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Towards evidence-based writing advice: Using applied linguistics to understand reviewers' expectations

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Abstract

Several best practice articles in management journals provide prospective authors with guidelines on how to satisfy the explicit and implicit expectations of editors and reviewers in management research. Although these suggestions may be particularly beneficial for non-US authors, who lack visibility in high impact journals, the suggestions are usually not based on empirical data. Thus, we argue that writing advice should be evidence-based, and explain what the field of applied linguistics has to offer in this regard. Using the linguistic concept of hedges (words reducing commitment to claims), we analyze 1,991 management research articles written by US, European, and Indian scholars. We find that European and Indian researchers use hedges less often, suggesting that expectations of reviewers from US journals are likely unmet. More generally, our research implies that research socializations might influence authors' and reviewers' perception of the necessity of rhetorical devices. Our hope is that the results of this study might raise the awareness for such peculiarities of language and convince editors and reviewers to become more tolerant of them.

Keywords: hedging in management research articles, expectations of reviewers, center-periphery debate

Introduction

Only a handful of management journals are widely read, influencing research debates and generating new research questions (Judge, Cable, Colbert, & Rynes, 2007; Podsakoff, MacKenzie, Podsakoff, & Bachrach, 2008). Accordingly, researchers around the world endeavor to have their research published in one of these high impact journals, as academic success is related to the impact a paper makes (Canagarajah, 2002; Judge et al., 2007; Monastersky, 2005). Despite the often-invoked motto "publish or perish" (e.g., Harzing, 2007), space in high impact journals is limited, and with more and more submissions pouring in, rejection rates of 90% and more are nowadays common (APA, 2013).

Editors are increasingly realizing that many promising studies might remain unpublished because the structural design, language, or quality of the manuscripts do not meet with the editors' and reviewers' expectations (see Eden & Rynes, 2003). Researchers from outside the US in particular seem to experience these difficulties, as their visibility in high impact journals is comparatively low (e.g., Cascio & Aguinis, 2008). For example, an editorial series in the *Academy of Management Journal* from 2011-2012 made various suggestions for fulfilling editors' and reviewers' expectations (e.g., how to choose a topic or discuss implications), with the aim of increasing the chances of getting research published in top-tier journals (e.g., Colquitt & George, 2011; Sparrowe & Mayer, 2011). However, these suggestions mostly stem from experience-based knowledge, with successful researchers in the field sharing their personal experiences and thus often relying on best practice examples rather than on empirical evidence or research frameworks (e.g., Grant & Pollock, 2011).

Thus, it seems important to reach out to other disciplines that provide a research framework in which to analyze the expectations of editors and reviewers. In the field of applied linguistics, a large number of studies have linked writing styles to success in research (e.g., Hyland & Salager-Meyer, 2008; Swales, 2004). In particular, researchers' use of hedges, that is

authors' use of certain words and phrases to reduce their commitment to a proposition (e.g., it *may* be.., it is *likely* that…, it *seems* that…) has gained a great deal of attention in the applied linguistics literature, as the purpose of research communication is perceived as being not only to communicate results but also to convey attitudes and to evaluate previous work (Hyland, 2002). However, to date, no research has shed light on successful management researchers' use of hedges.

Hence, our study seeks to gain an understanding of linguistic success factors that influence the acceptance of research manuscripts in management research. In this study, we focus on human resource management/industrial and organizational psychology (HR/IOP), as researchers have argued that this field is most vulnerable to cultural influences, meaning that generalizable knowledge can only be created by incorporating a multitude of views from across the world (e.g., Gooderham & Brewster, 2008; Laurent, 1986; Schneider, 1988). Therefore, we analyze the use of linguistic devices (i.e., hedges, which are defined as words that reduce commitment to a proposition) that have been found to be a key characteristic of high impact HR/IOP journal articles (Hyland, 1998).

We argue that hedges constitute a rather implicit form of academic writing knowledge, of which non-US researchers might not be as aware, and thus might partially explain the limited visibility of non-US researchers in high impact journals. Taking into account the visibility of various countries/regions in high impact journals, we hypothesize that US researchers use hedges more frequently than European and Indian researchers. To this aim, we compare 1,991 papers from US, European, and Indian high impact journals with respect to the frequency of hedges. We find the expected pattern of highest usage of hedges for US authors, comparatively lower usage for European authors, and lowest usage for Indian authors. These results imply first, that once reviewers and editors of high impact journals become aware of such peculiarities of language, they might become more tolerant of them, and second, that non-US researchers' awareness of

these peculiarities might increase their likelihood of getting their research published in high impact journals.

Theoretical background

Management research

Achieving publication in a high impact journal is still exceptional for researchers from countries other than the US (Baruch, 2001; Alcadipani, Khan, Gantman, & Nkomo, 2012; Tsui, 2007). Although the number of contributions from countries outside the US has steadily increased, the representation of non-US authors remains very low. For example, Baruch (2001) found that the number of non-US authors in management journals such as *Academy of Management Review*, *Human Relations* or *Administrative Science Quarterly* in the last decades was below 10%. Furthermore, Podsakoff et al. (2008) found that only a few universities and authors, almost exclusively affiliated with the US, account for most of the citations in the highest impact management journals and thus influence research debates.

Various reasons might go some way to explaining this high proportion of US contributors: For example, out of the top ten management journals, only two have their origins in countries other than the US (i.e., *Journal of Operations Management* and *Journal of Information Technology*, see Thomson Reuters, 2013). Furthermore, the composition of editorial boards might influence the content that is published (Harzing & Metz, 2013; Ozbilgin, 2004; Weller, 2001), and adding radically new concepts and ideas to an already ongoing discussion on empirical theories and models is a more difficult task than addressing research gaps (Hollenbeck, 2008). Thus, the dominance of one country in the most relevant management journals has left some researchers wondering whether the research presented in these journals can be generalized to other countries, and whether the research community is missing out on inspirational theories and methodological frameworks from other parts of the world (Joy & Poonamallee, 2013; Ozbilgin, 2004; Üsdiken, 2014).

However, it should be acknowledged that most of the modern knowledge and studies on management originated in the US, and therefore research outlets from the US have traditionally been seen as the premier outlets for management research (Üsdiken, 1996, 2014). This perspective, while historically accurate, needs to be reevaluated. For example, already, almost half of the Academy of Management members are currently from outside the US (with a continuing upward trend), and thus the demand for contextualized and generalizable management knowledge is likely to increase (Academy of Management, 2015). In contrast, the number of non-US editors and reviewers in high impact journals has not kept up with this pace, creating challenges for the evaluation of manuscripts (Burgess & Shaw, 2010; Ozbilgin, 2004).

Nonetheless, management journals have recognized the necessity of incorporating multiple perspectives to enrich scientific discussions, and have hence pushed for an internationalization of their readers and contributors (Eden & Rynes, 2003). Furthermore, journal editors and reviewers have also realized that a good and innovative research idea is not the sole factor to take into consideration in a peer review, and is therefore not sufficient for publication in a high impact journal (Colquitt & George, 2011). Accordingly, a well thought-out and well-conducted study that has followed all the rules of good scientific research might be rejected due to its presentation and narrative framing in the research article (Hollenbeck, 2008). It is therefore crucial that authors consider issues pertaining to the language and structure of research articles if they are hoping for acceptance by a high impact journal (Gosden, 1995).

Such language or structural challenges do not primarily relate to the appropriate use of vocabulary, punctuation or grammar; rather, they refer, for example, to the rhetorical structure of sections and the ability to effectively use nuanced language (Burrough-Boenisch, 2003). A recent editorial series in the *Academy of Management Journal* specifically addressed issues ranging from the expected structure of an introduction to creating a meaningful discussion (Geletkanycz & Tepper, 2012; Grant & Pollock, 2011). Such knowledge is relevant to native English speakers

and non-native speakers alike, as they are all seeking to participate in the community of international researchers. However, non-native speakers' research socialization and language proficiency might differ, and they might therefore be less aware of these implicit structures, nuanced language and how to present and frame research articles compared to US researchers and their coworkers (Canagarajah, 1996; Flowerdew, 2001).

