

No 5 June 2018

# RM-SIG activities at AIB Minneapolis:

The RM-SIG has organized the following activities for the 2018 AIB annual meeting:

#### CARMA-AIB pre-conference workshops

Six workshops are being offered on Sunday 24 June in partnership with the **Consortium for the Advancement of Research Methods and Analysis (CARMA)**. Pre-registration for the workshops was required.

#### Research methods clinics

Clinics provide roundtable discussions and direct feedback from a research methods enthusiast. A total of six clinics will be held at different times during the conference, on a variety of topics. Pre-registration was required.

#### **Panel**

Multi-level Issues in IB Research: Theory, Methods, and Empirics, Chairs: Bo Bernhard Nielsen, University of Sydney and Torben Pedersen, Bocconi University. Time: Tuesday 26 June, 9-10.15

#### Best paper award in research methods

Join us for the award ceremony in the coffee break at 15.45 on Wednesday 26 June (see p. 12)

### In this Newsletter:

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# Notes on how to review quantitative papers

#### Bo Nielsen

Reviewing papers for conferences and academic journals is critical to our field – indeed to any field of science. The following are some notes on how to (critically) review quantitative papers based on various workshops and panel presentations at AIB 2016 and AIB 2017. They are by no means an exhaustive list of principles for evaluation of (predominantly quantitative) studies; however, they may provide some important insights and serve as preliminary guidelines for reviewers (and authors/editors).

The starting point is to understand the purpose of a review, which is to critically appraise or evaluate a study in terms of its (scientific) validity. **Critical Appraisal** is the application of rules of evidence to a study to assess the validity of the data, completeness of reporting, methods and procedures, conclusions, compliance with ethical standards, etc. Although the methodological criteria by which the validity of a study is assessed will vary according to its design (and potentially discipline), some **general principles** underpin the evaluation of any (quantitative) research study:

# Principle #1: Relevance and novelty of study's research question(s)

**Relevance** ≠ **Novelty** – yet both are subjective.

**Relevance** is about partaking in the ongoing conversation of a particular journal outlet or discipline. Ask: To whom is this research question important and why?

Novelty is about building on the state-of-the-art BUT contributing new knowledge.

Ask: How does this research question provide new insights? Insights could be theoretical, empirical (setting), replication or review.

Relevance and novelty trump methodological rigor, reliability, and analysis.

# Principle #2: Appropriateness of research design

Determine the type of research question: exploratory, explanatory, causal, frequency, event, multilevel etc.

The research design **must** match the research question, i.e. the research question has implications for the POP-ULATION, SAMPLE, DATA, METHOD and ANALYSIS.

**Example no 1:** If a study is about how firms benefit from international diversification as a function of experiential knowledge and learning effects over time (S-curve), data should be longitudinal.

**Example no 2:** If a study is about the effects of subsidiary embeddedness on MNC performance and there is variance at both subsidiary and HQ levels, it should account for both subsidiary and MNC (HQ) characteristics – i.e. multilevel design may be appropriate.

**Example no 3:** If a study is about how MNCs from emerging markets differ from MNCs from developed markets in terms of their ability to extract benefits from internationalization, it should (1) account for differences in institutional/country level environment and (2) account for differences between EMNCs and MNCs (e.g., matched sample or multiple groups) – your sample **must** include **both** EMNCs and MNCs!

Example no 4: If a study infers causality, it must establish such causality (i.e. include temporal effects

via lagged variables, longitudinal/panel design etc.)

**Example no 5:** If a study is exploratory in nature (i.e. seeks to establish new construct(s) or measures, it should utilize exploratory design and analysis (e.g., exploratory factor analysis, item response theory etc.).

# Principle #3: Study method's ability to address potential sources of bias

Bias can be attributed to (1) chance (e.g., random error) or (2) the study method (systematic bias). Random error does not influence results in any particular direction; but will affect precision of results. Systematic bias has a direction and results in over- or underestimation of "true" findings

Different study designs are prone to varying sources of systematic bias.

