

---

## ALIGNING ARTICLE WORD-COUNT WITH SEARCH QUERY LENGTH: INSIGHTS FROM THE HEALTH AND WELLNESS INDUSTRY

**Zlatko Bezhovski**

Faculty of Economics, Goce Delcev University, Shtip, N. Macedonia, zlatko.bezovski@ugd.edu.mk

**Abstract:** This study investigates the relationship between search query length and optimal article word count in the Health and Wellness industry, addressing a critical gap in content optimization strategies. Through analysis of 2.458 high-ranking web articles across different keyword query lengths (1-6 keywords), the research identifies distinct patterns in content length that correlate with search performance. Using descriptive statistics, modal range analysis, Chi-Square tests, and K-Means clustering, the study reveals that different query lengths require tailored content strategies. Findings indicate two distinct word-count peaks for each query length: one-keyword queries perform well at 500 and 1.000 words; two-to-three-keyword queries at 700 and 1.500 words; four-keyword queries at 700 and 1.300 words; and five-to-six-keyword queries at 900 and 1.400 words. The existence of dual peaks suggests that content creators can adopt flexible strategies to address varying user intents within the same query length. Statistical analysis confirms the significance of these relationships, with Chi-Square tests and K-Means Clustering. The research contributes to both academic literature and practical application by providing industry-specific insights for content optimization in the Health and Wellness sector. These findings enable content creators and SEO professionals to develop more targeted content strategies based on keyword length, though further research is recommended to explore additional ranking factors and cross-industry applications.

**Keywords:** Content marketing, Search engine optimization, User intent, Keyword research, Health and Wellness

### 1. INTRODUCTION

The synergy between content marketing (CM) and search engine optimization (SEO) plays a pivotal role in driving web traffic, engaging users, and building long-term brand loyalty. While CM focuses on creating valuable, consistent content to attract targeted audiences (Pulizzi, 2013), SEO ensures this content reaches the intended audience by improving its visibility in search engine result pages (SERPs) (Drivas et al., 2020; Matosevic et al., 2021; Google, 2024). Over the years, search engines have evolved to prioritize user experience, intent, and content quality, thereby blurring the lines between CM and SEO practices (Ho & Choy, 2020; Daoud et al., 2024; Ziakis et al., 2019).

Content length, while not a standalone determinant of search ranking, is a meaningful component within the broader CM and SEO strategy. More critical factors include content quality and relevance (such as semantics and keywords), backlinks, direct traffic, and user engagement (Ziakis et al., 2019; Tober, 2024). Although word count alone does not directly influence rankings, Martin Splitt, a Google Developer Advocate, has suggested that content depth and relevance to user intent may play a significant role in ranking (Google Search Central, 2020).

Recent academic, industry-specific studies have explored optimal content lengths for favorable search engine positioning, finding that word count varies by industry and even niche within the same industry. According to Bezhovski and Jovanov (2024), the recommended content length for the auto repair industry is between 500 and 1.000 words, for personal development 1.000 to 1.500 words, and for digital marketing 1.500 to 2.000 words per article. In the alternative tourism sector, wine travel articles should be around 600 words, rural tourism articles approximately 750 words, and adventure travel content about 1.200 words (Bezhovski, 2024). Neither study accounts for the influence of search query length on article word count, as they both rely on search queries containing three keywords or more than four keywords, respectively, targeting the long tail (3+ keywords) of search. Recommendations for content word count, based on expert reports, industry studies, and practitioners' advice, range from 300 to 3.000 words, and in some specific contexts, even exceed 5.000 words (Schaferhoff, 2018). For example, a study by Backlinko analyzing over 11,8 million Google search results found that the average first-page result contains 1.447 words (Dean, 2024). In a web article, Neil Patel (2024), a digital marketing expert, categorizes content into short-form (below 1.000 words), medium-form (1.000 to 2.000 words), and long-form (over 2.000 words). Patel specifically recommends long-form content for industries like finance, fintech, sales, and healthcare, where users tend to seek detailed information that provides added value.

