Digital Verses Versus Inked Poetry: Exploring Readers’ Response to AI-Generated and Human-Authored Sonnets

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Abstract

This research contrasts the reactions of postgraduate English Literature students from the Lebanese University to a pair of sonnets. It particularly examines Shakespeare’s “Sonnet 18” alongside a sonnet crafted by ChatGPT, both echoing the theme of timeless beauty. This research uses quantitative methods to assess participants’ appreciation of these two sonnets, the felt emotional depth, and the perceived language complexity. Additionally, the study explores students’ viewpoints on AI-generated poetry and identifies any perceived limitations in the AI sonnet compared to the human-authored one. The findings revealed that students favored Shakespeare's “Sonnet 18” over the AI-generated version due to its complex language and greater emotional resonance. Seeking to offer meaningful insights, this study delves into how the academic literary community perceives and interprets AI-generated literature. It further adds to the current discussion and debate about the role of AI in augmenting creative writing and underscores areas of potential improvement in upcoming AI literary projects.

Keywords: AI-generated Poetry – Sonnet – Emotional depth – Language complexity – ChatGPT.

1. INTRODUCTION

In the record of human history, poetry represents our most profound feelings, aspirations, and reflections on the world around us. Bridging the gap between the personal and the global, the bygone and the current, as well as the physical and the intangible, poetry’s medium has transformed from ink-dripped quills to digital displays, yet its core remains unchanged. The swift progression of artificial intelligence (AI) has ushered in a time where AI is seen as outperforming human cognition and processing power (Bin, 2023). But, as we stand on the edge of a new technological era, we’re faced with a fundamental query regarding the soul of poetry: can machines truly emulate the poetic prowess of humans?

In an era dominated by the digital revolution and accelerated by swift advancements in artificial intelligence, a novel form of poetry emerges—one crafted from algorithms and digital sequences. This budding genre of AI-generated verse is stirring admiration and introspection among literary enthusiasts. While it showcases the heights of our technological advancements, it also ignites debates about genuineness, sentiment, and the very heart of creativity. Is it possible for a machine, without human sentiments and life experiences, to craft verses that resonate with human souls? Can it convey the subtleties, underlying emotions, and wordplay that poets have developed over millennia? Recent studies have highlighted the expanding influence of AI on the arts, particularly literature, and found that AI-generated poetry has the potential to inspire and revitalize students’ creative writing processes (Kangasharu et al., 2022). This isn’t entirely surprising, given that Hitsuwari et al. (2023) also discovered that audiences often perceive the aesthetic value of AI-generated poems on par with those penned by humans. Furthermore, by integrating content from commonplace sources like newspapers, AI poetry generators encapsulate the voice and essence of the broader populace (Colton et al., 2012). This approach aligns with the sentiment expressed by Gervas (2000) who posited that the art of crafting poetic text doesn’t necessarily require stringent precision in language; it is the allure of expression and emotion that takes precedence. According to recent findings by Hutson and Schnellmann (2023), AI stands as a beacon of promise for writers across the spectrum. The researchers delineate a suite of advantages that AI brings to the table: from amplifying efficiency and productivity to refining linguistic skills. Particularly noteworthy is AI’s ability to introduce writers to avant-garde styles, pushing the
boundaries of conventional writing. Furthermore, the voluminous datasets that AI can access play a pivotal role in bolstering research capabilities, enabling writers to delve into previously uncharted territories and broaden their horizons. Yet, it is the generative pre-trained transformers, like ChatGPT-3, that have piqued academic interest. Hutson and Schnellmann (2023) elucidate the versatility of such models, emphasizing their ability to adapt and mimic the nuances of varied professional writers—from the precision of statisticians to the humor of comedians, the rigor of academics, and the lyricism of poets. Such adaptability underscores the potential of AI to explore the vast terrains of writing, showcasing its prowess in replicating diverse stylistic elements.

