

**A SYSTEMATIC APPROACH TO CONDUCTING REVIEW STUDIES:
AN ASSESSMENT OF CONTENT ANALYSIS IN 25 YEARS OF IB RESEARCH**

Ajai Gaur

Department of Management and Global Business
Rutgers Business School - Newark and New Brunswick
1 Washington Park, Newark, NJ 07102
Tel: 1 732-646-5094
Fax: 1 973-353-1664
Email: ajai@business.rutgers.edu

Mukesh Kumar

Strategic Management Area
Indian Institute of Management Indore
Prabandh Shikhar, Rau-Pithampur Road, Indore (M.P.), India
Email: f14mukeshk@iimidr.ac.in

Citation:

Gaur, A. S., & Kumar, M. 2017. A systematic approach to conducting review studies: An assessment of content analysis in 25 years of IB research. **Journal of World Business**, forthcoming.

A SYSTEMATIC APPROACH TO CONDUCTING REVIEW STUDIES: AN ASSESSMENT OF CONTENT ANALYSIS IN 25 YEARS OF IB RESEARCH

ABSTRACT

Content analysis has become a popular method for qualitative and quantitative analyses in management and international business. It is increasingly used in literature reviews to take stock of the extant knowledge and understand the intellectual structure of a field. As a methodology, however, content analysis is not well understood and is often poorly applied. In this article we explain content analysis as a method to conduct systematic and quality review studies. Towards this end, we list a set of benchmark steps, and develop coding schemes that can be utilized by international business (IB) scholars for conducting future review studies. Further we demonstrate the application of content analysis by conducting a literature review of content analysis based articles published in top eight IB journals in the past 25 years (1991-2015). We also assess the methodological rigour of those IB review studies that have used content analysis and suggest potential avenues for conducting future review studies.

Keywords: Content analysis; literature review; coding schemes; international business

1. Introduction

Content analysis, as a measurement method, has gained popularity in management research (Duriau, Reger, & Pfarrer, 2007; Short & Pamler, 2008). Scholars have used content analysis for identifying and summarizing trends in the extant literature, and for measuring latent constructs in quantitative research for which it is difficult to obtain reliable and valid quantitative data from traditional sources (Duriau et al., 2007; Short & Pamler, 2008). Content analysis has many methodological advantages over other research methods. For example, content analysis is unobtrusive and therefore is relatively free from researchers' demand biases and informants' recall biases. It is suitable for both inductive and deductive research, and can be used to extract manifest¹ as well as latent content². Additionally, with the recent advances in computer aided techniques, content analysis can cope with large volume of unstructured data (Duriau et al., 2007; Krippendorf, 2004; Short & Pamler, 2008).

Despite its many merits, the method is not well understood and is often poorly applied, especially when conducting review of the extant literature to take a stock of knowledge in a field. Lombard, Snyder-Duch, and Bracken (2002), in a review of content analysis based articles indexed in Communication Abstracts between 1994 and 1998, found that out of 200 articles only 69% reported reliability statistics. A similar trend was reported in management research. Duriau et al. (2007) found only 62.2% articles explicitly reported inter-coder reliability. Our preliminary investigation of content analysis based articles in IB field reveals a similar trend. Keeping this in mind, a key aim of this article is to demonstrate the proper application of content analysis in conducting review studies, with a particular focus on the IB field.

Towards this end, we first explicate different methodological aspects of content analysis with respect to its application for review studies. Issues involved at various stages of content

analysis such as selection of source databases, sampling of journal articles, development of coding scheme, coding process, reliability and validity etc. have been discussed in considerable detail from the perspective of conducting review studies. Further we conduct a content analysis of content analysis based articles in the eight leading IB journals for a period of 25 years from 1991 to 2015. This has twin objectives - first to demonstrate the application of content analysis in conducting systematic and quality literature reviews and second to critically assess the trends and methodological rigor in the use of content analysis in IB literature. While we include all articles that use content analysis, our focus is on a specific application of content analysis – literature review. We critically assess the content analysis techniques applied in extant IB literature reviews, and suggest steps that should be followed to bring methodological rigour. We also present coding schemes that can be utilized for conducting content analysis based review studies, and suggest potential avenues for conducting future review studies.

2. What is Content Analysis?

Content analysis as a methodological tool first appeared in literature in early 1940s (Franzosi, 2004; Krippendorf, 2004). The focus of early content analysis studies was primarily in identifying manifest content (Berelson, 1952). The technique was later expanded to the domain of qualitative methods with a focus on both manifest as well as latent content (Driski & Maschi, 2016; Franzosi, 2004; Krippendorf, 2004). While some scholars criticise content analysis for its over-reliance on simplistic quantification of the text into word counts, its proponents insist on the scientific utility of such quantification (Krippendorf, 2004).

To conduct a content analysis, data is first converted in textual form if it is in other forms (e.g. video or audio clips). Based on the study objective, the textual data is coded into different categories at a variety of levels – word, word sense, phrase, sentence, paragraph or theme. The

coding categories, which represent different characteristics of interest based on the research objective, are collectively known as coding scheme/rules. This coding scheme is applied to entire body of text for the purpose of extracting uniform and standard information. This information can be used on its own to draw inferences or combined with other data for conducting further statistical analyses. In case of quantitative content analysis, scholars often use deductive route, using theory, to develop coding scheme (Neuendorf, 2002), whereas qualitative content analysis may involve inductive development of coding scheme through analysis of collected data (Driski & Maschi, 2016).

Many scholars consider content analysis at the intersection of qualitative and quantitative traditions for bringing out replicable and valid inferences from a body of text (Durlauf et al., 2007; Krippendorff, 2004; Li & Cavusgil, 1995; Weber, 1990). In most cases, content analysis invariably involves coding of the target textual data which is central to qualitative data analysis (Driski & Maschi, 2016), and subsequent summarization and analysis of the coded text. IB articles reviewed in this paper (in section 3) strongly reflect this trend of application of content analysis in both quantitative and qualitative research traditions. Reviewing extant literature using content analysis may require coding of manifest contents and or latent contents that focus mostly on pattern form of latent content³ (Potter & Levine-Donnerstein, 1999). Given this nature of content in review studies, it is possible to develop coding rules⁴ that can minimize the subjective interpretation of coder(s) (Potter & Levine-Donnerstein, 1999). In addition, quantification in terms of frequency count and percentage is often useful in summarizing findings in tables and graphs. The analysis of coded data may rely on qualitative tools such as rhetorical analysis, discourse analysis, narrative analysis etc., or quantitative tools such as multi-dimensional scaling and regression models.

In terms of the approaches for data coding, Short and Palmer (2008) put content analysis

in three different groups: human scored system, individual word count system, and computerized systems using artificial intelligence. Human scored system involves manual coding with the help of trained coders. In this approach, the researcher decides the coding units for classification (e.g. word, phrase, sentence, paragraph, full text) and develops the coding scheme, deductively or inductively, based on the research objective. A coding manual is prepared that includes description of each category. This coding manual is utilized to train the coders so that they have a common understanding of the coding rules for a high level of inter-coder reliability. In the individual word count approach, each category is developed by pooling the semantically equivalent words to capture a particular theme of interest in the target body of text, and frequency count of pooled words is used to determine the relative importance of each category in the given text. Lastly, computerized systems using artificial intelligence automate the word count, based on in-built dictionary or researcher developed dictionary. These methods have algorithms to resolve words with more than a single meaning as well as to identify different words that have the same meaning.

Some more advanced computer aided techniques, such as topic modelling, do not require researchers to specify the coding categories, removing any kind of researcher bias. These techniques help identify the latent themes based on complex but stable algorithms. Such computer aided techniques increase the speed and reliability of content analysis as the coding process is automated, eliminating the need for manual coding – a major source of threat to reliability (Krippendorf, 2004; Weber, 1990). NVivo, Altal.ti, QDA Miner & Wordstat, Diction, and “tm”, “quanteda” packages of R statistical software are some of the popular CATA (computer-aided text analysis) softwares available to conduct computer aided content analysis. Many of these popular CATA softwares have the ability to input data of multiple types such as document (MS word, PDF etc.), audio, video, websites and social networking sites. Despite many benefits of CATA, scholars

often do not use them mainly due to lack of awareness and technical expertise needed to use these tools.