ClearVoice reports that in the healthcare sector, 46,1% of articles are between 300 and 600 words, 28,2% are 601 to 900 words, and 12,9% are between 901 and 1.200 words. However, articles with more than 3.000 words (only 1,3%) generate the highest traffic per article (McKinley, 2020). The report does not correlate the success of these articles with their ranking positions and lacks transparency regarding the methodology used.

A study by SEMrush (2017), based on 600.000 search queries across industries and multiple languages, found that articles ranking in the top three (#1–#3) search engine results pages (SERPs) typically contain between 500 and 800 words. Additionally, the study observed that articles targeting long-tail search queries (4+ keywords) tend to require higher word counts than those addressing short-head queries (1–3 keywords).

Despite the importance of content length, the academic literature on this topic remains limited and fragmented. This gap in research is particularly evident in emerging sectors such as health and wellness, where practitioners seek guidance to optimize content for both user engagement and SEO performance.

Given this gap, the objective of this study is to explore content length (word count) best practices and their relationship with search query keyword length and ranking positions in search engine results within the health and wellness industry.

## 2.METHODOLOGY

This study employs a quantitative research approach to explore the relationship between search query length (1 to 6 keyword queries), article length (word count), and search engine ranking position (#1 to #9) within the Health and Wellness industry.

For this analysis, word counts from 2.458 website articles were gathered. The dataset consists of six keyword (kw) groups, each representing a distinct query length: 1 to 6 keywords. For each group, 50 keywords were selected, and for every keyword, the first nine results from Google’s search engine result page (SERP) were collected, resulting in a total of 2.700 data points (6 × 50 × 9). After excluding missing word counts, the final dataset comprised 2.458 web articles. This ensures a comprehensive sample that captures both shorter and longer query intentions across multiple SERP positions. A custom Node.js script was employed for automated data extraction.

Following data collection, various statistical measures and tests were applied to analyze the dataset. These include Descriptive Statistics, Regression Analysis, ANOVA (Analysis of Variance), Modal Range Identification, Chi-Square Test for Independence, and K-Means Clustering.

## 3.FINDINGS

The study presents the findings from a comprehensive analysis of 2.458 web articles, focusing on the relationship between article word count and keyword length. Using various statistical techniques and analyses, the study identifies patterns that provide insights into optimal content lengths for achieving high search engine rankings.

The descriptive statistics offer an overview of word counts across six keyword groups. Table 1 summarizes the maximum, average, and minimum word counts, along with spread metrics such as the interquartile range (IQR) and standard deviation for each keyword length group.

*Table 1: Descriptive Statistics (Aggregate) – Word Counts vs. Search Queries*

	1kw queries	2kw queries	3kw queries	4kw queries	5kw queries	6kw queries
Maximal length	26.550	5.232	4.795	4.504	6.672	6.672
<b>Average</b>	<b>1.151</b>	<b>1.068</b>	<b>1.191</b>	<b>1.213</b>	<b>1.245</b>	<b>1.215</b>
Minimal length	57	51	60	68	84	84
<b>Interquartile Range (IQR)</b>	<b>831</b>	<b>928</b>	<b>863</b>	<b>813</b>	<b>784</b>	<b>810</b>
Standard deviation	2.134	774	800	739	715	730
SV	185%	72%	67%	61%	57%	60%

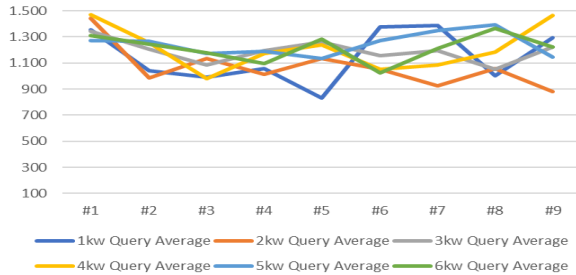
Source: Author’s findings

The table shows that the average word count increases slightly from 1-keyword (1kw) queries (1.151 words) to 5- and 6-keyword (5–6kw) queries (1.245 and 1.215 words, respectively), although variability within each group remains evident. The interquartile range (IQR) values span from 784 to 928, indicating considerable variation in article length even within the same keyword groups. The search variability (SV) is highest for 1kw queries (185%), reflecting a wide range of content lengths, but decreases for longer keyword queries, suggesting greater consistency in recorded word counts as query length increases.