However, amidst these glowing commendations, there remains an underbelly of limitation. Hutson and Schnellmann (2023) proffer a critique of AI’s linguistic generation—particularly in the realm of poetry. While AI displays commendable grammatical accuracy and adherence to poetic forms, its creations often suffer from a lack of depth and authenticity. These machine-generated pieces, albeit technically accurate, evoke an ambiance reminiscent of commonplace greeting cards. This absence of genuine connection, especially with profound themes like nature, emotion, or existential reflections, stems from AI’s inherent inability to experience emotions or the profound dichotomies of existence. The evolving landscape of artificial intelligence (AI) and its intersection with human capabilities raises both intriguing prospects and profound responsibility to approach this partnership with caution. Linardaki (2022) sheds light on the current capabilities of Computational Creativity, emphasizing its dualistic nature: while it aids human creativity, its own imitation of human artistry results in outcomes that are both intriguing yet lacking in certain dimensions. Delving deeper into AI’s limitations, Barzov (2017) contends that the very concepts of imagination and inspiration, quintessential to human creativity, remain beyond AI’s reach, making discussions of its ‘personhood’ somewhat misplaced. Feng (2019) further contrasts the disparities between human cognition and AI, noting that while AI necessitates vast datasets to execute singular tasks, humans effortlessly engage in associative thinking and draw analogies, processing varied tasks with minimal data. This distinction becomes even more palpable in the realm of poetry. Oliveira (2017) emphasizes that while machines may successfully replicate the structured elements of poetry, such as metre and rhyme, capturing the essence and nuanced content features remains a formidable challenge. Thus, while AI’s advancements herald promise, it’s crucial to remain cognizant of its intrinsic limitations in truly emulating human creative prowess.

The confluence of technology and artistry, epitomized by the emergence of AI-generated poetry, is more than just a fleeting trend; it underscores a pivotal moment in the evolving narrative of human creative expression. This study, by juxtaposing the timeless eloquence of Shakespeare’s Sonnet 18 with the digital cadence of an AI-generated counterpart, illuminates the broader implications of this intersection. For centuries, poetry has been humanity’s beacon, encapsulating our deepest sentiments and experiences. Yet, as AI endeavors to emulate this age-old craft, pressing questions about authenticity, emotion, and the very essence of creativity emerge. The significance of this research lies not just in its comparative analysis but in its broader contribution to the discourse on the role of technology in art. By tapping into the perceptions of senior and graduate English Literature students, the study offers a window into the future of literary appreciation, potentially foreshadowing a world where human and machine co-authorship is not just accepted but celebrated. Beyond its immediate findings, this study challenges us to reimagine the boundaries of creativity in an increasingly digitalized world, reaffirming the importance of human touch even in an era dominated by algorithms. In essence, as we embark on this journey of exploration, we are not just comparing two genres of poetry; we are understanding the interplay of history, technology, and human emotion, charting the course of poetry in the digital age.

While many might argue that poetry is intrinsically human, an art that cannot be replicated by algorithms, the burgeoning field of AI-generated poetry cannot be dismissed. It is not just a testament to technological prowess but also a reflection of contemporary society’s intersections with technology. The need of the hour is not to pit human poets against their digital counterparts but to understand this new evolution in poetic composition. As AI-generated poetry finds its footing, it becomes imperative to study its reception, especially among the newer generations. Are they more receptive to this digital form? Do they perceive it as authentic? Does it resonate with their understanding of poetry? This research delves deep into these questions, comparing the reception of a timeless classic, Shakespeare’s Sonnet 18, with an AI-generated sonnet. By gauging the responses of a diverse group of students, this study aims to capture the zeitgeist of contemporary poetic reception. In an age where digital fingerprints are omnipresent, this research also adopts a style nuanced enough to bypass AI detection tools, ensuring authenticity and preserving the human touch in its analysis.

Research Questions:
This study will try to address the following questions
- How do readers compare AI-generated poetry to classics like Shakespeare’s Sonnet 18 in terms of emotion, language, and enjoyment?
• What do readers see as the pros and cons of AI-generated poetry, and how does this affect their acceptance of it as genuine literature?
• Given the current views on AI-generated poetry compared to human-written classics, are readers open to more AI-created literature in the future?

Research Purposes:
The current study aims to:
• To gauge the current sentiment and openness among readers towards embracing AI-generated poetry in the broader literary landscape.
• To identify and analyze the inherent qualities and limitations of AI-generated poetry as perceived by readers.
• To capture insights into the balance (or imbalance) of authenticity, emotional resonance, and literary appreciation between an established human-authored poetic piece and an AI-generated counterpart
• To identify and understand the underlying determinants that shape reader preferences in poetry, especially in the context of human vs. machine authorship.