Nevertheless, most would agree that research papers should not have lower chances of publication merely because they do not fulfill the language-related expectations of editors and reviewers (Alvesson & Gabriel, 2013; Flowerdew, 2000). For non-native speakers in particular, this creates a huge challenge: They have to communicate their research in a foreign language and at the same time adhere to structures which, at best, they have come to know from a handful of best practice examples of successful authors (e.g., Webster & Watson, 2002). While, generally speaking, there is little to criticize about best practice examples from experts, which might help authors to improve their manuscripts, evidence-based research and data to underpin these suggestions is limited. In order to advise researchers on creating research papers that adhere to certain rules, a more systematic analysis of editors' and reviewers' expectations is necessary. To this aim, we can look beyond management research and into a research field that has devoted itself to the analysis of situated language and offers more systematic approaches: applied linguistics.

Applied Linguistics

There have been several attempts to utilize language aspects in the management field in order to systemically analyze, for example, differences in the linguistic styles of leaders' speeches (Bligh, Kohles, & Meindl, 2004; Pennebaker & Lay, 2002) or free riding in teams (Urbig, Terjesen, Procher, Muehlfeld, & Witteloostuijn, 2015). The field of applied linguistics as such was established to target practical and everyday challenges of language (including language in academic settings) and ranges from normative descriptions by linguistic experts regarding how

language should be to data-oriented analyses of language (Davies & Elder, 2004). For a long time, academic writing was perceived as an objective and impersonal form of delivering knowledge to an audience of likeminded researchers, which focused solely on content (c.f. Hyland, 2005). This view has changed dramatically in the last decades, and research communication is nowadays seen as a means of interpersonal discussion that explicitly aims at persuading readers (Hyland, 1998).

More specifically, applied linguists assume that researchers construct socially acceptable writing conventions within academic communities, also called genres, where the structure of a research article (textual aspects) and the factoring in of readers' knowledge and attitudes by writers (interpersonal aspects) play a significant role (Hyland, 2002; Swales, 1990). This so-called metadiscourse assists readers "to connect, organize, and interpret material in a way preferred by the writer" (Hyland & Tse, 2004, p. 157) and aims at persuading readers of the veracity of the presented arguments.

Research communication not only serves the purpose of communicating content, but also refers to positioning oneself in a debate, trying to persuade the reader of theories and findings, while at the same time acknowledging that differing or opposing views might exist (Ashford, 2013; Hyland & Salager-Meyer, 2008; Hyland & Tse, 2004). The interaction between reader and writer requires the author to consider the reader, for instance by being modest and demonstrating respect for the reader, who might hold an opposing view (Burrough-Boenisch, 2002; Vold, 2006). For this reason, some researchers consider one of the functions of metadiscourse to be a strategy of politeness, through which authors actively seek approval for their theses and give readers the benefit of the doubt to disapprove of their theses and restrict their appreciation and acknowledgement (Myers, 1989; Vold, 2006). One of the key elements of interpersonal metadiscourse that has attracted a great deal of attention is the use of cautious and tentative

statements to enable the interaction partner to respond even to strong utterances. Applied linguists also refer to this as hedging (Burrough-Boenisch, 2002; Gosden, 1995).

Hedging

The concept of hedging was first introduced by Lakoff (1973), who broadly defined it as "words that make things fuzzy". A later and more refined definition referred to hedges as "any linguistic means used to indicate either a) a lack of complete commitment to the truth value of an accompanying proposition, or b) a desire not to express that commitment categorically" (Hyland, 1998: 1). The use of hedges enables authors to refrain from their statements and avoid accountability for their claims (Salager-Meyer, 1994). Accordingly, hedging can be regarded as a vehicle to qualify commitment to the theoretical underpinnings and results of a study. If authors are rather uncertain regarding particular interpretations, data or theories, they can avoid making a strong commitment to statements by using hedges. Similarly, a reduction in hedging can occur if new knowledge gains acceptance in the research community and withstands rigorous scientific analysis (Burrough-Boenisch, 2005; Crompton, 1997; Hyland, 1996a). Therefore, authors who wish to be tentative, cautious, and considerate can still convey their attitude while at the same time incorporating possible objections and criticism into their arguments and interpretation of literature (Burrough-Boenisch, 2002; Hyland, 1996a).

Hyland (1998) classified hedges into two categories: lexical and non-lexical hedges. Lexical hedges, which typically make up approximately 85% of the total amount of hedges, are in turn divided into three subgroups: *modals* (e.g., *may*, *would*), lexical verbs (e.g., *indicate*, *suggest*), and *noun*s, *adjective*s and *adverbs* (e.g., *possibility*, *likely*, *somewhat*). Non-lexical hedges, which are used rather seldom, are highly dependent on the context and consist of more than just one word, for example "*Consistent with theory XY…*".

Especially in research communication, readers of empirical research articles seem to expect authors to use hedges (Hyland, 1998). For example, Crismore and Vande Kopple (1997)

described that researchers are often actively encouraged to use hedges wherever they are not presenting facts, but rather hypotheses, predictions, and assumptions. However, in management research fields such as HR/IOP, facts rather rarely form the basis of scientific discussion, and therefore a tentative and cautious framing of one's own findings and interpretations is key to gaining acceptance for one's hypotheses. In this regard, Crismore and Vande Kopple (1997) found that a hedged text increases the likelihood that a reader will experience a more positive attitude towards the content of a text, and the reader should also experience a larger learning gain in comparison to an unhedged text.

Analyses of scientific journals that originated in and are still affiliated with the US have shown hedging to be highly common in these journals (e.g., Burrough-Boenisch, 2002; Hyland, 1998b). Nonetheless, it seems reasonable to assume that readers of these journals, who themselves might have published or plan to publish similar studies, will expect authors to sufficiently hedge a research article to avoid overstating the impact of their study (Hyland, 1998). Similarly, authors have to consider that statements that are perceived as being too strong might create reactance on the readers' part and thus reduce the likelihood of gaining acceptance (cf. Tjosvold, Wong, & Feng Chen, 2014).

Editors and reviewers comprise the first barrier that has to be crossed if research manuscripts are to find their way into journals. Thus, authors have to prevent their writing style from creating reactance at this crucial barrier (cf. Eden & Rynes, 2003). Studies hint at great similarities between the expectations of reviewers and editors of journals that have a similar impact and geographically confined authorship compared to those with a geographically more diverse authorship (see Vold, 2006b). As the overwhelming majority of editorial board members and reviewers of many high impact management journals are from North America (Burgess & Shaw, 2010; Ozbilgin, 2004), it seems plausible to expect a comparatively higher frequency of hedging.

Hence, if readers as well as editors and reviewers are used to reading hedged research articles, and hedges increase the credibility of research reports (Jensen, 2008), it makes sense to assume that hedges are expected in research articles. This is underlined by the fact that initial reviews by editors and reviewers often note that the claims in a respective article are too strong, and thus run the risk of encountering objections (Burrough-Boenisch, 2002), and native speakers of English tend to add more hedges to research articles rather than remove them (Burrough-Boenisch, 2005). Therefore, it seems to be more likely that a high frequency of hedges will be expected in top US journals such as the *Journal of Management* or *Personnel Psychology*, where very low proportions of editorial board members are from outside the US (60 out of 281 and 3 out of 73, respectively), according to their official websites.

The situation is different in journals with origins outside the US. For example, research in other fields demonstrated that papers published in Chinese, Bulgarian or Finnish tend to show fewer hedges compared to papers published in English (Hu & Cao, 2011; Vassileva, 2001; Ventola, 1997), and non-native speakers of English seem to rarely use hedges when writing in English (Nikula, 1997). Additionally, the use of hedges constitutes a rather implicit form of academic writing knowledge, of which second-language learners might not be as aware (Hyland, 2000), and which is not considered as important in non-English-language research journals (Burrough-Boenisch, 2002; Hyland, 1998; Salager-Meyer, 1994; Vold, 2006). Even in the US, aspiring researchers (i.e., PhD students) acquire these specialized language skills in academic writing workshops (e.g., Corson, 1997). For researchers who have not been "research-socialized" in the US, acquiring the skills to attenuate their own assertions, and thus conveying modesty, is a very difficult task (e.g., Holmes, 1988; Hyland, 1998). Therefore, they focus rather on clarity, argumentation, and coherence of manuscripts (Kwan, 2013).