For cross-sectional studies, ask:

- Was the study sample/population clearly defined?
- Was a representative sample achieved (e.g., was the response rate sufficient)?
- Was common method bias addressed (e.g., by design or statistically)?
- Was the timing of the "snapshot" biased (e.g., was the sample pre- during or after financial crises)?
- Were all independent, dependent and confounding (control) variables measured accurately? How was potential measurement error reduced?

For longitudinal studies, ask:

- Was the study sample/population clearly defined and comparable over time?
- Was a representative sample achieved (e.g., was the response rate sufficient over time)?
- Was the timing of panel biased (e.g., 1 year prior, 1 year during and 5 years after the financial crises)?
- Were all independent, dependent and confounding (controls) variables measured accurately over time?
- How was potential for measurement error(s) reduced?
- Was time variance treated correctly in data preparation?
- How was potential for auto correlation reduced?

# Principle #4: Testing of a priori hypotheses

Hypotheses are theoretical and must be specified *a priori* – be wary of empirically derived hypotheses that appear to be the results of the analysis. Possible signs of the latter are:

- No theoretical rationale is given for hypotheses
- No overarching theory binds together hypotheses
- Direction of hypotheses is opposite than expected and/or conventional in literature
- All hypotheses are highly significant

# Principle #5: Statistical evidence

#### Check for:

- Level of statistical significance (t-tests): Is 0.05 statistically significant? Yes and no. It depends on the sample (size), model complexity etc. Also check the effect size is reported.
- Check model explanatory power: R<sup>2</sup> variance explained and F-test significance of R<sup>2</sup>
- What about omitted variables? Check that all data/results relevant to the study objectives have ben reported. Selected outcomes are variables (controls) which may be omitted to boost results.

# Principle #6: Analytical Validity and Reliability

Check the following aspects of the analysis:

- How were missing variables treated?
- How was time variance treated during analyses (e.g., balanced/unbalanced panels, growth modelling or simply by controlling for time effects)?
- How were controls treated during analyses (e.g., were models run with/without controls)?
- How were moderators/mediators treated during analyses (e.g., variance restricted moderators; partial or full mediation etc.)?
- How was causality established (e.g., lagged variables or instrumentation)?
- How was common method bias handled (e.g., Harmon's one-factor test or better)?
- How were multi-collinearity issues handled?
- How were auto correlations handled?
- Was power (to detect accurate results) considered/analyzed?

# Principle #7: Appropriateness of measures

Ask the following questions about measures:

- Are measures appropriate? This includes
  - Proxies
  - Dummies
  - Categorical (ordinal, nominal, dichotomous)
  - Continuous
- Are measures consistent with theory? They are
  - often taken out of context (i.e. data collected for other purpose)
  - often poorly measuring concepts/constructs purported in theory

There may be mismatch between levels of theory and measurement.

**Example**: theory/hypotheses suggest resource complementarity (RC) between alliance partners influence firm/alliance performance yet RC measured as 2-digit industry code overlap.

# Principle #8: Do data justify conclusions?

Instances where the data do not justify the conclusions are when there is:

- Over-emphasis on statistically significant results with little or no real effect (perhaps due to large sample or lack of controls)
- Under-emphasis on statistically insignificant results (i.e., potential differences between groups that cannot be detected due to small sample size)
- Generalizability of results beyond the study context (e.g., does Chinese firm behaviour generalize to other EM contexts?)

# Principle #9: Are ALL relevant results reported?

This means good and bad, significant or not. Check what has been included in terms of:

- Robustness checks
- Controls
- Correlations, means, SD, range etc.
- Effect size

# Principle #10: Are ethical standards met?

Rule out academic misconduct, which can come in many forms:

- Plagiarism
- Fabrication and falsification
- Non-publication of data
- Faulty (un-ethical) data collection
- Poor data storage and retention
- Sneaky publication practices (double submissions etc.)

I reiterate, these are just some (quick) principles and rules of engagement which may help us better evaluate (quantitative) empirical studies. The purpose here is not to be exhaustive but rather to

- point to some important principles and
- b) to start a broader discussion about how to appropriately review empirical studies.

It is highly disturbing that most of us have received little or no formal training in how to review scientific papers, yet all of our careers are highly dependent upon such reviews...

#### Continue the conversation

Comments and suggestions are welcome.