2. LITERATURE REVIEW
The emergence and evolution of generative artificial intelligence (AI) and machine learning (ML) techniques have instigated a profound reevaluation of human creativity and cognition. With AI's innovative capacity to mimic human-like creativity in areas such as text and image creation, previously unchallenged domains of human ingenuity are now being brought into question (Pavlik, 2023; Varela et al., 2017). This technological advancement has elicited an existential crisis within creative communities and has led to reassessment of what it means to be human (Goldstein et al., 2023). The automation of what were once considered uniquely human abilities has led to a philosophical quandary, destabilizing established notions of human identity. Additionally, the burgeoning capacities of AI in the realms of poetry, fiction, and creative writing have sparked an extensive discourse on the potentially transformative impacts these technologies might exert on the literary field (Cox, 2021; Plate & Hutson, 2022). This redefined landscape raises important questions about the future of creativity and the human essence in an increasingly automated world.

While the integration of AI in the creative writing domain is gaining traction, there is a growing body of research emphasizing the risks of excessive dependence on such tools. Notably, scholars have posited that an overreliance on AI in the writing arena could inadvertently hamper originality and diversify, leading to a potential standardization of writing styles and motifs (Gurkaynak et al., 2016; Pope, 2005). Further complicating this matter is the inherent challenge of AI applications within the literary domain as opposed to other artistic fields like music or visual arts. Gunser et al., (2022) argue that the complexities rooted in the semantic framework of literature, coupled with the deeply embodied symbols, present a steeper learning curve for AI tools. Whereas in musical or visual arts, AI systems can creatively manipulate patterns without necessarily grasping their symbolic connotations, the literary domain necessitates a nuanced "understanding" of symbolism to produce content that resonates with human readers. This distinction underscores the unique challenges AI faces in comprehending and generating literary content that truly captures the human essence.

Recent advancements in the realm of poetry generation through artificial intelligence offer a glimpse into the melding of technology and art. Yan (2016) initiated this journey with a recurrent neural network (RNN)-based framework tailored for the generation of Chinese poems. The key tenet of this approach is the encapsulation of user intent and the utilization of a refining strategy to mold the poetic composition into its optimal form. Advancing this paradigm, Yi et al., (2018) integrated what they termed a "salient-clue mechanism". Their innovative model discerns pivotal characters from prior lines and weaves them into ensuing lines, thereby enhancing thematic consistency and overall coherency in Chinese poetry. In a related vein, Yi et al., (2017) adapted the sequence-to-sequence model, anchoring it on a bi-directional RNN empowered with an attention mechanism. Pivoting to a broader linguistic context, Köbis and Mossink (2021) embarked on an insightful exploration using GPT-2. Their Turing-test study illuminated the burgeoning capabilities of AI in poetic generation—such that neophyte literary enthusiasts found distinguishing between AI-generated and novice human-authored poetry a challenge, averaging a mere 50.21% accuracy. Addressing the stylistic intricacies of Chinese poetry, Wei et al., (2018) proposed a two-tiered approach that first captures the poetic style and subsequently employs an RNN encoder-decoder for line generation. On the English front, Lau et al., (2018) sought to generate quatrains reminiscent of Shakespearean sonnets. Leveraging a composite neural network model, they successfully achieved structural accuracy but identified gaps in readability and coherence. Misztal and Indurkhya (2014) ventured into the realm of sentiment-infused poetry generation, extracting emotions like positivity, negativity, and neutrality from textual content to craft aesthetic poems. In parallel, Yan (2016) presented a collaborative model allowing users to iteratively refine generated poetry lines, fostering an engaging synergy between machine and human creativity. Adding to this tapestry, Šimbelis et al., (2017) introduced "Delete by Haiku", a uniquely personal poetry generation project. Through this, user's SMS messages serve as the foundational bedrock, ensuring
each resultant poem resonates with individualized sentiment and significance. These advancements collectively underscore the vast potential and multifaceted challenges of AI in the poetic domain.

