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A Comparative Study of Children's Literature in Pakistan: Traditional vs. AI-Generated Stories in Reader Engagement and Cultural Relevance

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Abstract

The genre of Pakistani English short stories has been instrumental in shaping the identity of Pakistan and its people. With the rapid advancement of artificial intelligence (AI) in our digital society, there is a transformative impact on various aspects of life, including storytelling. This study delves into the evolving landscape of children's literature in Pakistan by conducting a comparative analysis between traditional short stories from Dawn Young World and AI-generated narratives tailored for young Pakistani readers. The research aims to explore the similarities and differences between these narratives using multidimensional analysis and qualitative analysis. The primary focus lies in understanding the impact of AI on storytelling for Pakistani children, specifically assessing potential variations in cultural relevance between narratives crafted by humans and those generated by AI. The study reveals significant differences in scores of dimensions 1 (involved vs. informational) between the two corpora through ANOVA followed by a mean comparison test. While AI technology demonstrates remarkable strides in emulating storytelling styles and producing involved and engaging narratives deemed superior to those by human authors, a qualitative analysis using the cultural continuum model indicates a shortfall in delivering the cultural relevance inherent in human-authored tales. The findings advocate for collaborative approaches that leverage AI's efficiency in producing linguistically rich text while preserving human creativity and societal context. The goal is to craft meaningful and culturally resonant storytelling experiences for young readers in Pakistan.

Introduction

In shaping the identity of the Pakistani nation and its people, the genre of Pakistani English short stories has been extremely influential. The history and literary heritage of Pakistan have greatly benefited from the portrayal of Pakistani culture and traditions by Pakistani English short story writers. The Pakistani English short story writers were given a platform in the early 1960s by prestigious publications like the Herald, Pakistan Quarterly, and Vision. When it comes to children's fiction, it is obvious that the main objective is to delight or amuse the reader.

Artificial intelligence (AI) has become a potent instrument, revolutionizing many facets of our lives in today's quickly developing digital society. In the world of storytelling, AI-generated content is becoming increasingly prevalent, including in Pakistan. Children's literature plays a crucial role in shaping young minds in the country. This article aims to compare traditional short stories published locally in children's magazines with AI-generated narratives tailored for Pakistani children.

This exploration intends to foster a dialogue between the traditional and technological realms of storytelling. Rather than viewing AI-generated stories as a threat to human creativity, we seek to highlight the potential synergy

between human imagination and machine-generated narratives. This discussion can potentially inspire new approaches to storytelling that incorporate the best of both worlds, enhancing children's literary experiences in Pakistan.

This article embarks on a comparative journey, examining the captivating narratives found in Pakistan's children's magazines and contrasting them with AI-generated short stories tailored for Pakistani children. Through an MD analysis and qualitative analysis, this study aims to unravel the intricacies of these two storytelling approaches, shedding light on their respective merits and limitations. By fostering a dialogue between tradition and technology, we hope to pave the way for a richer and more diverse landscape of children's literature in Pakistan.

Research Questions

- At which dimensional level there is a difference between human-generated short stories by Dawn Young and AI-generated short stories for Pakistani children?
- Can AI generate culturally relevant stories, especially in the context of Pakistan?

Literature Review

Children's literature plays a significant role in language development and education. It serves as a medium to engage young readers, foster imagination, and impart valuable knowledge. With the emergence of artificial intelligence (AI) and advancements in natural language generation, there is growing interest in exploring the comparison of traditional children's stories and AI-generated stories. This literature review examines studies conducted over time to understand the characteristics of short stories in Pakistani children's magazines and AI-generated stories for Pakistani children using multidimensional analysis (MD).

Early Studies on Children's Literature

In the early 2000s, Stuart et al. (2003) conducted a study to analyze the most frequently used words in children's books. Their findings revealed that functional words were more prevalent than content words, and there was a significant difference in the usage of pronouns by males and females. This study laid the foundation for understanding linguistic patterns in children's literature**.** In 2013, Wild et al. explored a keyword analysis of children's literature, focusing on fictional and non-fictional texts. Their research indicated that children's literature commonly incorporated words related to weather, tools, buildings, and body parts, whereas adult fiction emphasized education, religion, law, and relationships. This study highlighted thematic differences between children's and adult's literature. Fareed, Sultan, and Shireen (2021) conducted a comprehensive review of Pakistani English stories for children, focusing on linguistic adaptation and technical elements. Analyzing a diverse selection of stories, the study highlights how authors creatively infuse the English language with cultural nuances to resonate with young readers. The research emphasizes the importance of age-appropriate content and engaging narrative techniques in fostering language development and capturing children's interest. This review contributes valuable insights for educators, parents, and publishers, offering guidance in curating enriching reading experiences for young learners in Pakistan. Recent research by Latif, Ali, and Shakir (2022) examined short stories for children and adults published in Pakistani English magazines. Their multidimensional analysis focused on narrative and non-narrative concerns. The findings indicated that while both children's and adult stories shared common structural components, such as characters, settings, and plots, they differed significantly in thematic content and complexity. Children's stories prioritized entertainment and moral lessons, whereas adult stories emphasized psychological insights and social issues. This study contributes to our understanding of short stories in Pakistani English literature and provides insights into storytelling techniques for different target audiences. Bashir, Nayab, and Batool (2022) present a concise review highlighting the pivotal role of children's story books in fostering social and intellectual development. Through a comprehensive analysis of existing literature, the study underscores the positive impact of storytelling on cognitive growth, emotional intelligence, and communication skills in young minds. The findings emphasize the significance of incorporating diverse and engaging storybooks into early childhood education to nurture well-rounded individuals with enhanced social adaptability and problem-solving abilities.

