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The Prevalence and Challenges of Mixed Methods Research in Japan: Focusing on the Field of Nursing

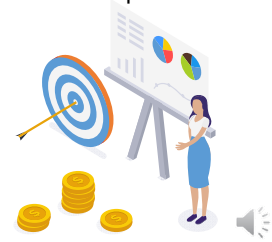
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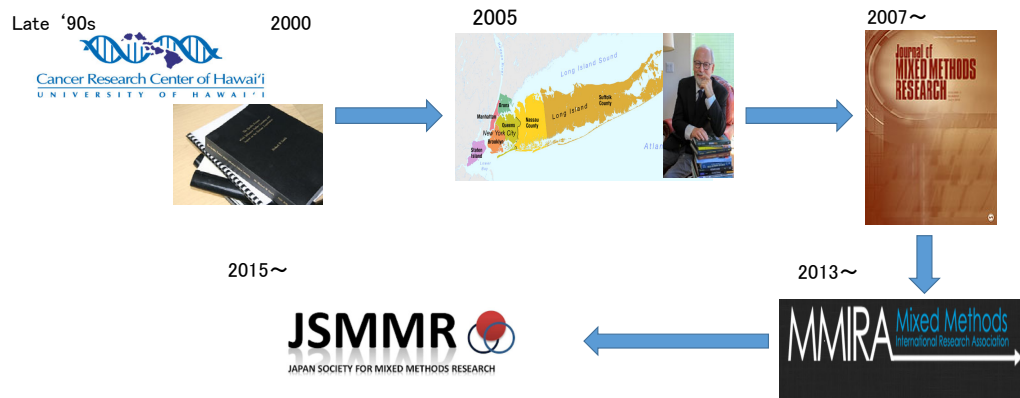


An Outline of Today's Talk

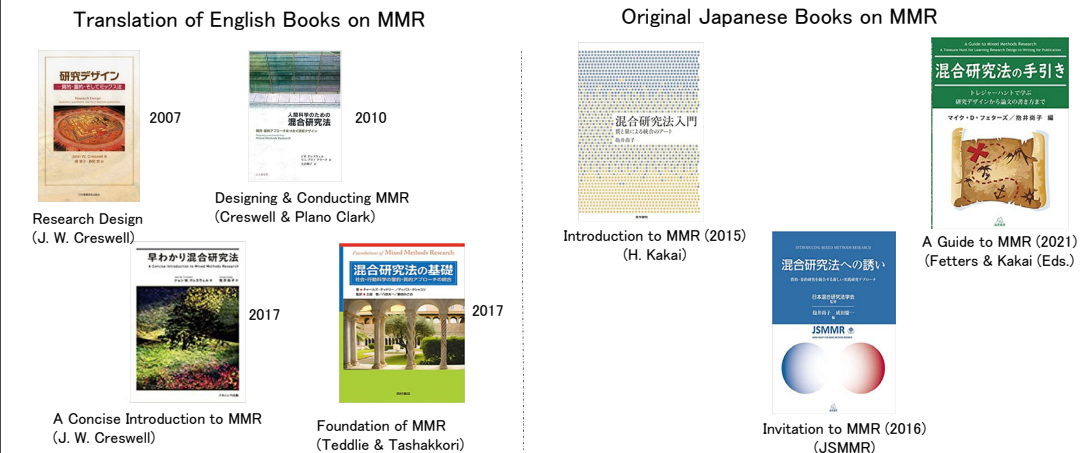
- I. My Mixed Methods Trajectory
- II. The Historical Development of Mixed Methods Research in Japan
- III. The Prevalence of Mixed Methods Research in Japan
- IV. The Challenges of Mixed Methods Research Nursing Researchers in Japan Face
- V. Concluding Thoughts



I. My Mixed Methods Trajectory



II. The Historical Development of MMR in Japan



Membership and Activities of JSMMR

➤ JSMMR was established in 2015.

JSMMR currently has **roughly 240 members**:
 12% of its members are **JSMMR-MMIRA dual membership holders**.
 The largest group of its members are **nursing researchers**.