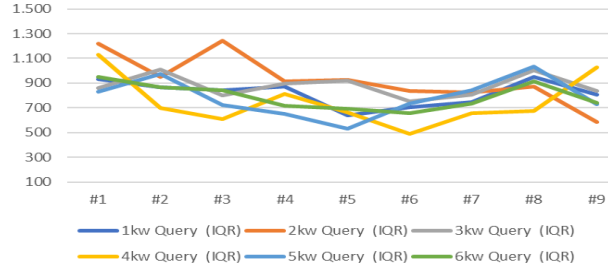
Figures 1 and 2 visualize the average and interquartile range (IQR) of word counts across articles by search engine ranking page (SERP) position. Regression analyses did not reveal any statistically significant relationship between

ranking position and word count, and ANOVA results indicated no statistically significant differences in word counts among different search query lengths. These findings are understandable given the high standard deviation and the presence of notable outliers.

**Figure 1: Average word-counts of articles ranking from #1 to #9 positions**



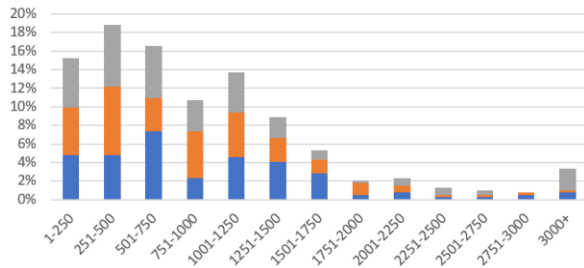
**Figure 2: IQR word-counts of articles ranking from #1 to #9 positions**



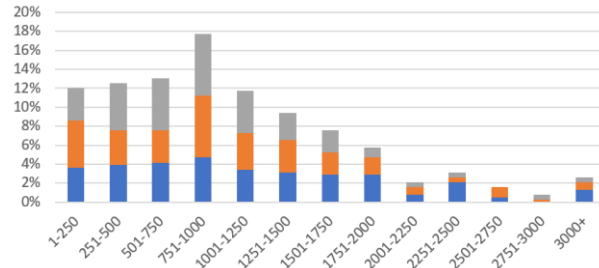
Source: Author's findings

Since the ANOVA test did not yield statistically significant differences in word counts across search query lengths, we applied an alternative approach using modal ranges. The modal ranges represent the most frequently occurring word count intervals within each keyword group, providing further insight into the distribution of article lengths.

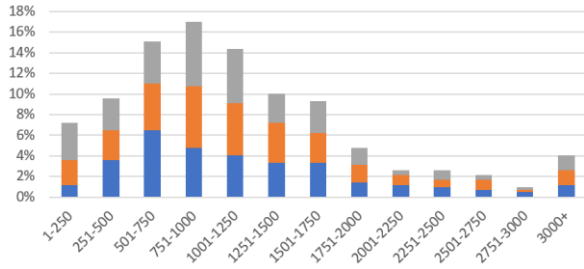
**Figure 3: Modal ranges – 1 kw queries**



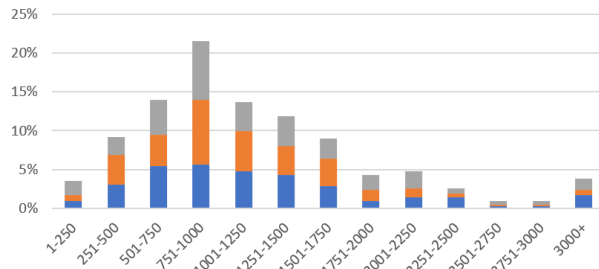
**Figure 4: Modal ranges – 2 kw queries**