Before moving to the specifics of content analysis in conducting literature reviews, we would like to note two other important methods for literature review – Meta analysis and Delphi method. Delphi method relies on the opinion of a panel of area experts and is more suitable for review studies involving ill-defined problems (Liang & Parkhe, 1997). In addition, this method may not be free from experts' own biases and selection of experts may involve availability of the experts as well as subjectivity of the researcher. Meta-analysis, on the other hand, is statistical analysis of empirical studies in a very specific domain and is most suitable for well-established fields where there exists a high degree of agreement with respect to variable measurement and statistical techniques (Liang & Parkhe, 1997). Thus, while one can conduct meta-analysis to establish general consensus about the effect of a given set of explanatory variables on a given set of dependent variables, this technique is not suitable to do a general and broad based survey of a field. Clearly, both these methods have a narrow scope of application and less flexibility as compared to content analysis for studies that aim to survey existing work in a given field.

3. Conducting Literature Reviews using Content Analysis

There are four important stages in content analysis: data collection, coding, analysis and interpretation of coded content (Duriiau et al., 2007; Holsti, 1969; Weber, 1990). Below we discuss the first two steps which are critical for achieving validity and reliability in content analysis. We demonstrate all four steps in conducting review studies with the help of an example, later in this paper.

3.1. Data collection.

The data collection phase includes decision on selection of data sources and sampling criteria. In

human intensive content analysis, it may be more efficient to sample a limited number of representative documents (Franzosi, 2004). The knowledge of relationship between source databases, samples characteristics and research questions is essential for selection of valid samples. Proper selection of the data sources and samples ensures the reliability and validity of the findings. However, as we detail below, sample size in the context of conducting review studies may not have much relevance.

In review studies, researchers know the population of texts well, making it possible to do a more targeted sampling. In such cases, the choice of sample is guided by its relevance to the purpose of the review study under consideration (Driski & Maschi, 2016; Krippendorf, 2004). The samples selected are not always representative of the entire population, but relevant to the objective of the review study (Krippendorf, 2004). The guiding principal at this stage is to identify data sources and sample based on some objective criteria for a given research question. The criteria may be minimum journal impact factor scores, articles with certain minimum citation count etc. Once all selection/exclusion criteria, derived from the objective of the review study, are exhausted, the researcher gets the relevant body of text for content analysis. In this case, sample size has little meaning as entire population of relevant texts becomes part of the data for content analysis (Driski & Maschi, 2016; Krippendorf, 2004). Furthermore, recent advancement in document collection, computer aided tools and increased computational power have made it possible to analyse larger number of documents, eliminating the need to sample.

3.2. Data coding.

Once data sources and sample are identified, a valid coding scheme needs to be developed. A valid coding scheme is critical for generating confidence in a content analysis. In this regard, Weber (1990)'s protocol (reproduced in Table 1) for development of coding scheme and coding process

has been widely used in literature. Weber (1990) emphasizes the assessment of inter-coder reliability at both the pilot coding and final coding stages. Since the development of a valid coding scheme and coding process constitute core components of content analysis (Duriau et al., 2007), below we discuss these in detail from the perspective of literature reviews. In literature review studies, the focus of analysis is mostly on manifest content, and sometimes on a mix of latent and manifest content. In addition, the coding scheme is typically available prior to the final coding process. Under such conditions, we find following options suitable for developing coding scheme for review articles (Krippendorf, 2004; Holsti, 1969; Weber, 1990, Neuendorf, 2002).

Please insert Table 1 about here

The first option is that the researcher develops the coding scheme herself (Potter & Levine-Donnerstein, 1999). In general, coding schemes may be developed in consultation with field experts who have deep knowledge of the subject being investigated. In case of literature reviews, the researcher herself may be a field expert and can come up with a coding scheme based on objectives of the literature review. The literature review of a particular field is conducted to find out the direction of development of the field/subfield and potential avenues for future research. In case of non-theory based coding, a key objective is to reduce the complexity of needed categories and to bring them down to a manageable and insightful set of attributes (Potter & Levine-Donnerstein, 1999). Potter and Levine-Donnerstein (1999) suggest that in case of coding of manifest content using non-theory based coding scheme, the validity requirement of coding scheme need not be as stringent as in case of coding of projective latent content⁵ using theory-based coding scheme. In case of manifest content with non-theory based coding scheme, there is a high degree of commonly shared knowledge, which may form the basis of assessing the face

validity of a developed coding scheme. Duriau et al. (2007) follow the same principal to develop part of their coding scheme for their review study.

The second option is to rely on coding scheme developed elsewhere in extant literature that has similar objectives as that of the focal study (Krippendorff, 2004). For example, Duriau et al. (2007) adopted the “*research theme*” category from Scandura and Williams (2000), who themselves relied on the coding schemes developed by McGrath (1982) and Cook and Cambell (1976). Krippendorff (2004) argues that it is prudent to draw on past work while developing coding scheme as it helps in accumulating a cohesive body of knowledge. Further, scholars may use both the above options simultaneously to develop different coding categories as an initial coding scheme.

There may be situations when researchers need to add or drop some of the coding categories while in the middle of the coding process. This is usually acceptable as long as the changes are not too extensive and done towards the end of the coding process. For example, while coding the content analysis based IB articles (discussed in next section), we realized that the parent category of *research design* should have one more sub-category, that is, *descriptive*. It is imperative to note here the importance of exhaustiveness of coding categories (Krippendorff, 2004). A proper pilot test using Weber (1990)’s protocol helps in minimizing the need for such adjustments. When the coding scheme is altered midway, the final coding scheme needs to be uniformly applied to code the entire text sample including what may have already been coded before altering the coding scheme. At this stage, reliability of coding becomes important, especially when the coding is done manually and focus of analysis includes latent content (Weber, 1990). For inter-coder reliability, a generally accepted standard is to have the correlation coefficient of 0.7 and above or Cohen’s kappa of 0.8 and above or Krippendorff’s alpha of 0.8 and

above (Neuendorf, 2002).

When coders are not researchers themselves, the reliability of coding is also impacted by the training of coders (Krippendorff, 2004). Based on the feedback obtained from trainees, the researcher may need to modify the coding rules (Neuendorf, 2002). These changes may be more at the definitional level of the coding categories so as to have agreement about the meaning of coding rules between coders and researchers. If researcher's focus of review study is manifest content, coders need not apply their individual knowledge for the purpose of coding. Coding job, in this case, is rather repetitive in nature, and an exhaustive training on the understanding of coding rules may not be warranted (Potter & Levine-Donnerstein, 1999). But in case of latent content, coders must have understanding of the coding rules as researcher understands them.

Finally, summarization and interpretation of the coded text are done. Now it becomes possible to explore the sample articles in manageable, meaningful, and structured manner. This helps the researchers to assess the state and knowledge structure of a field more accurately.

Within the board theme of literature review, there are different types of reviews which would require different coding schemes. Based on the literature review of content analysis articles that we discuss in the next section, we classify literature review studies into four broad categories based on the scope of focus (broad versus narrow) and area of focus (research theme versus research method). Figure 1 presents a 2x2 classification of the types of literature review conducted by scholars with examples. As there are different coding schemes used for these four groups, we propose coding schemes for each of the four types of literature review in Table 2. These coding schemes are only suggestive and may form a good starting point; the actual coding categories should be driven by the objective of the literature review.

Please insert Figure 1 about here

Please insert Table 2 about here

3.3. Use of CATA for coding.

CATA tools have become quite popular for content analysis in recent years. CATA can make the entire review process more systematic, fast and trustworthy through proper management of data. For literature reviews, we can rely on CATA to code bibliographic categories such as authors, journals, year of publication, keywords, abstract etc. These details can be imported from citation and literature management softwares such as “Endnote” to CATA softwares such as “NVivo”. CATA also allows manual coding by facilitating selection of portions of relevant body of text seamlessly. The researcher can record her observation/insight at the time of coding or otherwise by creating memos (attaching either to data or coding categories). Additionally, CATA facilitates visualizing data/coded data through innovative diagrams, keeping linkages between the coded texts, coding categories, memos and coded articles, and storing all records and activity logs for future verification by self or a third-party.

The advanced CATA softwares like “NVivo” provide function for manual coding where one can keep track of what one has coded and also extract the coded texts along with corresponding coding categories for reporting. CATA also provides many functionalities for data interpretation and summarization. For example, one can perform more advanced analyses such as multi-dimensional scaling and factor analysis in CATA softwares like “NVivo”, and “R”. These advantages of CATA have to be weighed against the costs of learning a new tool, which could potentially interfere with creativity of the researcher (Marshall, 2002).

It is important to note that CATA tools do not carry out the data analysis for the researcher but only facilitate the data analysis process by making it more rigorous, transparent, fast, flexible

and trustworthy (Costa, Sousa, Moreira & Souza, 2017; Sinkovics & Alfoldi, 2012). Reliance on CATA substantially improves transparency as it maintains the audit trail of the coded text that may be verified by external party for authenticity (Maxwell, 1997). Some advanced CATA tools provide features for the research team to conduct collaborative qualitative coding and analysis. This feature is quite relevant in IB where researchers from many countries collaborate on a single research project (Sinkovics, Penz & Ghauri, 2008). However, the final choice on whether to use CATA or rely on manual coding is a matter of personal preference of the researcher, depending on her comfort level in using CATA tools.