➤ JSMMR offers the following types of activities:

- Conferences
- Workshops
- Colloquiums
- Seminars
- Journal Publication (*Annals of Mixed Methods Research, since Apr. 2022*)



III. The Prevalence of Mixed Methods Research in Japan



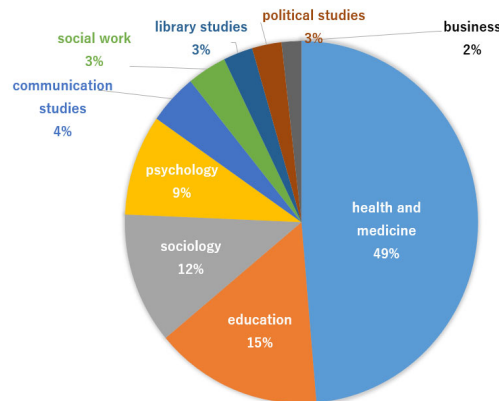
Extracted references using the following keywords in the title or abstract:
 混合研究法 OR ミックス法 OR ミックスメソッド OR ミックスドメソッド OR
 “mixed method” OR “mixed methods”

n = 418



Mixed Methods Empirical Articles by Fields (2000~2008)

search terms: “mixed method,” “mixed-method,” or “mixed methods”



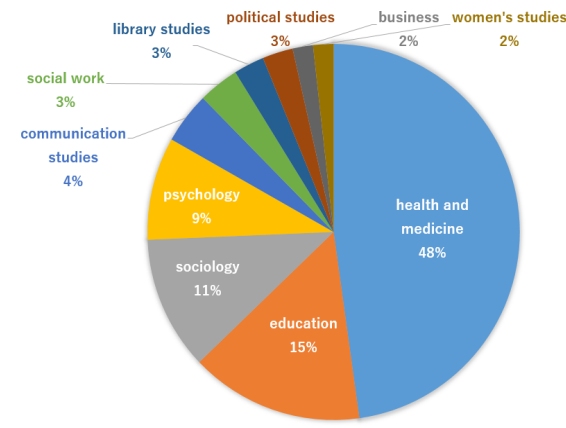
n = 689

Source: [Ivankova and Kawamura \(2010\)](#)



Mixed Methods Methodological Articles by Fields (2000~2009)

search terms:
 “mixed method”
 OR
 “mixed-method”
 OR
 “mixed methods”

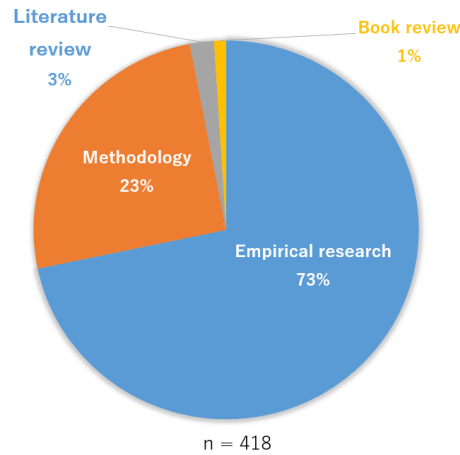


n = 113

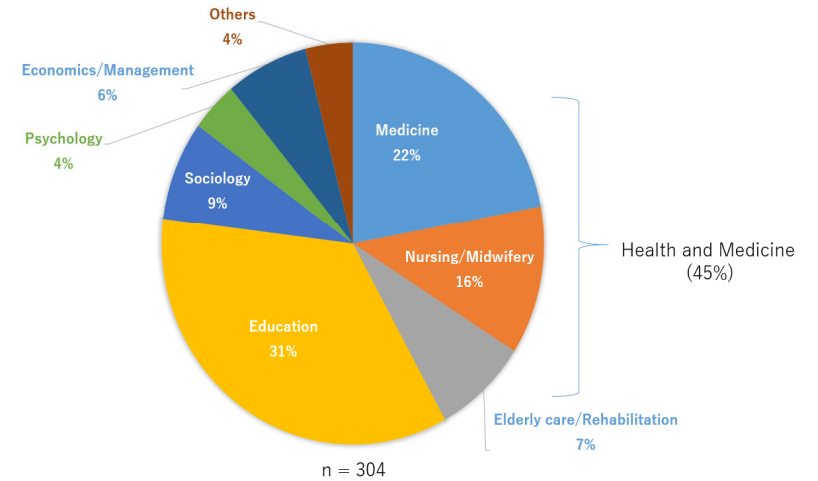
Source: [Ivankova and Kawamura \(2010\)](#)