Please email Bo.Nielsen@sydney.edu.au or drop by the RM-SIG website and leave a comment:

# https://rmsig.aib.world/

For a discussion of reviewing qualitative papers, see the previous issue of our newsletter (Issue no. 4, February 2018).

# New methodological paper

# Three Pathways to Case Selection in International Business: A Twenty-Year Review, Analysis and Synthesis

#### Margaret Fletcher, Yang Zhao, Emmanuella Plakoyiannaki, and Trevor Buck

Case studies are becoming a popular methodological choice for many International Business (IB) researchers. A case study approach can be used to ground qualitative IB studies in reality and local settings, gaining contextual knowledge of IB phenomena and addressing the contextual conditions of IB theory. While the case study literature highlights the importance of case selection to produce trustworthy qualitative evidence, case studies have been criticized for the absence of consensus, transparency and methodological justification regarding case selection. Criticism of case selection presents a challenge that goes to the heart of an appreciation of qualitative case study research and its theorizing potential.

In our recent article in *International Business Review* published in 2018, we systematically review 333 case studies in four IB journals over two decades (1995-2014). We relate case selection strategies to chosen logics employed and theoretical purposes. The study intends to improve the coherence of case sampling practices in IB and to help researchers to justify their case selections, thus help raise the standard and status of case study research.

Our results indicate that 12% of the 333 case study articles reviewed lacked even a methodology section and 41% reported no indication of how cases were selected. The percentage of papers reporting methodology sections improved gradually from 1995 to 2014, reflecting authors' (editors' and reviewers') efforts of enhancing methodological rigor of published manuscripts. However, the percentage of papers that stated or implied their case selection strategies showed no consistent improvement over time. This low level of disclosure suggests that case researchers should be more transparent in declaring their methodological choices.

In our analysis we distinguish between theory-driven and phenomenon-driven case study selection approaches. Theory-driven selection can usually be traced back to previously identified relationships, models, logic or mechanisms relating theoretical concepts or constructs to each other. Case selection is pre-determined before the project has started and informed by theory. The cases are selected because they are particularly suitable for extending and revising relationships among concepts and models. Case selection strategies that involved replication logic, polar types, homogeneous, confirming/disconfirming cases were more likely to be theory-driven. In contrast, phenomenon-driven selection is based on a focal phenomenon, where the cases are found in the process of investigating real-world phenomena, that were often new, with little prior research and no pre-determined theoretical assumptions. Thus, the selection of cases is broadly designed to provide the flexibility to capture, document and conceptualize a phenomenon that lacks plausible existing theory and empirical evidence. These phenomenon-driven strategies included critical, extreme, key informant, snowball, and revelatory case selection.

We identify there broad pathways in terms of *theory-driven* and *phenomenon-driven* case selection, logic employed and theoretical purpose. These aim to make it more straightforward for researchers to

explain, and for readers to appreciate, the theoretical purpose and contribution of the study. Case study papers adopting pathway 1, the *theory-driven* selection, typically employ a deductive logic, where initial propositions or frameworks are developed from prior theory, and are then revised or modified through case studies. In contrast, in pathway 2, case studies following the *phenomenon-driven* selection, develop case studies inductively, often aiming to develop emergent theory in which propositions and theoretical models were directly generated from data analysis. We also found pathway 3, a *theory-driven* selection approach with induction and theory building, based on *a priori* reasoning, whereby for example, pre-defined constructs shape the design of the research.

Whilst papers are identified and apportioned to coherent pathways, it would be wrong to force all case study papers into straitjackets. Hybrid methodologies may produce innovative approaches. Indeed, we found papers with various combinations of theorizing logic, theoretical purpose and case selection that did not fall conclusively into the pathways. Such departures may be both acceptable and interesting, provided that they are clearly explained and justified, and we provide exemplar case study papers that justified departures clearly.

In conclusion, we advocate greater methodological sophistication and transparency of case selection reporting in IB research. We recommend that case study papers should be more transparent in declaring their methodological choices and justifications and address the link between case selection and theorizing. We do not aim to provide a universal case study protocol or template because there can be no single "best-practice" case selection strategy for all circumstances and purposes. We do however, recommend that case selections should be fit for the researcher's purpose and aligned in pathways, or at least, deviations from the pathways should be clearly justified.