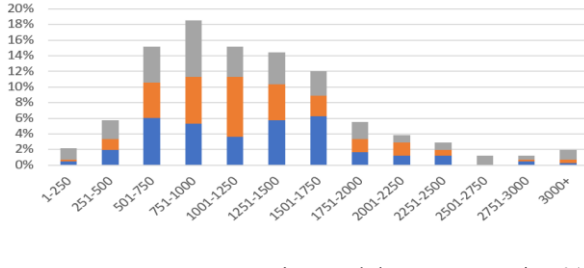
**Figure 5: Modal ranges – 3 kw queries**



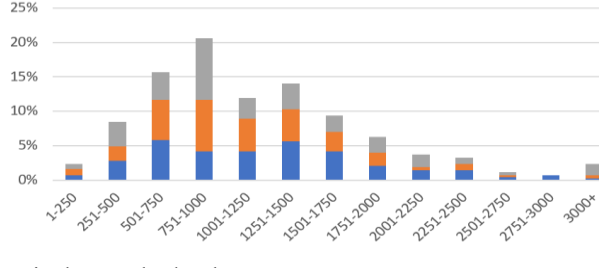
**Figure 4: Modal ranges – 4 kw queries**



**Figure 7: Modal ranges – 5 kw queries**



**Figure 8: Modal ranges – 6 kw queries**



Legend: X axis=Modal ranges, Y axis= % of articles, Stacked columns = #1-3 #4-6 #7-9

Source: Author's findings

Figures 3 to 8 illustrate the distribution of modal word count ranges for keyword queries of varying lengths, highlighting key findings:

- **1-kw queries (Figure 3):** Two peaks are observed, one at 501–750 words and another at 1.001–1.250 words. Notably, 51% of the articles within these queries contain fewer than 750 words.
- **2-kw queries (Figure 4):** The peak occurs at 751–1.000 words, with 55% of the articles falling below 1.000 words.
- **3-kw to 6-kw queries (Figures 5–8):** These queries also peak at 751–1.000 words, but the majority of articles (57% for 3-kw, 61% for 4-kw, 63% for 5-kw, and 62% for 6-kw queries) fall between 501 and 1.500 words.
- **6-kw queries (Figure 8):** A dual-peak pattern emerges, with word counts clustered around 751–1.000 and 1.251–1.500 words.

These patterns suggest that content strategies should be adapted to query length. While shorter queries (1- and 2-kw) tend to perform well with concise articles, longer queries (3-kw to 6-kw) benefit from more comprehensive content. The Chi-Square Test for Independence was conducted to determine whether query length is significantly associated with word count ranges. Table 2 summarizes the results of the Chi-Square test, which yielded a p-value of  $1.12 \times 10^{-16}$ . Since this value is below the threshold of 0.05, the results confirm a statistically significant relationship between query length and word count range. This finding supports the hypothesis that content length strategies should align with keyword length to optimize search performance.

**Table 2: Modal Ranges vs Search Queries**

Modal ranges*	Search query length						
	1kw	2kw	3kw	4kw	5kw	6kw	All
1-250	60	46	30	15	9	10	170
251-500	74	48	40	39	24	36	261
501-750	65	50	63	59	63	67	367
751-1000	42	68	71	91	77	88	437
1001-1250	54	45	60	58	63	51	331
1251-1500	35	36	42	50	60	60	283
1501-1750	21	29	39	38	50	40	217
1751-2000	8	22	20	18	23	27	118
2001-2250	9	8	11	20	16	16	80
2251-2500	5	12	11	11	12	14	65
2501-2750	4	6	9	4	5	5	33
2751-3000	3	3	4	4	5	3	22
3000+	13	10	17	16	8	10	74
<b>Total</b>	<b>393</b>	<b>383</b>	<b>417</b>	<b>423</b>	<b>415</b>	<b>427</b>	<b>2.458</b>

\* Word-count modal ranges of high-ranking (#1-#9) articles/pages

Source: Author’s findings

While examining the modal ranges, specifically for the top three results (#1-#3), a distinct distribution pattern emerged. To gain deeper insights, we conducted a segmented analysis focused on articles ranking within the top three SERP positions (#1-3). This analysis involved grouping similar query lengths (2-kw with 3-kw, and 5-kw with 6-kw) and removing outlier keywords (related to page results) that produced higher-than-average standard deviations, thereby minimizing the influence of non-content-related SEO factors.