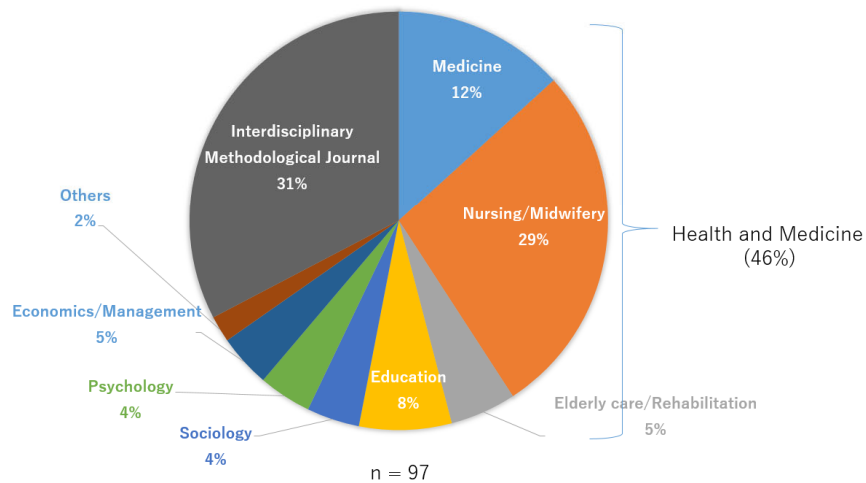
Types of Mixed Methods Articles Published in Japan (~2022)



Mixed Methods Empirical Articles Published in Japan by Fields (~2022)



Mixed Methods Methodological Articles Published in Japan by Fields (~2022)



IV. The Challenges of Mixed Methods Research Nursing Researchers in Japan Face

Project title:

“Development of a Guidebook and e-learning programs for Mixed Methods for Nursing Researchers” (KAKENHI grant number: 20H03966)

Principal Investigator: KAKAI, Hisako

Research Manager: ABE, Michiko

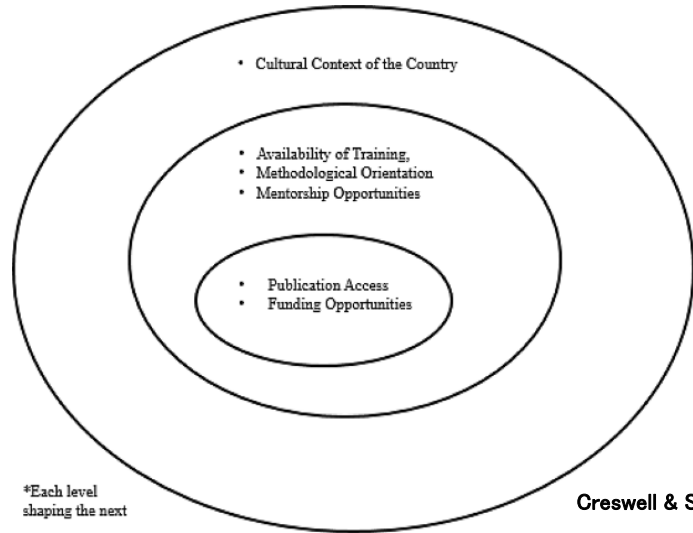
Project members (alphabetical order):

Nursing Researchers: FUKUDA, Miwako; KAMEI, Tomoko; MAKABE, Sachiko; Nozaki, Manami; OKAWARA, Chikako

Researchers in Other Fields: HATTA, Taichi; INABA, Mitsuyuki; INOUE, Michiko; KAWAMURA, Yoko; NARITA, Keiichi; TAKAGI, Akiko; TAJIMA, Chihiro



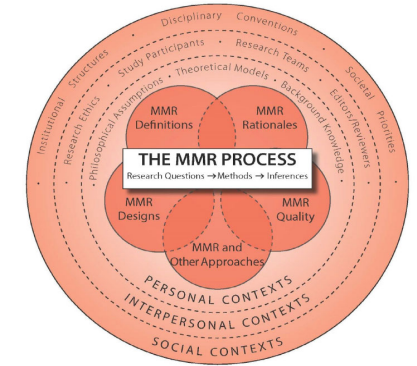
Culturally-Specific Mixed Methods



Creswell & Sinley (2017, p. 100)