Multidimensional Analysis in Fiction

Researchers have employed multidimensional analysis to gain deeper insights into various aspects of fiction. Biber and Finegan (1994), Watson (1994), Baker and Eggington (1999), and Egbert (2012), conducted studies that applied multidimensional analysis to analyze different aspects of fictional texts. These studies explored narrative concerns, differences among varieties of English, and literary styles, offering valuable insights into the narrative nature of different texts and variations in writing styles. Ali and Ahmad (2016) investigate discourse style variation among prominent novelists of Pakistani fiction in English. Employing a multidimensional analysis (MD) approach, the study explores the linguistic intricacies and distinctive narrative techniques employed by these authors. By examining a diverse corpus of literary works, the researchers discern patterns of discourse variation, identifying unique stylistic

features that distinguish one novelist from another. The analysis delves into aspects such as syntax, vocabulary, and narrative structures, shedding light on the individual authorial voices that contribute to the rich tapestry of Pakistani English fiction. The article emphasizes the significance of such research in understanding the evolving landscape of English literature in Pakistan and offers valuable insights for scholars and literary enthusiasts alike. This review provides a comprehensive overview of the linguistic diversity within Pakistani fiction in English, paving the way for further exploration and appreciation of the literary contributions from this region.

AI Tools in Education

In more recent years, studies have explored the integration of AI tools in education. Septiani and Kostakos (2022) proposed a framework for analyzing the level of creative engagement in AI tools, focusing on problem-solving, prototyping, ideation, collaboration, reflection, and evaluation. They found that intelligent tutoring systems were commonly used to support creative engagement in learners. Topsakal and Topsakal (2022) introduced a framework that combined augmented reality, voice bots, and AI language models (such as ChatGPT) to develop a foreign language teaching software tool. This framework aimed to provide an engaging and effective learning experience for young children.

Children's literature, both traditional and AI-generated, holds great potential in fostering language development, imagination, and critical thinking skills. Previous research has shed light on the characteristics of short stories in Pakistani children's magazines and explored the integration of AI tools in education. As AI continues to advance, further research is warranted to fully understand the implications, challenges, and benefits of AI-generated stories for Pakistani children. This literature review contributes to the broader understanding of children's literature and sets the stage for future studies in this field.

Study of Cultural Continuum

Kim, D., Pan, Y., & Park, H. S. (1998) applied the cultural continuum to American, Korean and Chinese sample subjects and identified that high and low context cultures exist as described by Hall(1976). Ogbuigwe, T. D. (2013) studied the cultural continuum as one of the seven cultural studies models and suggested that different businessmen should know these models to become more relevant to the target market.

Research Methodology

Biber's groundbreaking work in 1988 introduced the Multidimensional analysis method to examine the variation in language registers. He compared 23 spoken and written registers, focusing on the co-occurrence patterns of prominent linguistic features to understand how they contribute to specific communicative goals.

Before Biber's work, linguists had recognized the limitations of studying isolated linguistic markers without considering their systematic co-occurrence. The idea that sets of linguistic features work together to achieve specific communicative purposes became essential in this approach. Biber emphasizes that the analysis of registers should not solely rely on individual linguistic features but must take into account the overall usage and combinations of features within a register.

Multidimensional analysis combines both quantitative and qualitative methodologies. Statistical factor analysis is employed to identify clusters of co-occurring linguistic features, with both positive and negative loadings, indicating the presence or absence of complementary features within a given register. These co-occurring patterns are then qualitatively interpreted to identify and label dimensions, representing distinct aspects of the register variation.

Biber's study revealed six textual dimensions of register variation:

i. **Informational vs. Involved Production:** This dimension captures the distinction between registers that focus on dense information and those that involve interactive and engaged discourse.
ii. **Narrative vs. Non-Narrative Concerns:** It distinguishes between registers primarily focused on narrating events and those with different types of discourse.
iii. **Explicit vs. Situation Dependent Reference:** This dimension separates registers that employ explicit informational discourse from those relying on context-dependent expressions.
iv. **Overt Expression of Persuasion:** It identifies registers that overtly express persuasion through specific linguistic features.
v. **Abstract vs. Non-Abstract Information:** This dimension highlights the difference between formal, abstract informational discourse and other types of expression.
vi. **On-Line Informational Elaboration:** This dimension highlights whether the information expressed is produced under certain time constraints or not, for example in speeches.

The old MD analysis, which is based on Biber's 1988 study, and the new MD analysis, which entails the investigation of new dimensions through factor analysis, are two different forms of multidimensional analysis that can