**Reference:** Fletcher, M., Zhao, Y., Plakoyiannaki, E., & Buck, T. (2018). Three Pathways to Case Selection in International Business: A Twenty–Year Review, Analysis and Synthesis. *International Business Review*, 27, 4, pp. 755-766.

See also the following for additional resources on case selection in international business:

Buck, T. (2011). Case selection informed by theory. In R. Piekkari and C. Welch (eds), *Rethinking the case study in international business and management research*, Cheltenham: Edward Elgar, pp. 192–209.

Fletcher, M., & Plakoyiannaki, E. (2011). Case selection in international business: key issues and common misconceptions. In R. Piekkari and C. Welch (eds), *Rethinking the case study in international business and management research*, Cheltenham: Edward Elgar, pp. 171-191.

# Have you published a methodology paper in an IB journal recently?

If so, we would like to hear from you! We would like to feature recent methodological papers in future issues of this newsletter.

# What if fully agree doesn't mean the same thing across cultures?

<u>Anne-Wil Harzing</u>, Professor of International Management, Middlesex University. Reprinted with permission from <a href="https://harzing.com/">https://harzing.com/</a>

Studies of attitudes across countries generally rely on a comparison of aggregated mean scores to Likert-scale questions. This presupposes that when people complete a questionnaire, their answers are based on the substantive meaning of the items to which they respond. However, people's responses are also influenced by their response style. Hence, the studies we conduct might simply reflect differences in the way people respond to surveys, rather than picking up real differences in phenomena across countries.

# What are response styles?

Response styles refer to a respondent's tendency to systematically respond to questionnaire items regardless of item content. The main type of response styles are:

- Acquiescent Response Style (ARS) where respondents are more likely to agree or give a positive response to a question
- Dis-acquiescent Response Style (DRS) where respondents are more likely to disagree or give a negative response to a question
- Extreme Response Style (ERS) where the response is more likely to be highly positive or highly negative
- Middle Response Style (MRS) where there is a greater tendency to go for an 'average' response.
   High ARS implies better/higher scores while ERS gives you more varied or extreme (and possibly higher) scores than MRS.

# Study 1: Response style differences in 26 countries

My <u>2006 study</u> showed that there are major differences in response styles between countries. Country-level characteristics such as power distance, collectivism, uncertainty avoidance and extraversion all have a positive influence on response styles such as acquiescence and (positive) extreme response styles.

There are also clear country clusters. Northern and Western European countries show lower levels of acquiescence and higher levels of dis-acquiescence, whereas the reverse is true for Southern European and most Latin American countries, with France displaying a "bridgehead" position. Within Eastern Europe two clear patterns are visible with Russia and Poland showing high dis-acquiescence, low MRS and low positive ERS, while Bulgaria and Lithuania show the reverse pattern.

Respondents in China and Hong Kong show medium acquiescence, low dis-acquiescence, low positive and negative ERS and high MRS, while Malaysia and India show the reverse pattern on nearly all of these indicators. Taiwan takes up a middle position between these extremes. A third and very distinct pattern is shown by Japan, which has the lowest acquiescence, the highest dis-acquiescence and the highest MRS of all 26 countries. The results for Malaysia show that ethnic background also influences response styles: Malaysian-born Chinese respondents had response styles that differed significantly from Malay respondents and were generally situated between Malay and Chinese (mainland China & Hong Kong) in terms of response styles.

# Study 2: Ranking and language

A second study (Harzing, 2009) showed that even though changing from a 5-point Likert scale to a 7-point Likert scale reduced MRS and ERS, it did not fully eliminate the problem of differences between countries in their tendency to use middle or end points of the scale. As expected, switching to a 7-point scale did very little to address the major differences between countries in terms of DRS and ARS. However, our results suggest that ranking – asking respondents to rank responses in order of preference - provides an excellent alternative, as it completely eliminates both MRS/ERS and ARS/DRS.

