

#### COMMENTARY

# Making the abstract concrete: A case for structured abstracts in organizational sciences

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Despite significant efforts by organizational researchers to modernize academic writing by enhancing structure, clarity, and style (e.g., Grant & Pollock, 2011; Johanson, 2007; Lange & Pfarrer, 2017; Locke & Golden-Biddle, 1997; Pollock & Bono, 2013), the modern abstract remains unaddressed. According to the American Psychological Association (APA, 2022), the abstract's goal is to convey the article's purpose and content to the reader through a comprehensive summary. However, beyond formatting recommendations (e.g., no indent, single paragraph), this definition lacks structural guidance and leaves room for subjective interpretation. Consequently, the persistence of the traditional, unstructured abstract has contributed to numerous issues in the field, impeding scientific and practical progress.

One major issue, highlighted by Zhou and colleagues (2024), is the abstract's harmful effect on the science-practitioner gap. Abstracts are sometimes the only access a practitioner or organization has to current literature due to paywalls and limited database access. Even for those who can obtain full access to a paper, abstracts are an important first impression for readers as they determine a research article's applicability. Given that 99.9% of US businesses are small (fewer than 500 employees; US SBA, 2022) and have limited access to research literature, it is essential to consider how practical implications for larger organizations can apply to smaller businesses. However, traditional abstracts offer minimal insight into incorporating evidencebased practices, hindering their application in both large and small businesses. Thus, although Zhou et al., provide broad recommendations for improving the gap (e.g., conducting research that is more relevant for small businesses, capitalizing on the utility of I-O scholars that work in the applied space, consider structural factors of organizations when making recommendations), we focus on the front line of science communication: the abstract. In this commentary, we build on Zhou et al.'s study by advocating for the widespread adoption of structured abstracts. We offer resources for authors and editors to integrate structured abstracts into their work. First, we discuss the benefits of structured abstracts for science and practice, and then we provide strategies and tools to promote their use.

# The promise of structured abstracts

Research consistently shows that traditional, unstructured abstracts are ineffective for science communication. They often lack critical background information, fail to report specifics regarding the sample and study procedures, and hinder readability for academics (Cook et al., 2007; Graf-Vlachy, 2022; Hartley & Betts, 2009; Plavén-Sigray et al., 2017). These issues extend to the communication of practical implications, where researchers often fail to consider and clearly convey feasible, practical applications, reducing practitioners' ability to grasp and implement the

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research (Islam et al., 2018; Olenick et al., 2018; Rogelberg et al., 2022; Rynes, 2012). For example, Bartunek (2007) found that more than one-third of articles published in the 2006 edition of the *Academy of Management Journal* lacked a practical implications section, and those that did tended to provide oversimplified and redundant recommendations. Because practical implications are crucial and sought out by practitioners, these should be emphasized and communicated clearly in the abstract.

In contrast, empirical evidence indicates that structured abstracts improve readability, clarity, and cross-cultural translation (Hartley, 2003; Hartley & Benjamin, 1998; Whissell, 1999). Structured abstracts are popular in disciplines like medical journals, biology, and computer sciences and have long been advocated by psychologists (Harris et al., 2002). Hartley (2003) suggests organizing abstracts into background, aim(s), method(s), results, and conclusions. Emerald Publishing exemplifies this approach by using a similar format (i.e., purpose, methodology, findings, and originality/value) and providing detailed guidelines for its sections, encouraging authors to detail their research (Emerald Group Publishing Limited, 2005, 2024). This format is effective across disciplines and methodologies. Regardless of the specific structure, abstracts should follow the research article's flow: purpose, research goal, methods, key findings, and practical applications.

There are a few advantages of structured abstracts that would benefit practitioners and researchers alike. First, structured abstracts improve readability and comprehension by reducing the use of complex jargon and overly complicated language, making scientific information more accessible to practitioners and laypeople. Plavén-Sigray and colleagues (2017) found that niche, scientific jargon damages the readability of abstracts. Authors in the organizational sciences often use overly complicated wording and grammar to amplify the impression of intelligence at the cost of readability and comprehension (Oppenheimer, 2006). As a result, practitioners and laypeople often struggle to understand technical jargon and academic language in abstracts. However, structured abstracts significantly reduce ambiguity for the authors about what to include in their abstract while also improving readability, comprehension, and informativeness for the audience (Hartley, 1994, 2003; Hartley & Benjamin, 1998). Because structured abstracts reduce sentence length and simplify language, they limit the use of unnecessary technical jargon. This clarity benefits both science and practice.

Second, structured abstracts provide more accurate information. Often, abstracts fail to fully represent the research article by either including unnecessary details or omitting pertinent information (Harris, 2002). These findings highlight the value of refining abstract-writing techniques to enhance both the creation and consumption of academic content. Furthermore, an abstract's readability has implications for researchers who use systematic article selection methods (e.g., systematic reviews) as they risk excluding articles that could be useful due to unclear and unnecessarily complex language (Boell & Cecez-Kecmanovic, 2015).

Finally, structuring abstracts may also improve cross-cultural research dissemination. Indeed, another benefit of structured abstracts is improving translation of research across both cultural contexts and languages (Hartley, 2003). Complex writing styles in English contribute to translation issues. For example, nominalization, which occurs when verbs or adjectives are made into nouns (e.g., translate vs. translation) is often used to condense sentences while maintaining meaning and formality. This writing style is challenging for international authors due to a lack of skill and awareness of different English expressions (Su & Qiu, 2023). Furthermore, similar translation issues are supported by research (Hosseingholipour et al., 2021; Klimova, 2013; Linder, 2014; Su & Qiu, 2023). Structured abstracts reduce these issues by encouraging authors to revise their abstracts to ensure clarity and simplicity in writing and to improve translatability.