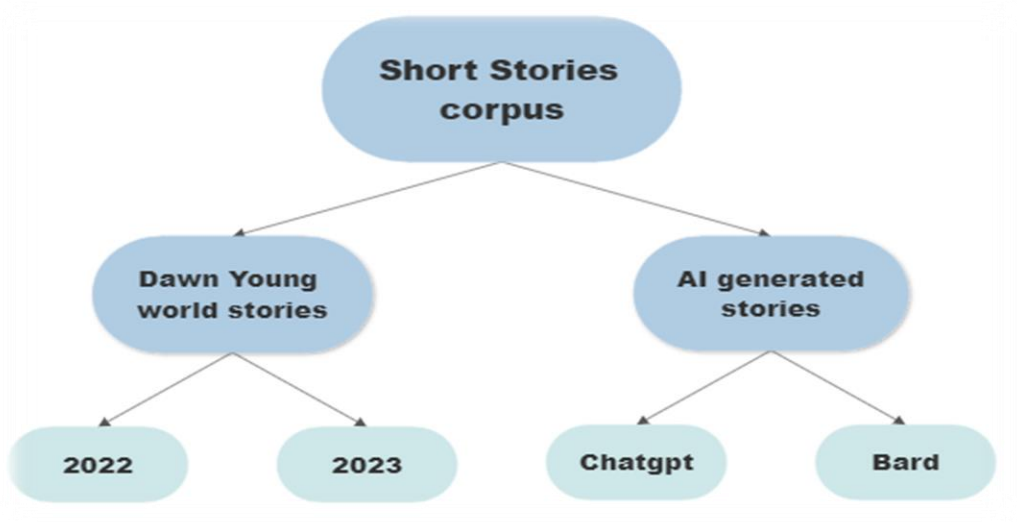
be performed. The six textual dimensions described by Bieber are used as a framework for analysis in the current study to analyze register variation in employing the old MD analysis.

For identifying the cultural relevance and cultural aspects of both human-generated and AI-generated stories, this study has used Edward T. Hall's cultural continuum which he presented in 1976. Hall (1976) explained that **high-context cultures** are characterized by strong interpersonal bonds extending from family to broader society, facilitating a free flow of information among individuals. Conversely**, low-context cultures** are marked by individualism, detachment, and limited interaction with others, resulting in less information exchange. Later on, Kim et al (1998) provided a detailed description of Hall's model under five major aspects

i. **Social Orientation:** In high-context cultures, such as collectivistic societies as described by Kim et al. (1998), people have close relationships and freely share detailed information. Conversely, low-context cultures, according to Kim et al. (1998), exhibit weaker social ties, and individuals tend to work independently with minimal information sharing. In such environments, there may be a constant competitive atmosphere as everyone strives to gain exclusive knowledge.
ii. **Commitment**: High-context cultures foster high levels of commitment due to strong interpersonal bonds, leading to cohesion and interdependence among members (Kim et al., 1998). In contrast, low-context cultures emphasize individualism, where people may not feel as obligated to commit to others, relying more on themselves.
iii. **Responsibility**: In high-context cultures, individuals in positions of authority are held personally accountable for the actions of their subordinates (Hall, 1976). In low-context cultures, identifying responsibility can be challenging, and errors may result in subordinates bearing the blame.
iv. **Confrontation**: Members of high-context cultures typically avoid confrontation and prioritize maintaining harmony (Hall, 1976). This often involves suppressing personal feelings to preserve dignity and avoid conflict, which can lead to unresolved disputes over time. Conversely, low-context cultures are more accepting of confrontation as a means of resolving issues and maintaining harmony through open expression.
v. **Communication**: In high-context cultures, communication is concise and relies heavily on implicit meanings, with less emphasis on verbal expression (Hall, 1976). Conversely, low-context cultures prioritize verbal communication, focusing on explicit messages rather than implicit meanings. Individuals from high-context cultures may find excessive verbal communication unnecessary, while those from low-context cultures may struggle with interpreting implicit cues.

Data collection

For research, 100 short stories with 75846 tokens were collected from Dawn Young World, which is a renowned children's magazine in the English language, first published in 1985. For corpus. 50 stories were collected from magazines of 2022 and 50 stories were collected from 2023's magazines. This study aims to compare the stories from dawn young world to AI-generated stories for Pakistani children of age group 8 to 12 years. For AI based corpus, 100 short stories with 46669 words. 50 short stories were generated through Google Bard, an AI-powered chatbot tool designed by Google to simulate human conversations using natural language processing and machine learning. And 50 short stories were generated through ChatGPT, a natural language processing tool driven by AI technology that allows you to have human-like conversations and much more with the chatbot.



Procedure

The provided data presents a comparative analysis of two distinct population groups: the "Dawn Young World Stories Corpus" and the "Artificial Intelligence Generated Stories Corpus." The analysis was conducted using the Multidimensional Analysis approach, and the resulting dimension scores for each group were examined and compared. Here's a summarized version of the steps:

1. The MAT software and the required JavaScript file were downloaded from the internet and installed on my PC.
2. MAT was opened, and the settings were configured by clicking on "tag and analyze," selecting "yes" for Zscore correction, and choosing "All tags" for analysis.
3. The corpus was uploaded by browsing and selecting the location of the folder containing the cleaned and untagged data.
4. The dimensions to be studied for the analysis were selected.
5. After analyzing the corpus using MAT, the "MAT corpus" files were found in the original corpus location. Opening the "statistics" section, graphical representations of each dimension, an Excel file showing corpus details, and another Excel file containing "Zscores" were viewed.
6. A cutoff point for the Zscore values, which was ±0.3, was decided upon.
7. In the Zscore Excel file, conditional formatting was applied to colour values greater than or equal to +0.3 and values less than or equal to -0.3. Then, the relevant data was copied to a new sheet, removing insignificant (colorless) values.
8. A list of 67 linguistic features along with their tags and dimension numbers was made, and the mean score for each tag was calculated.
9. Using a new sheet, the mean score of each feature was placed under its respective dimension. Then, negative feature scores were subtracted from positive feature scores for each dimension to obtain the dimension scores.
10. Finally, the dimension scores were interpreted to understand the linguistic features used in the analyzed corpus and their characteristics. The same procedure was applied to both corpora and statistical analysis was conducted to compare their dimension scores.

Statistical Analysis

Basic statistical measurements (mean, maximum value, minimum value and standard deviation) were computed by using Microsoft Excel. Then, a two-way analysis of variance and Tukey mean comparison test was applied by using Statistix 8.1.

