研究成果報告書 科学研究費助成事業

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課題番号: 18K00735

研究課題名(和文) Understanding why authors of medical research articles use hypes and how these influence readers

研究課題名(英文)Understanding why authors of medical research articles use hypes and how these

influence readers

研究代表者

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交付決定額(研究期間全体):(直接経費) 2,100,000円

研究成果の概要(和文): 医学研究者は、研究記事を執筆する際に、大げさな表現を用いるという傾向がますます増えてきている。例えば、robust, novel, innovative, unprecedented, excellent, talentedなどの、主観的で人の目を引くような言葉を用いて、その研究分野、メソッド、結果を、読む者にとってより興味深く見えるようにするということである。この研究では、(1)なぜ研究者は大げさな表現を用いるのか、(2)大げさな表 現が読む者にどういった影響を与えるかを検証した。

研究成果の学術的意義や社会的意義

Results serve to sensitise reviewers, editors and authors to value-laden language in scientific writing. We have highlighted implications for writing instruction, advocating a critical pedagogical approach to help students unpack ethical and practical issues surrounding hype in research writing.

研究成果の概要(英文): Authors of medical research increasingly 'hype' their research; that is, use subjective, promotional language to make the research field, methods or results seem more appealing to the readers (e.g. words such as robust, novel, innovative, unprecedented, excellent, talented). In this research, we (1) assessed authors' motivations for the use of hype, and (2) how 'hype' influences consumers of médical research.

In an interview study with seven authors, we found that all participants identified hype in their writing as promotional in function. Motives for hyping related to external editorial intervention, linguistic ability, and replication of conventionalised discourse, underlined by pressure to publish, and writing instruction. In an experimental study, we found that the presence in abstracts of hype had no statistically significant on clinicians' evaluation of the research.

研究分野: Applied Linguistics

キーワード: Discourse analysis ESP Medical Ethics

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1.研究開始当初の背景

There is a growing tendency for authors to 'hype' their research – that is, use subjective language to make the research field, methods or results seem more appealing to the target readers (e.g. words such as *robust*, *novel*, *innovative*, *unprecedented*, *excellent*, *talented*). Commentators on and researchers of scientific discourse argue that the use of hype subjugates the real significance of a study to the attitudes of the authors, and that such language may undermine efficient, objective, and disinterested interpretation.

2. 研究の目的 [Purpose of research]

This study set out to understand why hypes are used in medical literature and what effect they have on consumers. More specifically, the study sought to elucidate (1) authors' motivations for the use of hype, and (2) how 'hype' influences consumers of medical research.

3 . 研究の方法 [research method]

In the first study, we sought to understand **why** authors use hype. We used informant interviews to explore the writing preferences, practices and processes of seven authors who have recently published clinical research articles. Using open-ended prompts we elicited perceptions of rhetorical effectiveness and community discourse conventions, and self-reported motivations for using hype in their writing. In the second, we sought to understand **how** hype influences readers. We conducted an experiment in which 16 practicing clinicians were asked to read and evaluate of 'hyped' and 'un-hyped' versions of the same abstracts reporting the results of clinical trials. Our analyses assessed how hype targeted at different aspects of the research influences readers' evlauations.

4 . 研究成果 [research result]

In the first study assessing why authors hype, the informants, all users of English as an additional language, identified the function of most hypes as promotional in nature – e.g. emphasising methodological rigour, claiming priority, highlighting the implications. Factors influencing the use of hype included authors' struggle for objectivity, external editorial intervention, linguistic ability and replication of conventionalised discourse. This study was published in 2021 in the journal *English for Specific Purposes*.

In the second study assessing the impact of hype, we found no significant difference clinicians' evaluation of abstracts containing hype compared to those containing no hype.

However, participants did tend to evaluate hyped research as more novel. The lack of a statistically significant results points to the experiment being underpowered. Based on this study, we have calculated a sample size necessary to assess differences between the groups are preparing to extend the study. The initial study has been accepted as a pilot study for publication in the *Canadian Journal of Chiropractic*.

This research has also generated hypotheses that we are now testing. Specifically, we are conducting a large-scale analysis of hype in funding applications in order to assess changes in hype over time and the relationship between hype in funding calls, applications and subsequent publications. We hypothesize that hype can, in part, be traced back to funding agencies. A paper reporting initial findings is under review with the *Journal of the American Medical Association*.

Along with evidence from other studies, these findings serve to sensitize stakeholders (e.g. funding agencies, reviewers, editors, authors/applicants) to the increasing prevalence of value-laden language in scientific writing. In our publications, we have focused at length on the implications for formal writing instruction. Specifically, rather than encouraging students to use hype, we make suggestions for a more critical pedagogical approach to help students unpack various possible ethical and practical issues surrounding its use in research writing. Future activities will widen the impact of this work and raise awareness of hype among, for example, funding agencies and journals.

5 . 主な発表論文等

「雑誌論文】 計2件(うち査読付論文 2件/うち国際共著 2件/うちオープンアクセス 0件)

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1.著者名	4 . 巻
Millar Neil、Budgell Brian、Salager-Meyer Francoise	60
2.論文標題	5.発行年
Hype in reports of clinical research: The authors' perspectives	2020年
3.雑誌名	6.最初と最後の頁
English for Specific Purposes	53 ~ 64
担裁会立のDOL(ごぶん川 ナブジークト 禁団フト	<u></u> 査読の有無
掲載論文のDOI(デジタルオブジェクト識別子)	
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+ 1,7047	
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オープンアクセスではない、又はオープンアクセスが困難	該当する

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1.著者名	4 . 巻
Budgell Brian, Millar Neil	2022
2.論文標題	5.発行年
Impact of hype on clinicians' evaluation of trials: A cluster randomized controlled pilot	2022年
The part of the property of th	
3.雑誌名	6.最初と最後の頁
Journal of the Canadian Chiropractic Association	2022
掲載論文のDOI(デジタルオブジェクト識別子)	査読の有無
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オープンアクセス	国際共著
オープンアクセスではない、又はオープンアクセスが困難	該当する

〔学会発表〕 計3件(うち招待講演 0件/うち国際学会 3件)

1.発表者名

Neil Millar; Brian Budgell; Francoise Salager Mayer

2 . 発表標題

Understanding why authors of clinical research articles hype

3 . 学会等名

COMET 2019 (Communication, Medicine, and Ethics Conference) (国際学会)

4.発表年

2019年

1.発表者名

Neil Millar; Brian Budgell; Francoise Salager Mayer

2 . 発表標題

Authors' use of hype in clinical research articles

3 . 学会等名

BAAL 2019 (British Association of Applied Linguistics) (国際学会)

4.発表年

2019年

1.発表者名
Neil Millar; Brian Budgell; Francoise Salager Mayer
2 改主 博用
2 . 発表標題
"This is the first research to prove that": Why do authors of clinical research use hype?
3.学会等名
ALAPP 2019 (Applied Linguistics and Professional Practice) (国際学会)
4.発表年
2019年
(Mark) tight

〔図書〕 計0件

〔産業財産権〕

〔その他〕

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6 . 研究組織

	氏名 (ローマ字氏名) (研究者番号)	所属研究機関・部局・職 (機関番号)	備考

7.科研費を使用して開催した国際研究集会

〔国際研究集会〕 計0件

8. 本研究に関連して実施した国際共同研究の実施状況

共同研究相手国	相手方研究機関
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