Consequently, there might be a greater leniency during the evaluation of language-related aspects in journals with nationally diverse editorial and review boards. European journals, for

example, publish a higher number of articles by non-US authors, usually have a globally more diverse editorial board, and often explicitly encourage researchers from around the world to contribute their research findings (cf. for example the mission statements of *Applied Psychology: An International Review* or the *European Journal of Work and Organizational Psychology*). Given that there is a relationship between the frequency of hedges and publication in high impact journals, management researchers from European countries should use less hedges than their US counterparts. Accordingly, it is likely that a lower frequency of hedges will be expected in articles published in journals with a nationally diverse editorial board compared to journals with a predominantly US editorial board .

In contrast, management researchers from countries that have a very low visibility in high impact journals may not be aware of the importance of hedges at all. This is likely to apply in particular to researchers who mostly publish in their native language and are thus not well acquainted with the peculiarities of academic English (Cargill & O'Connor, 2006). However, it should also apply to researchers who choose to publish in local English-language journals, which are almost exclusively read and also reviewed by local researchers and therefore do not place a great emphasis on hedging (e.g., IJIR, 2014). With respect to the frequency of hedges in journals this means that the frequency of hedges should be lowest in journals from countries with a low visibility in management research as well as a predominantly non-US and nationally homogeneous editorial board and highest in journals with a predominantly US editorial board, with journals with a nationally diverse editorial board being in the middle.

H1: Hedges are found most often in journals with a predominantly US editorial board, followed by journals with an internationally more diverse editorial board, and then by journals with a predominantly local non-US editorial board.

Method

Sample

We limited our analysis to the management research field of HR/IOP in order to reduce any confounding effect of the different foci of the journals (Vold, 2006). Therefore, we selected research articles from HR/IOP journals that predominantly publish work by US authors, journals that have a more diverse and cross-national authorship, and journals that predominantly publish local work from one country. We selected US high impact journals, as most authors of research articles in high impact HR/IOP journals are from the US (see Cascio & Aguinis, 2008). For journals with a more international authorship, we tried to narrow down journals that did not originate in the US, do not exclusively focus on cross-cultural issues, and at the same time have a respectable impact. Thus, we selected European journals. Lastly, we wished to analyze journals from a country that has a very low visibility in international HR/IOP research (Shen et al., 2011), and selected Indian journals for several reasons: (a) Almost all management-related journals in India are published in English, (b) Indian academics often learn English as a first language (Medgyes, 1992), making it possible to ascertain whether differences in hedging are not attributable to language competency, and (c) as Indian management journals are explicitly targeted at the local community, their editorial boards and reviewers are almost exclusively from India.

Our aim was to compare research with the highest impact and relevance to the respective research communities. Therefore, for the US sample, the journals *Personnel Psychology* (impact factor: 4.54) and the *Journal of Applied Psychology* (impact factor: 4.37) were chosen for two reasons: (a) Both journals are represented in the categories “Management” as well as “Psychology, Applied” in the Journal Citation Report 2013, and (b) they are the highest-ranked journals with a focus on HR/IOP topics (see Deadrick & Gibson, 2007; also see Appendix for a list of the Top 10 journals in the field of management and psychology, applied, Thomson

Reuters, 2013). Similarly, for the European sample, we selected the highest-ranking European journals in the category "Management" or "Psychology, Applied" with a clear focus on HR/IOP topics (Thomson Reuters, 2013). Thus, we chose *Applied Psychology: An International Review* (impact factor: 2.10) and the *European Journal of Work and Organizational Psychology* (impact factor: 2.46). As the impact factor is not a reliable indicator for peripheral countries such as India, we interviewed 11 local research experts in India about the most relevant scientific HR/IOP journals that are comparable to the US sample (see Hyland, 1998; Wagner & Wong, 2012). Based on these interviews, we selected *Management and Labour Studies*, *Vision: The Journal of Business Perspective* and the *Indian Journal of Industrial Relations*.

We analyzed empirical articles published between 2006 and 2013 in all of the journals. As applied linguistics researchers suggest that there might be differences in the rhetorical structure of theoretical papers, case studies and empirical research articles (see Swales, 2004), and as qualitative research articles are often subjected to harsher criticism and evaluation due to methodological weaknesses (Diefenbach, 2009; Rynes & Gephart, 2004), we decided to limit our analysis to empirical research articles that primarily analyze quantitative data. We did not differentiate between articles with shorter versus longer theoretical parts, as long as there was an empirical part which analyzed quantitative data. As many of the Indian articles were either theoretical research papers (with no empirical data analysis at all) or case studies, only 239 research papers ultimately fulfilled the prerequisites of presenting quantitative-empirical management research. A scan of the *Scopus* database resulted in a total of 987 articles fulfilling these prerequisites in the *Journal of Applied Psychology* and *Personnel Psychology*, and 480 articles in *Applied Psychology: An International Review* and the *European Journal of Work and Organizational Psychology*. To assure that hedging was not a phenomenon of higher impact journals but rather a US phenomenon regardless of impact, we also included a US journal that was comparable to the other US journals with respect to content but had an impact factor that

was more comparable to the European journals. Thus, we selected 285 articles from the *Journal of Business and Psychology* (impact factor: 1.54) and assumed that there should be no significant differences in the frequency of hedges across all US journals. Accordingly, our total sample consisted of 1,991 articles.

As we counted the frequencies of words/hedges using qualitative data analysis software, which has proven to be a reliable methodology (see Pennebaker & Lay, 2002), it was first necessary to prepare the research article files for analysis. To this aim, in accordance with Hyland (1998), we removed references, appendices, and notes using *Adobe Acrobat Pro*. Additionally, as applied linguistics considers the abstract to be a compact summary rather than an integral part of a research article, we also excluded abstracts from the analysis (Hyland, 1998).

Selection of markers

Hyland's (1998) taxonomy is seen as more precise, less fuzzy and easier to handle than other taxonomies, both for research-related and practical purposes. Most notably, despite the frequent use of Salager-Meyer's (1994) taxonomy in other studies, it has been criticized for using categories that are supposed to be distinct (i.e. shields, approximators, expressions of the authors' personal doubt and direct involvement, and emotionally charged intensifiers), while in practice, it is difficult to categorize hedges into these categories as the categories overlap somewhat and do not account for the complexity of instances in which hedges can be used (Varttala, 1999). Therefore, and in line with other studies (Hu & Cao, 2011; Nikula, 1997; Vold, 2006), we decided to conduct the analysis with the most frequent lexical hedges (i.e., modals, lexical verbs, nouns, adjectives, and adverbs), which typically correspond to 85% of all hedging devices identified by Hyland (1998). The exact lists of words representing the most frequently used hedges can be found in Table 1. These lists were entered into the qualitative analysis software *MAXQDA* (Verbi GmbH, 2013) and different verb forms were taken into account,

covering third person singular, gerunds and passive or past participles (e.g., we entered believe, believes, believed, and believing as markers into the *MAXQDA* software; a complete list of words is available on request). After entering all 1,991 files into *MAXQDA,* the software calculated the number of total words per article and the frequency of each hedge for each file, which enabled us to process the data further.

Results

Descriptive analyses

While editing the research articles for the analysis, we noticed differences in the total amount of words across the different journals. We found that journals varied in the total amount of words (see Table 2) and that there was also a significant difference at the regional level, with the Indian journals having fewer words on average than the US journals, $F(3, 1988) = 149.33$, $p < .01$, $\eta^2 = .13$ (see Table 2). To prevent any consequent bias or misinterpretations, we chose to use the relative frequency of hedges per thousand words for further analysis. As can be seen in Table 1, the word "may" seems to be the most frequently used hedge across all regions. Even though the relative frequency of hedges differs, the first few ranks are fairly similar across regions, indicating that non-US researchers seem to use the same hedges, albeit less than US researchers.

