



## The strong need for extended research and replications in Latin American and emerging markets

You send a paper to a Q1 WoS-indexed business journal, and a couple of days later, the associate editor sends you a polite desk rejection letter saying that: "...although we value your research, and the sound methodology, and the very relevant and strong sample, we do not see value in replication studies that do not include other variables or help the theory-building process. We wish you the best with the study and we invite you to have our journal in mind for your future research...". Of course, you are disappointed. To your knowledge, the study has not been replicated in the US or overseas. But your 2000+-subjects study, drawn from several cities and towns in Brazil, retesting for the first time three hypotheses in the original paper -run with 250+ college students in a US university town- was not enough to pass the editorial decision. After a couple of further attempts, you end up publishing the manuscript in a good but regional journal.

### 1. Problems generated by the lack of replications in business research

If you have been in business research for some time, and you reside or work in less covered countries in the business research world, you probably have had similar experiences, and as adaptive individuals, you probably have developed some strategies to cope with this general practice (or policy). For example, you add concepts, dependent or independent variables to the previous model, you add mediators or moderators, you gather data from multiple cultures or countries, or you partner with scholars in the US, Europe, Australia to collaborate with their newer studies, working with samples and issues relevant to those markets.

However, as you may infer if all well-trained emerging markets researchers follow these strategies several problems emerge. First, it generates a dynamic negative stimulus towards re-testing, confirming, or duplicating research, against the scientific method and statistical theory, and other sciences practices (see for example [Fanelli, 2010](#)). Second, good quality research is not granted the visibility it deserves, which is bad for knowledge and science. Relevant evidence in those studies is obscured and less accessible to the scientific community, preventing knowledge advancement. Third, these policies increase the file drawer bias which is critical in business and the social sciences ([Rosenthal, 1979](#)). Researchers with relevant results may prefer to keep their research in their drawers and not bother with trying to publish these findings. Moreover, if such replication research provides negative results (does not confirm hypotheses), very relevant outputs and findings in the field may be lost, since even local or second-tier business journals also suffer from positive results publishing bias. Fourth, researchers may think that some replication studies are needed,

particularly for testing propositions, hypotheses, and theories in their contexts (very practice-oriented impact) but may discard such endeavors given their lower likelihoods to get published in top journals. Finally, this process creates the wrong incentives for the top-trained Ph.Ds in emerging nations, turning their interests and minds to newer problems or to very specific but not so important issues ([Churchill, 1988](#)); but avoiding relevant and needed research serving their societies, business communities, and students (see the RRBM position paper 2017, for a stronger argumentation in favor of responsible research in business).

### 2. Replication bias in business research from Latin America is larger than in social and natural sciences

Science is supposed to be built through the cumulative (collaborative & competitive) work of academics and scientists that applying sound methods try to address, represent, understand the world. Imagine that you are testing the effect of a new strategic management process to rescue and save distressed or bankrupt small businesses. It seems scientific and obvious that if you are testing this business "vaccine" or "antiviral treatment", you would prefer to have it tested in several small firm populations, and that you would like to combine both experimental evidence and process-related in-depth qualitative evidence. Will you trust knowledge based on a single study performed in a small university city town in the UK or the USA, or would it be better you wait until several studies confirm, repeat (or not) the results in the original study.

Natural sciences perform these pure replications all the time. Sometimes, competing research groups using similar data try to replicate the results to find errors in the original study (favoring their hypotheses) or they faithfully replicate the results (see for example [Gertler, Galiani, & Romero, 2018](#)). In both cases, knowledge is gained, and the state of the art in terms of knowledge in the discipline is better. If the new evidence is against the original hypotheses future work can consider both studies and avoid the risks of assuming the original study results for granted. If the second study provides support to the original one, the new study can have more confidence in the strength of the theory and may attempt to falsify (test) it again, with a similar population or in a different context. In both cases replications serve science.