Additionally, we refined the analysis by examining the modal ranges of articles ranked first (#1) and performing sensitivity analyses, which involved adjusting the range size and shifting the middle points of the ranges. The results of these analyses are presented in Table 3 and Figures 9 to 12.

The Chi-Square Test for Independence yielded a p-value of 0,0373, confirming a statistically significant relationship between query length and word count range.

*Table 3: Descriptive Statistics and Clusters (Peaks) Derived by Segmented Analysis*

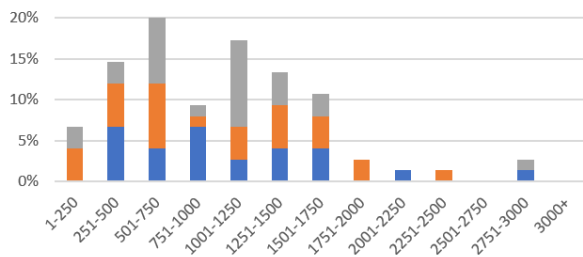
Results only for the top 3 (#1-#3) ranking articles	Average	IQR	SV	Peak 1 (Words / % of articles)	Peak 2 (Words / % of articles)
1 kw Queries	1.007	869	60%	500 (21%)	1.000 (17%)
2- and 3-kw Queries	1.175	954	59%	700 (19%)	1.500 (14%)
4 kw Queries	1.150	685	52%	700 (27%)	1.300 (15%)
5- and 6-kw Queries	1.273	752	47%	900 (15%)	1.400 (19%)

Source: Author’s findings

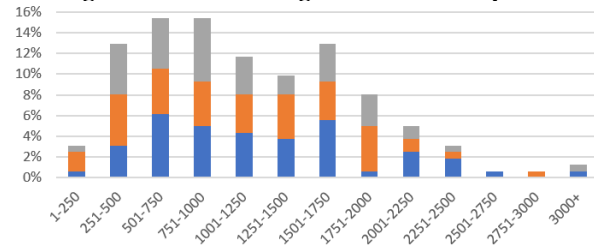
The most notable outcome of this analysis is that each search query length (1 to 6 keywords) exhibits two strong peaks, ranging from 14% to 27%. A potential third peak is weak, accounting for less than 6%, and represents outliers. Due to the similarity in peak distributions, the results for 2- and 3-kw queries, as well as 5- and 6-kw queries, were grouped together. The segmented analysis revealed the following patterns:

- **1-kw queries:** A primary peak occurs at 500 words, with 21% of the articles clustered around this point, and a secondary peak at 1.000 words, with 17% of the articles nearby.
- **2-3 kw queries:** Peaks are observed at 700 words (19%) and 1.500 words (14%).
- **4-kw queries:** The strongest peak is at 700 words, representing 27% of the articles, with a secondary peak at 1.300 words (15%).
- **5-6 kw queries:** A higher peak occurs at 1.400 words, with 19% of the articles, followed by a lower peak at 900 words (15%).

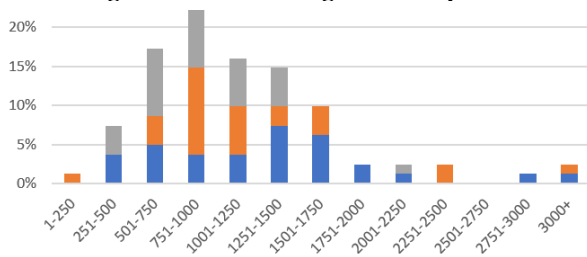
*Figure 9: Modal ranges – 1 kw queries*



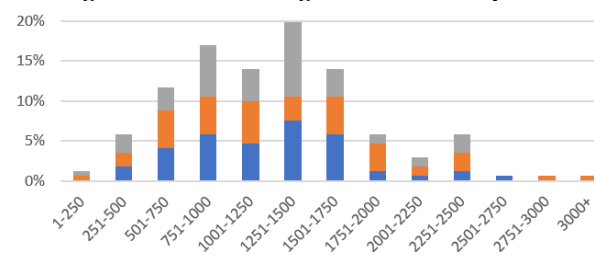
*Figure 10: Modal ranges – 2 and 3 kw queries*