Test of hypothesis

To test our hypothesis that US journals show a higher frequency of hedges, we calculated a contrast analysis[1]. As hypothesized, we found that Indian, European and US journals differed

[1] Contrast analysis can help to precisely analyze theoretically driven predictions (Furr & Rosenthal, 2003). As we had a clear prediction, i.e. that articles in US journals will have the highest frequency of hedges, followed by European journals and then Indian journals, we followed the recommendations of Furr and Rosenthal (2003) and translated our predictions into critical contrast weights (-1 -1 -1 for the Indian journals, 0 0 for the European journals, and 1 1 1 for the US journals) and used these for further analysis.

significantly regarding the use of hedges, $F(7, 1983) = 58.91$, $p < .01$, $\eta^2 = .17$ (for further details, see Table 3, analysis 1, and Table 4).

In addition, we ran an analysis to check whether differences were stable even within subgroups of lexical hedges. Following Hyland's (1998) approach, we analyzed the groups *modals, lexical verbs* and *nouns, adjectives and adverbs.* Again, confirming our hypothesis, we found significant differences using contrast analysis between modals, $F(7, 1983) = 25.49$, $p < .01$, $\eta^2 = .08$, lexical verbs, $F(7, 1983) = 46.74$, $p < .01$, $\eta^2 = .14$, and nouns, adjectives and adverbs, $F(7, 1983) = 21.17$, $p < .01$, $\eta^2 = .07$ (for further details, see Table 3, analysis 1 and Table 4).

Besides the expectation that US journals show a higher frequency of hedges, we argue that the frequency of hedges is partially determined by a US research socialization. Thus, we refined our analysis to ensure that the authors were truly US research-socialized. To this aim, we went through all papers from the high impact US sample and looked up the CV of the first authors (this information was available on their websites, LinkedIn or Researchgate pages, except for authors of 14 papers, whom we excluded from further analysis) and coded whether the authors had completed their PhD, Master or Bachelor degree in the US. We limited our analysis to researchers who had completed at least one academic degree in the US. Furthermore, we limited our European sample to European authors only, and removed all articles for which the first author was not affiliated with a European institution. The results for these contrast analyses replicated the previous results, with slightly stronger effect sizes, for all hedges $F(7, 1501) = 68.04$, $p < .01$, $\eta^2 = .24$, as well as modals $F(7, 1501) = 26.85$, $p < .01$, $\eta^2 = .11$, lexical verbs $F(7, 1501) = 47.14$, $p < .01$, $\eta^2 = .18$, and nouns, adjectives and adverbs, $F(7, 1501) = 26.23$, $p < .01$, $\eta^2 = .11$ (see Table 3, analysis 2 for further details).

Post-hoc robustness tests

Furthermore, to explore whether non-US researchers who manage to publish in high impact journals use fewer hedges than US researchers, we analyzed whether first authors who had completed one of their academic degrees in the US and first authors with degrees from countries other than the US differed in their use of hedges within the US sample. A significant difference emerged, indicating that non-US first authors use hedges comparatively less frequently, $F(1, 1270) = 14.46$, $p < .01$, $\eta^2 = .01$ (see Table 3, analysis 3).

Similarly, it could be argued that the number of US authors who coauthor an article might influence the frequency of hedging. Therefore, for the US sample, we performed a regression analysis in order to analyze whether the frequency of hedges differed for author teams that had no US author, at least one US author, or only US authors. As can be seen in Table 5, a higher number of US authors indeed seems to be related to a higher frequency of hedges, $F(2, 1267) = 18.36$, $p < .01$. Additionally, we checked whether our results were robust when comparing only single-author papers. Although the total number of single-author papers is comparatively small, we found the expected pattern that papers co-authored by exclusively US authors exhibit the most number of hedges, followed by papers co-authored by at least one US author, and then followed by papers with no US co-author $F(7, 157) = 12.43$, $p < .01$, $\eta^2 = .36$.

Lastly, one reviewer of this paper pointed out that gender might represent a confounding variable, as there is some evidence that women tend to use more tentative language (e.g., Leaper & Robnett, 2011). Thus, we coded the gender of the first authors for all papers and excluded papers for which we could not identify the gender of the first authors, resulting in a total $N = 1973$. As can be seen in Table 6, we found no significant differences between male and female first authors regarding their use of hedges either in the total sample, $t_{Total}(1971) = 1.77$, $p = 0.08$, or on a country level, $t_{US}(1263) = .50$, $p = 0.62$, $t_{Europe}(478) = -.62$, $p = 0.54$, $t_{India}(226) = .27$, $p = 0.79$.

Discussion

The aim of this study was to introduce applied linguistics to the management field as a means to investigate how language-related aspects might influence the visibility of research. Our findings reveal that the use of hedges seems to differ across different regions of the world and that comparatively more hedges occur in high impact journals. Our data also indicate that the frequency with which hedges are used does not differ significantly within regions, suggesting that differing "research socializations" might influence researchers' perception of the necessity of hedges.

As hypothesized, we found significant differences in the use of hedges between US, European and Indian journals. These differences were visible in terms of the rather broad category of hedges as such, as well as according to the subcategories of modals (e.g., may, would), lexical verbs (e.g., indicate, suggest), and nouns, adjectives and adverbs (e.g., possibility, likely, somewhat). Stronger effects emerged when we limited our analyses to research articles written exclusively by authors who had completed their undergraduate, graduate or postgraduate studies in the US, and excluded non-European authors from the European sample, respectively. One might argue that tentative language is a feature of high impact journals and not necessarily related to the specific regions of the world. To exclude the impact factor of a journal as a driver for the frequency of hedges, we incorporated the *Journal of Business and Psychology* into our analysis, as it had a significantly lower impact factor than the *Journal of Applied Psychology* and *Personnel Psychology* and was even ranked lower than the European journals we analyzed (Thomson Reuters, 2013). However, the US journals did not differ with respect to the frequency of hedges. Together with the finding that there seem to be significant differences between US researchers and researchers from other countries even within high impact US journals, as well as the finding that the frequency of hedges increases with the

number of US authors, this lent further support to our argument that a US research socialization affects the use of hedges.

We also conducted additional analyses that might have provided alternative explanations for our results and thereby illuminate confounding effects. For instance, we were unable to find any gender differences regarding the use of hedges. Although a meta-analysis by Leaper and Robnett (2011) found that gender seems to influence the use of tentative language, with women using more tentative language than men, their analysis was based mostly on spoken language. In contrast, Yavari and Kashani (2013) analyzed academic written language and found no significant differences in the use of hedges based on gender. Thus, our results support the latter finding. Additionally, one reviewer of this paper pointed out that it might be possible that Indian journals limit the space available for papers, thereby forcing authors to be more concise with their manuscripts and reducing the use of hedges. We wrote to the editors of the respective journals regarding this matter and were given no indication of a stricter space limitation than in US or European journals (Ghosh, 2015).

Our study demonstrates that even though research communities around the globe might be working in similar fields and towards similar goals, their expectations regarding the communication of research might differ significantly. While there are various reasons why management research from regions other than the US might lack visibility (e.g., Canagarajah, 1996; Eden & Rynes, 2003), our study shows that a good command over the English language does not necessarily extend to the use of hedges and thus is not only relevant factor when trying to communicate research in high impact journals. Consequently, applied linguistics theories might provide insights and evidence-based advice on how to fulfill the expectations of editors and reviewers of high impact journals, and ultimately increase the visibility of research from non-US countries.

Our results imply that US editors and reviewers of high impact journals should be more aware of implicit peculiarities of language, which might influence their decision to accept or reject articles. Some editorials that try to give researchers guidance on how to increase the likelihood of getting research published in high impact journals already touch upon linguistic characteristics and advise researchers to carefully develop novel insights (see Sparrowe & Mayer, 2011). However, as these recommendations are somewhat vague and abstract in nature, we argue that editors and reviewers of management journals would benefit from acquiring more knowledge on evidence-based academic writing advice. Moreover, the acquisition of such knowledge would enable them to express their expectations more precisely (e.g., in their reviews).