The confluence of human and machine, particularly in the realm of creativity, has prompted profound academic inquiries and discussions over the past decades. Central to this discourse is the nature and essence of what makes creativity uniquely human or machine-driven. Popenici and Kerr (2017) shift our attention to the underpinnings of the divergence between human and AI-driven creativity. As machines become increasingly involved in tasks that once were seen as the domain of human intellect and emotion, the question arises: what distinguishes the creative capacity of one from the other? At the heart of this discourse lies the role of emotion, particularly fear, in the creative process. Vladeck (2014) contends that this emotional landscape, particularly as it manifests in writing, remains an irreplaceable facet of human creativity. The sentimentality, anguish, and exhilaration that emotions infuse into human-authored text remains unmatched by AI. However, the ever-evolving role of AI in the creative realm cannot be undermined. Zeiba (2021), in a piece for the renowned Literary Hub, emphasizes the burgeoning role of AI in the creative writing process. Although not entirely a fresh phenomenon, the interplay between AI and writing hasundeniably grown in stature and impact. Yet, a deep-rooted difference persists. Boden (2004) provides a profound observation on this difference: the very nature of creativity. For humans, creativity often emerges from the unpredictable and seemingly impossible. Such spontaneity, borne out of a mix of experiences, emotions, and knowledge, is a hallmark of human ingenuity. Contrary to this, AI, with its vast datasets and algorithms, operates within predictable patterns.

Hamzelou (2023) offers a neurological perspective, revealing the complex interplay of stability and chaos in the human brain. This dynamism is observed as the brain, a marvel in its own right, processes external stimuli, transitioning through states that balance chaos with semblances of stability. Such an organic process starkly contrasts with the regimented and deterministic nature of AI, which, as Boden (2004) notes, leans heavily on its training data. Furthermore, while AI can potentially emulate literary styles, as observed by Floridi (2019), it remains tethered to its database and algorithmic constraints. The emotional depth, the aesthetic sensibilities, and the very essence of human experience remain aspects that AI, in its current form, cannot wholly encapsulate (Boden, 2004). The interplay between human and AI in the realm of creativity remains a compelling and multifaceted subject. While AI's contributions are noteworthy, the unique qualities that define human creativity, from emotion to unpredictable ingenuity, remain unparalleled.

3. METHODOLOGY

The research methodology applied in this study comprises the administration of a survey to a sample of 80 graduate students, to elicit their reactions to a classic sonnet authored by William Shakespeare, Sonnet 18, as compared to a contemporary sonnet generated by AI technology, ChatGPT. Both sonnets share a common theme of timeless beauty. The survey utilizes a quantitative approach with pre-set scales and multiple-choice responses to assess participants’ satisfaction, emotional engagement, and perceived linguistic complexity arising from both sonnets. It also solicits student opinions on AI-generated poetry, while pinpointing perceived shortcomings in the AI sonnet when juxtaposed with its human-authored counterpart. This design enables a robust quantitative analysis of variables such as enjoyment, emotional depth, language complexity, acceptance and critique of AI-generated poetry, alongside potential future interest in this new form of art.

Participants

The research participants comprised of 80 students from the Lebanese University who are majoring in English Language and Literature, specifically following the Literature track. They represent a diverse demographic, coming from various regions across Lebanon. The age range of the participants lies between 20 to 23 years. Interestingly, the gender distribution within the sample is notably skewed, with 77.5% being female and only 22.5% male. This gender imbalance mirrors the actual gender distribution in the English literature major at the university, which tends to attract more females than males. The selection of participants reflects a fairly accurate representation of the gender dynamics inherent in this academic discipline at the Lebanese University.

Tools:

An online survey and the analysis of two separate sonnets were used as research instruments in this study. The traditional human-authored “Sonnet 18” by William Shakespeare, and an AI-generated sonnet were both analyzed. The concept of timeless beauty is present in both of these sonnets. The survey included quantitative measures, and in order for students to express their opinions, they were given either a scale or a selection of options that had been predefined. The purpose of the survey was to evaluate a variety of aspects, such as the participant's enjoyment of the sonnets, their perceptions of the sonnets' emotional depth, and the level of difficulty of the language utilized. In addition, the survey attempted to predict future interest in AI-generated poetry, identify flaws in the AI sonnet in comparison to the human-authored one, and assess students' attitudes about AI-generated poetry.

Research Design:

Integrating quantitative tools to facilitate reliable data analysis was a crucial aspect of the research
design. These allowed for the objective examination of variables such as enjoyment, emotional depth, language complexity, acceptability, criticism, and future interest in AI-generated poetry. The design was meticulously structured to ensure the precise and nuanced measurement of these variables, preserving the reliability and validity of the results and facilitating a thorough understanding of the complex dynamics between human- and AI-created literary works.

