper type
- Review and submit to JMMR



Impact Factor: 1.927

Registration is open at  
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Early bird discount available



## Writing Your Mixed Methods Research for Publication

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University of Michigan including:



Michael D. Fetters, MD, MPH, MA



John W. Creswell, PhD



Timothy Guetterman, PhD

Find out more and register at: [www.mixedmethods.org](http://www.mixedmethods.org)

Inquiries: Satoko Motohara (734) 998-7120 ext. 328 or

[smotohar@umich.edu](mailto:smotohar@umich.edu)

# Next Steps



The MMIRA Invites you to 2015  
Asia Regional Conference in Ibaraki, Osaka, Japan

**September 19<sup>th</sup>-20<sup>th</sup>, 2015**



# MMIRA 2nd International Conference 2016

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***Moving Beyond the Linear Model: The Role of Mixed Methods Research in an Age of Complexity***

August 3-5<sup>th</sup> 2016, Calman Centre, Durham University, United Kingdom

Workshops to follow, 5<sup>th</sup> and 6<sup>th</sup> August



The conference seeks to centre mixed methods research as a key way to advance the role of social science in relation to public debate, engagement and in driving social change.

**Keynote Speakers:** [Julia Brannen](#), [Margarete Sandelowski](#), [Emma Uprichard](#)

Learn more about the conference theme, keynote speakers, program, and abstract submission at:

[www.dur.ac.uk/sass/events/events/mmira2016/](http://www.dur.ac.uk/sass/events/events/mmira2016/)

Accommodation, with breakfast, will be available in Collingwood College.

Questions: [MMIRA.Conference2016@durham.ac.uk](mailto:MMIRA.Conference2016@durham.ac.uk)