At the same time, our results imply that researchers who are not from the US or who have had a different research socialization need to adapt to the language conventions of high impact journals in order to increase their chances of publication. According to our findings, non-US researchers should increase their use of hedges, and as Hyland and Milton (1997) pointed out, the appropriate use of hedges can be trained by increasing writing practice and improving proficiency in academic English. Similarly, such research training would be especially beneficial to novice researchers with no or limited experience in publishing in high impact journals, as they often look for guidelines on how to write in academic English (Golde & Dore, 2001; McCulloch & Thomas, 2013). In contrast, some researchers accuse such strict adherence to patterns in management research articles of being formulaic and argue that it is deleterious to innovative research (Alvesson & Gabriel, 2013). Even so, the same authors also note that a structural approach to academic writing also has several benefits, such as "…clear procedures and rules, standardization of work, efficiency in the labor process, smooth and predictable evaluation processes, limited anxiety and worries associated with too much ambiguity and surprise"

(Alvesson & Gabriel, 2013: 246). Thus, for the time being, "the trick is to be different while not violating journal readers' expectations by too much" (Eden & Rynes, 2003: 680).

Regarding the implications of this study, one reviewer of this paper commented that the Academy of Management tends to ask authors for decisive statements, which would imply that hedging is less preferred. Applied linguistics researchers have argued that apart from conveying modesty, researchers might also opt to qualify a stronger commitment to a proposition (e.g., Holmes, 1984; Hyland, 2005) by using boosters (i.e. words such as clearly, demonstrate, always), which would rather indicate decisiveness. However, research clearly demonstrates that boosters are always used with a considerably lower frequency than hedges (Hyland, 2005), as they seem to be easier to identify and criticize (Hyland, 2000). Therefore, our results imply a comparatively high expectation of using tentative language from US editors and reviewers, and that conveying modesty is a very important part of academic writing for management research. Nonetheless, hedges and boosters are both a part of the higher-order linguistic concept of stance, which is defined as the ways in which "writers intrude to stamp their personal authority onto their arguments or step back and disguise their involvement" (Hyland, 2005: 176). Therefore, an analysis of their combined and balanced use could shed more light on the use of tentative language in management research.

Like all studies, this study also has some limitations. First, we did not include non-lexical hedges in our analysis, as they depend heavily on the content and context of the article (Hyland, 1998). However, as non-lexical hedges make up only approximately 15% of the total hedges, and studies indicate that there is a high co-occurrence between the use of non-lexical and lexical hedges (Hyland, 1996b), it seems plausible that the analysis of non-lexical hedges would yield a similar result. Second, as we wished to limit the potentially confounding effect of the different areas of management research on the use of hedges (see Vold, 2006), we decided to limit our analysis to HR/IOP. Nonetheless, given the overlap of researchers' membership of multiple

management divisions (Tinsley, 2006), the fact that they publish in various management journals, and the rather generalized advice on best practices of writing for management journals (e.g., Grant & Pollock, 2011), our implications should be fairly widely applicable in the field of management research.

As our study identified characteristics of published papers that we assumed to indicate expectations of US editors and reviewers, future research could extend our approach and strengthen the case we make regarding the influence of hedges on editors' and reviewers' perception of a manuscript by analyzing unpublished and rejected manuscripts as well. Although it will not be easy to collect a large amount of unpublished and rejected manuscripts, the analysis of these manuscripts and a comparison to already published articles could provide a more direct way to capture editors' and reviewers' expectations.

Future research could also extend our approach and analyze success-related factors of research articles as described by leading editors (e.g., Baruch, Konrad, Aguinis, & Starbuck, 2008) using further linguistic approaches. For example, Grant and Pollock (2011) suggested ideas on how to frame an introduction to gain the initial attention of readers and provided some best practice examples. However, a more systematic analysis could use linguistic models to analyze introductions (Swales, 1990, 2004). First studies already indicate that psychology journals published in Chinese seem to expect a different structure of the introduction than US journals (Loi, 2010). Thus, a more systematic and evidence-based understanding of the structure of research articles might be helpful in terms of furthering the understanding of one's own peculiarities of language as well the expectations of editors and reviewers, and might ultimately increase the visibility of research from countries other than the US.

Let us conclude with a personal observation: As non-native speakers of English, the work which we put into this study made us very sensitive to the use of hedges, as we constantly pondered on whether or not we should use a hedge to qualify our commitment to certain

propositions. Indeed, we added hedges in every proofreading cycle. While we constantly felt that dealing with the subject of hedges, and the knowledge that editors and reviewers might oppose our views if we conveyed them too strongly, should definitely have resulted in us being rather oversensitive, the use of hedges in this article is around the mean level of our findings. We used 21.98 total hedges per 1000 words, 9.91 modals, 7.61 lexical verbs, and 4.45 nouns, adjectives and adverbs, showing just how wrong our gut feeling that we were being too fuzzy actually was!

References

Academy of Management. 2015. ***Member statistics***. http://aom.org/Member-Services/Member-Statistics.aspx. Viewed 3 June 2015.

Alcadipani, R., Khan, F. R., Gantman, E., & Nkomo, S. 2012. Southern voices in management and organization knowledge. ***Organization***, 19: 131–143.

Alvesson, M., & Gabriel, Y. 2013. Beyond formulaic research: In praise of greater diversity in organizational research and publications. ***Academy of Management Learning & Education***, 12: 245–263.

APA. 2013. Summary report of journal operations, 2012. ***American Psychologist***, 68: 381–382.

Ashford, S. J. 2013. Having scholarly impact: The art of hitting academic home runs. ***Academy of Management Learning & Education***, 12: 623–633.

Baruch, Y. 2001. Global or North American? A geographical based comparative analysis of publications in top management journals. ***International Journal of Cross Cultural Management***, 1: 109–126.

Baruch, Y., Konrad, A. M., Aguinis, H., & Starbuck, W. H. (Eds.). 2008. ***Opening the black box of editorship***. Basingstoke: Palgrave Macmillan.

Bligh, M. C., Kohles, J. C., & Meindl, J. R. 2004. Charting the language of leadership: A methodological investigation of President Bush and the crisis of 9/11. ***Journal of Applied Psychology***, 89: 562–574.

Burgess, T. F., & Shaw, N. E. 2010. Editorial board membership of management and business Journals: A social network analysis study of the Financial Times 40. ***British Journal of Management***, 21: 627–648.

Burrough-Boenisch, J. 2002. ***Culture and conventions: Writing and reading Dutch scientific English***. Utrecht, The Netherlands: LOT,

http://www.lotpublications.nl/publish/articles/000141/bookpart.pdf. Viewed 7 September 2014.

Burrough-Boenisch, J. 2003. Shapers of published NNS research articles. ***Journal of Second Language Writing***, 12: 223–243.

Burrough-Boenisch, J. 2005. NS and NNS scientists' amendments of Dutch scientific English and their impact on hedging. ***English for Specific Purposes***, 24: 25–39.

Canagarajah, A. S. 1996. "Nondiscursive" requirements in academic publishing, material resources of periphery scholars, and the politics of knowledge production. ***Written Communication***, 13: 435–472.

Canagarajah, A. S. 2002. ***Geopolitics of academic writing***. Pittsburgh, PA: University of Pittsburgh Press.

Cargill, M., & O'Connor, P. 2006. Developing Chinese scientists' skills for publishing in English: Evaluating collaborating-colleague workshops based on genre analysis. ***Journal of English for Academic Purposes***, 5: 207–221.

Cascio, W. F., & Aguinis, H. 2008. Research in industrial and organizational psychology from 1963 to 2007: Changes, choices, and trends. ***Journal of Applied Psychology***, 93: 1062–1081.

Colquitt, J. A., & George, G. 2011. Publishing in AMJ - Part 1: Topic choice. ***Academy of Management Journal***, 54: 432–435.

Corson, D. 1997. The learning and use of academic English words. ***Language Learning***, 47: 671–718.