Based on above discussion, we summarize below the steps for conducting systematic literature reviews using content analysis technique:

- 1) Selection of database(s) based on the objective of a review study.
- 2) Selection of the sample literature based on the objective of a review that sets the criteria for sample selection/exclusion. The selection criteria could include time period, domain definition of literature review, types of manuscript etc. To ensure the reliability of the sample selection process, one should assess the inter-coder reliability (Welch & Bjorkman, 2015) by employing an independent person to examine the same sources of databases for sample selection.
- 3) Development of the valid coding scheme as discussed in this section.
- 4) Coding of the entire sample.
- 5) Assessing the coding accuracy and inter-coder reliability using reliability testing methods such as Cohen's kappa or Krippendorff's alpha (Potter & Levine-Donnerstein, 1999)
- 6) Summarization and interpretation of the coded text.

In the next section, we demonstrate the application of above discussed processes by conducting review of IB studies that use content analysis method in some form. We have defined the aim of our review quite narrowly, which allows us to limit the number of articles that are included in this review. Given our objective of demonstrating the proper usage of content analysis for literature review, such a narrow scope helps in keeping the focus on the methodological aspects in review studies.

4. A Review of Content Analysis in IB research

4.1. Sample, Data and Methods

As mentioned earlier, this review study has two objectives. First, we want to demonstrate the application of content analysis for conducting review studies. Second, we want to assess the methodological rigor in using content analysis in the IB literature. Towards this end, we selected eight IB journals that have a ranking of three or above based on ABS (Association of Business Schools) 2015 ranking list. The eight journals include *Journal of International Business Studies (JIBS)*, *Journal of World Business (JWB)*, *Global Strategy Journal (GSJ)*, *Management and Organizational Research (MOR)*, *Management International Review (MIR)*, *International Business Review (IBR)*, *Journal of International Management (JIM)*, and *Asia Pacific Journal of Management (APJM)*. Tuselmann, Sinkovics and Pishchulov (2016) have also identified these eight journals at the top of the IB journals rankings. The selection of journals would have to be broader if the objective was to analyse all of the IB research in leading journals. There are other outlets such as *Academy of Management Journal (AMJ)*, *Strategic Management Journal (SMJ)*, and *International Marketing Research (IMR)* that routinely publish IB research.

Having selected the database sources, the next step is to identify the sample articles. In line with our objective, we decided to focus on full-length peer-reviewed articles and not editorials,

letters, book reviews, comments and replies. Additionally, we focused on years from 1991 to 2015. We chose 1991 as the starting year as there were very few articles that used content analysis in earlier years; we found only one article in JIBS prior to 1991 applying this method. We searched for articles in the journals' official websites and JSTOR database with the keywords "content analysis" and "qualitative". We retrieved the abstracts of the articles from this search along with title and other bibliographic detail. We searched the abstracts for word "content analysis" and "qualitative" sequentially. If we found the word "qualitative" and not "content analysis" in the abstracts, the corresponding articles were downloaded and searched for following words: "coding scheme", "coding", "coded", "inter-coder/rater". The journal years for which abstracts were not retrievable from electronic databases, we manually searched all articles for "content analysis", "coding scheme", "coding", "coded", "inter-coder/rater". This process resulted in a total of 99 content analysis based articles. From this corpus, we removed the editorials, letters, book reviews, comments and replies etc. We also removed articles in which content analysis was only superficially mentioned without any details of the procedure to conduct the data coding. This resulted in a final sample of 86 articles. These articles are listed in the Annexure-I.

We followed Duriau et al. (2007)'s coding scheme with some variations (Krippendorff, 2004), in line with the objectives of the review study and the requirement of exhaustiveness for parent coding categories as needed (Weber, 1990). The focus in Duriau et al. (2007)'s study was on the review of content analysis based articles in organizational studies, whereas we are interested in the review of content analysis based articles in the leading IB journals. Duriau et al., (2007)'s study has 10 parent coding categories (with sub-categories). To suite the objective of our review study, we added one more category to this - *objective of applying content analysis*, with two sub-categories *classification of source data* and *operationalization of constructs*. We also modified the

sub-categories in three other parent categories of Duriau et al (2007). We revised the *research themes* parent category to include five sub-categories: *international business management, review and assessment of extant literature, introduction of new research methodology, bibliographic and citation analysis* and *others*. Under the *research design* parent category, we included *descriptive* as a fourth sub-category to make this category exhaustive. Further, we replaced one existing sub-category *advanced features* of parent category *content analysis technique* by *mapping into metric/non-metric scale* to suite our objective. In Table 3, we present this coding scheme with its explanation.

Please insert Table 3 about here

Once coding scheme is developed, the next step is to code the sample articles and to establish reliability of the coding process. Given that the members of this research team are both part of the IB community, understanding of the meaning of coding categories is likely to be similar. However, to establish the reliability of coding process, the two authors coded randomly chosen 15 articles individually, after discussing the meaning of different categories to avoid potential disagreements. Though there is no agreed and well-defined value, in line with extant literature (Neuendorf, 2002; Potter & Levine-Donnerstein, 1999) we took 15 (18%) of the articles for testing inter-coder reliability. Potter & Levine-Donnerstein (1999) find the size of the sub-sample for inter-coder reliability testing to be from 10% to 100% of the full sample. While deciding on the sub-sample size, it may be noted that the absolute size of sub-sample is more important than its percentage. For example, five percent of 1000 will provide a better estimate of inter-coder reliability than 20% of 100. In our case, the inter-coder reliability using Cohen's kappa coefficient was 82%, which is in the acceptable range as per Neuendorf (2002).

4.2. Findings

In the following paragraphs, we present a brief analysis and interpretation of the outcome of content analysis. Table 4 provides the summary of the sample articles based on the journals and years of publication. Figure 2 provides the distribution of sample articles based on broad research themes. About 70% of the articles have used content analysis to investigate some IB phenomena. Only 10% articles have used content analysis for conducting literature reviews. Table 5 provides the summary of coded articles as per the above-mentioned coding scheme.

Please insert Table 4 and 5 about here

Please insert Figure 2 about here

Clearly, the use of content analysis for literature reviews is rather limited in IB field. This may be due to the general perception that literature review does not require the use of any specific method such as content analysis. Given that literature review is “in many ways considered as another form of qualitative data analysis” (Wickham & Woods, 2005: 690), there is a need to follow a systematic and methodological approach in conducting review studies. Any non-methodological approach may not be systematic, transparent and replicable and thus may compromise with the quality of review study.

4.2.1. Objective of applying content analysis. Under this coding category, we included two sub-categories: *classification of source data* and *operationalization of construct*. In 80% of the sample articles (68 articles), classification of data was the main objective. This classification is done through generating coding categories that are developed in two ways. In some studies, scholars developed the categories based on theory, extant literature and past evidence in a deductive manner as in quantitative tradition (Neuendorf, 2002; Potter & Levine-Donnerstein, 1999). In other

studies, the coding categories were developed through recursive refinement by repetitively moving back and forth between theory and data as in qualitative tradition (Welch Piekkari, Plakoyiannaki & Paavilainen-Mäntymäki, 2011). Some studies also develop the coding scheme in an inductive manner using data or observations without theory (Potter & Levine-Donnerstein, 1999). In a majority of these studies (63 out of 68 articles), researchers relied on qualitative interpretation of the data. In rest of the articles, researchers used some statistical tools to compare different groups, such as between the American and Chinese negotiators in Lee, Yang and Graham (2006).

With respect to construct operationalization, it is important to note that content analysis is capable of measuring both manifest and latent constructs (Duriau et al., 2007). This method is particularly useful when it is difficult to operationalize certain constructs using alternative techniques. Content analysis helps in measuring advanced concepts and latent constructs using wide variety of secondary qualitative data sources. This has a particular significance in extending the boundaries of a given field of study (Duriau et al., 2007). For example, while studying the influence of information sharing and group efficacy on communication and decision quality, Lam and Schaubroeck (2011) apply content analysis to measure constructs like group decision quality, pattern of group communication etc. Merchant (2005, 2014) operationalizes the construct of JV formation motives, JV competitive strategy and JV governance structure by mapping the relevant textual data into nominal scales and operationalizes competitive pressure by mapping the textual data into an ordinal scale. Similarly, Hope, Thomas and Vyas (2010) operationalize the concept of national pride by categorizing bid premiums in cross-border acquisitions into “national pride bid” and “non-national pride bid”. Despite its utility in developing latent constructs that are difficult to measure otherwise, it is surprising to find that such application of content analysis is in minority (21% articles). Clearly, content analysis as technique for measuring latent constructs has a great

promise for a multidisciplinary field like IB.