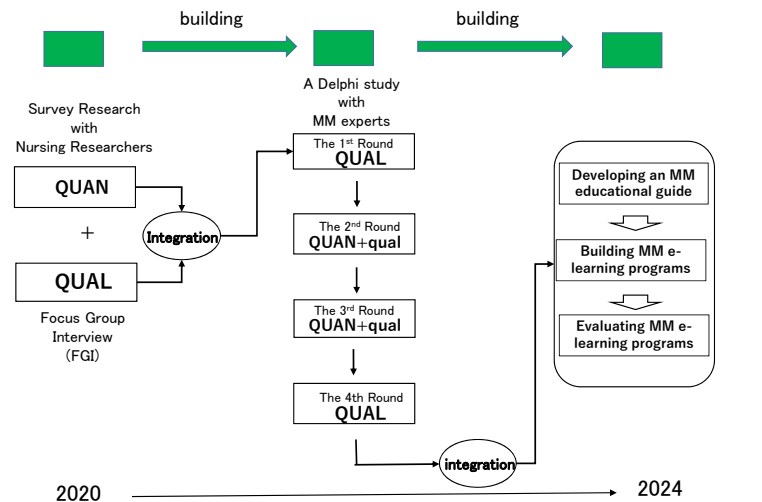
The socio-ecological framework for the field of mixed methods research

The socio-ecological framework “acknowledges that **mixed methods research practice**, which is broadly defined as any use of mixed methods by researchers, scholars, and other stakeholders, **is a dynamic and interactive process and involves complex relationships among multiple methodological domains and contexts that inform this process.**”



(Ivankova & Plano Clark, 2018, pp. 412-413)

The Design of Our 5-year Project



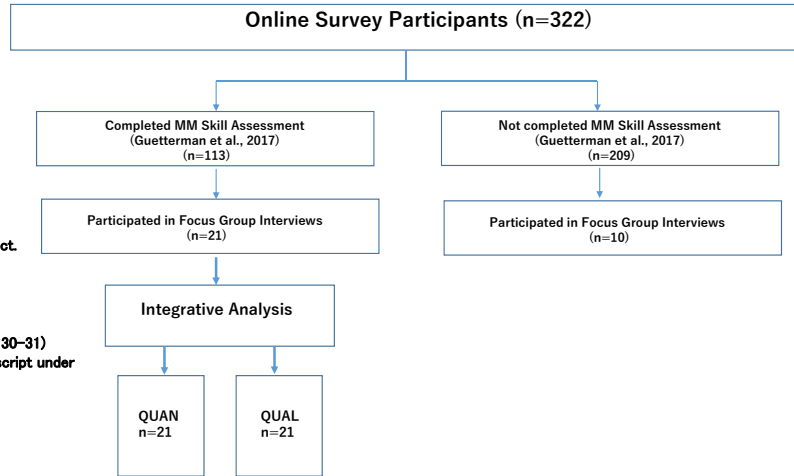
Kakai (2021)

Data Sources and MM Elements of the Four Integrative Analyses in Our Project

	Data Source	Mixed Methods Elements
Hatta et al.	survey interview	convergent design CL→ANOVA + Thematic Analysis
Kawamura et al.	demographic data survey interview	convergent design + CL→ data transformation of QAUAL + Chi-square test or Fisher's exact test
Inaba et al.	group membership data interview	crossover mixed analysis text mining + Constructivist GT
Okawara et al.	group membership data interview	crossover mixed analysis sentiment analysis + qualitative content analysis

Participant Flow Chart of Phase I

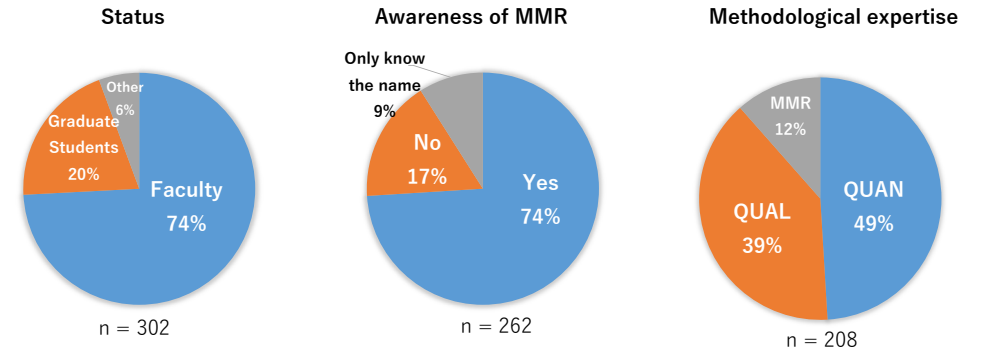
Kakai et al. (2022)
(a paper published in Japanese)