Crismore, A., & Vande Kopple, W. J. 1997. Hedges and readers: Effects on attitudes and learning. In R. Markkanen & H. Schröder (Eds.), ***Hedging and discourse: Approaches to the analysis of a pragmatic phenomenon in academic texts***: 83–114. Berlin, Germany: Walter de Gruyter.

Crompton, P. 1997. Hedging in academic writing: Some theoretical problems. ***English for Specific Purposes***, 16: 271–287.

Davies, A., & Elder, C. 2004. Applied linguistics: Subject to discipline? In A. Davies & C. Elder (Eds.), ***The handbook of applied linguistics***. Padstow, UK: Wiley.

Deadrick, D. L., & Gibson, P. A. 2007. An examination of the research-practice gap in HR: Comparing topics of interest to HR academics and HR professionals. ***Human Resource Management Review***, 17: 131–139.

Diefenbach, T. 2009. Are case studies more than sophisticated storytelling? Methodological problems of qualitative empirical research mainly based on semi-structured interviews. ***Quality & Quantity***, 43: 875–894.

Eden, D., & Rynes, S. 2003. Publishing across borders: Furthering the internationalization of "AMJ." ***Academy of Management Journal***, 46: 679–683.

Flowerdew, J. 2000. Discourse community, legitimate peripheral participation, and the nonnative-English-speaking scholar. ***TESOL Quarterly***, 34: 127–150.

Flowerdew, J. 2001. Attitudes of journal editors to nonnative speaker contributions. ***TESOL Quarterly***, 35: 121–150.

Furr, R. M., & Rosenthal, R. 2003. Evaluating theories efficiently: The nuts and bolts of contrast analysis. ***Understanding Statistics***, 2: 33–67.

Geletkanycz, M., & Tepper, B. J. 2012. Publishing in AMJ - Part 6: Discussing the implications. ***Academy of Management Journal***, 55: 256–260.

Ghosh, S. 2015, May 18. ***Question on editorial policy of Vision: The Journal of Business Perspective***.

Golde, C. M., & Dore, T. M. 2001. ***At cross purposes: What the experiences of today's doctoral students reveal about doctoral education***. http://eric.ed.gov/?id=ED450628. viewed 5 May 2015.

Gooderham, P. N., & Brewster, C. 2008. Convergence, stasis or divergence? The case of personnel management in Europe. In M. Festing & S. Royer (Eds.), ***Current issues in international human resource management and strategy research***: 141–156. Munich, Germany: Rainer Hampp Verlag.

Gosden, H. 1995. Success in research article writing and revision: A social-constructionist perspective. ***English for Specific Purposes***, 14: 37–57.

Grant, A. M., & Pollock, T. G. 2011. Publishing in AMJ - Part 3: Setting the hook. ***Academy of Management Journal***, 54: 873–879.

Harzing, A.-W. 2007. ***Publish or Perish***. http://www.harzing.com/pop.htm. viewed 25 November 2014.

Harzing, P. A.-W., & Metz, A. P. I. 2013. Practicing what we preach. ***Management International Review***, 53: 169–187.

Hollenbeck, J. R. 2008. The role of editing in knowledge development: Consensus shifting and consensus creation. In Y. Baruch, A. M. Konrad, H. Aguinis, & W. H. Starbuck (Eds.), ***Opening the black box of editorship***: 16–26. Hampshire, GB: Palgrave Macmillan.

Holmes, J. 1984. Modifying illocutionary force. ***Journal of Pragmatics***, 8: 345–366.

Holmes, J. 1988. Doubt and certainty in ESL textbooks. ***Applied Linguistics***, 9: 21–44.

Hu, G., & Cao, F. 2011. Hedging and boosting in abstracts of applied linguistics articles: A comparative study of English- and Chinese-medium journals. ***Journal of Pragmatics***, 43: 2795–2809.

Hyland, K. 1996a. Writing without conviction? Hedging in science research articles. ***Applied Linguistics***, 17: 433–454.

Hyland, K. 1996b. Talking to the academy: Forms of hedging in science research articles. ***Written Communication***, 13: 251–281.

Hyland, K. 1998. ***Hedging in scientific research articles***. Amsterdam, Netherlands: John Benjamins Publishing.

Hyland, K. 2000. Hedges, boosters and lexical invisibility: Noticing modifiers in academic texts. ***Language Awareness***, 9: 179–197.

Hyland, K. 2002. Genre: Language, context, and literacy. ***Annual Review of Applied Linguistics***, 22: 113–135.

Hyland, K. 2005. Stance and engagement: A model of interaction in academic discourse. ***Discourse Studies***, 7: 173–192.

Hyland, K., & Milton, J. 1997. Qualification and certainty in L1 and L2 students' writing. ***Journal of Second Language Writing***, 6: 183–205.

Hyland, K., & Salager-Meyer, F. 2008. Scientific writing. ***Annual Review of Information Science and Technology***, 42: 297–338.

Hyland, K., & Tse, P. 2004. Metadiscourse in academic writing: A reappraisal. ***Applied Linguistics***, 25: 156–177.

IJIR. 2014. ***The Indian Journal of Industrial Relations***. http://www.srcirhr.com/ijir.php. viewed 18 November 2014.

Jensen, J. D. 2008. Scientific uncertainty in news coverage of cancer research: Effects of hedging on scientists' and journalists' credibility. ***Human Communication Research***, 34: 347–369.

Joy, S., & Poonamallee, L. 2013. Cross-cultural teaching in globalized management classrooms: Time to move from functionalist to postcolonial approaches? ***Academy of Management Learning & Education***, 12: 396–413.

Judge, T. A., Cable, D. M., Colbert, A. E., & Rynes, S. L. 2007. What causes a management article to be cited - Article, author, or journal? ***Academy of Management Journal***, 50: 491–506.

Kwan, B. S. C. 2013. Facilitating novice researchers in project publishing during the doctoral years and beyond: A Hong Kong-based study. ***Studies in Higher Education***, 38: 207–225.

Lakoff, G. 1973. Hedges: A study in meaning criteria and the logic of fuzzy concepts. ***Journal of Philosophical Logic***, 2: 458–508.

Laurent, A. 1986. The cross-cultural puzzle of international human resource management. ***Human Resource Management***, 25: 91–102.

Leaper, C., & Robnett, R. D. 2011. Women are more likely than men to use tentative language, aren't they? A meta-analysis testing for gender differences and moderators. ***Psychology of Women Quarterly***, 35: 129–142.

Loi, C. K. 2010. Research article introductions in Chinese and English: A comparative genre-based study. ***Journal of English for Academic Purposes***, 9: 267–279.

McCulloch, A., & Thomas, L. 2013. Widening participation to doctoral education and research degrees: A research agenda for an emerging policy issue. ***Higher Education Research & Development***, 32: 214–227.

Medgyes, P. 1992. Native or non-native: Who's worth more? ***ELT Journal***, 46: 340–349.

Monastersky, R. 2005. The number that's devouring science. ***Chronicle of Higher Education***, 52: 12–17.

Myers, G. 1989. The pragmatics of politeness in scientific articles. ***Applied Linguistics***, 10: 1–35.

Nikula, T. 1997. Interlanguage view on hedging. In R. Markkanen & H. Schröder (Eds.), ***Hedging and discourse: Approaches to the analysis of a pragmatic phenomenon in academic texts***: 188–207. Berlin, Germany: Walter de Gruyter.

Ozbilgin, M. 2004. "International" human resource management: Academic parochialism in editorial boards of the "top" 22 journals on international human resource management. ***Personnel Review***, 33: 205–221.

Pennebaker, J. W., & Lay, T. C. 2002. Language use and personality during crises: Analyses of Mayor Rudolph Giuliani's press conferences. ***Journal of Research in Personality***, 36: 271–282.

Podsakoff, P. M., MacKenzie, S. B., Podsakoff, N. P., & Bachrach, D. G. 2008. Scholarly influence in the field of management: A bibliometric analysis of the determinants of university and author impact in the management literature in the past quarter century. ***Journal of Management***, 34: 641–720.