Our <u>second study</u> also showed that substantive differences between countries are smaller for the English-language version of the questionnaire items than for the native-language versions, thus suppressing potentially relevant country differences. However, the reduction in variance was smaller for 7-point Likert scales than it was for 5-point Likert scales. The reduction in variance for the English-language version was very small indeed, and only a guarter of the solutions showed a significant reduction in variance.

# Study 3: Scale anchors and prior subject knowledge

A <u>third study</u> (Harzing et al., 2012) included five groups of respondents: Chinese in China, Chinese in Australia, Anglo-Australians in Australia, and two groups of German students in Germany. We asked them to indicate on a 10-point scale whether certain employee attitudes or behaviour were more typically Australian (left-hand of the scale) or Chinese (right-hand of the scale). We then asked them how they would rate the performance (low to high on a 10-point scale) of an employee who displayed this attitude or behaviour.

When scale anchors referred to naturally opposing and mutually exclusive constructs (Australian vs. Chinese) respondents showed more ERS than when they referred to level or degree of a construct (low-high performance). A higher level of knowledge of cross national differences through prior education also resulted in higher ERS on behavioural questions – probably reflecting the higher levels of confidence in the answers given – but not on performance questions.

### Conclusion

Although there are some remedies to eliminate or alleviate response bias, the first step towards finding a solution is acknowledging that response bias can be a serious threat to valid comparisons across countries. We hope this piece has provided a step in that direction and that in future response bias will receive the attention it deserves from researchers in the area of international and cross cultural management.

### References

Harzing, A.W. (2006) **Response styles in cross-national mail survey research: A 26-country study**, *The International Journal of Crosscultural Management*, 6(2): 243-266. [reprinted in Cross-Cultural Management (in the Routledge series Critical Perspectives on Business and Management) Editors: Tim G. Andrews and Richard Mead, Routledge, 2008].

Harzing, A.W.; and 26 collaborators (2009) **Rating versus ranking: what is the best way to reduce response and language bias in cross-national research?**, *International Business Review*, 18(4): 417-432.

Harzing, A.W.; Brown, M.; Köster, K., Zhao, S. (2012) **Response style differences in cross-national research:** dispositional and situational determinants, *Management International Review*, 52(3): 341-363.

# What do we mean by theory? The diversity of theorizing styles

As a scholarly community, we judge each others' work in terms of the theoretical contribution that it makes. But what do we mean by theory?

In recent years, there has been growing recognition that what we think of as 'theory' comes in different forms. What theoretical arguments we make and how we present them vary. Delbridge and Fiss (2013) term them different 'styles of theorizing'. They argue that the diversity of theorizing styles exists because of:

- ontological and epistemological differences, i.e. our assumptions about what social reality is and what and how we can gain knowledge about it;
- multiple theoretical traditions, i.e. the philosophers and social theorists who have influenced us;
- methodological preferences, i.e. we choose research problems and theoretical forms which best fit the methodologies with which we are most familiar;
- different writing styles and ways of presenting our work.

They are concerned that management research has not been successful at encouraging diversity. Rather, a single form of theorizing—which they term the 'propositional style' - has come to dominate our journals. This style is based on a correlational, linear notion of causality..

The danger, they suggest, is that other forms of theorizing are potentially not seen as a rigorous theoretical tradition. Other forms which they discuss are:

- Narrative styles, which enable the development of process models which account for the drivers, mechanisms and patterns of change.
- Typological styles, which provide insights into complex causal relationships, e.g. equifinality and causal configurations.

Delbridge and Fiss make a plea for greater diversity of theorizing styles. Limiting the range of theorizing styles means that we run the danger of narrowing the types of problems we address.

So before you conclude that a paper does not have a sufficient theoretical contribution, it is worth asking: What sort of theorizing is the author trying to achieve? Am I not seeing a theoretical contribution because the author is not using the sort of theorizing style I expect?

Asking these questions will mean we are less likely to impose a particular theorizing style on a paper when it does not fit the author's aims and research problem.