Inaba et al. (2021, Oct. 30-31)
Okawara et al. (2021, Oct. 30-31)

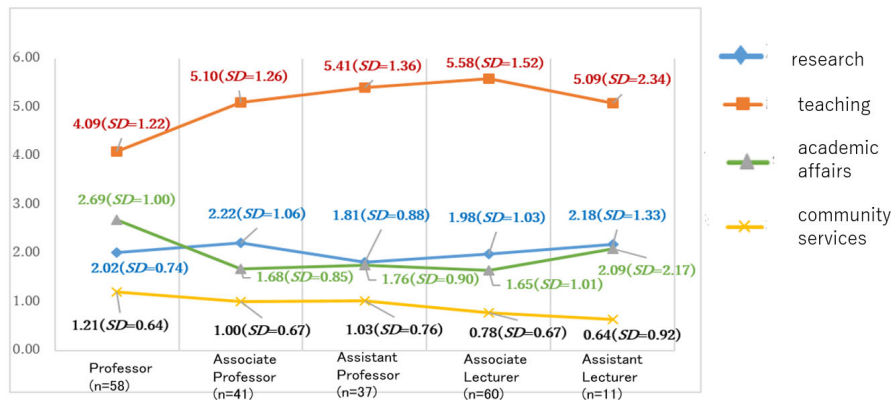
Hatta et al. (2021, Oct. 30-31)
Kawamura et al. (manuscript under preparation)

Characteristics of Survey Participants



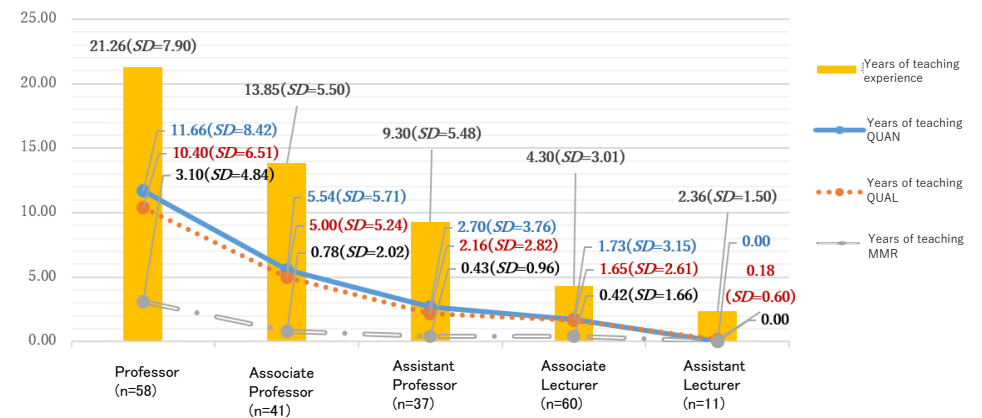
Kakai et al. (2022)

A mean plot of job duties by position (n=207)



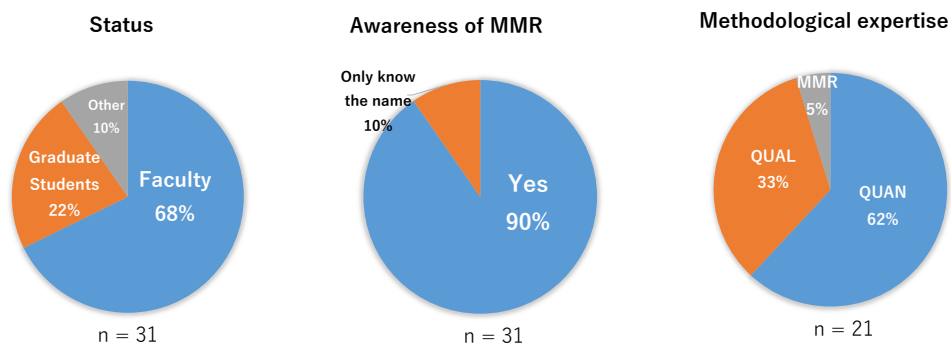
Kakai et al. (2022)

Teaching experience and Years of teaching research methods-related courses by position (n = 207)



