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Quality and Reliability of Multiple Sclerosis-related Short Videos on TikTok and Bilibili: A Cross-sectional Study

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Research Article

Keywords: Multiple Sclerosis, TikTok, Bilibili, Video Quality, Health Information, GQS, mDISCERN

Posted Date: May 4th, 2026

DOI: https://doi.org/10.21203/rs.3.rs-9368691/v1

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Additional Declarations: No competing interests reported.

Abstract

Background

Multiple Sclerosis (MS) is a chronic neurodegenerative disease, and social media platforms like TikTok and Bilibili play an increasingly important role in disseminating health information. However, the quality and reliability of MS-related content on these platforms remain underexplored.

Methods

This cross-sectional study evaluated the quality and reliability of Multiple Sclerosis-related short videos on TikTok and Bilibili. A total of 198 videos were analyzed using the Global Quality Score (GQS) and modified DISCERN (mDISCERN) scoring systems. Data on video characteristics, uploader types, and engagement metrics were also collected.

Results

An analysis of 198 M Multiple Sclerosis-related short videos showed that symptoms (n = 140, 70.71%) were the most frequently discussed topic, followed by treatment (n = 82, 41.41%). However, discussions on prevention (n = 24, 12.1%) and diagnosis (n = 58, 29.3%) were relatively scarce.Regarding video quality, the median Global Quality Score (GQS) for all videos was 3.00 (IQR: 2.00, 3.00), with no significant difference between TikTok (3.00, IQR: 2.75, 3.00) and Bilibili (3.00, IQR: 2.00, 3.00) ($p = 0.157$). Similarly, the median modified DISCERN (mDISCERN) score for both platforms was 2.00 (IQR: 2.00, 3.00), with no significant difference ($p = 0.684$).Videos uploaded by specialists generally had higher GQS and mDISCERN scores compared to those uploaded by individual users ($p < 0.05$). Additionally, a positive correlation was found between video length and both GQS ($r = 0.23$) and mDISCERN ($r = 0.24$).

Conclusion

TikTok demonstrated higher engagement compared to Bilibili, but the overall quality and reliability of MS-related videos on both platforms were moderate. Videos uploaded by specialists were generally more reliable. MS-related videos should place more emphasis on prevention and diagnosis to enhance public health education.

Introduction

Multiple Sclerosis (MS) is a chronic, autoimmune, and neurodegenerative disease that primarily affects the central nervous system, leading to significant disability in young adults[1]. It is characterized by episodes of inflammation, demyelination, and axonal damage, which can cause a variety of neurological symptoms, including visual disturbances, motor dysfunction, cognitive decline, and sensory abnormalities[2]. Epidemiological studies have demonstrated that the prevalence of MS exhibits geographic variability, with

higher rates observed in regions with temperate climates and among populations of European descent[3]. In China, while the prevalence of MS has been estimated at approximately 2.32 per 100,000 people, this may represent an underestimation due to diagnostic challenges, particularly in rural areas, and the growing awareness of the disease in more developed regions[4]. The disease places a substantial burden on patients, healthcare systems, and society as a whole, not only due to its direct medical costs but also because of the long-term socioeconomic impacts, such as lost productivity and the need for long-term care[5]. Raising public awareness and understanding of MS is crucial in mitigating the disease burden. Increased awareness can promote early diagnosis, reduce stigma, and encourage timely interventions, which may ultimately improve the quality of life for those affected[6].

The rapid growth of digital media has created new opportunities for disseminating health information. Social media platforms, in particular, have become powerful tools for spreading medical knowledge to the general public. Platforms like TikTok and Bilibili have large user bases and personalized recommendation algorithms, which allow health-related content to reach a wide audience quickly[7]. The interactive nature of these platforms further enhances engagement, making them effective for spreading awareness and promoting health education [8]. However, the ease of content creation and sharing also raises concerns about the quality and reliability of medical information. Previous studies have shown that while health-related videos on social media platforms, such as those related to cancer, hypertension, and mental health, tend to have high engagement, their overall quality and accuracy are often questionable[9–11]. Inaccurate or misleading health information can contribute to misconceptions, delay proper diagnosis, and undermine effective treatments. Despite the potential of digital media for health education, there is a gap in evaluating the quality and reliability of videos related to MS.

This study aims to assess the quality and reliability of MS-related short videos on TikTok and Bilibili using the Global Quality Score (GQS) and modified DISCERN (mDISCERN) scoring systems. The findings of this study will provide valuable insights into the current state of MS-related content on these platforms and highlight areas for improvement in digital health communication. This research is significant for informing both content creators and healthcare professionals about the challenges and opportunities associated with using social media for public health education.

Methods

Study Period and Design

This cross-sectional study was conducted from October 1, 2025, to October 3, 2025. The objective of this study was to evaluate the quality and reliability of Multiple Sclerosis (MS) related short videos available on TikTok and Bilibili. To eliminate the potential bias introduced by personalized recommendations, new accounts were used during the search and data collection processes. The top 150 videos from each platform were selected in default order based on their ranking. The flowchart of this study is shown in Fig. 1.

Inclusion and Exclusion Criteria

The inclusion criteria for this study were Chinese-language videos related to MS. Videos unrelated to MS, such as advertisements, promotional materials, duplicate uploads, or those uploaded within one week prior to the start of data collection, were excluded from the study.

Data Collection

Videos were retrieved based on their rankings on TikTok and Bilibili. For each platform, the top 150 videos were selected. Data extracted from each video included the video title, uploader identity, content type, number of likes, comments, shares, and video length. These data were then organized and analyzed to assess the quality and engagement of the videos.