Results

Table 1 represents the dimension scores for each dimension of the Dawn young world corpus, their minimum and maximum values, ranges, and standard deviations.

Dimensions	Dimension score	MAX. value	MIN. Value	Range	Standard Deviation
D1	13101.83	13083.33	-1.68	13085.01	2348.51
D2	5.43	2.05	-0.77	2.82	0.93

D3	4.56	0.92	-0.79	1.71	0.58
D4	3.50	0.99	-0.78	1.76	0.66
D5	10.79	3.82	-1.33	5.15	1.63
D6	5.67	2.52	-0.88	3.40	1.14

TABLE 1

As shown in table 1, the score of dimension-1(D1) is 13101.83. The maximum mean score of a feature in this dimension was 13083 and the minimum mean score of a feature in this dimension is -1.68. The range of mean scores was calculated by subtracting the minimum value from the maximum value. The range of mean scores for dimension 1 is 13085.01. there is a 2348.51 value of the standard deviation of dimension 1. The score of dimension-2(D2) is 5.43. The maximum mean score of a feature in this dimension was 2.05 and the minimum mean score of a feature in this dimension was -0.77. The range of mean scores was calculated by subtracting the minimum value from the maximum value. The range of mean scores for dimension 2 is 2.82. There is a 0.93 value of standard deviation of dimension 2. The score of dimension-3(D3) is 4.56. The maximum mean score of a feature in this dimension was 0.92 and the minimum mean score of a feature in this dimension was -0.79. The range of mean scores was calculated by subtracting the minimum value from the maximum value. The range of mean scores for dimension 3 is 1.71. there is a 0.58 value of standard deviation of dimension 3. The score of dimension-4(D4) is 3.50. The maximum mean score of a feature in this dimension was 0.99 and the minimum mean score of a feature in this dimension is -0.78. The range of mean scores was calculated by subtracting the minimum value from the maximum value. The range of mean scores for dimension 4 is 1.76. There is a 0.66 value of the standard deviation of dimension 4. The score of dimension-5(D5) is 10.79. The maximum mean score of a feature in this dimension was 2.82 and the minimum mean score of a feature in this dimension is -1.33. The range of mean scores was calculated by subtracting minimum value from maximum value. Range of mean scores for dimension 5 is 5.15. there is 1.63 value of standard deviation of dimension 5. The score of dimension-6(D6) is 5.67. The maximum mean score of a feature in this dimension was 2.52 and the minimum mean score of a feature in this dimension is -0.88. The range of mean scores was calculated by subtracting minimum value from maximum value. Range of mean scores for dimension 6 is 3.40. There is 1.14 value of standard deviation of dimension 6.

Dimensions	Dimension Scores	Max. Value	Min. Value	Range	Standard Deviation
D1	22525.62	22500	-2.00	22502.00	4038.90
D2	8.39	2.13	-0.89	3.02	1.31
D3	6.07	2.46	-0.78	3.24	0.94
D4	5.36	1.42	-1.07	2.49	0.91
D5	15.22	9.29	-2.31	11.60	3.36
D6	7.22	3.00	-1.45	4.45	1.42

TABLE 2

As shown in table 1, the score of dimension-1(D1) is 22525.62. The maximum mean score of a feature in this dimension was 22500 and the minimum mean score of a feature in this dimension is -2.00. The range of mean scores was calculated by subtracting minimum value from maximum value. Range of mean scores for dimension 1 is 22502.0. There is 4038.90 value of standard deviation of dimension 1. The score of dimension-2(D2) is 8.39. The maximum mean score of a feature in this dimension was 2.13 and the minimum mean score of a feature in this dimension is -0.89. The range of mean scores was calculated by subtracting minimum value from maximum value. Range of mean scores for dimension 2 is 3.02. There is 1.31 value of standard deviation of dimension 2. The score of dimension-3(D3) is 6.07. The maximum mean score of a feature in this dimension was 2.46 and the minimum mean score of a feature in this dimension is -0.78. The range of mean scores was calculated by subtracting the minimum value from maximum value. Range of mean scores for dimension 3 is 3.24. There is a 0.94 value of standard deviation of dimension 3. The score of dimension-4(D4) is 5.36. The maximum mean score of a feature in this dimension was 1.42 and the minimum mean score of a feature in this dimension is -1.07. The range of mean scores was calculated by subtracting minimum value from maximum value. Range of mean scores for dimension 4 is 2.49. There is 0.91 value of standard deviation of dimension 4. The score of dimension-5(D5) is 15.22. The maximum mean score of a feature in this dimension was 9.29 and the minimum mean score of a feature in this dimension is -2.31. The range of mean scores was calculated by subtracting minimum value from maximum value. Range of mean scores for dimension 5 is 11.60. There is 3.36 value of standard deviation of dimension 5. The score of dimension-6(D6) is 7.22. The maximum mean score of a feature in this dimension was 3.00 and the minimum mean score of a feature in this dimension is -

1.45. The range of mean scores was calculated by subtracting minimum value from maximum value. Range of mean scores for dimension 6 is 4.45. There is 1.42 value of standard deviation of dimension 6.

Here is the graphical comparative representation of dimension scores of all 6 dimensions of both corpora i.e. Dawn Young world and AI generated stories.