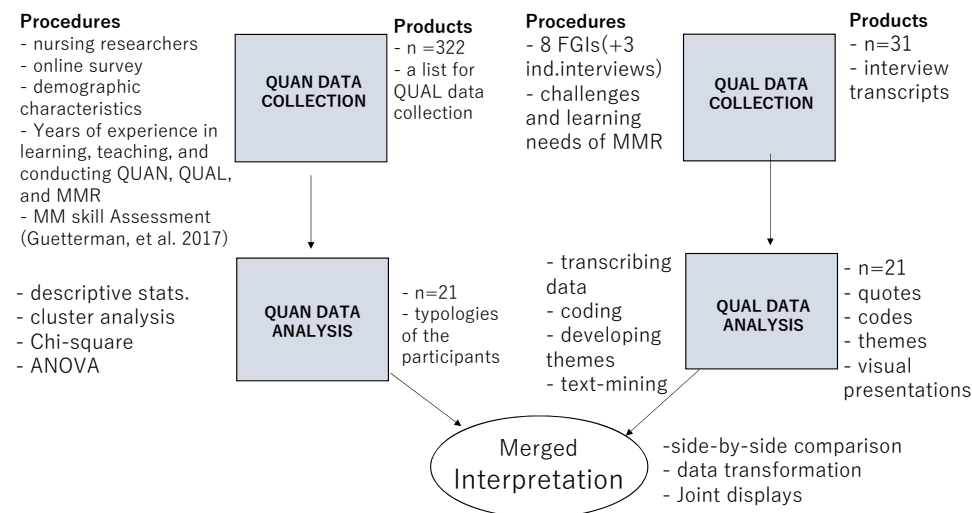
Kakai et al. (2022)

Characteristics of Interview Participants



Kakai et al. (2022)

A Diagram for Procedures and Products in Phase I Convergent MM Study



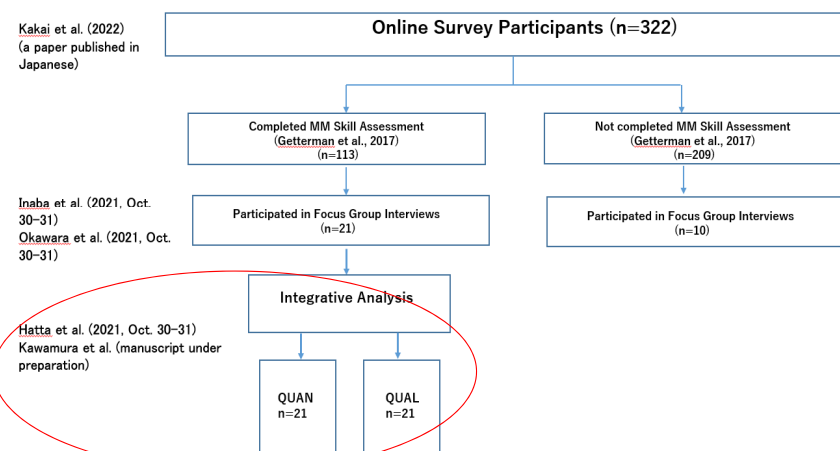
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A Self-Rated Mixed Methods Skills Assessment Instrument (Guetterman et al., 2017)

- The self-rated mixed methods assessment instrument was originally developed to help participants in the Mixed Methods Research Training Program for Health Sciences (MMRTP) assess the extent to which they had acquired MMR skills (Earley, 2014).
- The instrument exhibited good reliability and validity, thus usable for university faculty and graduate students (Guetterman et al. 2017).
- This instrument focuses on six areas, including (1) research questions, (2) design, (3) sampling, (4) data collection, (5) analysis, and (6) dissemination.
- The instrument helps individuals assess their ability to define and explain mixed methods concepts, their ability to apply them to problems, and the extent to which they require improvement in these six areas.
- The instrument also asks respondents to rate their professional experiences with mixed methods, familiarity with software, and familiarity with mixed methods references.