Uploader Classification

The videos were classified based on the background of the uploader into three categories. The specialists group included individuals with formal qualifications in neurology, such as neurologists, neurosurgeons, or those holding a PhD in neurology. These professionals were regarded as providing authoritative and accurate health information about Multiple Sclerosis (MS). The non-specialists group encompassed medical professionals from other fields, including practitioners of Traditional Chinese Medicine (TCM), cardiologists, radiologists, and healthcare institutions such as health agencies and medical companies. While these individuals possessed medical knowledge, they were not specifically specialized in neurology or MS. Lastly, the individual users category consisted of patients, health influencers, and non-medical organizations, such as news outlets and interview shows. These videos were typically created by individuals without formal medical training but often included personal experiences or general health-related information.

Video Quality and Reliability Assessment

The quality and reliability of the videos were assessed using the Global Quality Score (GQS) and modified DISCERN (mDISCERN) scores. The GQS is a widely recognized tool for evaluating the overall quality of health-related videos, with scores ranging from 1 to 5[12](Table 1). The mDISCERN tool was used to evaluate the reliability of videos based on five key criteria: clarity, relevance, evidence citation, objectivity, and additional information[13](Table 2). Each criterion was scored as either "yes" (1 point) or "no" (0 points), with higher total scores indicating greater reliability.

Table 1
The Global Quality Score (GQS) quality criteria.

Item features	Points
Poor quality; poor flow of the videos; most information missing; not at all useful for patients	1
Generally poor quality; some information listed, but many important topics missing; of very limited use to patients	2
Moderate quality; suboptimal flow; some important adequately discussed, but other information poorly discussed; somewhat useful for patients	3
Good quality and generally good flow; most of the relevant information listed, but some topics not covered; useful for patients	4
Excellent quality and flow; very useful for patients	5

Table 2
The Modified DISCERN (mDISCERN) quality criteria.

Reliability Score
1. Is the video clear, concise, and understandable?
2. Are valid sources cited?
3. Is the content presented balanced and unbiased?
4. Are additional sources of content listed for patient reference?
5. Are areas of uncertainty mentioned?

Statistical Analysis

Descriptive statistics were employed to summarize the data. For continuous variables, values were expressed as the mean ± standard deviation (SD) if the data followed a normal distribution, and as the median with interquartile range (IQR) for non-normally distributed data. Categorical variables were represented as counts and percentages. To compare differences between groups, independent-sample t-tests were utilized for normally distributed variables, while Mann-Whitney U tests were used for non-normally distributed data. When comparing three or more groups, the Kruskal-Wallis H test was applied, followed by Dunn's post hoc analysis when significant results were observed. Cohen's kappa coefficient evaluated the inter-rater reliability for GQS and mDISCERN scores, with a kappa value ≥ 0.8 indicating excellent agreement. Spearman's rank correlation coefficient was used to examine the relationships between video quality scores (GQS, mDISCERN) and engagement metrics, including likes, comments, shares, and collections. Statistical significance was determined using a two-tailed p-value of < 0.05. All analyses and figure generation were conducted using R software (version 4.3.2).

Results

Video characteristics

A total of 198 Multiple Sclerosis-related short videos were analyzed, with 104 videos from TikTok (52.53%) and 94 videos from Bilibili (47.47%) (Fig. 2A). The average video length was 134 seconds, with a median of 134.00 seconds (IQR: 66.00, 285.25). Engagement metrics varied significantly, with the median number of likes, collections, comments, and shares being 52.50 (IQR: 10.25, 123.25), 18.50 (IQR: 5.00, 62.00), 4.00 (IQR: 0.25, 23.00), and 9.00 (IQR: 2.00, 40.75), respectively. Regarding video content, symptoms (70.71%) were the most frequently discussed, followed by treatment (41.41%) and etiology (34.85%). The videos showed a median Global Quality Score (GQS) of 3.00 (IQR: 2.00, 3.00) and a median mDISCERN score of 2.00 (IQR: 2.00, 3.00) (Table 3). Inter-rater consistency was excellent, with Cohen's Kappa values of 0.940 for GQS and 0.938 for modified DISCERN scores.

Table 3
General Characteristics, Quality, and Reliability of the Videos

Variables	**Total (n = 198)**
General information	
Video length(s),M (Q1,Q3)	134.00 (66.00, 285.25)
Likes,M (Q1,Q3)	52.50 (10.25, 123.25)
Collections,M (Q1,Q3)	18.50 (5.00, 62.00)
Comments,M (Q1,Q3)	4.00 (0.25, 23.00)
Shares,M (Q1,Q3)	9.00 (2.00, 40.75)
Video content	
Epidemiology	44 (22.22%)
Etiology	69 (34.85%)
Symptoms	140 (70.71%)
Diagnosis	58 (29.29%)
Treatment	82 (41.41%)
Prevention	24 (12.12%)
Video quality	
GQS score,M (Q1,Q3)	3.00 (2.00, 3.00)
mDISCERN score,M (Q1,Q3)	2.00 (2.00, 3.00)
GQS: Global Quality Score; mDISCERN: Modified DISCERN	

Significant differences were observed between TikTok and Bilibili in video characteristics. TikTok videos were generally shorter (median 81.00 seconds) compared to Bilibili videos (median 262.00 seconds) ($p < 0.001$). TikTok also demonstrated significantly higher engagement. The median number of likes on TikTok was 92.00 (IQR: 54.75, 230.50), while Bilibili videos had only 9.50 (IQR: 2.00, 41.00) ($p < 0.001$). The median

number of collections on TikTok was 18.50 (IQR: 5.00, 62.00) compared to 9.50 (IQR: 2.00, 41.00) on Bilibili ($p < 0.001$). Similarly, TikTok videos had more comments (median 4.00, IQR: 0.25, 23.00) compared to 1.00 (IQR: 0.00, 5.00) on Bilibili ($p < 0.001$). Finally, TikTok videos had more shares (median 9.00, IQR: 2.00, 40.75) compared to Bilibili (median 1.00, IQR: 0.00, 5.00) ($p < 0.001$) (Table 4).