Figure 1 represents that the score of dimension 1 is higher in AI generated short stories corpus than Dawn Young World Stories corpus. Figure 2 represents that the score of dimension-2 are higher in AI generated short stories corpus than Dawn young world stories corpus. Figure 3 represents that score of dimension 3 are higher in AI generated short stories corpus than Dawn young world stories corpus. Figure 4 represents that score of dimension-4 are higher in AI generated short stories corpus than Dawn Young World Stories corpus. Figure 5 represents that score of dimension-5 are higher in AI generated short stories corpus than Dawn young world stories corpus. Figure 6 represents that score of dimension-6 are higher in AI generated short stories corpus than Dawn young world stories corpus.

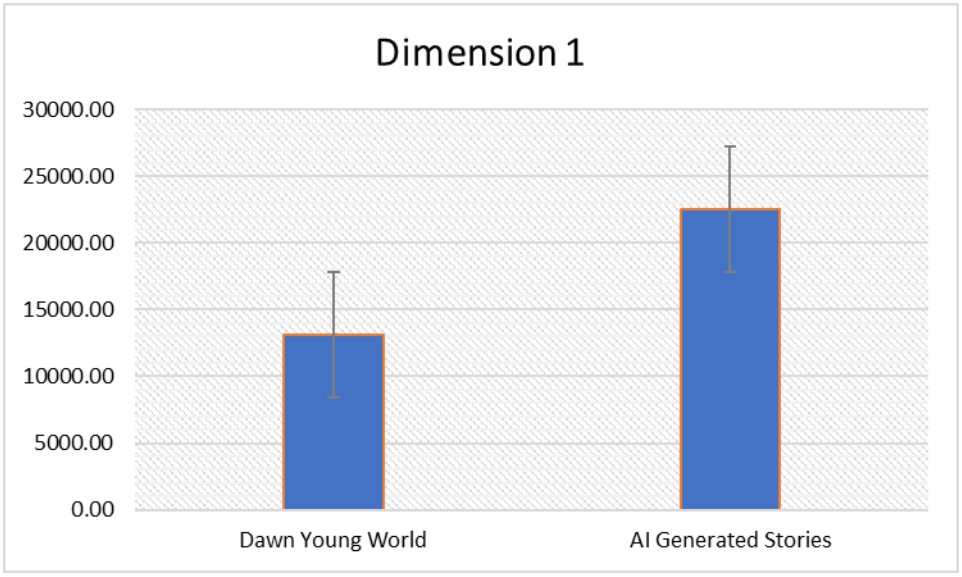
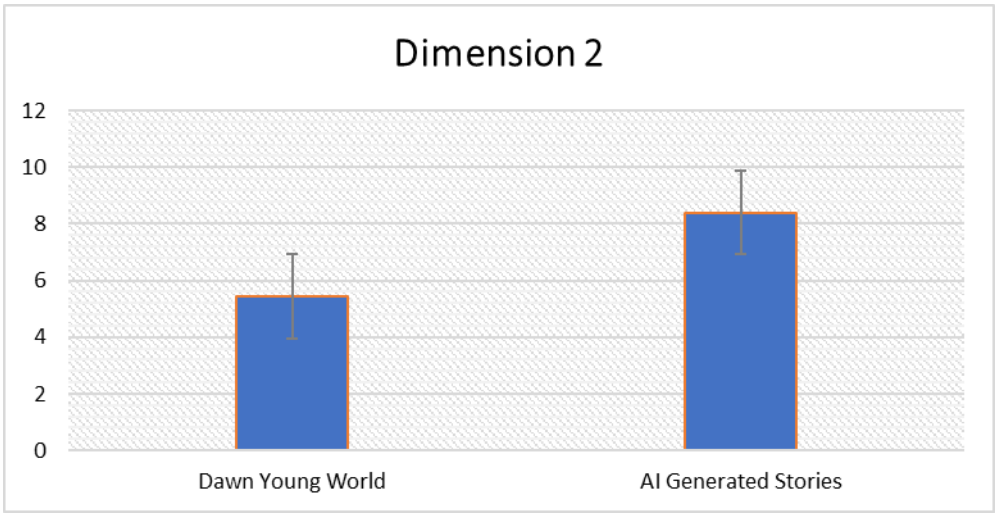


FIGURE 1



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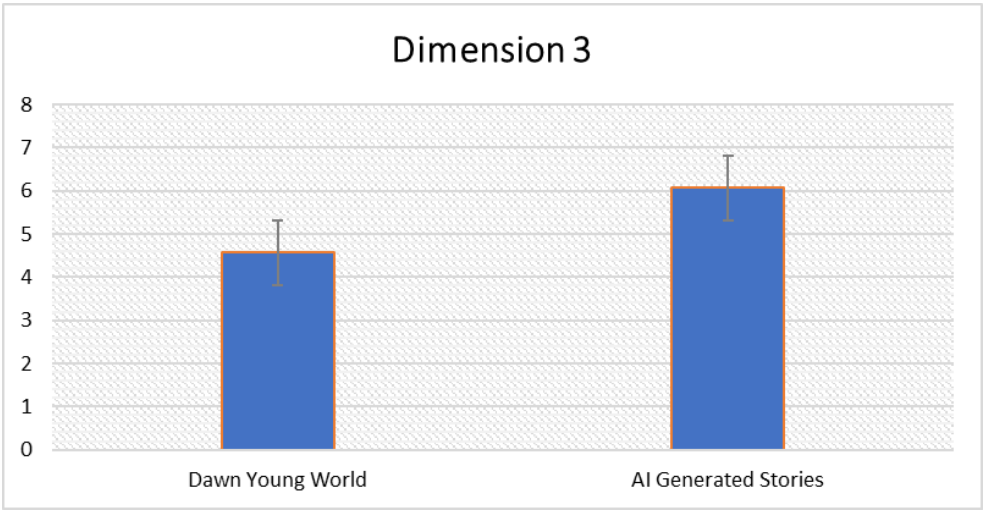