4.2.2. Research design related trends. With respect to specific content analysis techniques, frequency count for summarization of data has been the most popular with 55% of the sample (47 articles) using it, followed by qualitative analysis of the data through thematic/conceptual categorization in 42% of the sample (36 articles), for mapping of textual data into metric/non-metric scales mostly for construct operationalization in 21% of the sample (18 articles). Review studies have primarily used frequency counts with summarization using cross-tabulation and graphs (e.g., Griffith, Cavusgil & Xu, 2008; Lahiri, 2011; Leonidou, Katsikeas & Coudounaris, 2010; Yang, Wang, & Su, 2006). Further, frequency counts have also been used in comparative studies (Singh, Carasco, Svensson, Wood & Callaghan, 2005) and in understanding the different facets of same phenomenon (Coviello, 2006). Articles that do not use statistical techniques but employ qualitative methods (e.g., grounded theory) generally apply content analysis to develop themes from data and or literature (e.g., Bruton, Khavul & Chavez, 2011; Tsui-Auch & Möllering, 2010; Welch et al., 2011). For example, Welch et al. (2011) develop a classification for different theorizing methods from case studies available in the literature.

With regard to focus of analysis, about 59% of the articles focus on manifest content, whereas about 19% of the articles focus on latent content, and 22% focus on both manifest and latent content. Most of the latent content analysis articles use qualitative content analysis for identifying the latent content. This is consistent with Potter & Levine-Donnerstein (1999)'s observation that qualitative content analysis is most suitable for analysing latent content. Though our review finds that analysis of manifest content is more popular than the analysis of latent content, the latter holds more promise as it can help uncover and test phenomenon and measure constructs that are not easily possible using secondary quantitative data bases.

About half of the studies (about 52%) utilize content analysis as a standalone method. Understandably, all literature review articles fall under this category. However, content analysis is also used in conjunction with other methods in about 30% of the sample articles for hypotheses testing (integration). Many of these articles have used the frequency counts and their derived measures as input for conducting some statistical analysis, like, regression, ANOVA etc. (e.g., Heyden, Oehmichen, Nichting & Volberda, 2015; Hope et al., 2010; Lam & Schaubroeck, 2011). About 11% of the sample articles have used content analysis and some other research method to analyse different facets of the same phenomenon (elaboration). Coviello (2006) utilizes content analysis and social network analysis to analyse different facets of international new ventures network dynamics. Triangulation of content analysis method with other methods to validate the results has not found much favour and constitutes only 8% of the articles. Bruning et al. (2012) use qualitative content analysis to triangulate the finding of their regression analysis.

In the context of organization studies literature, Duriau et al. (2007) found integration (52% of the 98 articles reviewed) as most popular form of application of content analysis. But our review reveals that the standalone usage of content analysis is more prevalent in IB literature. This comparison reflects that predominantly organization studies scholars seem to be using more advanced application of content analysis. The potential of content analysis lies in using it in combination with other methods (e.g., Bruning, Sonpar & Wang, 2012; Chabowski, Samiee & Hult, 2013; Lim, Acito & Rusetski, 2006).

With respect to checking reliability of coded data, 43% of the reviewed articles (37 out of 86 articles) reported the inter-coder reliability coefficient. This figure is lower than what Duriau et al., (2007) found in context of organization studies literature (62.2%). This trend is not good even in case of manifest content. Coding a manifest content may be relatively easy, but inadequate

understanding of coding categories and coder mental fatigue could compromise coding reliability (Weber, 1990).

With respect to research design, about 47% articles applied inductive research design, while 23% applied both inductive and deductive research designs, and 30% used descriptive research design. So far as type of interpretation used is concerned, the most popular category is qualitative interpretation (such as frequency counts, cross-tabulation and other forms of summarizations) constituting 62% of the articles, whereas only 27% of the articles include some type of quantitative interpretation that uses statistical inferences. Scrutinizing these results, we find that content analysis based IB literature has focussed more on inductive research design and qualitative tradition of interpretation (e.g., Buckley, Chapman, Clegg & Mattos, 2014; Jormanainen & Koveshnikov, 2012).

With respect to the type of data sources, interview and other publically available documents have been most referred data sources constituting about 31% and 30% of the articles respectively. This is followed by scholarly journals (26%) and annual reports (17%). These figures reveal that secondary qualitative data sources such as annual reports, firms' websites, trade magazine etc. are underutilized. Such data sources are easier to obtain, and have tremendous potential for IB scholars. One can operationalize latent constructs such as a firm's risk taking behavior (Bowman, 1984), its competitive intensity (Andrevski, Richard, Shaw & Ferrier, 2014), its exploration versus exploitation orientation (Heyden et al., 2015) using secondary qualitative data sources. In the organization studies field, scholars have often used annual reports to study firms' strategic intentions and letter to shareholders to measure CEO attention (Duriau et al., 2007; Eggers & Kaplan, 2009; Gamache, Mcnamara, Mannor & Johnson, 2015). Arguably, content analysis has clear advantages over other approaches that use interviews and surveys of senior managers for

collecting data on difficult to measure constructs.

4.2.3. Trend in the use of CATA softwares. Our analysis suggests that CATA is not yet common for content analysis in IB literature, as most articles reported only human coding. We found only three of the articles that use CATA and explicitly mention name of the CATA software. This may be due to unfamiliarity with the use of advanced CATA softwares and methods, despite many advantages they provide. A good example of auto coding by CATA software can be found in Heyden et al. (2015). More advanced CATA methods such as topic modelling allow identification of latent content without much human interaction. This allows scholars to examine very large corpus of data and draw inferences without researcher bias. For example, in a literature review of studies on emerging markets, Piepenbrink and Nurmammadov (2015) analyzed about 6000 articles covering 18 years and identified latent themes in the literature without using any *a priori* knowledge of the field. Such large scale studies are not possible without use of CATA. As such, we expect many studies shifting from human coding and analysis to CATA in coming years.

5. Methodological Rigor in IB Review Studies and Avenues for Future Research

In the top eight IB journals identified earlier, we found 19 articles that use content analysis for the purpose of literature review and bibliographic/citation analysis. Ten of these articles deal only with bibliographic and citation analysis, seven articles deal only with review of IB field, and two articles deal with both. JIBS is the leading outlet with five articles based on bibliographic and citation analysis. We dropped eight of these bibliographic and citation studies as they focus on authors and their influence in terms of citation, institutional affiliations, and disciplines contributing to the IB literature. This reduces the number of review articles that we include in this analysis to 11. In Table 6, we list these articles along with an assessment on key benchmark criteria for conducting literature review that we identified earlier in section 3.

-----Please insert Table 6 about here-----

As one can see from Table 6, there is a relative paucity of content analysis based literature review in IB field. The focus of analysis is predominantly on manifest content with only three studies examining both manifest and latent themes. Analysis of latent content allows the researchers to understand the data beyond its literal meaning and facilitate deeper insight into the data by coding implicit categories. Qualitative content analysis generally aims at such deep analysis of textual data (Jormanainen and Koveshnikov, 2012; Welch et al., 2011; Suddaby and Greenwood, 2005). For example, Jormanainen and Koveshnikov (2012) reviews the literature dealing with international activities of emerging market firms. They examine the latent content of the sample articles as well to identify core concepts, and main contribution areas. Moving forward, identification of latent content in review studies would be important for substantive growth of the IB field. With respect to the methodological rigor, seven articles have not reported inter-coder reliability. As all the 11 articles appeared to have used manual coding, it is imperative to conduct inter-coder reliability tests for the reasons we outlined in earlier sections. In six articles, researchers list the coding schemes without providing details on how they were developed. This raises concerns about the validity of the coding scheme. We list several options in section 3 that could be adopted for developing valid coding schemes for review studies.

The studies included in our review, find several important themes that could be subject to further investigation in content analysis based future review studies. For example, Griffith et al. (2008) identify areas such as entry mode, exporting, marketing, internationalization process, subsidiary management, culture and its impact on MNC strategies, innovation and knowledge management and human resource management as areas in which substantial research has been done. In terms of theories, they found transaction cost theory, Hofstede's culture framework,

internationalization theory and eclectic theory receiving attention in a sizable number of articles. Seno-Alday (2010) identifies four major themes on which majority of the work has focused. These themes include the unique nature of international business, the process of internationalization, the nature of the interaction among the various actors and players in international business, and the impact of internationalization on business.