*Figure 11: Modal ranges – 4 kw queries*



*Figure 12: Modal ranges – 5 and 6 kw queries*



**Legend:** X axis=Modal ranges, Y axis= % of articles, Stacked columns = #1 #2 #3

Source: Author’s findings

To assess the statistical significance of the identified peaks, K-Means Clustering was applied. Table 4 presents the cluster centers determined for each keyword group.

*Table 4: K-Means Clustering results*

Results only for the top 3 (#1-#3) ranking articles	Cluster Center 1	Cluster Center 2	The Outliers (cluster 3)
1kw Queries	500	1.323	2.594
2 and 3kw Queries	735	1.794	4.104
4kw Queries	729	1.400	2.721
5 and 6kw Queries	790	1.483	2.343

Source: Author's findings

The K-Means clustering results, while not an exact match, align with the findings from the modal ranges and sensitivity analyses, reinforcing (and statistically validating) the existence of peaks or clusters. These results highlight the need for flexible, two-fold content strategies tailored to search query lengths. However, since the K-Means clustering results may be affected by the presence of outliers, the observed peaks (Table 3) offer higher practical value and will serve as the recommended article lengths for the Health and Wellness industry.

The segmented data analysis reveals that two types of article lengths rank well for the observed search queries:

- **1-kw queries:** (1) Concise articles around 500 words and (2) moderately long articles around 1.000 words.
- **2–3 kw queries:** (1) Concise articles around 700 words and (2) longer articles around 1.500 words.
- **4-kw queries:** (1) Concise articles around 700 words and (2) longer articles around 1.300 words.
- **5–6 kw queries:** (1) Moderately long articles around 900 words and (2) longer articles around 1.400 words.

These findings suggest that query length should guide content development, with optimal or recommended word-count ranges reflecting a two-peak structure. The Chi-Square Test for Independence confirms that differences in query keyword length are statistically significant, and the K-Means clustering further validates the observed peaks.

#### 4. DISCUSSION

##### Implication for Academics

The findings of this study confirm that query length plays a critical role in determining the optimal word count for articles targeting high search engine rankings in the Health and Wellness industry. The modal range analysis identified multiple word count peaks across different query lengths, reflecting varied user intent and information needs. This study extends the body of literature by providing industry-specific insights into content length optimization, specifically targeting search queries in the Health and Wellness sector. Unlike previous research, which offered general or industry-specific recommendations, this study emphasizes that the optimal word count varies with search query length. These findings offer a nuanced understanding of the relationship between query intent and article length, bridging a gap in SEO and content marketing research.

Furthermore, the study contributes to the growing discourse on user behavior and search intent by identifying statistically significant peaks in content length. These insights are particularly valuable given the competitive nature of the Health and Wellness industry, where content relevance and optimization are essential for search performance. The use of statistical techniques such as the Chi-Square Test for Independence and K-Means clustering adds methodological rigor, providing a replicable framework for future research.

##### Contribution for Practitioners

For practitioners, the findings underscore the importance of aligning content strategies with query length to accurately reflect user intent or user type. The presence of two word-count sizes within the same query length suggests that dynamic search engine algorithms may be addressing dual user intentions by offering different types of articles on the same SERP.

Content creators in the Health and Wellness industry can benefit from the following recommendations regarding content word count, which should align with broader content strategy:

- Research keywords and group them into 4 groups by length: 1-kw, 2–3-kw, 4-kw, and 5–6+ kw search queries.
- Research competition, perform SEO SWOT analyses, and decide to optimize content for: 1-kw queries: Highly competitive and less relevant, 2–3-kw queries: Also highly competitive but more relevant, and 4-kw and 5+ kw queries: Less competitive with the highest relevance
- Develop content strategy regarding search queries and word-count of articles (select one to follow):
  - a) Produce only short articles (for the first peak) around 500 words for 1-kw queries, 700 words for 2-, 3-, and 4-kw queries, and 900 words for 5- and 6-kw queries.