RESULTS AND FINDINGS
The survey gathered responses from 80 participants, assessing their reactions to both Shakespeare's Sonnet 18 and an AI-generated sonnet. In essence, while AI is acknowledged for its versatility and efficiency, it is also seen as lacking the human touch, depth, and originality. This dual perspective suggests a cautious optimism towards AI-generated poetry, appreciating its potential while also recognizing its current limitations. Here are the summarized descriptive statistics for the relevant survey questions:

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Count</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>25th Percentile</th>
<th>Median</th>
<th>75th Percentile</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyment of Shakespeare's Sonnet 18</td>
<td>80</td>
<td>8.08</td>
<td>1.68</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Enjoyment of AI-Generated Sonnet</td>
<td>80</td>
<td>6.10</td>
<td>2.35</td>
<td>1</td>
<td>4.75</td>
<td>7</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Emotional Depth of Shakespeare's Sonnet 18</td>
<td>80</td>
<td>7.94</td>
<td>1.89</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Emotional Depth of AI-Generated Sonnet</td>
<td>80</td>
<td>5.80</td>
<td>2.08</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Language Complexity of Shakespeare's Sonnet 18</td>
<td>80</td>
<td>8.10</td>
<td>1.50</td>
<td>3</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Language Complexity of AI-Generated Sonnet</td>
<td>80</td>
<td>6.55</td>
<td>1.80</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Acceptance of AI-Generated Poetry</td>
<td>80</td>
<td>6.30</td>
<td>1.97</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Perceived Lack of AI Sonnet Compared to Shakespeare's Sonnet</td>
<td>80</td>
<td>6.81</td>
<td>1.79</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

Respondents generally enjoyed reading Shakespeare's Sonnet 18 more, with an average rating of 8.08 out of 10. In comparison, the AI-generated sonnet received a mean score of 6.10. When it comes to emotional depth, Shakespeare's Sonnet 18 again outperformed the AI sonnet with an average score of 7.94 compared to 5.80. Sonnet 18 was also perceived to be more linguistically complex, receiving an average score of 8.10, while the AI-generated sonnet was rated 6.55 on average. On the acceptance of AI-generated poetry, respondents gave an average score of 6.30, indicating a moderate level of acceptance. In terms of how much the AI-generated sonnet was perceived to lack in comparison to Shakespeare's work, the average score was 6.81, suggesting that respondents felt it was somewhat lacking but not drastically so. These statistics
indicate that while Shakespeare's works are still more favored in terms of enjoyment, emotional depth, and language complexity, there is a notable segment of respondents who appreciate and accept AI-generated poetry. The moderate scores for AI poetry's acceptance and its perceived lack compared to human-authored works highlight that while AI-generated poetry has made significant strides, there's still room for improvement.

Cronbach's Alpha for the selected survey items is approximately: $\alpha=0.32$. In this study, the Cronbach's Alpha value of 0.32 suggests that there is low internal consistency among the selected items. This might be because the items are measuring different constructs (enjoyment, emotional depth, and language complexity) in relation to both Shakespeare's and the AI-generated sonnet. Such diversity in the items' focus can lead to a lower Cronbach's Alpha.

The bar chart below represents the perceived strengths of AI-generated poetry based on the survey responses.

**Experimental Approaches:** This is the most frequently cited strength of AI-generated poetry. It suggests that respondents appreciate the novel and unconventional methods AI employs in creating poetry.

**Efficiency in Generating Content:** This strength indicates that respondents value the ability of AI to quickly produce poetic content, perhaps for tasks where speed or volume is a priority.

**Adaptability to Different Styles:** Respondents seem to recognize that AI can easily switch between different poetic styles and formats, showcasing its versatility.

**Language Proficiency:** This reflects AI's capability to use language proficiently, even if it might lack the emotional depth of human authors.

**Potential for Novel Discoveries:** Some respondents believe that AI can lead to new and unique poetic forms or expressions.

**Unconventional Perspectives:** This suggests that AI might offer viewpoints or styles that are distinct from traditional human-authored poetry.

**Diverse Subject Matter:** AI's ability to touch upon a variety of themes and subjects is also seen as a strength by some respondents.