There are a few other important topics on which content analyses have been done, even though they did not emerge as important themes in the review studies. Examples of these topics include global branding (Chabowski et al., 2013), emerging market firm internationalization (Jormanainen & Koveshnikov, 2012), export management (Leonidou et al., 2010), and import management (Aykol, Palihawadana, & Leonidou, 2013). The 50th anniversary issue of the Journal of World Business has published articles by leading scholars on specific research areas in the broad IB domain, all of which could be potential topics for content analysis based literature review studies.

6. Conclusion

Content analysis has tremendous potential to push the frontiers of knowledge in the IB field by allowing researchers to take stock of the existing knowledge base in a systematic manner. It also enables researchers to study topics on which availability and accessibility of quantitative data is difficult. Given the multidisciplinary nature of the IB field, there is a need to include different methodologies and approaches for data collection and analyses. With the recent advancements in CATA techniques such as topic modelling, there is a potential to systematically and scientifically analyse a large volume of qualitative textual data for qualitative as well as quantitative studies. There is a clear push by journals and editors to publish more studies that use novel research methods to examine hitherto unanswered research questions (Doh, 2015; Suddaby, 2006; Pratt,

2009). We hope that this article encourages scholars to utilize content analysis in a rigorous manner in future review studies.

References

- Andrevski, G., Richard, O. C., Shaw, J. D., & Ferrier, W. J. (2014). Racial diversity and firm performance: The mediating role of competitive intensity. *Journal of Management*, 40(3), 820-844.
- Aykol, B., Palihawadana, D., & Leonidou, L. C. (2013). Research on the import activities of firms 1960-2010: Review, assessment, and future directions. *Management International Review*, 53(2), 215-250.
- Berelson, B. (1952). *Content analysis in communication research*. New York: Free Press.
- Bowman, E. H. (1984). Content analysis of annual reports for corporate strategy and risk. *Interfaces*, 14, 61-71.
- Bruning, N. S., Sonpar, K., & Wang, X. (2012). Host-country national networks and expatriate effectiveness: A mixed-methods study. *Journal of International Business Studies*, 43(4), 444-450.
- Bruton, G. D., Khavul, S., & Chavez, H. (2011). Microlending in emerging economies: Building a new line of inquiry from the ground up. *Journal of International Business Studies*, 42(5), 718-739.
- Buckley, P. J., Chapman, M., Clegg, J., & Mattos, H. G. (2014). A linguistic and philosophical analysis of emic and etic and their use in international business research. *Management International Review*, 54, 307-324.
- Chabowski, B. R., Samiee, S., & Hult, G. T. (2013). A bibliometric analysis of the global branding literature and a research agenda. *Journal of International Business Studies*, 44(6), 622-634.
- Cook, T. D., & Cambell, D. T. (1976). The design and conduct of quasi-experiments and true experiments in the field settings. In M. D. Dunnette, *Handbook of industrial and organizational psychology* (pp. 223-336). Chicago: Rand McNally.
- Costa, A. P., Sousa, F. N. de, Moreira, A., & Souza, D. N. de. (2017). Research through design: Qualitative analysis to evaluate the usability. In A. P. Costa, L. P. Reis, F. N. de Sousa, & D. Lamas, *Computer supported qualitative research* (pp. 223-336). Switzerland: Springer.
- Coviello, N. E. (2006). The network dynamics of international new ventures. *Journal of International Business Studies*, 37(5), 713-731.
- Doh, J. P. (2015). From the Editor: Why we need phenomenon-based research in international business. *Journal of World Business*, 50(4), 609-611.
- Drisko, J. W., & Maschi, T. (2016). *Content analysis*. New York: Oxford University Press.

- Duriau, V. J., Reger, R. K., & Pfarrer, M. D. (2007). A content analysis of the content analysis literature in organization studies: Research themes, data sources, and methodological refinements. *Organizational research methods*, 10(1), 5-34.
- Eggers, J. P., & Kaplan, S. (2009). Cognition and renewal: Comparing CEO and organizational effects on incumbent adaptation to technical change. *Organization Science*, 20(2), 461-477.
- Franzosi, R. P. (2004). Content analysis. In M. Hardy, & A. Bryman, *Handbook of data analysis* (pp. 547-565). New Delhi: Sage Publications.
- Gamache, D. L., Mcnamara, G., Mannor, M. J., & Johnson, R. E. (2015). Motivated to acquire? The impact of CEO regulatory focus on firm acquisitions. *Academy of Management Journal*, 58(4), 1261-1282.
- Griffith, D. A., Cavusgil, S. T., & Xu, S. C. (2008). Emerging themes in international business research. *Journal of International Business Studies*, 39(7), 1220-1235.
- Heyden, M. L., Oehmichen, J., Nichting, S., & Volberda, H. W. (2015). Board background heterogeneity and exploration-exploitation: The role of institutionally adopted board model. *Global Strategy Journal*, 5(2), 154-176.
- Holsti, O. R. (1969). Content analysis. In L. Gardner, & E. Aronson, *Handbook of social psychology* (pp. 596-692). Reading, MA: Addison-Wesley.
- Hope, O., Thomas, W., & Vyas, D. (2011). The cost of pride: Why do firms from developing countries bid higher?. *Journal of International Business Studies*, 42, 128-151.
- Jormanainen, I., & Koveshnikov, A. (2012). International activities of emerging market firms: A critical assessment of research in top international management journals. *Management International Review*, 52(5), 691-725.
- Krippendorff, K. (2004). *Content analysis: An introduction to its methodology*. Thousand Oaks, California: Sage.
- Lahiri, S. (2011). India-focused publications in leading international business journals. *Asia Pacific Journal of Management*, 28, 427-447
- Lam, S. S. K., & Schaubroeck, J. (2011). Information sharing and group efficacy influences on communication and decision quality. *Asia Pacific Journal of Management*, 28, 509-528.
- Lee, K., Yang, G., & Graham, J. (2006). Tension and trust in international business negotiations: American executives negotiating with chinese executives. *Journal of International Business Studies*, 37(5), 623-641.
- Leonidou, L. C., Katsikeas, C. S., & Coudounaris, D. N. (2010). Five decades of business research into exporting: A bibliographic analysis. *Journal of International Management*, 16(1), 78-91.

- Li, T., & Cavusgil, S. T. (1995). The classification and assessment of research streams in international marketing. *International Business Review*, 251-277.
- Liang, N., & Parkhe, A. (1997). Importer behavior: The neglected counterpart of international exchange. *Journal of International Business Studies*, 28(3), 495-530.
- Lim, L. K. S., Acito, F., & Rusetski, A. (2006). Development of archetypes of international marketing strategy. *Journal of International Business Studies*, 37(4), 499-524.
- Lombard, M., Snyder-Duch, J., & Bracken, C. C. (2002). Content analysis in mass communication research: An assessment and reporting of intercoder reliability. *Human Communication Research*, 28(4), 587-604.
- Marshall, H. (2002). What do we do when we code data? *Qualitative Research Journal*, 2(1), 56-70.
- Maxwell, J. A. (1997). Designing a qualitative study. In Bickman, L., & Rog, D. J., *Handbook of Applied social research method* (pp. 69-100). Thousand Oaks: Sage Publications.
- McGrath, J. (1982). Dilemmatics: The study of research choices and dilemmas. In J. E. McGrath, J. M. Martin, & R. A. Kulka, *Judgment calls in research* (pp. 69-102). Newbury Park, CA: Sage.
- Merchant, H. (2005). The structure–performance relationship in international joint ventures: A comparative analysis. *Journal of World Business*, 40(1), 41-56.
- Merchant, H. (2014). Configurations of governance structure, generic strategy, and firm size: Opening the black box of value creation in international joint ventures. *Global Strategy Journal*, 4(4), 292-309.
- Neuendorf, K. A. (2002). *The content analysis: Guidebook*. Thousand Oaks: Sage Publications.
- Piepenbrink, A., & Nurmammadov, E. (2015). A bibliometric analysis of the literature of transition economies and emerging markets. *Scientometrics*, 102(3), 2107–2130.
- Potter, W. J., & Levine-Donnerstein, D. (1999). Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research*, 27(3), 258-284.
- Pratt, M. G. (2009). From the editors: For the lack of boilerplate: Tips on writing up (and reviewing) qualitative research. *Academy of Management Journal*, 52(5), 856-862.
- Rynes, S., & Gephart Jr., R. P. (2004). From the editors: Qualitative research and the "Academy of Management Journal". *Academy of Management Journal*, 454-462.
- Scandura, T. A., & Williams, E. A. (2000). Research methodology in management: Current practices, trends, and implications for future research. *Academy of Management Journal*, 43(6), 1248-1268.