- b) Produce articles for the highest peak for each query (short peak articles for 1–4-kw queries, and around 1,400-word articles for 5- and 6-kw queries).
- c) Produce longer articles (matching the second peak) around 1,000 words for 1-kw queries, 1,500 words for 2- and 3-kw queries, 1,300 words for 4-kw queries, and 1,400 words for 5- and 6-kw queries.
- d) Target both peaks with 2 separate articles for each keyword: one concise as an overview, and the other more detailed as a guide.
- e) Test different strategies with each search query length and/or with each targeted keyword.

SEO professionals in the Health and Wellness industry should incorporate these findings into their content strategies to improve SERP performance. The dual peaks identified for certain query lengths suggest that there is no "one-size-fits-all" approach, and content length must be tailored to specific search contexts. Which recommendations professionals follow depends on various factors, such as their current competitive position, available resources, content marketing (CM) and SEO goals, and SEO budget. For example, Nagpal and Petersen (2021) suggest that for high-authority websites, improving content relevance is more effective for broader keywords (1–2 keyword queries). In contrast, for low-authority websites, focusing on content relevance is more effective in achieving higher rankings for specific keywords (3+ keyword queries). Additionally, Schultheiss et al. (2022) reveal that well-optimized content, even if of lower quality, can outperform high-quality content that lacks optimization. This suggests that addressing SEO requirements, including word count, can yield better results than solely focusing on content relevance and quality.

### **Limitations and Future Research**

Despite its contributions, this study has several limitations. Focusing on the Health and Wellness industry limits the generalizability of the findings to other sectors, as different industries may exhibit unique content length patterns not captured in this study. Furthermore, the dual peaks identified may result from queries targeting the distinct niches of health or wellness, which requires further investigation.

This study focuses exclusively on content length; however, SEO involves multiple elements, such as backlinks, domain authority, content quality, and user engagement metrics. The absence of these factors in the analysis reduces the comprehensiveness of the findings. Although efforts were made to remove outliers and focus on top-ranked articles, high variability within keyword groups suggests that other unexplored factors influence ranking performance regardless of word count. Future research should isolate these factors—such as backlinks and domain authority—to measure the importance of word count more precisely.

Additionally, the analysis assumes that query length correlates with user intent, but it does not explicitly measure user engagement or satisfaction with the content. Future studies could incorporate qualitative metrics, such as user feedback, to validate the relevance of content length.

To build on the findings of this study, several avenues for future research are recommended, including improving the methodology, expanding the dataset, analyzing high-, mid-, and low-volume search queries, incorporating additional ranking factors, measuring user engagement, and conducting cross-industry analyses.

## **5. CONCLUSIONS**

This study provides key insights into the relationship between content length (article word count) and search query length within the Health and Wellness industry, emphasizing the importance of aligning article length with user intent or user type, as represented by search queries.

The findings confirm that content length varies meaningfully with query length. In general, Health and Wellness content benefits from concise articles (500–700 words) for quick informational needs, mid-length articles (900–1,000 words), and extended content (1,300–1,500 words) for more complex topics. However, these content ranges (in two distinct peaks) must be tailored to specific search query lengths to address search intent effectively.

The results suggest that shorter queries (1-kw) perform well with concise articles (500 words) or moderately detailed content (1,000 words). Mid-length queries (2–4 kw) show greater flexibility, requiring concise content (700 words) or extended articles (1,300–1,500 words) to satisfy user intent. Longer queries (5–6 kw), on the other hand, often benefit from extended content (1,400 words), although moderately detailed articles (900 words) may also be effective.

The dual peaks observed across all query groups indicate that content creators can adopt diverse strategies, tailoring article length based on search intent, the nature of the topic, or the specifics of individual keywords.