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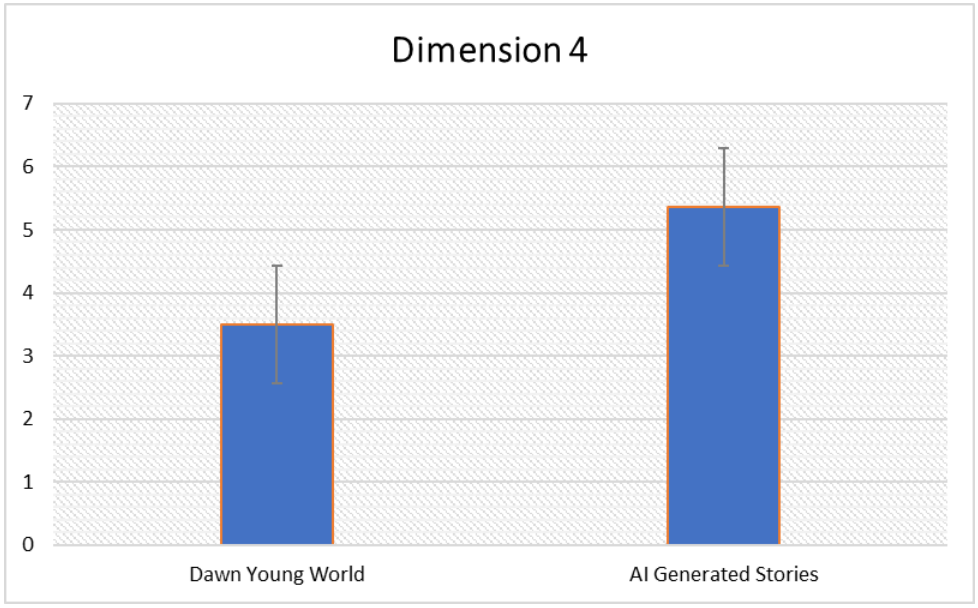

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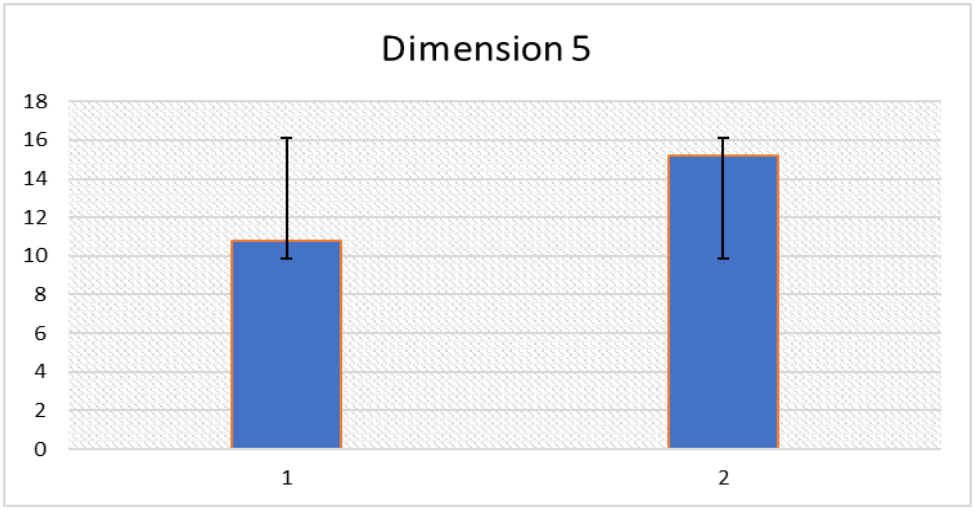