Table 4
General Information, Quality, and Reliability Scores of Multiple Sclerosis Videos on TikTok and Bilibili

Variables	**Bilibili (n = 94)**	**TikTok (n = 104)**	***P***
General information			
Video length(s),M (Q1,Q3)	262.00 (144.25, 675.50)	81.00 (49.00, 135.00)	< 0.001
Likes,M (Q1,Q3)	9.50 (2.00, 41.00)	92.00 (54.75, 230.50)	< 0.001
Collections,M (Q1,Q3)	10.00 (1.00, 52.50)	23.50 (10.00, 69.00)	0.002
Comments,M (Q1,Q3)	0.00 (0.00, 2.75)	15.50 (4.00, 34.00)	< 0.001
Shares,M (Q1,Q3)	2.50 (0.00, 16.25)	21.50 (7.00, 68.25)	< 0.001
Video content			
Epidemiology	26 (27.66%)	18 (17.31%)	-
Etiology	47 (50.00%)	22 (21.15%)	-
Symptoms	74 (78.72%)	66 (63.46%)	
Diagnosis	27 (28.72%)	31 (29.81%)	-
Treatment	36 (38.30%)	46 (44.23%)	-
Prevention	5 (5.32%)	19 (18.27%)	-
Video quality			
GQS score,M (Q1,Q3)	3.00 (2.00, 3.00)	3.00 (2.75, 3.00)	0.157
mDISCERN score,M (Q1,Q3)	2.00 (2.00, 3.00)	2.00 (2.00, 3.00)	0.684
GQS: Global Quality Score; mDISCERN: Modified DISCERN			

On TikTok, specialists were the most common uploaders (52%), while Bilibili had a higher proportion of individual users (47%) (Fig. 2B). Significant differences in video length and engagement were observed across uploader types. Specialist-uploaded videos were generally shorter (93.50 seconds, IQR: 56.25, 216.00) compared to non-specialists (144.00 seconds, IQR: 91.00, 384.00) and individual users (182.00 seconds, IQR: 69.00, 267.50) ($p = 0.031$). Engagement metrics for specialist-uploaded videos were also higher than those for individual users (Table 5).

Table 5
Characteristics, Quality, and Reliability of Multiple Sclerosis Videos by Different Uploaders on TikTok and Bilibili

Variables	Individual users (n = 75)	Non-specialists (n = 53)	Specialists (n = 70)	*P*	**P*	***P*	****P*
Video length(s),M (Q1,Q3)	182.00 (69.00,267.50)	144.00 (91.00,384.00)	93.50 (56.25,216.00)	0.031			
Likes,M (Q1,Q3)	24.00 (3.00,120.50)	43.00 (7.00,97.00)	64.50 (42.00,150.50)	0.004			
Collections,M (Q1,Q3)	9.00 (1.00,48.00)	38.00 (5.00,98.00)	24.50 (10.25,55.50)	0.021			
Comments,M (Q1,Q3)	2.00 (0.00,22.50)	1.00 (0.00,5.00)	11.50 (3.00,27.00)	< 0.001			
Shares,M (Q1,Q3)	5.00 (1.00,34.00)	8.00 (0.00,38.00)	15.00 (7.00,48.00)	0.003			
GQS score,M (Q1,Q3)	2.00 (2.00,3.00)	3.00 (3.00,4.00)	3.00 (3.00,4.00)	< 0.001	< 0.001	< 0.001	0.348
mDISCERN score,M (Q1,Q3)	2.00 (1.00,2.00)	2.00 (2.00,3.00)	3.00 (2.00,3.00)	< 0.001	< 0.001	< 0.001	0.569

GQS: Global Quality Score; mDISCERN: Modified DISCERN

**P* value for the comparison between individual users and non-specialists.

***P* value for the comparison between individual users and specialists.

****P* value for the comparison between specialists and non-specialists.

Video Content

The topics covered in the videos were diverse, with symptoms (n = 140, 70.7%) and treatment (n = 82, 41.4%) being the most discussed (Fig. 3). Etiology (n = 69, 34.9%), diagnosis (n = 58, 29.3%), prevention (n = 24, 12.1%), and epidemiology (n = 44, 22.2%) were less frequently addressed (Table 3). Platform-based analysis revealed that symptoms were the most discussed topic on both platforms, appearing in 63.5% of TikTok videos (n = 66,) and 78.7% of Bilibili videos (n = 74). Treatment was also a common topic, with 44.2% of TikTok videos (n = 46) and 38.3% of Bilibili videos (n = 36) covering it. Prevention and epidemiology were the least mentioned topics across both platforms. On TikTok, prevention was addressed in 18.3% of videos (n = 19) and epidemiology in 17.3% (n = 18,), while on Bilibili, prevention appeared in 5.3% of videos (n = 5) and epidemiology in 27.7% (n = 26). Notably, etiology was much more prevalent on Bilibili, with 50.0% of videos addressing it (n = 47), compared to just 21.2% on TikTok (n = 22) (Table 4).