This research contributes to both academic understanding and practical strategies by demonstrating the impact of query length on content optimization. Future research should explore other industries and additional SEO factors, further refining content strategies to align with user expectations and search engine algorithms more effectively.

## REFERENCES

- Bezhovski, Z. (2024). Content Length Recommendations for Alternative Tourism Web Pages: A Comparative Analysis of Rural, Wine, and Adventure Travel. *Asian Journal of Management, Entrepreneurship and Social Science*, 4(04), 1157-1169.
- Bezhovski, Z., & Jovanov Apasieva, T. (2024). *Optimal content length for digital marketing, personal development, and auto repair web articles* [Manuscript under review]
- Daoud, M. K., Sharabati, A.-A., Samarah, T., Alqurashi, D., Alfityani, A., Allahham, M., & Nasereddin, A. Y. (2024). Optimizing online visibility: A comprehensive study on effective SEO strategies and their impact on website ranking. *Journal of Infrastructure, Policy and Development*, 8(7), 4860. <https://doi.org/10.24294/jipd.v8i8.4860>
- Dean, B. (2024). We Analyzed 11.8 Million Google Search Results. Here's What We Learned About SEO. Retrieved August 26, 2024, from <https://backlinko.com/search-engine-ranking>
- Drivas, I. C., Sakas, D. P., Giannakopoulos, G. A., & Kyriaki-Manessi, D. (2020). Big Data Analytics for Search Engine Optimization. *Big Data and Cognitive Computing*, 4(2), 5.
- Google, (2024). Google Search Central: Create helpful, reliable, people-first content. Retrieved October 25, 2024, from <https://developers.google.com/search/docs/fundamentals/creating-helpful-content>
- Google Search Central. (2020). Is more content better? SEO Mythbusting [YouTube Video]. Retrieved from <https://www.youtube.com/watch?v=gKoriHae71w>
- Ho, J., Pang, C., & Choy, C. (2020). Content marketing capability building: a conceptual framework. *Journal of Research in Interactive Marketing*, 14(1), 133–151.
- Matosevic, G., Dobsa, J., & Mladenic, D. (2021). Using machine learning for web page classification in search engine optimization. *Future Internet*, 13(1), 9. <https://doi.org/10.3390/fi13010009>
- McKinley, J. (2020). Word Count Trends in 25+ Industries: VoiceGraph Data Study of 24,600,000+ Articles. Retrieved October 27, 2024, from <https://www.clearvoice.com/resources/word-count-trends/>
- Patel, N. (2024). How Long Should Your Blog Articles Be? Retrieved October 25, 2024, from <https://neilpatel.com/blog/long-blog-articles/>
- Nagpal, M., & Petersen, J. A. (2021). Keyword selection strategies in search engine optimization: how relevant is relevance?. *Journal of retailing*, 97(4), 746-763.
- Pulizzi, J. (2013). *Epic content marketing*. McGraw-Hill. ISBN: 978-0-07-181989-3
- Schultheiss, S., Haussler, H., & Lewandowski, D. (2022). Does Search Engine Optimization come along with high-quality content? A comparison between optimized and non-optimized health-related web pages. *Proceedings of the 2022 Conference on Human Information Interaction and Retrieval*, 123–134. <https://doi.org/10.1145/3498366.3505811>
- Schaferhoff, N. (2018). What is the Optimal Content Length? - Here's What the Science Says. Retrieved August 25, 2024, from <https://torquemag.io/2018/04/optimal-content-length/>
- SEMrush. (2017). Ranking Factors SEMrush Study 2.0. Retrieved from <https://renerodriguez.eu/wp-content/uploads/2017/09/Ranking-factors-2017.pdf>
- Tober, M. (2024) Ranking Factors 2024. Retrieved October 25, 2024, from <https://go.semrush.com/Ranking-Factors.html>
- Ziakis, C., Katerelos, D., Papadamou, K., & Christodoulou, A. (2019). From first result to zero click: A search engine optimization (SEO) analysis. *Journal of Internet Research and Search Marketing*, 23(2), 50-69.