Rynes, S., & Gephart, R. P. J. 2004. Qualitative research and the "Academy of Management Journal." ***Academy of Management Journal***, 47: 454–462.

Salager-Meyer, F. 1994. Hedges and textual communicative function in medical English written discourse. ***English for Specific Purposes***, 13: 149–170.

Schneider, S. C. 1988. National vs. corporate culture: Implications for human resource management. ***Human Resource Management***, 27: 231–246.

Shen, W., Kiger, T. B., Davies, S. E., Rasch, R. L., Simon, K. M., et al. 2011. Samples in applied psychology: Over a decade of research in review. ***Journal of Applied Psychology***, 96: 1055–1064.

Sparrowe, R. T., & Mayer, K. J. 2011. Publishing in AMJ - Part 4: Grounding hypotheses. ***Academy of Management Journal***, 54: 1098–1102.

Swales, J. 1990. ***Genre analysis: English in academic and research settings***. New York, NY: Cambridge University Press.

Swales, J. 2004. ***Research genres: Explorations and applications***. New York, NY: Cambridge University Press.

Thomson Reuters. 2013. ***Journal citation reports***. http://thomsonreuters.com/journal-citation-reports/. Viewed 7 September 2014.

Tinsley, C. H. 2006. ***Report to the academy professional division review committee***. Washington, DC, http://cm.aom.org/wp-content/uploads/2015/04/2006_5-year-report_CM-Division.pdf. Viewed 5 June 2015.

Tjosvold, D., Wong, A. S. H., & Feng Chen, N. Y. 2014. Constructively managing conflicts in organizations. ***Annual Review of Organizational Psychology and Organizational Behavior***, 1: 545–568.

Tsui, A. S. 2007. From homogenization to pluralism: International management research in the academy and beyond. ***Academy of Management Journal***, 50: 1353–1364.

Urbig, D., Terjesen, S., Procher, V., Muehlfeld, K., & Witteloostuijn, A. van. 2015. Come on and take a free ride: Contributing to public goods in native and foreign language settings. ***Academy of Management Learning & Education***, Published online before print.

Üsdiken, B. 1996. Importing theories of management and organization: The case of Turkish Academia. ***International Studies of Management & Organization***, 26: 33–46.

Üsdiken, B. 2014. Centres and peripheries: Research styles and publication patterns in "top" US journals and their European alternatives, 1960–2010. ***Journal of Management Studies***, 51: 764–789.

Varttala, T. 1999. Remarks on the communicative functions of hedging in popular scientific and specialist research articles on medicine. ***English for Specific Purposes***, 18: 177–200.

Vassileva, I. 2001. Commitment and detachment in English and Bulgarian academic writing. ***English for Specific Purposes***, 20: 83–102.

Ventola, E. 1997. Modalization: Probability - An exploration into its role in academic writing. In A. Duszak (Ed.), ***Culture and styles of academic discourse***: 157–179. Berlin, Germany: Walter de Gruyter.

Verbi GmbH. 2013. ***MAXQDA***. Berlin, Germany: VERBI Software – Consult – Sozialforschung GmbH, http://www.maxqda.com/downloads. Accessed on September 4, 2014.

Vold, E. T. 2006. Epistemic modality markers in research articles: A cross-linguistic and cross-disciplinary study. ***International Journal of Applied Linguistics***, 16: 61–87.

Wagner, C. S., & Wong, S. K. 2012. Unseen science? Representation of BRICs in global science. ***Scientometrics***, 90: 1001–1013.

Webster, J., & Watson, R. T. 2002. Analyzing the past to prepare for the future: Writing a literature review. ***Management Information Systems Quarterly***, 26(2): xiii–xxiii.

Weller, A. C. 2001. ***Editorial peer review: Its strengths and weaknesses***. Medford, NJ: Information Today.

Yavari, M., & Kashani, A. F. 2013. Gender-based study of metadiscourse in research articles' rhetorical sections. ***International Journal of Applied Linguistics and English Literature***, 2: 77–88.

Table 1

Descriptive statistics for hedges according to region

Region	India			Europe			US		
	Hedge	Absolute number	Relative frequency per 1000 words	Hedge	Absolute number	Relative frequency per 1000 words	Hedge	Absolute number	Relative frequency per 1000 words
1	may	2254	1.61	may	8530	2.43	may	29261	2.56
2	about	1630	1.17	will	4480	1.28	suggest	16905	1.48
3	will	1533	1.10	about	4158	1.19	will	16227	1.42
4	most	1513	1.08	suggest	4112	1.17	would	14981	1.31
5	indicate	1482	1.06	would	3831	1.09	likely	13393	1.17
6	should	1299	0.93	report	3419	0.97	report	12792	1.12
7	would	1256	0.90	should	3335	0.95	should	12341	1.08
8	suggest	1091	0.78	indicate	3203	0.91	about	11894	1.04
9	could	971	0.70	likely	3075	0.88	indicate	10735	0.94
10	report	949	0.68	predict	2764	0.79	predict	10114	0.89
11	likely	494	0.35	most	2690	0.77	note	9975	0.87
12	attempt	476	0.34	could	2631	0.75	estimate	9183	0.8
13	seem	420	0.30	might	2528	0.72	most	8840	0.77
14	believe	409	0.29	note	1697	0.48	could	7622	0.67
15	predict	396	0.28	propose	1613	0.46	might	7224	0.63
16	must	382	0.27	possible	1575	0.45	consistent	6820	0.6
17	note	363	0.26	estimate	1329	0.38	possible	5036	0.44
18	possible	363	0.26	consistent	1264	0.36	propose	5015	0.44
19	propose	334	0.24	seem	1137	0.32	relatively	3243	0.28
20	relatively	327	0.23	assume	966	0.28	believe	3227	0.28
21	generally	325	0.23	relatively	889	0.25	seek	3162	0.28
22	might	311	0.22	believe	836	0.24	appear	3088	0.27

Table 1 continued

23	imply	306	0.22	appear	810	0.23	generally	2613	0.23
24	seek	292	0.21	seek	720	0.21	calculate	2270	0.2
25	estimate	281	0.20	generally	689	0.2	attempt	2145	0.19
26	appear	246	0.18	imply	601	0.17	seem	2098	0.18
27	assume	238	0.17	cannot	534	0.15	assume	2059	0.18
28	calculate	219	0.16	attempt	472	0.14	must	2052	0.18
29	cannot	196	0.14	must	470	0.13	possibility	1557	0.14
30	consistent	180	0.13	calculate	455	0.13	cannot	1420	0.12
31	possibility	77	0.06	possibility	428	0.12	imply	1330	0.12
32	probable	75	0.05	partially	391	0.11	approximate	1242	0.11
33	approximate	59	0.04	somewhat	316	0.09	partially	1240	0.11
34	apparent	59	0.04	probable	257	0.07	somewhat	1055	0.09
35	somewhat	56	0.04	slightly	243	0.07	slightly	871	0.08
36	partially	54	0.04	approximate	208	0.06	unlikely	818	0.07
37	essentially	51	0.04	unlikely	191	0.05	probable	523	0.05
38	shall	44	0.03	apparent	156	0.04	apparent	505	0.04
39	slightly	43	0.03	essentially	78	0.02	essentially	393	0.03
40	unlikely	22	0.02	presumably	77	0.02	presumably	268	0.02
41	ought to	9	0.01	speculate	72	0.02	speculate	207	0.02
42	presumably	5	0.00	ought to	25	0.01	ought to	82	0.01
43	speculate	4	0.00	shall	18	0.01	shall	23	0.00
	Total	21094	15.1	Total	67273	19.18	Total	245849	21.53

Table 2

Descriptive statistics for the total amount of words according to region and journal

Journal[a]	*n*	*Min*	*Max*	*M*	*SD*
IJIR	125	1100	25653	6864.95	4909.37
MLS	69	1757	9746	4611.09	1733.86
V	45	3278	8381	4898.60	1237.60
Total India	239	1100	25653	5844.00	3854.00
JAP	793	3114	25296	9172.83	3040.64
PPsych	194	2853	18044	10690.21	2401.54
JBP	285	2734	13932	7258.47	2071.61
Total US	1272	2734	25296	8975.00	2955.00
AP:IR	249	2478	17239	7069.23	2148.86
EJWOP	231	2888	15054	7545.81	1759.53
Total Europe	480	2478	17239	7299.00	1983.00