If this is true for the natural sciences and medicine, it is also true for social sciences and business disciplines. However, there is some evidence of a strong bias against replication studies and negative results-studies as has been found in the literature (see [Beyer, 1978](#); [Evan-schitzky, Baumgarth, Hubbard, & Armstrong, 2007](#); [Fanelli, 2011](#); [Gertler et al., 2018](#)). Sometimes, researchers have the wrong belief that they can substitute replicating supporting evidence for higher p-values

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in a single study (Bettis, Ethiraj, Gambardella, Helfat, & Mitchell, 2016) or for a very sophisticated research method. To have a very low p-value (0,001) says nothing about the repeatability of the evidence, it only says that in that particular sample, the probability of having the supporting evidence obtained is high. Theory testing and falsifying requires repeating results and requires repeating it in different populations and contexts to ensure external validity and generalizability (Camerer et al., 2018; Cook & Campbell, 1979).

To document some of these arguments we examined the Clarivate Web of Science research database. WoS-indexed journals are considered as the most reputable business journals in Latin America. We used the complete database from 1975 to 2019 of the Science and Social Science collections of the Web of Science. Following Makel, Plucker, and Hegarty (2012), we searched the term “replicat\*” in the titles and abstracts of all articles included in this database. We understand that this is a rough estimate of replication research, since *replicat\** may be used for other types of specific studies, not necessarily involving replication studies in the manner we have been using it in this paper. Reducing this bias is the goal of future research endeavors, but we offer these as initial findings that readers can scrutinize and use.

Results are presented in Tables 1 and 2. Tables compare the presence of *replicat\** papers from Latin America in the Sciences and the Social Sciences (and other regional areas: total = world, USA, other = total – (LatAm + USA)). You can observe that Latam replications in Science fields are a much larger percentage – 1,99% of total Science papers – than in Social Sciences where replication papers from LatAm are only 0.81% of all social science Latin American-based papers. Latam replication studies in Sciences double Latam replications in Social Sciences percentagewise. Interestingly, replications from the USA (1.47%) are also close to double LatAm replications incidence.

We wanted to check if the same patterns of Social Sciences research hold in the fields of business and economics. For this purpose, we analyzed the records of four web of science categories: economics, business, business & finance, and management. We created a supra category of Business & Economics including all four fields; and we also made separate counts for Business (including business, business & finance & management) and Economics (economics WoS category) papers. Table 2 shows that the representation of Business & Economics total papers by researchers located in Latin America is even lower than in the Social Sciences and Sciences: 2.2% versus 3.4% and 4.9% respectively. This reduced percentage is even lower for replication papers: 0.63% for Business & Economics, 0.81% for Social Sciences, and 1.99% for Sciences.

Also, if you compare the percentages of Latin American based replication studies in the different fields, you can see that they are the least present in Business: 9.3% in Sciences, 2.3% in Social Sciences, 2.4% in Business & Economics, 2.9% in Economics, and only 2.0% in Business studies. These results show that LatAm replications in business research are four times lower than LatAm replications in Science fields. These results coincide with the idea that sometimes disciplines perceived ad lower in the hierarchy of science, tend to be less receptive to replications

and negative results studies than disciplines at the top (Fanelli, 2010). This preliminary data provides additional support for the argument that we need more replication studies based in Latin America, particularly in Business Research.

### 3. Businesses, managers and students need more replication studies in Latin America and emerging markets

Despite many calls in different business-related disciplines for the need of more replications (Bettis, Helfat, & Shaver, 2016; Easley, Madden, & Dunn, 2000, marketing; Kerr, Schultz, & Lings, 2016, Mittelstaedt & Zorn, 1984; Reid, Soley, & Wimmer, 1981), the response has been narrow and limited. Most top journals in business and related disciplines (see Gertler et al., 2018, for economics) publish few replications, and if they do, normally they provide evidence rebutting the original paper.