- Seno-Alday, S. (2010). International business thought: A 50-year footprint. *Journal of International Management*, 16(1), 16-31.
- Singh, J., Carasco, E., Svensson, G., Wood, G., & Callaghan, M. (2005). A comparative study of the contents of corporate codes of ethics in Australia, Canada and Sweden. *Journal of World Business*, 40, 91-109.
- Short, J. C., & Palmer, T. B. (2008). The Application of DICTION to Content Analysis Research in Strategic Management. *Organizational Research Methods*, 11(4), 727-752.
- Sinkovics, R. R., & Alfoldi, E. A. (2012). Progressive focusing and trustworthiness in qualitative research: The enabling role of Computer-Assisted Qualitative Data Analysis Software (CAQDAS). *Management International Review*, 52(6), 817–845.
- Sinkovics, R. R., Penz, E., & Ghauri, P. N. (2008). Enhancing trustworthiness of qualitative research in International Business. *Management International Review*, 48(6), 689–714.
- Suddaby, R. (2006). From the editors: What grounded theory is not? *Academy of Management Journal*, 49(4), 633-642.
- Suddaby, R., & Greenwood, R. (2005). Rhetorical strategies of legitimacy. *Administrative Science Quarterly*, 50(1), 35-67.
- Tsui-Auch, L. S., & Mollering, G. (2010). Wary managers: Unfavorable environments, perceived vulnerability, and the development of trust in foreign enterprises in China. *Journal of International Business Studies*, 41(6), 1016–1035.
- Tuselmann, H., Sinkovics, R. R., & Pishchulov, G. (2016). Revisiting the standing of international business journals in the competitive landscape. *Journal of World Business*, 51(4), 487–498.
- Weber, R. P. (1990). *Basic content analysis*. Newbury Park, CA: Sage.
- Welch, C., Piekkari, R., Plakoyiannaki, E., & Paavilainen-Mäntymäki, E. (2011). Theorising from case studies: Towards a pluralist future for international business research. *Journal of International Business Studies*, 42(5), 740-762.
- Welch, D., & Björkman, I. (2015). The place of international human resource management in international business. *Management International Review*, 55(3), 303-322.
- Wickham, M., & Woods, M. (2005). Reflecting on the strategic use of CAQDAS to manage and report on the qualitative research process. *The Qualitative Report*, 10(4), 687-702.
- Yang, Z., Wang, X., & Su, C. (2006). A review of research methodologies in international business. *International Business Review*, 15, 601-617.

Figure 1 (Types of literature review)

		SCOPE OF THEMATIC OR JOURNAL FOCUS	
		Narrow	Broad
AREA OF FOCUS	Research Theme*	Literature review of specific sub-field, like, export, cross-culture, internationalization of emerging market firms, resource-based view, M&A, bibliographic studies etc. Example: Aykol et al (2013)	Literature review of broader field, like, IB, international marketing, strategic management etc. Example: Griffith et al. (2008)
	Research Method	Literature review of a particular research method, like, content analysis, grounded theory etc. in relation with specific sub-field. Example – Duriau et al (2007)	Literature review of family of research methods such as qualitative, quantitative, multi-level. Example – Yang, Wang, and Su (2006)

*Non-methodology themes

Figure 2 (Classification of sample articles by research themes)

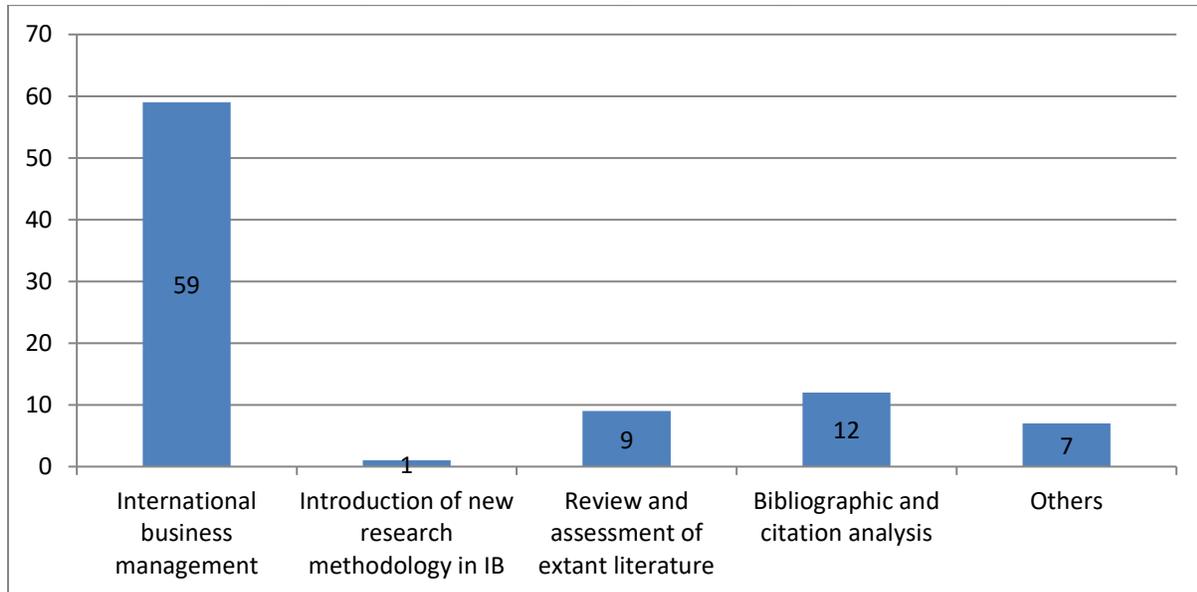


Table 1 (Steps in coding text and revising coding rules)

Step No	Descriptions
1	Definition of the recording units (e.g., word, phrase, sentence, paragraph).
2	Definition of the initial coding scheme
3	Test of coding on a sub-sample of sampled text.
4	Assessment of the accuracy and reliability of the sample coding
5	Revision of the coding rules/coding categories definition
6	Return to Step 3 until sufficient reliability is achieved
7	Coding of all the text

Source: Weber (1990)

Table 2 (Suggestive coding categories for four types of literature review)

Focus on research theme with narrow scope	Focus on research theme with broad scope	Focus on research method with narrow scope	Focus on research method with broad scope
<ol style="list-style-type: none"> 1. Research sub-themes (as per division and interest group of Academy of Management or different focus areas in JIBS) 2. Primarily variables – independent, moderators and dependent variables 3. Scope of study 4. Context of study 5. Type of study – conceptual or empirical 6. Theory(ies) employed 7. Key Findings 	<ol style="list-style-type: none"> 1. Research themes (as per division and interest group of Academy of Management) 2. Research sub-themes (as per division and interest group of Academy of Management or different focus areas in JIBS) 3. Context of study 4. Type of study – conceptual or empirical 5. Theory(ies) employed 	<ol style="list-style-type: none"> 1. Type of data sources 2. Type of data 3. Data collection method 4. Sampling technique 5. Type of analysis – cross-sectional or longitudinal 6. Multimethods – single or mixed method 7. Research design – inductive, deductive or both 8. Type of interpretation 9. Check for validity and reliability of results 	<ol style="list-style-type: none"> 1. Type of data sources 2. Type of data 3. Data collection method 4. Sampling technique 5. Type of analysis – cross-sectional or longitudinal 6. Research tradition – qualitative or quantitative 7. Method of analysis 8. Multimethods – single or mixed method 9. Research design – inductive, deductive or both 10. Type of interpretation 11. Check for validity and reliability of results

Table 3 (Coding scheme)

Parent category	Sub-categories	Explanation
Computer-assisted text analysis (CATA)	Yes/No	Whether the article uses CATA
Content analysis techniques	Frequency count	Count of number of units falling under coding categories
	Mapping into nominal/ordinal/ratio scale	Mapping of textual data (with selected unit of analysis) into some scale using some rules/formulae.
	Qualitative approach	Categorization, summarization and interpretation of textual data without using statistical interpretation
Focus of analysis	Latent	Inferred and indirect meaning
	Manifest	Obvious and direct meaning
	Both	
Longitudinal design	Yes/No	Longitudinal/ Cross-sectional
Multimethods	Elaboration	Different facets of the same phenomenon are analyzed and/or measured through alternative methods
	Integration	Two or more methods are used to analyse and/or measure single research question
	Single	Only one method is used
	Triangulation	Alternate method is used to verify the findings of main method
Objective of applying content analysis	Classification of source data	
	Construct operationalization	
Reliability check	Yes/No	
Research design	Deductive	Building generalizable statements from theories and extant literature
	Inductive	Building generalizable statements from data and observations
	Both	
	Descriptive	
Research theme	International business	
	Research methodology	
	Other focused areas	E.g. International human resource management
	Bibliographic and citation studies	
	Others	Other than above four research themes
Type of data	Annual reports	
	Business cases	
	Computerized database	
	Internal company documents	
	Interviews	
	Measurement items	
	Mission statements	
	Open-ended questions in surveys	
	Other field data	
	Other publicly available documents	
	Proxy statements	
	Scholarly journals	
	Trade magazines	
	Transcribed videotapes	
Type of interpretation	Qualitative	Interpretative inquiry like grounded theory approach, case study approach, discourse analysis, descriptive studies etc.
	Quantitative	Postpositivist inquiry using statistical techniques
	Both	