Some researchers may have concerns about adopting the structured abstract format. For example, changing to structured abstracts may raise concerns about journals needing to increase their abstract word count (Harbourt et al., 1995; Hartley, 2002, 2003) or restricting the creativity of

authors as they summarize their findings. Previous concerns about space in journals become minimal and less significant as research shifts toward virtual dissemination. As a result, increasing the word count or space needed to accurately summarize one's article should not be a problem, especially considering the benefits. Additionally, authors can still express their writing style and voice within the recommended structured format.

# Strategies for implementation and moving the field forward

In our discussion about how to implement structured abstracts as a field moving forward, we recognize that the role of the author, editor, scientific organization, or publisher may require different approaches to adopting the structured abstract. We have created resources adapted from similar resources in other fields (e.g., Hartley & Benjamin, 1998; Hartley & Betts, 2009), including a checklist and an evaluation form, to guide authors and editors in this process.

Starting with authors, the Author's Checklist for Structured Abstracts (See Appendix A) can be adopted to produce more clear and structured abstracts moving forward. Additionally, authors may need to manage editorial pushback (if any) during the publication process. Hartley and Betts (2009) recommend that if structured abstracts face pushback from publishers and journals, authors should first write their abstracts in a structured format and then remove the headings to present the information in a more traditional format. These suggestions offer promising avenues for authors seeking to implement structured abstracts with minimal disruption to the current research process.

Established researchers may have more influence over the publication process as editors or members of editorial boards. Due to their influence and connections, these individuals can serve as liaisons between authors and publishers. As such, editors and the editorial team can also play a key role in implementing structured abstracts. One way to implement structured abstracts would be to request structured abstracts and disseminate resources on how to properly write structured abstracts during the review process. In fact, researchers could adopt evaluation forms that can be used by researchers and editors alike as they develop their abstracts (Hartley & Benjamin, 1998; Hartley & Betts, 2009). See Appendix B for one such form.

Finally, scientific organizations such as APA or journal publishers can also help implement structured interviews. One way to do this would include updating current abstract guidelines to recommend structured abstracts within the APA *Publication Manual*. Specifically, the Working Group on Journal Article Reporting Standards (JARS) provides the APA Publications and Communications Board with background and recommendations on information that should be included in manuscripts submitted to APA journals. They achieve this by proposing recommendations to inform future, new editions of the APA *Publication Manual*. With several authors serving as role models and urging from editorial teams, this idea could reach the JARS Group during their background research and inform new policies in a future edition of the APA *Publication Manual*.

Some publishers, such as Emerald Publishing, have already adopted structured abstracts to improve science communication. This format helps researchers quickly assess the relevance of papers. Emerald implemented this change by notifying authors and editorial teams and continues to enforce this structure across journals. In addition to their guidelines for each subheading, they also recommend following the paper's chronology and including practical and social implications to emphasize the research's practitioner perspective. Other publishers could improve their abstract formats by following Emerald's example and providing clear guidelines for structured abstracts. In sum, it is imperative the field (authors, editors, organizations, and publishers) does not revert to unstructured abstracts but rather provides ways that positively reinforce and incentivize structured abstracts.

#### Conclusion

In conclusion, establishing the use of structured abstracts as standard practice in the organizational sciences would provide multiple benefits to researchers and practitioners alike. The minimally disruptive changes we propose to the field and individual research teams would improve science communication both among and beyond other researchers.

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# Appendix A. Abstract Checklist for Authors

### Background

• Is previous literature discussed?

#### Aim

- · What is the purpose of the current paper?
- · What is the problem the authors solve?
- Are the hypotheses and/or research questions mentioned?

#### Methods

- · How many studies are included?
- · Indicate the methodology (e.g., quantitative, qualitative, mixed methods, review, meta-analysis, etc.) of each study
- Indicate the sample size and relevant characteristics of the sample
- Indicate source of data (e.g., archival data, primary data collection), if applicable
- · Indicate the setting of the study
- · Describe the procedure
- · Indicate how key variables were operationalized

#### Results

- · Are the main results presented accurately?
- Are actual statistical significance values presented rather than generalized information (i.e. report p-values and other exact figures)?
- · Are insignificant results omitted?

# Originality/Value

- Describe your paper's contribution to the overall literature
- · Describe feasible, practical implications

#### Writing Clarity

- · Are you using active voice rather than passive voice?
- Did you use relevant keywords (i.e. words or phrases a researcher might use when searching for a paper on this topic)?
- Did you remove excessive, technical jargon?

# Appendix B. Abstract Evaluation Form for Editors/Reviewers

This document is for editors and reviewers to evaluate the quality of the research paper's abstract. The score for each category can range from 0 to 3 or N/A:

- 0 information is completely missing
- 1 information is presented inaccurately, or relevant information is omitted
- 2 information is accurate and thorough, but the language should be adapted (i.e. excessive technical jargon, using passive voice, etc.)
- 3 information is accurate, and writing and clarity is good. Proper keywords are used.

N/A - This criterion is not applicable for this type of article or for this outlet

|                   | <u>Score (0-3)</u> |
|-------------------|--------------------|
| Background        |                    |
| Aim(s)            |                    |
| Method            |                    |
| Sample            |                    |
| Results           |                    |
| Originality/value |                    |
| Implications      |                    |

Cite this article: Roux, S. M. & Burke, V. (2024). Making the abstract concrete: A case for structured abstracts in organizational sciences. *Industrial and Organizational Psychology* 17, 443–448. https://doi.org/10.1017/iop.2024.50