Editorial boards, journal editors, business academic associations need to assess societal needs and rethink their strategies, identifying relevant advantages that create value, and serve the different constituencies and potential users of business knowledge (RRBM, 2017). As in any market, if they do not take into account trends, new options and outlets will emerge that will serve better those societal needs. This is an even more relevant issue for Latin American or Emerging Markets business research. Latin America is one of the continents that need businesses to create value, jobs, innovations, to serve their communities, to fight poverty, and promote prosperity. Lots of studies are needed to illuminate Latam’s business education and corporate and governmental practices. Sound, relevant, business and management research is key. However, few international well-reputed journals publish business studies based on this area of the world (see Olavarrieta & Villena, 2014). Indeed, business academia is still developing in our region, but more coverage is needed. There are some globally prestigious journals like the Journal of Business Research and the Journal of Business Ethics that systematically publish Latin American business research, but more efforts are needed. Business journal editorial boards have an important gatekeeper role that may affect research resource allocation in emerging countries and its future development.

However, there are some indications that this state of things may change in the future. For example, the Strategic Management Journal (SMJ) in 2016 (see Bettis, Ethiraj, & et al., 2016) published a special issue on replication research, and more interestingly, they radically changed the editorial policies of SMJ encouraging quality replication research in strategy. This might spark a change in the editorial policies of other top-tier journals. Other journals are also promoting replication research (see for example Kerr et al., 2016 Journal of Advertising, or Block & Kuckertz, 2018 Management Review Quarterly, or a recent call by the Journal of Family Business Strategy). A second signal indicating a starting trend comes from the changes in the institutional assessment of Universities and Business Schools. The loss of public funding and the need to increase relevance to students and the business community is also changing the institutional assessment and accreditation criteria of

**Table 1**  
Replications in sciences & social sciences: world, USA vs LATAM.

Collection	Area	Total Papers	% of Total	Replicat* papers	% of Replicat*	% of Area
Sciences	Total	21,642,729	100%	227,501	100.0%	1.05%
	LatAm	1,057,862	4.9%	21,099	9.3%	1.99%
	USA	5,706,162	26.4%	91,277	40.1%	1.60%
	Other	14,878,705	68.7%	115,125	50.6%	0.77%
Collection	Area	Total Papers	% of Total	Replicat* papers	% of Replicat*	% of Area
Social Sciences	Total	3,028,921	100.0%	35,999	100.0%	1.19%
	LatAm	101,565	3.4%	827	2.3%	0.81%
	USA	1,241,582	41.0%	18,200	50.6%	1.47%
	Other	1,685,774	55.7%	16,972	47.1%	1.01%

\* = indicates papers that have the word Replicat\* (and derivations) in the title or in the abstract.

**Table 2**  
Replications in social sciences & business/economics: world, USA vs. LatAm.

Collection	Area	Total Papers	% of Total	Bus/Econ Replicat*	% of Replicat*	% of Area	Business* papers	% of papers	% of Business*	% of Area	Economics* papers	% of papers	% of Economic*	% of Area
Business & Economics	Total	809,016	100.0%	4662	100.0%	0.58%	2749	100.0%	100.0%	0.34%	2184	100.0%	100.0%	0.27%
	LatAm	17,491	2.2%	111	2.4%	0.63%	54	2.0%	2.0%	0.31%	63	2.9%	0.36%	0.27%
	USA	343,289	42.4%	2219	47.6%	0.65%	1430	52.0%	52.0%	0.42%	922	42.2%	42.2%	0.27%
	Other	448,236	55.4%	2332	50.0%	0.52%	1265	46.0%	46.0%	0.28%	1199	54.9%	54.9%	0.27%

\* = indicates papers that have the word Replicat\* (and derivations) in the title or in the abstract.

business schools. Most relevant accreditation agencies in the global Business School arena, are looking for impact measures of a school's activities. The narrow assessment of research using just index impact factors is being complemented with evidence of the application and relevance of such research to local business communities, and non-academic stakeholders. This trend is backed up by several calls to senior researchers to set up different examples and values in the field (see RRBM, 2017, Harley, 2018).

