

INTRODUCTION

- Exigence
 - Human papillomavirus (HPV) is the most common sexually transmitted infection (STI) in the U.S.
 - HPV vaccines have been surrounded with doubts and controversies on their effectiveness and safety.
- Previous research
 - A range of research dealt with the media construction of HPV vaccine from interpersonal health communication, ethnography, content analysis, or public communication.
 - Less work has been done from a rhetorical perspective which substantially influences people’s attitudes towards HPV vaccination.

RESEARCH QUESTIONS

- RQ1: What are the hedging strategies employed in news reports when constructing HPV vaccine?
- RQ2: What factors contribute to the use of these hedges?
- RQ3: What are the implications for the professional communication of HPV vaccine?

METHODS

- Theoretical Framework - Hedging
 - Hedging can be defined as a tentative language to avoid any certainty or to mitigate the statements to able to avert possible criticism (Swales & Hazem, 1987).
 - Hedges could mitigate scientific claims (Zuck & Zuck, 1986), enable authors to report with more precision in scientific discourse (Hyland, 1996).
- Data Selection
 - Database: NexisUni → The New York Times (47 articles)
 - Search term: HPV vaccine
 - Time frame: January 1, 2014 - January 1, 2019
- Analytical Approach
 - Employed Hedge-O-Matic, a computational text processing tool to classify the hedging and non-hedging sentences
 - Coded the hedging sentences based on the co-occurring linguistic markers
 - Counted the frequency of each hedging type

RESULTS

Hedging Strategies Used in NYT

- We identified a total of 1443 sentences in the NYT corpus, among which 338 are sentences using hedging (23%).
- Figure 1 shows the frequency of four hedge sentence types.
- Figure 2 shows the illustrative quotes and linguistic markers of the four hedge sentence types.