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Participant Flow Chart of Phase I



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Integrated Findings (merged interpretations)

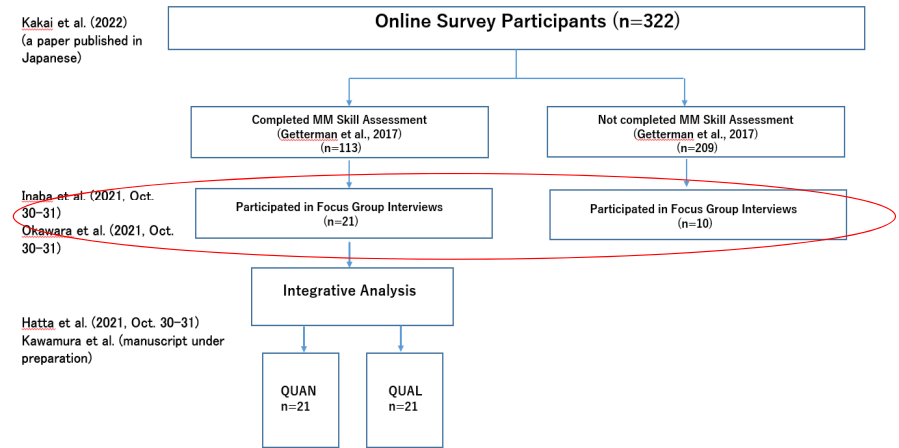
- [Challenges & Learning Needs] x [MM Experiences]** (Hatta et al., 2021, Oct. 30–31)
 The challenges & learning needs of 4 clusters generated by the participants' MMR experiences (defined by methodological training backgrounds and achievements in MMR) were compared and contrasted.
 → Different patterns in motivations to learn MMR and attributions related to MM challenges were found across groups.

- [Challenges & Learning Needs] x [Self-evaluation of MM Skills]**
 (Kawamura et al., manuscript under preparation)
 The challenges & learning needs of participants classified into 3 categories according to the participants' self-assessment of MM skills were compared and contrasted.
 → Different levels and scopes of needs related to MM learning were exhibited across groups.



Necessary to design e-learning programs considering the different learning needs of the users at different levels.

Participant Flow Chart of Phase I

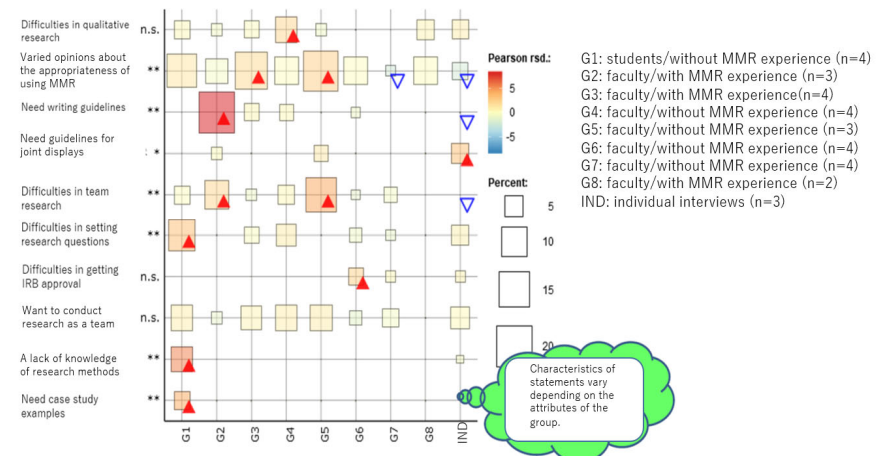


Findings from Crossover Mixed Analyses (Hitchcock & Onwuenbuzie, 2019)

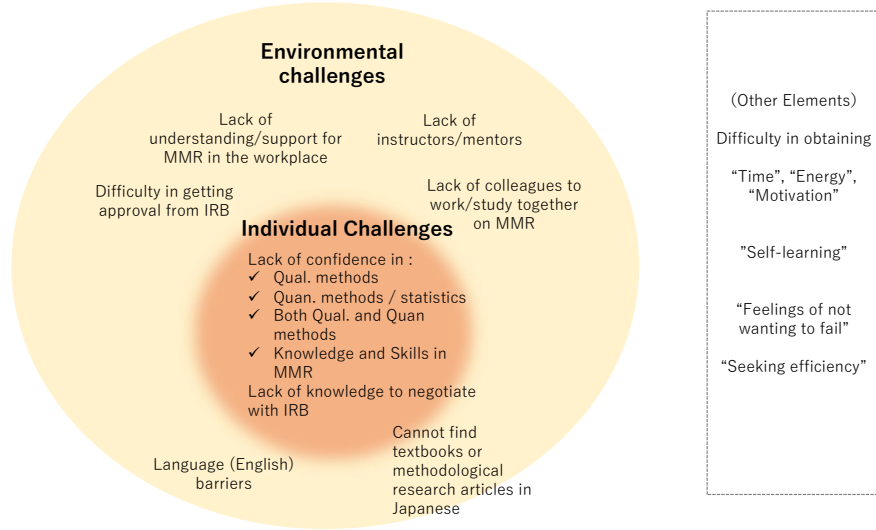
- Identifying Challenges of MMR using GTxA** (Inaba et al., 2021, Oct. 30–31)
 Many participants perceived “qualitative research” as a challenge of MMR. The use of MMR was often discouraged due to its heavy workload and time-consuming nature.
 * GTxA=Grounded Text Mining Approach (Inaba & Kakai, 2019; in press)
- Identifying Challenges of MMR using qualitative content analysis and sentiment analysis** (Okawara et al., 2021, Oct. 30–31)
 Many perceived qualitative research as a challenge of MMR. Due to the exploratory nature of qualitative methods, MMR has problems such as the inability to maintain consistency in research questions and the difficulty of integrating qualitative and quantitative results.