FIGURE 5

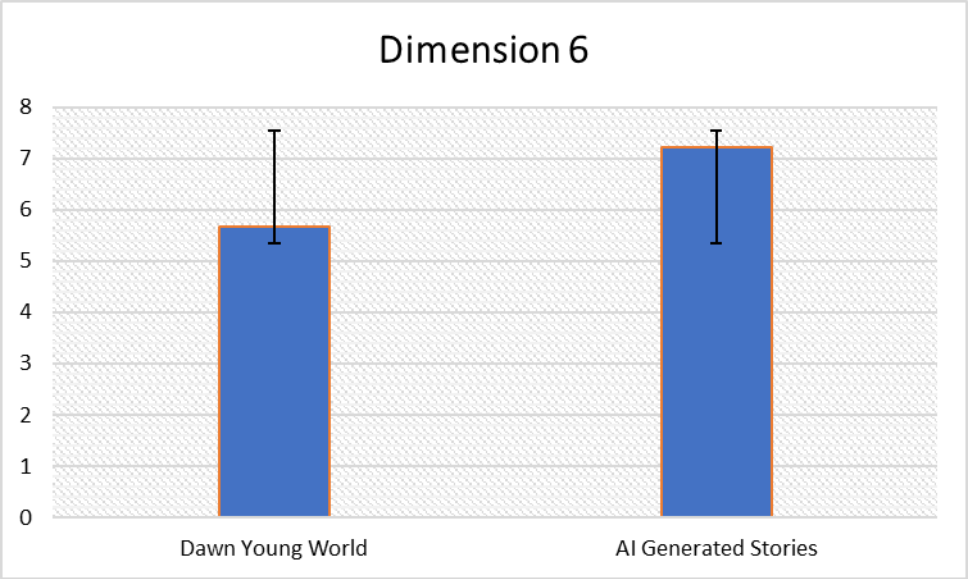

FIGURE 6

Analysis of Variance

To gauge whether the variation illustrated in Fig 1 to Fig 6 is statistically significant, a two-way ANOVA has been applied to the mean dimension scores of the two data groups (Dawn Young World and AI generated short stories). Table 3 shows that there are significant differences between two data groups, mean dimension scores and their interaction effects. The significance of data groups (F value = 5549.09, P value < 0.01) showed that Dawn Young World and AI generated short stories have different linguistic features from each other. Dimension scores were also highly significant (F value = 78063, P value < 0.01) which showed that the dimensions of the two data groups were also different from each other. The interaction effects of data groups and dimension scores were also highly significant (F value = 5533.66, P value < 0.000) which indicated that the dimension scores within each data group were different from each other. (Table 3)

Mean Comparison Test

Tukey mean comparison test was applied to see from where the difference came. Table 4 shows that the dimensions of both groups were different due to differences only in the first dimension. All the remaining dimensions were similar to each other while different from dimension 1. The mean comparison of interactive effects of dimension scores of the two data groups showed that dimension 1 of the Dawn Young World short stories was significantly different not only from its remaining 5 dimension but also showed significant results from the dimension 1 of the AI generated short stories (Table 5).

Table 3: Two-way analysis of variance (ANOVA) table

SOV	**DF**	SS	MSS	F	P
Data	1	2.26E+07	2.26E+07	5549.09**	0.001
Dimension	5	1.59E+09	3.17E+08	78063**	0.0001
Data*dimension	5	1.12E+08	2.25E+07	5533.66**	0.000
Error	24	97511.1	4062.96		
Total	35	1.72E+09			
Grand mean	2975.2				
CV	2.14%				

P value < 0.05 = significant (*), P value < 0.01 = highly significant (**)

Table 4: All-Pairwise Comparisons Test of scores for dimensions

Dimension	Mean	Homogeneous groups
D1	17816	A

D5	13	B
D2	7	B
D6	6	B
D4	5	B
D3	4	B

α = 0.05, Standard Error for Comparison = 36.801
Critical Q Value = 4.373, Critical Value for Comparison = 113.79
There are 2 groups (A and B) in which the means are not significantly different from one another.

Table 5: All-Pairwise Comparisons Test of scores for Data*Dimension

Data	Dimension	Mean	Homogeneous Groups
AI	D1	22559	A
DYW	D1	13073	B
AI	D5	15	C
DYW	D5	11	C
AI	D2	8	C
AI	D6	7	C
AI	D4	6	C
DYW	D6	5	C
DYW	D2	5	C
DYW	D3	5	C
AI	D3	4	C
DYW	D4	3	C

Alpha = 0.05, Standard Error for Comparison = 52.045
Critical Q Value = 5.098, Critical Value for Comparison = 187.61
There are 3 groups (A, B and C) in which the means
are not significantly different from one another.

Qualitative Analysis

Pakistan, regarded as a high-context culture similar to many other Asian nations, boasts a diverse population with a strong emphasis on interpersonal relationships. Social interaction, including frequent visits among friends and families, is a prominent feature of daily life. Religion significantly reinforces the importance of these visits and hospitality values (Mujtaba, BG.2011).

For the study of cultural relevance in Dawn Young World stories and AI-generated stories, the researcher qualitatively analyzed all the stories. As shown in Figure 7, 80% of DYW stories showed the social orientation which includes social ties and family relationships while only 20% of AI-generated stories showed the social orientation. Although AI-generated stories were set in different cities of Pakistan such as Lahore, Karachi, and Islamabad the characters shown are extremely individualist. Human-generated stories showed 75% commitment in the characters while the characters of AI-generated stories only showed 25% commitment. 60% of DYW stories showed responsibility while 40% of AI-generated stories presented the characters who were responsible for their subordinates' actions. 20% of DYW stories showed characters who were showing confrontation while 80% of AI stories characters were extroverts and showed confrontation. The DYW stories showed nonverbal communication by 70% while 30% of AI-generated stories showed the characters doing nonverbal communication.