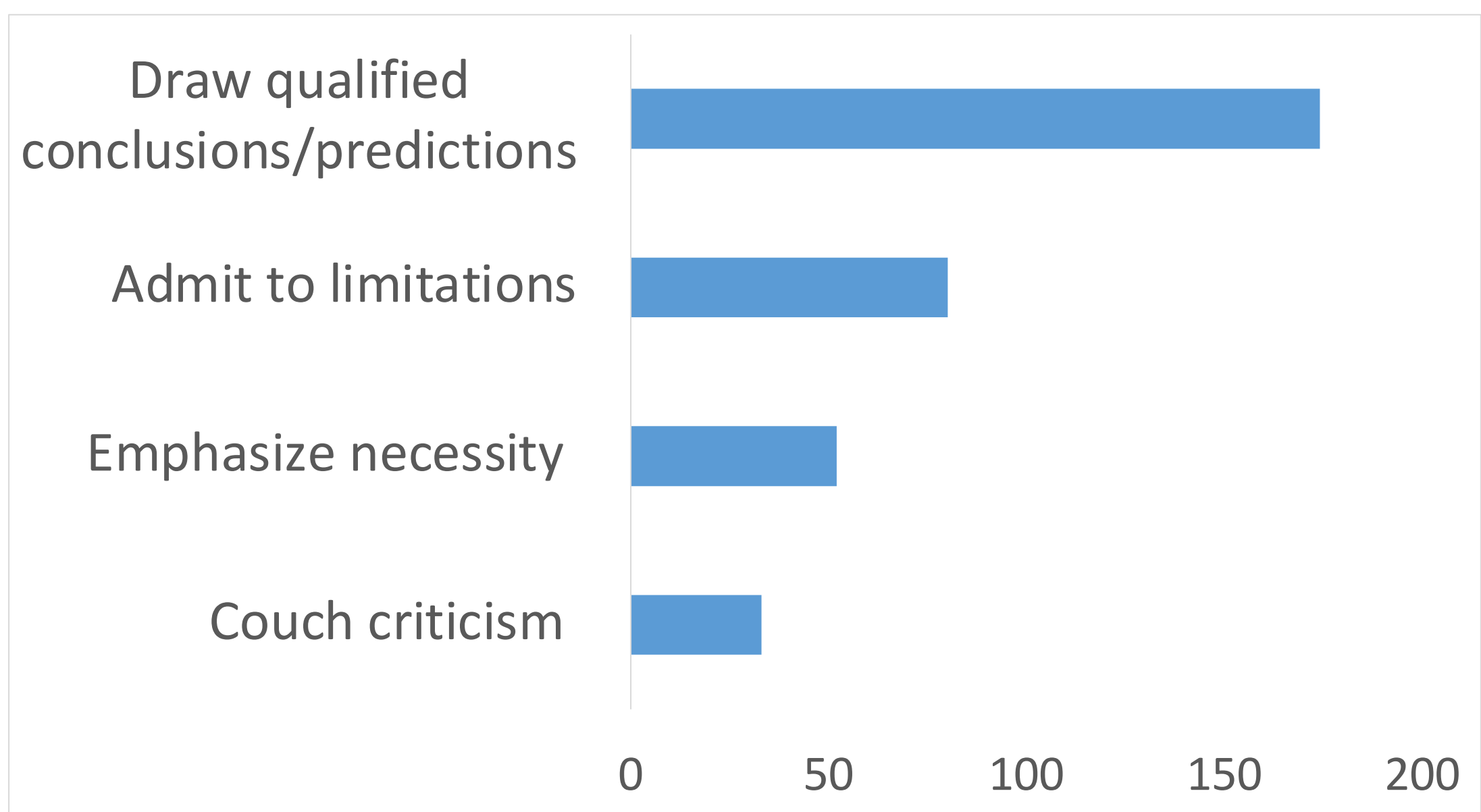


Figure 1. Four Hedge Sentence Types

Hedge Sentence Type	Illustrative Quotes	Linguistic Markers
Admit to limitations	Indeed, the HPV vaccine <i>doesn't</i> even prevent <i>all</i> types of HPV, <i>just the majority of those</i> most likely to cause cancer.	the majority of, percentage
Draw qualified conclusions/predictions	About 90 percent of those cases could be prevented with the vaccine, <i>according to</i> the C.D.C.	according to, given, based on
Couch criticism	Other countries have moved more slowly, <i>partly</i> because of a global anti-vaccination movement that has falsely claimed vaccines are linked to autism and illness.	may, might, would, could
Emphasize necessity	Still, this book's punitive view of female sexuality is <i>worth noting</i> for its kinship with nonfiction writers [...].	It is necessary, it is worth, should

Figure 2. Illustrative quotes of Four Hedge Sentence Types

Hedge Distribution

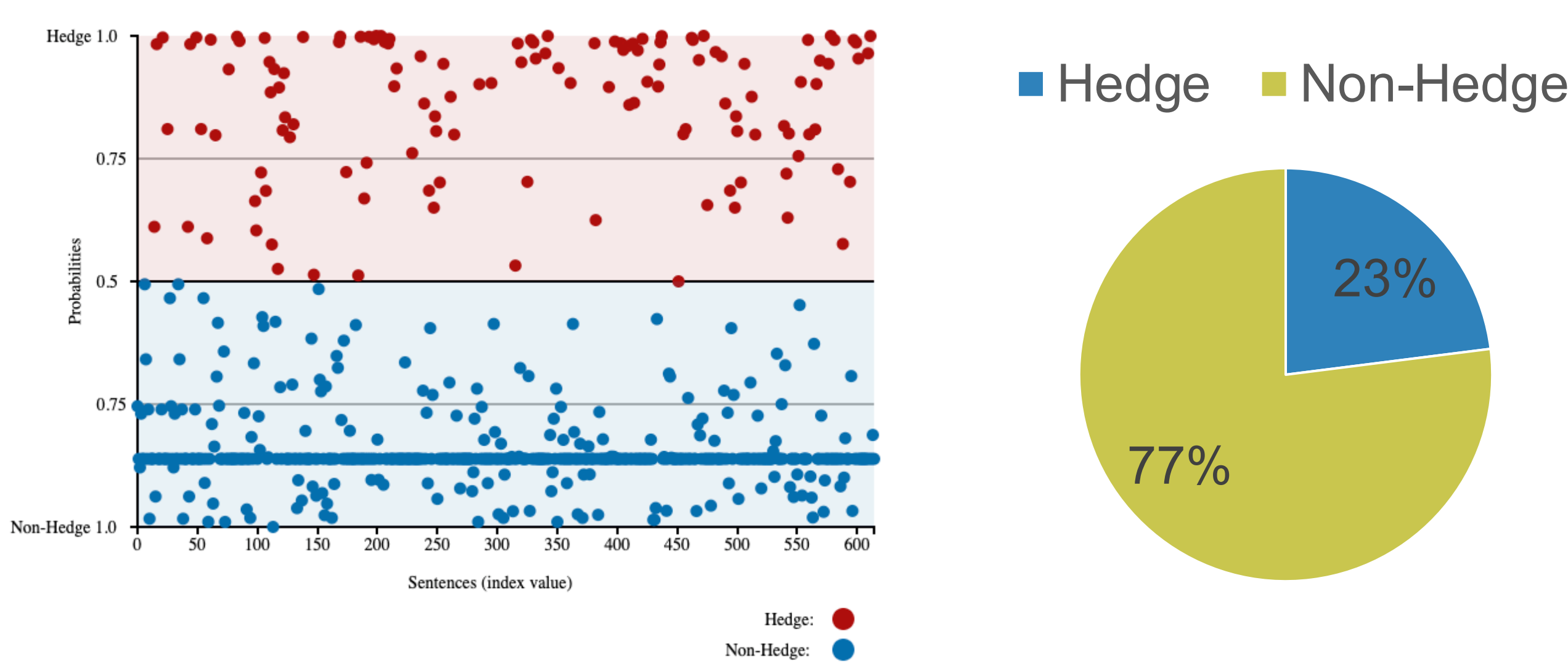


Figure 3. Output from Hedge-O-Matic

Figure 4. Percentage of Hedge

DISCUSSION

- Functions of hedging
 - Drawing qualified conclusions/predictions or making qualified recommendations is the most frequently used hedging strategy that serves as a mitigating device to minimize potential controversy and enhance the reliability of the content
- Implications for Professional Communication
 - The results shed light on the effective communication of HPV vaccine:
 - Professional communicators should have the rhetorical awareness and a holistic view of the features and functions of the hedging strategies.
 - The strategic adoption of hedges in writing for the news media would improve the public acceptance of HPV vaccine.

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