Q1 Answer: Cross tabulation by auto-coding (per group)

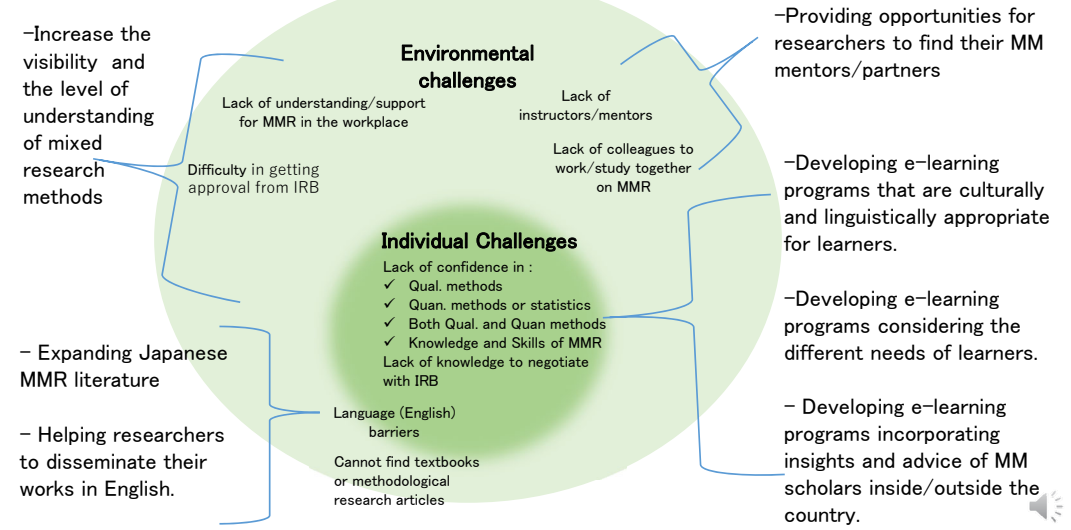


Challenges of Conducting MMR Identified by Nursing Researchers in Japan – A Summary From FGI



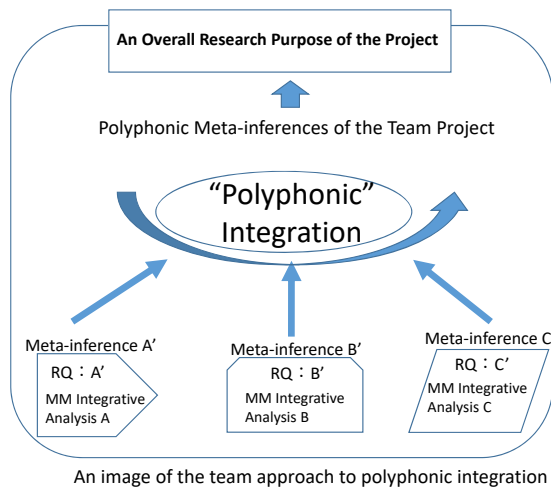
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Responding to the Identified Challenges of Nursing Researchers in Japan



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V. Concluding Thoughts (Implications for MMR)



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- Using a team approach for achieving "polyphonic" integration for investigating a complex phenomenon.
- Investigating team approach within the Japanese cultural context.
- Paying more attention to language-related challenges for promoting the global use of MMR.

Kakai et al. (2021, Oct. 30-31)

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Thank you for your kind attention!

Any questions?

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