### 3.1. Business replication research types

To promote and encourage replication endeavors in Latin America and Emerging Markets, we offer in Table 3 a working classification of replication studies based on Bettis, Helfat, & et al., 2016, Easley et al., 2000, Tsang and Kwan (1999), and related works. Replication studies can be classified according to the *similarity of data* used and the *similarity in method/design*. Studies may use the exact same sample, a different sample from the same population, a different population sample, and a different context sample. Research studies can also vary in terms of the research design/model used, i.e.: exactly the same research design/model, different research design (measures, data gathering, analysis techniques), and research/model extension (inclusion of new variables in the design, new independent or dependent variables, moderators and mediators).

By combining these two dimensions, twelve replication types are identified. Each type of replication study contributes to business science in different ways: detecting errors, method artifacts, supporting reliability, external validity and generalizability, cross/context generalizability, and promoting theory development. Authors can use this classification for planning replication research design, for clarifying objectives, and for better position their papers at the writing and submission stage. Consistent with Bettis, Ethiraj, & et al., Bettis, Helfat, & et al. (2016), this classification proposes three major groups of replications: narrow or simple replications -also called duplications- (using same research designs/models and identical or similar samples), quasi replications that use samples from different populations in similar contexts or research designs/models, and cross-context quasi replications that use samples in different contexts and different research designs or models.

For all the reasons laid out in this introduction, we believe that more replication studies are needed for better understanding business reality, and for correctly identifying sound and more likely theories from weak speculations based on single/study evidence (see for example Evanschitzky et al., 2007). We argue that this need is particularly important in the context of Latin America and Emerging markets since most business theories are published in journals based in developed (US and Europe) countries and supported by evidence from such populations, cultures, markets, and institutions. The consideration of different contexts is important and necessary for theory testing, just for the sake of repeating results and providing evidence for theory testing and also for assessing generalizability, boundary conditions, or contingency variations for previously tested hypotheses thus extending and developing theory and generating more relevant knowledge for local and global business and management practice.

## 4. Synthesis of the special collection

In this section, we present the papers of the special collection. We organized them by major subfields.

### 4.1. Entrepreneurship and family business

Amoros, Cristi, and Naude explore the role of motivation (necessity vs. opportunity) on entrepreneurs' subjective well being. They use the Global Entrepreneurship Database, finding similar levels of well-being for both types of motivations. Interestingly, they provide evidence that

**Table 3**  
Types of replication studies.

	<b>Research DESIGN Similarity</b>	<b>Same Research Design</b>	<b>Different Research Design</b>	<b>Different Research Model/ Variables</b>
<b>DATA Similarity</b>		Repetition Different software or version	Different measures, methods (may include some control variables)	Inclusion of variables: Dependent, Independent, Moderating, Mediating
<b>Same Dataset (Pure)</b>	Managers in US food industry	<b>Pure Duplication</b>  Checking for <u>errors</u> or software/code effects	<b>Pure Quasi Replication</b>  Method artifacts, Robustness of hypotheses and theory	<b>Pure Extension Replication</b> <u>Intervening variables or controls</u> , fit improvement, theory development
<b>Same Population/ Different Sample (Faithful)</b>	Managers in US food industry (different sample)	<b>Faithful Duplication</b> Errors, <u>Reliability</u> and <u>Repeatability</u>	<b>Faithful Quasi Replication</b> <u>Reliability</u> , <u>Repeatability</u> and <u>Robustness</u> to design change	<b>Faithful Extension Replication</b> <u>Intervening variables or controls</u> , fit improvement, <u>repeatability</u> & theory development
<b>Different Population</b>	Managers in US Financial Sector	<b>Population Duplication</b> Reliability and <u>Generalizability</u> to other populations	<b>Population Quasireplication</b>  <u>Reliability</u> , <u>Generalizability</u> , and <u>Robustness</u>	<b>Cross Population Extension</b> Reliability, <u>Generalizability</u> and <u>&amp; theory development</u>
<b>Different Context</b>	Managers in Chile food industry	<b>Context Quasi Duplication</b> Generalizability to a new Context (subjects, industry, period, etc.) Reliability, <u>Generalizability</u> to other contexts, theory development	<b>Context Quasi Replication</b>  <u>Cross context Generalizability Robustness and Theory Development</u>	<b>Cross Context Extension</b>  <u>Cross context Generalizability and &amp; theory development</u>