Table 4 (Year and journal-wise publication of content analysis based research articles)

	GSJ	IBR	JIBS	JIM	JWB	MIR	APJM	MOR	Total
1991	0	0	1	0	0	1	1	0	3
1992	0	0	0	0	0	1	0	0	1
1994	0	0	2	0	0	0	0	0	2
1995	0	1	0	0	0	0	0	0	1
1996	0	0	2	0	0	0	0	0	2
1997	0	1	2	0	0	0	1	0	4
1998	0	0	0	0	0	0	1	0	1
1999	0	0	0	0	0	0	3	0	3
2000	0	0	3	0	0	0	1	0	4
2001	0	1	0	0	0	0	1	0	2
2003	0	0	0	0	0	0	3	0	3
2004	0	0	0	0	0	0	1	0	1
2005	0	0	0	0	2	1	1	1	5
2006	0	1	4	1	1	0	0	0	7
2007	0	0	2	0	0	0		0	2
2008	0	0	1	0	0	1	1	1	4
2009	0	0	3	0	0	1	0	1	5
2010	0	0	2	2	0	1	0	0	5
2011	0	1	3	0	1	0	2	1	8
2012	0	2	2	0	2	2	1	0	9
2013	0	0	1	0	0	1	1	0	3
2014	1	0	0	0	0	2	1	0	4
2015	1	0	0	0	1	1	4	0	7
Total	2	7	28	3	7	12	23	4	86

Table 5 (Summary of coded articles)

Coding categories	Sub-categories	Number and percentage of articles coded*
Research themes	International business management	59 (68.6%)
	Introduction to new methods	1 (1.2%)
	Review and assessment of literature	9 (10.5%)
	Bibliographic and citation study	12 (14%)
	Others	7 (8.1%)
Objective of content analysis	Classification of source data	68 (79.1%)
	Construct operationalization	18 (20.9%)
Use of CATA	Yes	3 (3.5%)
	No	83 (96.5%)
Content analysis technique	Frequency count	47 (54.7%)
	Mapping into metric/non-metric scale	18 (20.9%)
	Qualitative approach	36 (41.9%)
Focus of analysis	Both	19 (22.1%)
	Latent	16 (18.6%)
	Manifest	51 (59.3%)
Longitudinal design	No	61 (70.9%)
	Yes	25 (29.1%)
Multimethods	Elaboration	9 (10.5%)
	Integration	26 (30.2%)
	Single	45 (52.3%)
	Triangulation	7 (8.1%)
Reliability check	No	49 (57.0%)
	Yes	37 (43.0%)
Research design	Both	20 (23.3%)
	Deductive	1 (1.2%)
	Descriptive	26 (30.2%)
	Inductive	40 (46.5%)
Type of data	Annual reports	15 (17.4%)
	Business cases	3 (3.5%)
	Computerized database	0 (0.0%)
	Internal company documents	7 (8.1%)
	Interviews	27 (31.4%)
	Measurement items	0 (0.0%)
	Mission statements	0 (0.0%)
	Open-ended questions in surveys	1 (1.2%)
	Other field data	4 (4.7%)
	Other publicly available documents	26 (30.2%)
	Proxy statements	0 (0.0%)
	Scholarly journals	22 (25.6%)
	Trade magazines	6 (7.0%)
Type of interpretation	Transcribed videotapes	3 (3.5%)
	Both	10 (11.6%)
	Qualitative	53 (61.6%)
	Quantitative	23 (26.7%)

*In some of the coding categories (e.g., *research themes*, *content analysis technique*, *type of data*), percentage may be higher than 100, this is due to coding of article(s) against more than one sub-categories.

Table 6 (Assessment of literature review articles against key benchmark criteria)

Author (s)	Journal	Type of literature review	Benchmark steps					
			Database selection	Sample selection	Coding Scheme and its validity	Coding of the entire sample text	Reliability checks	Summarization and interpretation
Li and Cavusgil (1995)	IBR	Research theme and method with broad thematic focus	✓	✓	Partial	✓	✗	✓
Yang, Wang, and Su (2006)	IBR	Research method with broad thematic focus	✓	✓	Partial	✓	✓	✓
Ilhan-Nas, Sahin, and Cilingir (2011)	IBR	Research theme with narrow thematic focus	✓	✓	✓	✓	✓	✓
Liang and Parkhe (1997)	JIBS	Research theme with narrow thematic focus	✓	✓	✓	✓	✗	✓
Griffith et al. (2008)	JIBS	Research theme with broad thematic focus	✓	✓	✗	✓	✗	✓
Chabowski et al (2013)	JIBS	Research theme with narrow thematic focus	✓	✓	✗*	✓	✗	✓
Leonidou et al (2010)	JIM	Research theme with narrow thematic focus	✓	✓	Partial	✓	✓	✓
Seno-Alday (2010)	JIM	Research theme with broad thematic and narrow journal focus	✓	✓	✓	✓	✗	✓
Jormanainen and Koveshnikov (2012)	MIR	Research theme with narrow thematic focus	✓	✓	✗	✓	✗	✓
Aykol et al (2013)	MIR	Research theme with narrow thematic focus	✓	✓	✗	✓	✓	✓
Welch and Björkman (2015)	MIR	Research theme with narrow thematic focus	✓	✓	✓	✓	✗	✓

* Being citation/co-citation analysis it does not require specific coding categories.

Annexure-I (Bibliographic detail of the sample articles)

Author(s)	Journal	Title
Palia and Liesch (1991)	APJM	Recent trends in Australian countertrades: A cross-national analysis
Ang (1997)	APJM	Fourteen years of research in the Asia Pacific Journal of Management
Wirtz (1998)	APJM	Development of a service guarantee model
Jeon, Franke, Huhmann and Phelps (1999)	APJM	Appeals in Korean magazine advertising: A content analysis and cross-cultural comparison
Siu and Kirby (1999)	APJM	Small firm marketing: A comparison of Eastern and Western marketing practices
Chen (1999)	APJM	The manufacturing strategy and competitive priority of SMEs in Taiwan: A case survey
Snell and Herndon Jr (2000)	APJM	An evaluation of Hong Kong's corporate code of ethics initiative
Tsang (2001)	APJM	Annual report disclosure and corporate legitimacy management: A study of Singapore companies' responses to the government's call for venturing abroad
Yan and Duan (2003)	APJM	Interpartner fit and its performance implications: A four-case study of U.S.-China joint ventures
Li (2003)	APJM	Toward a geocentric theory of multinational evolution: The implications from the Asian MNEs as latecomers
Fu and Tsui (2003)	APJM	Utilizing printed media to understand desired leadership attributes in the people's republic of China
Tan and See (2004)	APJM	Strategic reorientation and responses to the Asian financial crisis: The case of the manufacturing industry in Singapore
Nguyen, Weinstein and Meyer (2005)	APJM	Development of trust: A study of interfirm relationships in Vietnam
Xu, Yalcinkaya and Seggie (2008)	APJM	Prolific authors and institutions in leading international business journals
Lahiri (2011)	APJM	India-focused publications in leading international business journals
Lam and Schaubroeck (2011)	APJM	Information sharing and group efficacy influences on communication and decision quality
Soltani, Syed, Liao and Shahi-Sough (2012)	APJM	Tackling one-sidedness in equality and diversity research: Characteristics of the current dominant approach to managing diverse workgroups in Iran
Dou and Li (2013)	APJM	The succession process in Chinese family firms: A guanxi perspective
Park, Jung and Noh (2014)	APJM	Strategic action and customer mobility: Antecedents and consequences of strategic actions in the Korean mobile telecommunication service industry
Cooke and Saini (2015)	APJM	From legalism to strategic HRM in India? Grievance management in transition
Prashantham and Dhanaraj (2015)	APJM	MNE ties and new venture internationalization: Exploratory insights from India
Xu, Yang, Quan and Lu (2015)	APJM	Organizational slack and corporate social performance: Empirical evidence from China's public firms
Zhang, Deng, Zhang and Hu (2015)	APJM	Why do Chinese employees build supervisor-subordinate guanxi? A motivational analysis
Heyden, Oehmichen, Nichting, and Volberda (2015)	GSJ	Board background heterogeneity and exploration-exploitation: The role of institutionally adopted board model
Merchant (2014)	GSJ	Configuration of governance structure, generic strategy, and firm size: Opening the black box of value creation in international joint ventures
Li and Cavusgil (1995)	IBR	A classification and assessment of research streams in International Marketing
Perry (1997)	IBR	Total quality management and reconceptualising management in Africa
Singh and Schoenbachler (2001)	IBR	Communication strategies for technology products in Singapore: a content analysis
Yang, Wang, and Su (2006)	IBR	A review of research methodologies in international business