Video Quality and Reliability

Overall, the median GQS for all videos was 3.00 (IQR: 2.00, 3.00), and the median mDISCERN was 2.00 (IQR: 2.00, 3.00) (Table 3). Platform-based analysis showed that the median GQS on TikTok was 3.00 (IQR: 2.75, 3.00), while on Bilibili it was also 3.00 (IQR: 2.00, 3.00), with no significant difference in GQS ($p = 0.157$). The median mDISCERN on TikTok was 2.00 (IQR: 2.00, 3.00), while on Bilibili, it was also 2.00 (IQR: 2.00, 3.00), and again, there was no significant difference in mDISCERN ($p = 0.684$) (Table 4). However, when analyzed by uploader type, significant differences in the scores were observed. (Table 5) As shown in Figs. 4A and 4B, the distribution of GQS and mDISCERN scores varied by uploader type. Specifically, as shown in Figs. 5A and 5B, videos uploaded by specialists and non-specialists generally had higher quality and reliability scores compared to those uploaded by individual users ($p < 0.05$).

Correlation Between Video Features and Quality

The correlation analysis between video features and quality showed a positive correlation between video length and both GQS ($r = 0.23$) and mDISCERN ($r = 0.24$) (Fig. 6). No significant correlations were found between engagement metrics (including likes, collections, comments, and shares) and GQS or mDISCERN scores.

Discussion

This study aimed to evaluate the quality and reliability of Multiple Sclerosis-related short videos on TikTok and Bilibili, focusing on video characteristics, engagement metrics, and uploader types. A total of 198 videos were analyzed, revealing several key findings. Firstly, TikTok videos were generally shorter and had significantly higher engagement compared to Bilibili. Regarding content, symptoms were the most frequently discussed topic, followed by treatment and etiology, while Bilibili featured a higher proportion of videos on prevention and etiology compared to TikTok. The analysis of video quality and reliability indicated that videos uploaded by specialists and non-specialists generally had higher quality and reliability scores compared to those uploaded by individual users. Notably, a positive correlation was found between video length and Global Quality Score (GQS) and modified DISCERN (mDISCERN) scores, suggesting that longer videos tend to have higher quality and reliability. However, no significant correlation was found between engagement metrics and quality scores, indicating that high user interaction does not necessarily reflect higher content quality.

There were significant differences in engagement metrics for Multiple Sclerosis-related short videos between TikTok and Bilibili. TikTok videos generally had higher likes, comments, shares, and collections than Bilibili videos. This finding aligns with previous studies, indicating that TikTok's algorithm-driven short video format is particularly effective in driving engagement, especially among younger, entertainment-focused audiences[14]. In contrast, Bilibili attracts a more knowledge-oriented user base, with longer videos and relatively lower engagement metrics, likely reflecting the platform's emphasis on in-depth content[15].When comparing different uploader types, videos uploaded by specialists showed significantly higher engagement compared to those uploaded by individual users. This suggests that professional content resonates more with viewers, leading to higher engagement. This finding is consistent with earlier

research, which indicates that health-related videos uploaded by professionals are more likely to attract viewers and increase engagement [16–18].

In this study, although symptoms and treatment were the most frequently discussed topics, discussions on etiology, diagnosis, prevention, and epidemiology were relatively infrequent. The lack of discussions on etiology and prevention may have a significant impact on the public's understanding of the disease. The limited discussion of etiology could lead to misconceptions about the causes of MS, especially considering its complex and multifactorial nature. For example, genetic factors, such as specific gene variants like HLA-DRB1*15, are linked to MS susceptibility. Environmental factors like EBV infection are considered important triggers for MS, while vitamin D deficiency, smoking, and obesity during adolescence have also been associated with an increased risk of developing MS[19, 20]. The lack of such information may delay recognition of risk factors and hinder early intervention efforts.

Similarly, the limited discussion on prevention may result in missed opportunities to educate the public about modified lifestyle factors and the importance of early medical consultation, which could help alleviate the disease burden. Given the critical role of neuroprotective mechanisms, such as high-dose vitamin D, in preventing MS progression and relapse, enhancing public awareness of these preventive strategies is essential for improving patient outcomes, particularly in relapsing-remitting MS[21–23].

While treatment was a commonly discussed topic, the lack of in-depth discussions on diagnosis and epidemiology may affect individuals' self-awareness and hinder timely access to medical resources, particularly in regions where MS diagnosis may be delayed or underrecognized. Delayed diagnosis of MS is a significant concern. A study in Egypt found that the average time from symptom onset to diagnosis was over five years, with misdiagnosis and lack of awareness among healthcare providers contributing to delays[24]. Similarly, a global survey involving coordinators from 107 countries, representing approximately 82% of the world population, indicated that 83% of participants reported at least one major barrier to early MS diagnosis. These barriers included a lack of awareness of MS symptoms among both the general public and healthcare professionals, as well as limited access to healthcare professionals with the necessary knowledge to diagnose MS[25].

Although the content trends on TikTok and Bilibili were broadly similar, the proportion of videos on etiology was notably higher on Bilibili compared to TikTok. This difference likely reflects Bilibili's focus on a more knowledge-oriented audience. In contrast, TikTok's younger, entertainment-driven audience is more inclined to engage with symptom and treatment-related content[26, 27]. This discrepancy highlights the importance of balancing MS education across platforms. Both platforms should strive to include more comprehensive content that covers etiology, prevention, and epidemiology, especially given the growing influence of social media in shaping public health knowledge.