Adapted from Bettis, Helfat, & et al. (2016), Tsang and Kwan (1999). Color codes corresponding to Bettis, Helfat, & et al. (2016) categories: White = Narrow Replications, Midgray = Quasi Replications, Darker gray = Cross Context Quasi replications.

entrepreneurship itself may generate higher levels of subjective well-being.

Jara Bertin, López, and Torres examine a Chilean sample of family-controlled firms showing a U-shaped relationship between voting rights divergence in the corporate governance and firm value. Excessive divergence in rights may reduce the value of firms. Additionally, they provide evidence regarding the moderating role of business group affiliation in the previous relationship and examine the role of family CEOs may help performance and value at lower levels of rights divergence, but lower or null effects, when the divergence increases. Interesting implications for corporate governance design are derived in this study.

#### 4.2. Finance

In an interesting study, Garay examines a particular investment market: the market for Artworks. They analyze auction prices for 5961 artworks executed by top Venezuelan artists worldwide from 1969 to 2014. They find that some idiosyncratic variables like artist reputation and aesthetic style can be key explanatory variables for price variance. However, they argue that, contrary to the literature, a strong “master-piece effect” is the key explaining factor for artworks.

In their paper, González, Guzmán, Téllez, and Trujillo, address the issue of financial corporate communications and information disclosure practices and their effect on market valuation and financial performance. From their study of over 450 Latin American firms, they show a positive effect of better information disclosure practices. Also, they provide further evidence that the tone of such information may have an

impact: a positive tone will increase valuation and financial performance while an uncertain tone will generate negative effects.

#### 4.3. Marketing

Heldt, Silveira, and Luce examine RFM (recency, frequency, monetary) models to estimate customer value. They extend previous models by introducing the product perspective, suggesting the idea to compute customer value by products to aggregate them in a second phase to obtain the firm's customer value. They test the model in a financial services company and a supermarket, finding that this model increases prediction efficacy when recency and purchase frequency vary by product, as it is often the case.

Soccer or football is a relevant sport and business around the world, particularly in the case of global events like the World Cup. Uribe, Buzeta, Manzur, and Alvarez take a look at the factors affecting TV audience size for the FIFA world cups by contrasting matches with and without the national teams, and World Cups with and without the participation of such teams. Interestingly, they find that the predictors of match audiences vary from one case to another, with relevant implications for advertising and media planning decisions and tv programming.

#### 4.4. Human resource management

Training is a relevant activity in a business. Since a large amount of resources are allocated each year to training activities, several experts have suggested different methods and factors that may affect its efficiency and effectiveness. Cotes and Ugarte study the use of Training Needs Analysis (TNA) in a financial institution using data analytics. They find evidence that a systemic and strategic approach for TNA generates better results than the regular competence-based approach.

#### 4.5. Strategy

In the final paper of this special section, Torres, Barrera, Kunc, and Charters, examine the adoption factors of wine Tourism in Chile using a combination of methods: systematic literature review and semi structured interviews of Winery managers, and system dynamics modeling. Five drivers are identified including word-of-mouth recommendations, product attractiveness, internet information, related tourism services, and tour operators' actions. Authors identify factors that may affect short term adoption and highlight the role of product attractiveness that has a stronger influence over the long term.