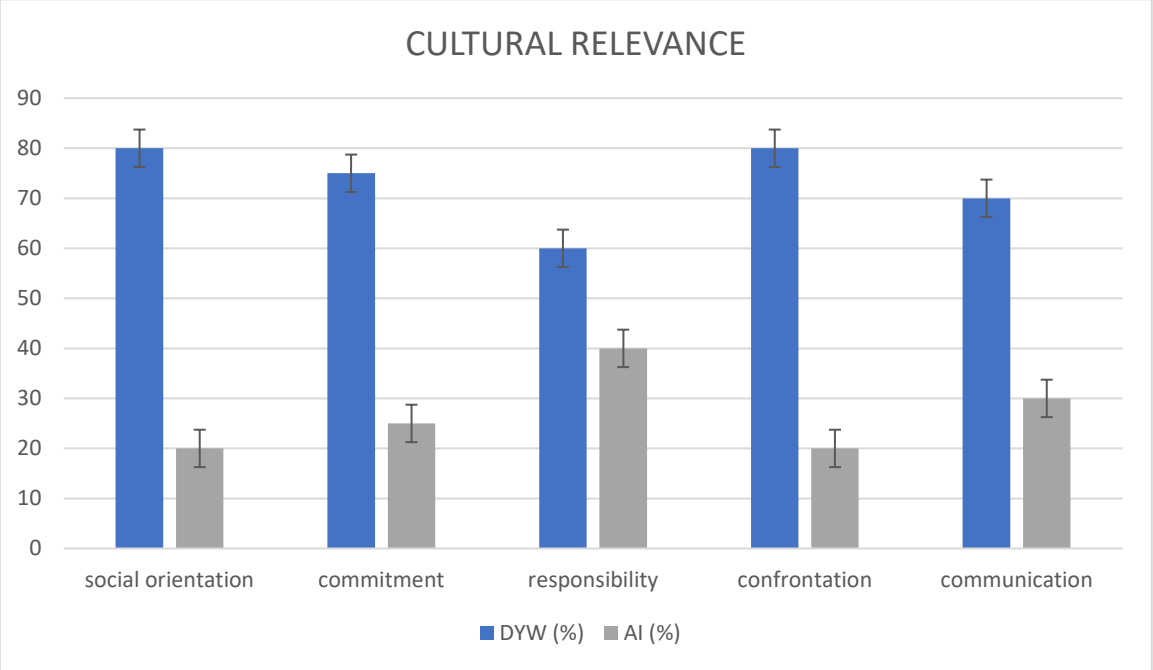

Figure 7

Discussion

The primary objective of this study was to investigate how AI and human-generated stories are different, especially in the context of Pakistan and how they influence the children's reading experience. By comparing multidimensional model scores of human-generated short stories from Dawn Young World with AI-generated stories, we uncovered statistically significant differences between the two data groups. These differences suggest potential disparities in storytelling characteristics and cultural relevance.

The significant differences observed in D1 are of particular concern, as this dimension encompasses the involved vs informational text, AI generated stories were more involved and engaging than Dawn Young World stories. Pakistan English writers are more descriptive than narrative (Rehman, 1991). The unnecessary description of every situation, place, and character leads to the production of informational texts.

On the other hand, similarities between dimensions 2 to 6 (D2 to D6) in AI-generated stories and human-authored narratives were observed, where AI technology has made significant advancements in natural language processing and generation capabilities, allowing it to mimic the storytelling style employed by human authors (Liu and Smith, 2018; Wang and Wang, 2020). However, despite these advancements, the emotional depth and cultural authenticity that define human-authored stories remain challenging for AI systems to achieve (Chen et al., 2021).

In qualitative analysis, findings are consistent with prior research on AI-generated content across various contexts. Studies conducted by Wang et al. (2019) and Li et al. (2021) have demonstrated that AI-generated stories lack the creativity, emotional depth, and cultural understanding that are inherent in human-authored narratives. Specifically, Wang et al. (2019) pointed out the challenges AI systems face in capturing complex cultural nuances, resulting in content that may feel generic and less relatable to specific cultural backgrounds. Studies conducted by Chen et al. (2020) and Khan and Rahman (2022) emphasize the importance of culturally relevant stories in promoting identity development and moral values among children. Human authors possess a unique ability to draw from their cultural knowledge and empathy, allowing them to craft narratives that resonate deeply with the intended audience, a quality that AI systems may struggle to replicate (Zhang et al., 2020).

The implications of our findings are substantial for educational and entertainment platforms catering to young readers in Pakistan. Dawn Young World's human-generated stories have been thoughtfully crafted to reflect local cultural values, impart moral lessons, and instil a sense of cultural identity among Pakistani children (Hussain et al., 2019). These narratives play an integral role in the children's literary experience, fostering cognitive development and cultural understanding. Conversely, AI-generated stories, while offering potential diversity in storylines and genres, may not fully resonate with the cultural sensibilities of the Pakistani context. To optimize AI's role in storytelling, it

is crucial to consider collaborative approaches that leverage AI's efficiency while preserving the artistic vision of human authors.

In conclusion, this study sheds light on the impact of AI on storytelling for Pakistani children. The significant differences observed in the first dimension suggest that AI-generated stories can produce more engaging texts but lack the cultural suitability and emotional resonance characteristic of human-authored narratives. While AI technology presents exciting opportunities, efforts should be made to integrate cultural relevance, empathy, and creativity to ensure meaningful and culturally resonant storytelling experiences for the young audience in Pakistan.

Limitations

The study focuses on comparing human-generated short stories from Dawn Young World and AI-generated stories multidimensionally and qualitatively, but it does not incorporate the perspective of young readers, which is crucial for understanding their engagement with both traditional and AI-generated stories. The sample size of 100 short stories from each corpus might limit the generalizability of conclusions regarding the entire landscape of children's literature in Pakistan. Furthermore, the use of specific AI language models like Google Bard and ChatGPT might not fully represent the potential of AI in storytelling, as different AI models or platforms could yield different results.

Conclusion

The article delves into the influence of AI on storytelling for Pakistani children, comparing human-generated short stories from Dawn Young World with AI-generated narratives. Utilizing multidimensional analysis, the study uncovers statistically significant differences between the two groups, particularly in the first dimension, implying potential disparities like content and cultural relevance. Nonetheless, the research has limitations, including a narrow scope, a limited sample size, and the absence of the young readers' perspective.

Despite these drawbacks, the article underscores the prospect of collaborative approaches that combine AI's efficiency with human creativity to craft culturally relevant and captivating stories. Emphasizing a dialogue between tradition and technology, the study advocates for a diverse landscape of children's literature in Pakistan. Overall, the research contributes valuable insights into the evolving realm of children's storytelling, inspiring novel approaches that harmoniously incorporate both human imagination and AI-generated narratives. With cognizance of the strengths and limitations of AI-generated content, the article aspires to nurture meaningful and culturally resonant storytelling experiences for young Pakistani readers.

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