The overall GQS and mDISCERN scores for the videos were moderate. Videos related to MS on TikTok and Bilibili showed similar quality and reliability, consistent with previous studies on liver cancer and Radiotherapy Health Information, which also found moderate video quality and no significant differences in scores[7, 28].Videos uploaded by specialists typically received higher GQS and mDISCERN scores. Specialists with a medical background generally provide more accurate, comprehensive, and reliable

content, while individual users often rely on personal experiences or unverified sources, leading to oversimplified or potentially misleading information[29–31].Despite the higher quality of videos uploaded by specialists, the overall quality and reliability of health-related videos on both platforms remain suboptimal. Even videos uploaded by specialists, though rated moderately, fall short of excellence. This highlights the potential for improvement, particularly in areas such as scientific evidence, clarity, and objectivity. Healthcare professionals can simplify complex concepts using accessible language and incorporate animations or graphics to aid understanding[32]. For example, a 3D animation illustrating the destruction of myelin by autoimmune attacks, which disrupts electrical impulses transmitted through the nerves, could significantly enhance comprehension. These advantages underscore the unique value of healthcare professionals in digital health communication and emphasize the importance of encouraging greater professional involvement.

The correlation analysis in this study shows that longer videos generally have better quality and reliability, which aligns with previous research on stroke prevention, lymphedema, and hypertension. These studies found that longer videos typically provide more detailed, accurate, and reliable health information, thereby enhancing public health education and engagement[10, 33, 34]. Longer videos enable content creators to cover key aspects such as etiology, prevention, and treatment, which are difficult to fully address in shorter formats, especially for complex rare diseases like MS. However, this positive correlation does not imply that short videos cannot deliver high-quality content. TikTok’s short videos engage viewers through visual stimuli and targeted information. The challenge lies in ensuring that even short videos maintain high accuracy and reliability. While short videos may focus more on symptoms or brief treatment overviews, they must still be evidence-based to ensure accuracy and benefit to the audience. The positive correlation between video length and higher GQS and mDISCERN scores suggests that both platforms and content creators should prioritize providing detailed content, especially for complex conditions like MS. With its longer video format, Bilibili is well-suited for delivering evidence-based, detailed content. However, TikTok's short video format requires innovative solutions to balance conciseness with thoroughness, such as using multiple interconnected videos or providing reliable source references.

This study assessed the quality and reliability of MS-related short videos on TikTok and Bilibili, finding similar overall quality across platforms. Content on prevention and diagnosis was limited, while specialist-uploaded videos generally showed higher quality. A positive correlation was found between video length and quality. These results highlight the importance of expert involvement and video length in improving content quality, and underscore the need to prioritize prevention and diagnosis in health communication.

There are several limitations to this study. First, the analysis was based on a cross-sectional design, which only provides a snapshot of the video content at a single point in time. This limits the ability to assess changes over time or the long-term impact of these videos on public health awareness. Second, the study only focused on videos from two platforms, TikTok and Bilibili, which may not be representative of all social media platforms, and videos from other platforms might present different patterns of content quality and engagement. Third, the evaluation of video quality was subjective, relying on scoring frameworks such as GQS and mDISCERN, which may vary depending on the assessors' interpretation. Lastly, although the study

analyzed a large number of videos, the sample may not fully represent all content available on these platforms, as videos not related to MS or those with very low engagement were excluded from the analysis.

Conclusion

This study assessed MS-related videos on TikTok and Bilibili, finding similar quality but differing content and engagement. TikTok had higher engagement, while Bilibili offered more detailed content, especially on etiology. Videos by specialists were of higher quality, with longer videos generally providing more comprehensive information.Although the quality was moderate, improvements in scientific accuracy are needed. Both platforms should focus more on prevention, diagnosis, and etiology, while ensuring short videos balance engagement with reliability. This study emphasizes the importance of expert involvement in enhancing the quality of health-related content.

Declarations

Contributorship

Biao Jiang: Methodology; Formal analysis; Writing – Original Draft.

Sheng-xue Wang: Conceptualization; Investigation; Writing – Review & Editing.

Yu-hao Chu: Supervision; Project administration; Writing – Review & Editing.

All authors have read and approved the final version of the manuscript.

Funding

None.

Conflicting interests

The authors declare no competing interests.

Patient and public involvement

Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication

Not applicable.

Ethics approval

This study was conducted in accordance with the Declaration of Helsinki. It did not involve human participants, clinical data, laboratory animals, or histological research. The data analyzed were sourced

from publicly accessible videos on TikTok and Bilibili, and all data collection procedures adhered to the terms of service of both platforms. No personally identifiable information was gathered, and no interactions with users were performed. As the research was based on publicly available data and did not involve direct human subject interaction, no ethical approval was required. Clinical trial number: not applicable.

Guarantor

Yuhao Chu is the guarantor of this article. She takes full responsibility for the integrity of the research and data, has full access to all data, and had the final decision-making authority regarding publication.

Data availability statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

Acknowledgements

The authors would like to express their gratitude to the participants who participated in the study.

Supporting Information

None.