Ilhan-Nas, Sahin, and Cilingir (2011)	IBR	International ethnic entrepreneurship: Antecedents, outcomes and environmental context
Michailova and Minbaeva (2012)	IBR	Organizational values and knowledge sharing in multinational corporations: The Danisco case
Fletcher and Harris (2012)	IBR	Knowledge acquisition for the internationalization of the smaller firm: Content and sources
Mueller (1991)	JIBS	An analysis of information content in standardized vs. specialized multinational advertisement
Inkpen and Beamish (1994)	JIBS	An analysis of twenty-five years of research in the Journal of International Business Studies
Chandy and Williams (1994)	JIBS	The impact of journals and authors on international business research: A citation analysis of JIBS articles
Leonidou and Katsikeas (1996)	JIBS	The export development process: An integrative review of empirical models
O'Grady and Lane (1996)	JIBS	The psychic distance paradox
Tse, Pan and Au (1997)	JIBS	How MNCs choose entry modes and form alliances: The China experience
Liang and Parkhe (1997)	JIBS	Importer behavior: The neglected counterpart of international exchange
Harrison, McKinnon, Wu and Chow (2000)	JIBS	Cultural influences on adaptation to fluid workgroups and teams
Ostergard, Jr. (2000)	JIBS	The measurement of intellectual property rights protection
DuBois and Reeb (2000)	JIBS	Ranking the International Business Journals
Lim, Acito and Rusetski (2006)	JIBS	Development of archetypes of international marketing strategy
Luthans and Ibrayeva (2006)	JIBS	Entrepreneurial self-efficacy in Central Asian transition economies: quantitative and qualitative analyses
Lee, Yang and Graham (2006)	JIBS	Tension and trust in international business negotiations: American executives negotiating with chinese executives
Coviello (2006)	JIBS	The network dynamics of international new ventures
Hung, Li and Belk (2007)	JIBS	Glocal understandings: Female readers' perceptions of the new woman in chinese advertising
Nadkarni and Perez (2007)	JIBS	Prior conditions and early international commitment: The mediating role of domestic mindset
Griffith, Cavusgil and Xu (2008)	JIBS	Emerging themes in international business research
Witt and Redding (2009)	JIBS	Culture, meaning, and institutions: Executive rationale in Germany and Japan
Bruton, Ahlstrom and Puky (2009)	JIBS	Institutional differences and the development of entrepreneurial ventures: A comparison of the venture capital Industries in Latin America and Asia
Brannen and Peterson (2009)	JIBS	Merging without alienating: Interventions promoting cross-cultural organizational integration and their limitations
Tsui-Auch and Möllering (2010)	JIBS	Wary managers: Unfavorable environments, perceived vulnerability, and the development of trust in foreign enterprises in China
Ambos, Andersson and Birkinshaw (2010)	JIBS	What are the consequences of initiative-taking in multinational subsidiaries?
Bruton, Khavul and Chavez (2011)	JIBS	Microlending in emerging economies: Building a new line of inquiry from the ground up
Hope, Thomas and Vyas (2011)	JIBS	The cost of pride: Why do firms from developing countries bid higher?
Welch, Piekkari, Plakoyiannaki and Paavilainen-mäntymäki (2011)	JIBS	Theorising from case studies: Towards a pluralist future for international business research
Essen, Heugens, Otten and Oosterhout (2012)	JIBS	An institution-based view of executive compensation: A multilevel meta-analytic test

Bruning, Sonpar and Wang (2012)	JIBS	Host-country national networks and expatriate effectiveness: A mixed-methods study
Chabowski, Samiee and Hult (2013)	JIBS	A bibliometric analysis of the global branding literature and a research agenda
Ford and Ismail (2006)	JIM	Perceptions of effective leadership among Central Eurasian managers: A cultural convergence–divergence examination within a globalization context
Leonidou, Katsikeas and Coudounaris (2010)	JIM	Five decades of business research into exporting: A bibliographic analysis
Seno-Alday (2010)	JIM	International business thought: A 50-year footprint
Singh, Carasco, Svensson, Wood and Callaghan (2005)	JWB	A comparative study of the contents of corporate codes of ethics in Australia, Canada and Sweden
Merchant (2005)	JWB	The structure–performance relationship in international joint ventures: a comparative analysis
Sharir and Lerner (2006)	JWB	Gauging the success of social ventures initiated by individual social entrepreneurs
Wanasika, Howell, Littrell and Dorfman (2011)	JWB	Managerial leadership and culture in Sub-Saharan Africa
Bangara, Freeman and Schroder (2012)	JWB	Legitimacy and accelerated internationalisation: An Indian perspective
Agrawal, Khatri and Srinivasan (2012)	JWB	Managing growth: Human resource management challenges facing the Indian software industry
Chidlow, Ghauri, Yenyurt and Cavusgil (2015)	JWB	Establishing rigor in mail-survey procedures in international business research
Schroeder, Aggarwal and Gibson (1991)	MIR	Financial reporting by Japanese firms on the NYSE: An analysis of linguistic content
Chandy and Gopalakrishna (1992)	MIR	A content analysis of contributions to the Management International Review journal
Ibeh (2005)	MIR	Toward a greater level of international entrepreneurship among smaller agribusiness firms: Resource levers and strategic options
Liang and Lin (2008)	MIR	Erroneous learning from the West? A narrative analysis of Chinese MBA cases published in 1992, 1999 and 2003
Coudounaris, Kvasova, Leonidou, Pitt and Nel (2009)	MIR	Fifteen good years: An analysis of publications in Management International Review
Piekkari, Nell and Ghauri (2010)	MIR	Regional management as a system: A longitudinal case study
Jormanainen and Koveshnikov (2012)	MIR	International activities of emerging market firms: A critical assessment of research in top international management journals
Alvi (2012)	MIR	Rethinking the institutional contexts of emerging markets through metaphor analysis
Aykol, Paliwadana, and Leonidou (2013)	MIR	Research on the import activities of firms 1960–2010 review, assessment, and future directions
Buckley, Chapman, Clegg and Gajewska-De (2014)	MIR	A linguistic and philosophical analysis of emic and etic and their use in international business research
Puthusserry, Child, and Rodrigues (2014)	MIR	Psychic distance, its business impact and modes of coping: A study of British and Indian partner SMEs
Welch and Björkman (2015)	MIR	The place of international human resource management in international business
Weber, Ames and Blais (2005)	MOR	'How Do I Choose Thee? Let me count the ways': A textual analysis of similarities and differences in modes of decision-making in China and the United States
He and Tian (2008)	MOR	Government-oriented corporate public relation strategies in transitional China
Zhang, Dolan, Lingham and Altman (2009)	MOR	International strategic human resource management: A comparative case analysis of Spanish firms in China

Wasti, Tan and Erdil (2011)	MOR	Antecedents of trust across foci: A comparative study of Turkey and China
-----------------------------	-----	---

¹ Manifest content: Focus of analysts is on easily observable meanings in a body of textual data, such as number of appearances of a word or group of words, length of commercials in TV channels, number of times handgun is fired etc.

² Latent content: Focus of analysts is on meaning underlying the texts, such as political message in a comedy show, quality of newspaper reporting etc. Latent content involves subjective interpretations of coders.

³ Potter & Levine-Donnerstein (1999) have made further classification of latent content into “pattern form of latent content” and “projective form of latent content”. In pattern content, focus is on patterns in the content itself which is considered to be objective in nature so that coders could recognize them without much use of personal judgement.

⁴ Coding categories, coding scheme and coding rules: A coding category corresponds to characteristic of interest analyst is looking for in a body of textual data. The set of all coding categories to be applied to a body of textual data is known as a coding scheme. Coding rules is more comprehensive in the sense that it contains the definition of coding categories with guidelines for coders to objectively extract uniform and standardized information from a body of textual data without or with minimum need for application of subjective interpretations by coders (Franzosi, 2004).

⁵ Projective latent content: In projective content, locus of meaning lies in the way coders make judgement about the content applying their personal schema. The distinction between pattern and projective content is primarily based on the degree of involvement of subjective interpretation or personal schema of the coders.