#### For further reading, see:

- J. P. Cornelissen (2017), "Editor's Comments: Developing Propositions, a Process Model, or a Typology? Addressing the Challenges of Writing Theory Without a Boilerplate", *Academy of Management Review*, 42,1: 1-9.
- J. P. Cornelissen (2017), "Preserving theoretical divergence in management research: Why the explanatory potential of qualitative research should be harnessed rather than suppressed", *Journal of Management Studies*, 54,3: 368-383.
- R. Delbridge and P. Fiss (2013), "Styles of theorizing and the social organization of knowledge", *Academy of Management Review*, 38, 3, 325–331
- G. Fisher and H. Aguinis (2017), "Using theory elaboration to make theoretical advancements", *Organizational Research Methods*, 20(3): 43-464.

# Methodological journals

Are you interested in multivariate data analysis? If so, the following journal will surely be of interest:

#### Journal of Multivariate Analysis

The journal's editorial policy states that it is interested in all forms of multivariate data analysis, multivariate data analysis and modeling, including cluster analysis, discriminant analysis, factor analysis, and multidimensional continuous or discrete distribution theory.

More details on the journal's scope and collection of articles can be found at:

https://www.journals.elsevier.com/journal-of-multivariate-analysis

# From the publisher

# Recent Handbooks on qualitative research in business and management

The discussion of qualitative research methodologies is flourishing in business and management disciplines. This is welcome but means that it can be hard to keep up with recent developments. A good place to start can be found in three edited handbooks which have been published in recent years. They provide an overview of the growing diversity of approaches used by qualitative researchers, current trends and future projections, methodological innovations, and enduring debates.

- Handbook of Qualitative Organizational Research: Innovative Pathways and Methods, edited by Kimberly D. Elsbach and Roderick M. Kramer, Routledge 2016.
- The Routledge Companion to Qualitative Research in Organization Studies, edited by Raza Mir and Sanjay Jain, Routledge 2018
- <u>The SAGE Handbook of Qualitative Business and Management Research Methods</u>, 2 vols, edited by Catherine Cassell, Ann L. Cunliffe and Gina Grandy, Sage 2018

It is (approximately) 30 years since Eisenhardt and Yin published their pioneering guides to case research. Since then, there have been many advances in qualitative research methodology. As a result, we now have a greater diversity of methodological sources which we can use for guidance and inspiration for field research, and when writing up our studies for publication.

# Finalists: AIB Best Paper Award in Research Methods 2018 Sponsored by the University of Sydney Business School

This award is given to the best paper (as selected by a committee) accepted to a competitive session at the AIB Annual Meeting that

- develops and/or utilizes innovative and non-traditional methodological approaches to investigate pertinent IB phenomena,
- advances IB methodology,
- provides creative methodological solutions to important IB problems, and
- informs scholars in IB and beyond about methodological advancements.

#### 2018 Finalists:

Wolfgang Messner, University of South Carolina, Identifying Necessary Conditions with Activation Functions in Large and Noisy Data Sets

Smita Paul, University of Auckland and Snejina Michailova, University of Auckland, 'Twitching Hands': Network Pictures as a Visual Method for Studying the MNE

Arash Sadeghi, University of Otago, Elizabeth L. Rose, University of Leeds / Aalto University and Sylvie Chetty, University of Otago, A New Measure of Perceived Export Performance: An Individualized Measurement Approach

#### Congratulations to all the finalists!

The award will be presented at the coffee break between 15.45 and 16.15 on **Wednesday 27 June**, in the Exhibit Hall. Please come along and meet other AIB members who are interested in the activities of the RM-SIG!

#### Previous award winners

This is the third year that the prize has been awarded. Previous award winners of the award are:

2016: Vasyl Taras (University of North Carolina at Greensboro), William Tullar (University of North Carolina at Greensboro), Piers Steel (University of Calgary), Thomas O'Neil (University of Calgary) and Matt McLarnon (University of Calgary), 'Free-Riding in Global Virtual Teams: An Experimental Study of Antecedents and Strategies to Minimize the Problem'

2017: Lilac Nachum (City University New York), Grace Hong Hyokyoung (Michigan State University and Grigorios Livanis (Northeastern University), 'When Near is Far and Far is Near: A Quantile Regression Model of FDI, Geographic Location and Connectivity'

# **Contact Us**

If you have any feedback, content or suggestions for the next issue, please let us know.

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