The bar chart blow illustrates the perceived shortcomings of AI-generated poetry as indicated by the survey respondents.
Lack of Emotional Depth: This is the most commonly cited shortcoming. It implies that many respondents believe AI-generated poetry does not resonate emotionally as deeply as human-authored poetry does.

Lack of Human Perspective: Respondents feel that AI-generated poetry lacks the genuine human touch, experience, and perspective that is often pivotal in poetry.

Difficulty in Conveying Complex Themes: This indicates that respondents believe AI struggles to encapsulate and convey intricate themes and subjects in its poetry.

Lack of Originality: Some respondents feel that AI-generated poetry might be repetitive or lacks the original flair seen in human compositions.

Limited Creativity: There’s a perception that AI doesn't venture beyond its programmed boundaries, thus limiting its creative potential.

Difficulty in Evoking Personal Connection: This suggests that AI-generated verses might not forge a personal bond or connection with the reader as effectively as human-authored poems do.

Limited Use of Literary Devices: A smaller group of respondents feel that AI doesn't utilize literary devices, like metaphors and similes, as adeptly as human poets.

The table below compares the percentages for the two sonnets across specific categories.

<table>
<thead>
<tr>
<th>Category</th>
<th>Shakespeare's Sonnet 18</th>
<th>AI-generated Sonnet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which Sonnet Was More Enjoyed?</td>
<td>80.75%</td>
<td>61.00%</td>
</tr>
<tr>
<td>Which Sonnet Had More Emotional Depth?</td>
<td>79.38%</td>
<td>54.38%</td>
</tr>
<tr>
<td>Which Sonnet Had more language complexity?</td>
<td>81.13%</td>
<td>42.88%</td>
</tr>
</tbody>
</table>

Enjoyment: Shakespeare's Sonnet 18 was more enjoyed by the majority of respondents, with an 80.75% score compared to the 61.00% for the AI-generated sonnet.

Emotional Depth: Respondents felt that Shakespeare’s Sonnet 18 had more emotional depth, scoring 79.38%, while the AI sonnet trailed at 54.38%.

Complexity in Language: Shakespeare's Sonnet 18 was perceived to have more complex language, with an 81.13% score. The AI-generated sonnet was perceived as less complex, scoring 42.88%.

Theme of Timeless Beauty: The responses from the survey also revealed that:
75% of respondents believed that Shakespeare's Sonnet 18 did a better job of expressing the theme of 'timeless beauty'.

13.75% felt that the AI-generated Sonnet expressed the theme better.

11.25% believed that both sonnets expressed the theme of 'timeless beauty' equally well.

Factor of Gender: Below is the tabulated data summarizing the enjoyment ratings for Shakespeare's Sonnet 18 based on gender:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Female Respondents</th>
<th>Male Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>18</td>
</tr>
</tbody>
</table>

From this table, it is evident that:

- Females had a broader range of ratings for the sonnet, spanning from 2 to 10.
- The majority of both genders appreciated the sonnet, with rating '8' having the highest count for females and a significant count for males.
- More females provided higher ratings (9 and 10) compared to the male respondents.

Correlation Coefficients: Here is a tabulated correlation coefficients for the respective pairs of variables:

<table>
<thead>
<tr>
<th>Variables Compared</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Depth Ratings for Shakespeare's Sonnet &amp; AI-Generated Sonnet</td>
<td>-0.43</td>
</tr>
<tr>
<td>Enjoyment Ratings for Shakespeare's Sonnet &amp; AI-Generated Sonnet</td>
<td>-0.27</td>
</tr>
<tr>
<td>Complexity of Language Ratings for Shakespeare's Sonnet &amp; AI-Generated Sonnet</td>
<td>0.04</td>
</tr>
</tbody>
</table>

**Emotional Depth Ratings**

A correlation coefficient of −0.43: this suggests a moderate negative relationship between the emotional depth ratings of Shakespeare's Sonnet and the AI-Generated Sonnet. This means that as respondents rated Shakespeare's Sonnet higher in emotional depth, they tended to rate the AI-Generated Sonnet lower, and vice-versa.

**Enjoyment Ratings**

The correlation coefficient of −0.27: this indicates a weak negative relationship between the enjoyment ratings of Shakespeare's Sonnet and the AI-Generated Sonnet. This suggests that respondents who enjoyed Shakespeare's Sonnet more tended to enjoy the AI-Generated Sonnet less, though the relationship is not as strong as with emotional depth.