Notes: [a] IJIR = Indian Journal of Industrial Relations, MLS = Management and Labour Studies (an Indian journal), V = Vision (an Indian journal), JAP = Journal of Applied Psychology, PPsych = Personnel Psychology, AP:IR = Applied Psychology: An International Review, EJWOP = European Journal of Work and Organizational Psychology, JBP = Journal of Business and Psychology

Table 3

Descriptive statistics for hedging categories according to region

		Modals per 1000 words					Lexical verbs per 1000 words					Nouns, adjectives, adverbs per 1000 words					Frequency of hedges per 1000 words				
Analysis	Region	*n*	*Min*	*Max*	*M*	*SD*	*n*	*Min*	*Max*	*M*	*SD*	*n*	*Min*	*Max*	*M*	*SD*	*n*	*Min*	*Max*	*M*	*SD*
1	India	239	0.00	22.10	5.93	3.11	239	0.80	18.31	5.28	2.55	239	0.00	9.87	3.70	1.70	239	3.64	31.53	14.91	4.66
	US	1272	1.45	25.09	8.15	2.75	1272	2.10	27.54	8.28	2.87	1272	1.13	19.38	5.29	1.94	1272	10.31	48.63	21.72	4.94
	Europe	480	1.75	23.17	7.59	2.88	480	1.64	22.57	6.91	2.57	480	0.98	13.55	4.77	1.88	480	8.00	46.13	19.27	5.14
2	India	239	0.00	22.10	5.93	3.11	239	0.80	18.31	5.28	2.55	239	0.00	9.87	3.70	1.70	239	3.64	31.53	14.91	4.66
	US	975	1.45	25.09	8.32	2.78	975	2.10	27.54	8.46	2.94	975	1.13	17.82	5.45	1.94	975	10.31	48.63	22.23	4.97
	Europe	295	1.75	16.19	7.59	2.77	295	1.64	22.57	6.65	2.43	295	1.57	13.55	4.58	1.84	295	8.00	41.09	18.82	4.87
3	US author	1184	1.45	25.09	8.15	2.72	1184	2.10	27.54	8.38	2.87	1184	1.13	19.38	5.34	1.96	1184	10.31	48.63	21.87	4.93
	Non-US author	88	3.55	23.70	8.13	3.21	88	2.93	17.35	7.06	2.69	88	1.54	9.47	4.62	1.49	88	11.10	33.99	19.80	4.56

Notes: Analysis 1 refers to the comparison of all articles from all journals; analysis 2 refers to the comparison limiting the US sample to US authors only (i.e. authors who are affiliated with a US institution and have completed at least one academic degree in the US) and only European authors for the European sample; analysis 3 refers to the comparison of US first authors and non-US first authors in US journals only.

Table 4

Descriptive statistics for hedging categories according to journal

Hedging category	Journal[a]	*n*	*Min*	*Max*	*M*	*SD*
Modals per 1000 words	IJIR	125	0.00	17.71	5.49	3.10
	MLS	69	1.38	22.10	6.68	3.48
	V	45	2.79	13.80	6.02	2.29
	JAP	793	1.45	25.09	7.96	2.50
	PPsych	194	2.39	16.90	7.74	2.61
	JBP	285	2.88	23.70	8.98	3.31
	AP:IR	249	1.75	23.17	7.23	3.07
	EJWOP	231	1.96	16.19	7.97	2.61
Lexical verbs per 1000 words	IJIR	125	0.80	13.17	5.23	2.63
	MLS	69	1.15	18.31	4.97	2.56
	V	45	1.02	13.36	5.88	2.28
	JAP	793	2.12	27.54	8.56	2.86
	PPsych	194	2.10	19.67	8.50	2.87
	JBP	285	2.61	25.96	7.38	2.73
	AP:IR	249	2.20	18.28	7.09	2.56
	EJWOP	231	1.64	22.57	6.72	2.57
Nouns, adjectives and adverbs per 1000 words	IJIR	125	0.00	9.87	3.66	1.67
	MLS	69	1.03	7.12	3.67	1.68
	V	45	0.00	8.99	3.84	1.86
	JAP	793	1.13	19.38	5.28	1.98
	PPsych	194	1.76	10.71	5.29	1.63
	JBP	285	1.54	12.81	5.32	2.03
	AP:IR	249	.98	13.55	4.84	1.94
	EJWOP	231	1.11	10.44	4.70	1.82
Frequency of hedges per 1000 words	IJIR	125	3.64	28.09	14.38	4.69
	MLS	69	5.28	31.53	15.33	5.00
	V	45	5.09	24.14	15.74	3.91
	JAP	793	10.33	48.63	21.79	4.89
	PPsych	194	11.41	36.21	21.52	4.73
	JBP	285	10.31	40.07	21.68	5.20
	AP:IR	249	8.68	46.13	19.16	5.28
	EJWOP	231	8.00	41.09	19.40	4.99

Note: [a] IJIR = Indian Journal of Industrial Relations, MLS = Management and Labour Studies (an Indian journal), V = Vision (an Indian journal), JAP = Journal of Applied Psychology, PPsych = Personnel Psychology, JBP = Journal of Business and Psychology, AP:IR = Applied Psychology: An International Review, EJWOP = European Journal of Work and Organizational Psychology

Table 5

Summary of regression analysis for author team compositions predicting frequency of hedges

Variable	*B*	*SE B*	β
Constant	20.16	0.31	
At least one author US	1.40	0.44	.11**
All authors US	0.75	0.36	.07*
R^2		.03	
F		18.68**	

Note. $N = 1262$. *$p < .05$, **$p < 0.01$, *B* = unstandardized coefficient (with the frequency of hedges if a paper has no US author as the comparison condition), *SE B* = standard error of the coefficient, β = standardized coefficient

Table 6

Descriptive statistics for hedges by sex and results of t-tests

	Sex						95% CI for mean		
	Male			Female					
	M	*SD*	*n*	*M*	*SD*	*n*	difference	*t*	*df*
Total	20.52	5.54	1251	20.07	5.21	722	-0.50, 0.94	1.77	1971
India	15.03	5.00	141	14.87	4.15	87	-1.09, 1.43	0.27	226
US	21.78	5.11	873	21.63	4.52	392	-0.43, 0.74	0.50	1263
Europe	19.13	5.04	237	19.42	5.24	243	-1.21, 0.63	-0.62	478

Note. * $p < .05$. CI = confidence interval

Appendix

Management Ranking in the Journal Citation Report® 2013 (Thomson Reuters, 2013):

Rank	Journal	Impact Factor	5-Year Impact Factor
1	Academy of Management Review	7.817	9.698
2	Academy of Management Annals	7.333	10.154
3	Journal of Management	6.862	8.027
4	Management Information Systems Quarterly	5.405	8.157
5	Academy of Management Journal	4.974	8.443
6	Personnel Psychology	4.540	5.845
7	Jounal of Operations Management	4.478	7.718
8	Journal of Applied Psychology	4.367	6.952
9	Organization Science	3.807	5.512
10	Journal of Information Technology	3.789	4.917

Psychology, Applied Ranking in the Journal Citation Report® 2013 (Thomson Reuters, 2013):

Rank	Journal	Impact Factor	5-Year Impact Factor
1	Journal of Management	6.862	8.027
2	Personnel Psychology	4.540	5.845
3	Journal of Applied Psychology	4.367	6.952
4	Organizational Research Methods	3.525	5.713
5	International Review of Sport and Exercise Psychology	3.353	-
6	Journal of Organizational Behavior	3.262	4.734
7	Journal of Counseling Psychology	2.955	3.608
8	Organizational Behavior and Human Decision	2.897	3.935
9	Journal of Sport and Exercise Psychology	2.593	3.787
10	Journal of Occupational and Organizational Psychology	2.480	3.052