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Figures

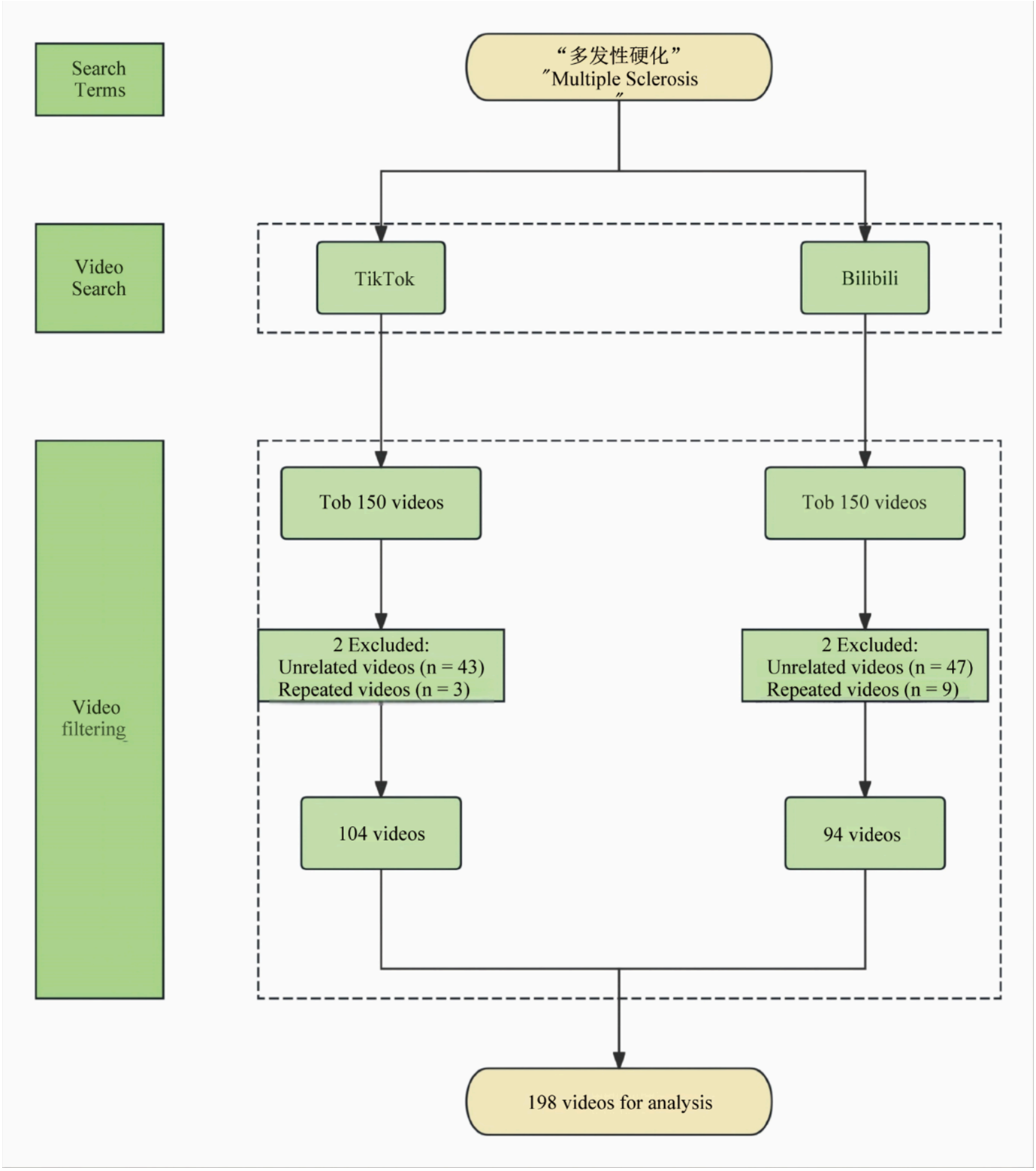


Figure 1

Flow chart of video selection

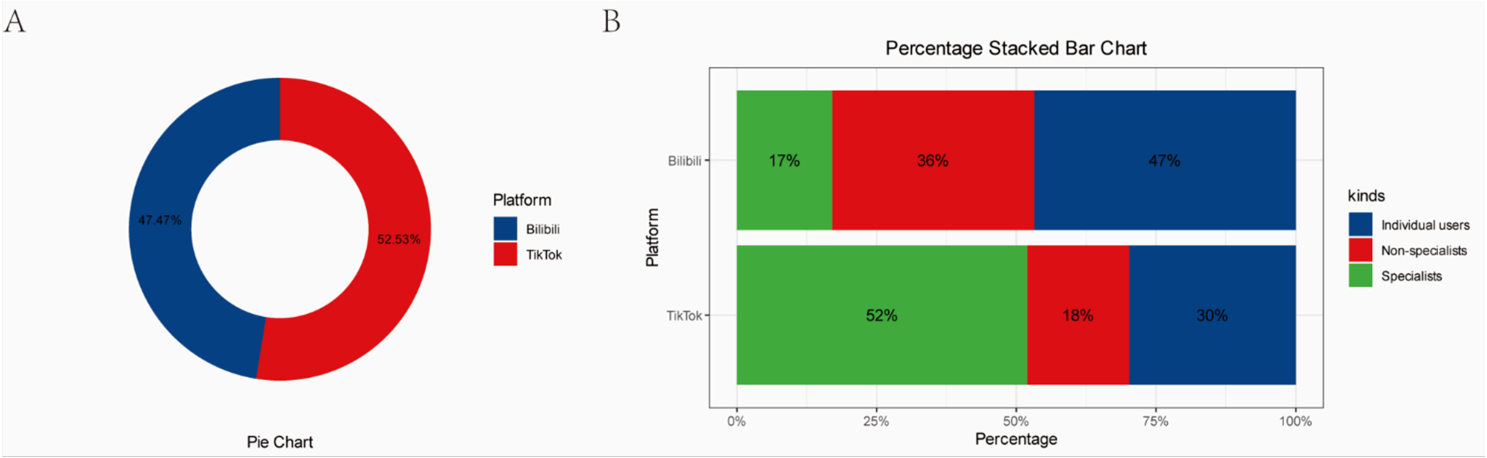


Figure 2

Distribution of Video Uploaders on Bilibili and TikTok. (A) Overall distribution of video uploaders.(B) Distribution of professional, non-professional, and individual user uploaders on TikTok and Bilibili.