#### References

Bettis, R. A., Ethiraj, S., Gambardella, A., Helfat, C., & Mitchell, W. (2016). Creating repeatable cumulative knowledge in strategic management: A call for broad and

- deep conversation among authors, referees, and editors. *Strategic Management Journal*, 37, 257–261.
- Bettis, R. A., Helfat, C. E., & Shaver, J. M. (2016). The necessity, logic, and forms of replication. *Strategic Management Journal*, 37, 2193–2203.
- Beyer, J. (1978). Editorial policies and practices among leading journals in four scientific fields. *Sociological Quarterly*, 19(Winter), 68–88.
- Block, J., & Kuckertz, A. (2018). Seven principles of effective replication studies: Strengthening the evidence base of management research. *Management Review Quarterly*, 68, 355–359.
- Camerer, C. F., Dreber, A., Holzmeister, F., Ho, T.-H., Huber, J., Johannesson, M., et al. (2018). Evaluating the replicability of social science experiments in nature and science between 2010 and 2015. *Nature Human Behavior*, 12(2), 637–644. <https://doi.org/10.1038/s41562-018-0399-z>.
- Churchill, Gilbert A. (1988). Comments on the AMA Task Force Study. *Journal of Marketing*, 52, 26–31.
- Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis issues for field settings*. New York: Houghton-Mifflin.
- Easley, R. W., Madden, C. S., & Dunn, M. G. (2000). Conducting marketing science: The role of replication in the research process. *Journal of Business Research*, 48(1), 83–92. [https://doi.org/10.1016/S0148-2963\(98\)00079-4](https://doi.org/10.1016/S0148-2963(98)00079-4).
- Evanschitzky, H., Baumgarth, C., Hubbard, R., & Armstrong, S. (2007). Replication research's disturbing trend. *Journal of Business Research*, 60, 411–415.
- Fanelli, D. (2010). "Positive" results increase down the hierarchy of the sciences. *PloS ONE*, 5. <https://doi.org/10.1371/journal.pone.0010068>.
- Fanelli, D. (2011). Negative results are disappearing from most disciplines and countries. *Scientometrics*, 90, 891–904. <https://doi.org/10.1007/s11192-011-0494-7>.
- Gertler, P., Galiani, S. S., & Romero, M. (2018). How to make replication the norm. *Nature*, 554, 417–419.
- Harley, B. (2018). Confronting the crisis of confidence in management studies: Why senior scholars need to stop setting a bad example. *Academy of Management Learning & Education*. <https://doi.org/10.5465/amle.2018.0107>.
- Kerr, G., Schultz, D. E., & Lings, I. (2016). Someone should do something: Replication and an agenda for collective action. *Journal of Advertising*, 45(1), 4–12. <https://doi.org/10.1080/00913367.2015.1077492>.
- Makel, M. C., Plucker, J. A., & Hegarty, B. (2012). Replications in psychology research: How often do they really occur? *Perspectives on Psychological Science*, 7(6), 537–542.
- Mittelstaedt, R. A., & Zorn, T. S. (1984). Econometric replication: Lessons from the experimental sciences. *Quarterly Journal of Business and Economics*, 23(Winter), 9–15.
- Olavarrieta, S., & Villena, M. (2014). Innovation and business research in Latin America: An overview. *Journal of Business Research*, 67(4), 489–497.
- Reid, L., Soley, L. C., & Wimmer, R. D. (1981). Replication in advertising research: 1977, 1978, 1979. *Journal of Advertising*, 10(1), 3–13.
- Rosenthal, R. (1979). The file drawer problem and tolerance for null results. *Psychological Bulletin*, 86(3), 638–641. <https://doi.org/10.1037/0033-2909.86.3.638>.
- RRBM Co-founders (2017, revised 2020). A vision for responsible research in business and management: Striving for useful and credible knowledge. Position Paper, accessible from [www.rrbm.network](http://www.rrbm.network).
- Tsang, E. W. K., & Kwan, K.-M. (1999). Replication and theory development in organizational science: A critical realist perspective. *Academy of Management Review*, 24(4), 759–780. <https://doi.org/10.5465/AMR.1999.2553252>.

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