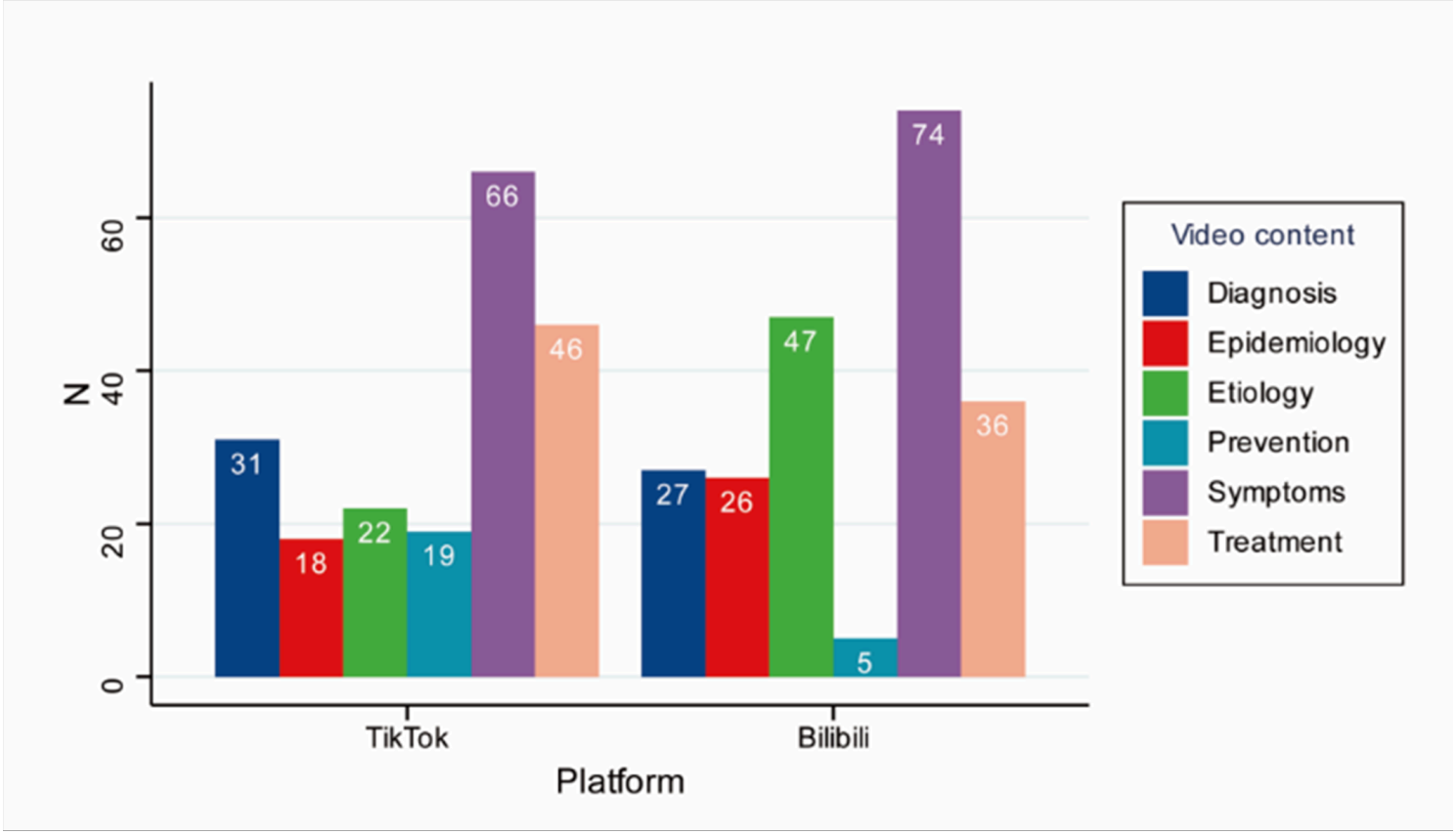


Figure 3

Information about Multiple Sclerosis-related video content from TikTok and Bilibili.

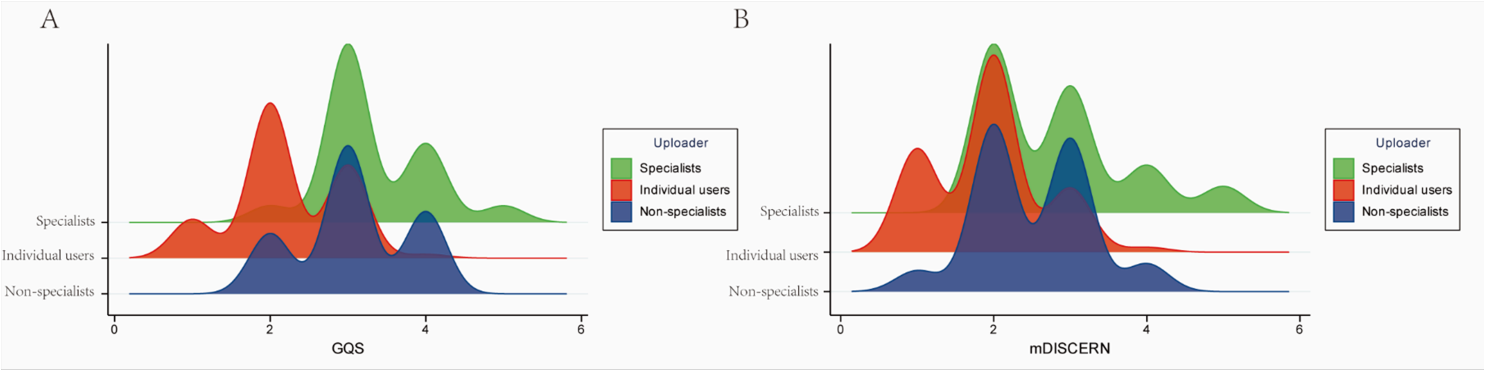


Figure 4

Distribution of video quality and reliability scores across uploader groups.

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Figure 5

Comparison of Quality and Reliability Scores Between Videos on TikTok and Bilibili.

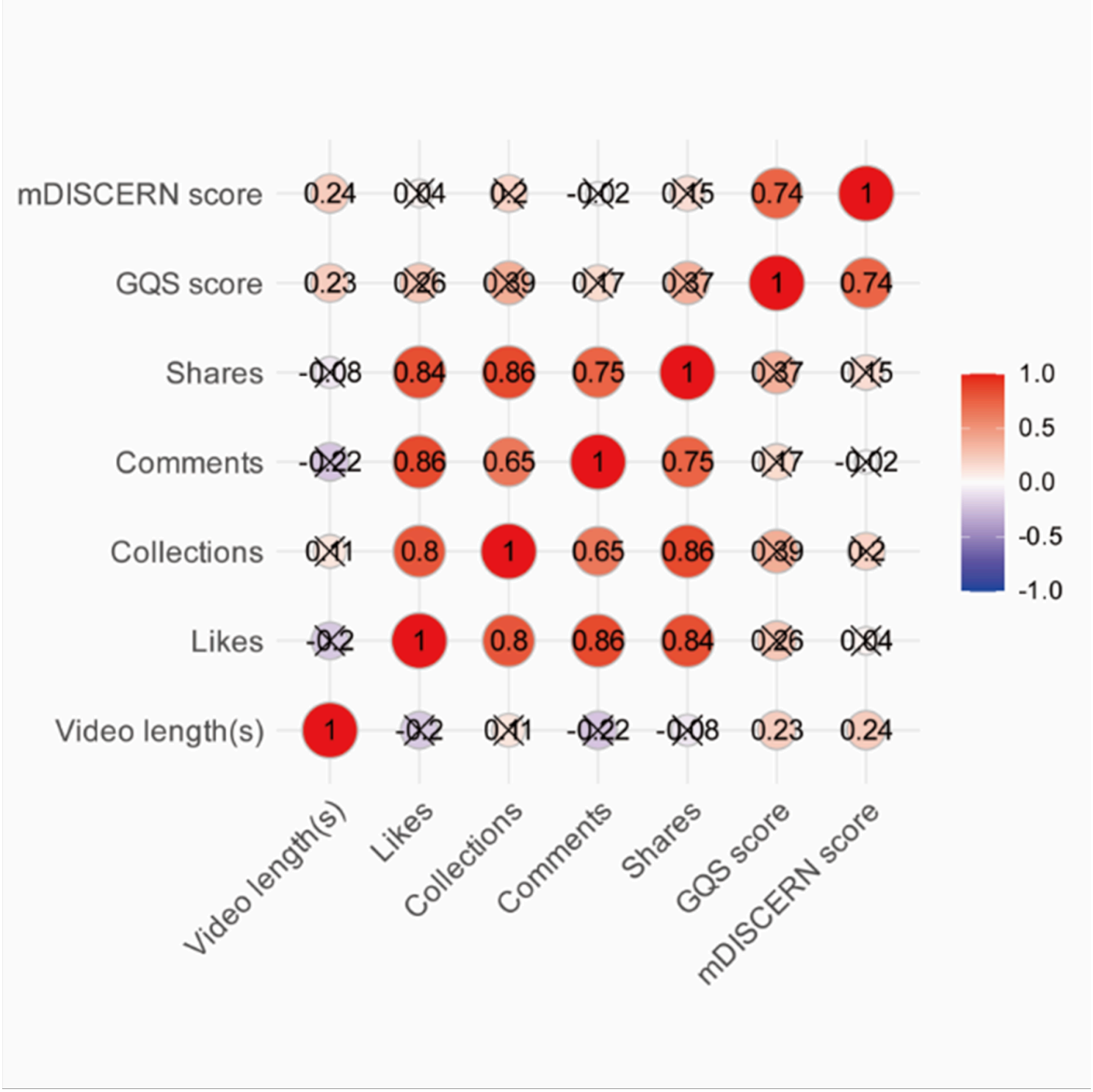


Figure 6

Correlation Heatmap of Video Characteristics, Engagement, and Quality Scores

Supplementary Files

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- data.xlsx