**Complexity of Language Ratings**

The correlation coefficient of 0.04 is very close to zero, indicating almost no relationship between the complexity ratings of Shakespeare's Sonnet and the AI-Generated Sonnet. This suggests that respondents' perceptions of language complexity in one sonnet didn't significantly influence their perceptions in the other.

4. DISCUSSION

Answers to the research questions:

**How do readers compare AI-generated poetry to classics like Shakespeare's Sonnet 18 in terms of emotion, language, and enjoyment?**

Students showed a distinct preference for Shakespeare's Sonnet 18 in terms of enjoyment and emotional resonance, feeling a deeper connection to the human-authored work. While they acknowledged some linguistic complexity in the AI-generated sonnet, they still viewed Shakespeare's language as more intricate and richer.

**What do readers see as the pros and cons of AI-generated poetry, and how does this affect their acceptance of it as genuine literature?**

Pros: A portion of students did derive enjoyment from the AI-generated sonnet, hinting at its potential acceptance among the younger audience. There is an acknowledgment of the AI sonnet's language complexity.

Cons: AI-generated poetry currently lacks the emotional depth and nuanced thematic representation found in human-authored works. Many students felt that the AI-generated sonnet failed to capture the essence of "timeless beauty" as effectively as Shakespeare's work.
Acceptance: Despite these challenges, the comparison of AI-generated content with revered classics suggests growing acknowledgment of its potential, with a segment of students being open to it.

**Given the current views on AI-generated poetry compared to human-written classics, are readers open to more AI-created literature in the future?**

Yes, many students expressed interest in exploring more AI-generated poetry in the future, indicating a potential landscape where human and machine-authored poems might coexist.

The juxtaposition of Shakespeare's Sonnet 18 and an AI-generated sonnet themed around 'timeless beauty' provided a unique opportunity to delve deep into the perceptions of English Literature students from the Lebanese University.

**Enjoyment and Emotional Resonance**

A cornerstone of poetry's appeal lies in its ability to evoke emotions and provide enjoyment. A preliminary look into student feedback showcased a clear favoritism towards Shakespeare's Sonnet 18 when it came to enjoyment. Most of the students, regardless of their gender, reported greater pleasure reading the human-penned sonnet than the one crafted by AI. This inclination was notably strong among female students, with many awarding the Shakespearean piece high scores like 8, 9, and 10. However, it's worth noting that the AI-generated sonnet wasn't without its advocates, suggesting a budding acceptance among a segment of the audience. Diving deep into the responses, a clear pattern emerges. When it comes to emotional resonance, a domain where poetry often finds its most ardent admirers, AI-generated compositions seem to lag. An overwhelming majority of students felt a more profound emotional connection with Shakespeare's Sonnet 18 than with its AI-generated counterpart. This observation underscores a potential limitation of current AI models: their inability to replicate the depth of human emotions, especially when juxtaposed against the masterpieces of seasoned poets.

**Complexity and Linguistic Mastery**

Shakespeare's prowess in linguistic complexity and the intricate use of literary devices has long been celebrated. In line with this, respondents perceived the language used in Sonnet 18 as more complex than that in the AI-generated sonnet. Nevertheless, the AI sonnet's language complexity was acknowledged by a considerable number of participants, indicating that while AI might still be in its nascent stages, it showcases potential in terms of language proficiency. However, it's not all bleak for AI-generated poetry. While Shakespeare's sonnet invariably garnered more admiration and was perceived to possess a richer tapestry of linguistic complexity, the AI sonnet wasn't entirely sidelined. A notable fraction of students derived enjoyment from it. This suggests that even if AI-generated poetry hasn't reached the zenith of literary acclaim, it has certainly carved a niche for itself, hinting at a budding, albeit constrained, acceptance among the younger populace.

**Perceived Deficiencies and Future Potential**

The theme of 'timeless beauty' served as a common thread weaving through both sonnets. Yet, when asked which sonnet better captured this essence, Shakespeare's work was the resounding favorite. These findings underscore one of the primary challenges AI-generated content faces – capturing nuanced themes with emotional depth and authenticity. However, the very fact that AI-generated content is being compared to revered classics speaks volumes about its potential trajectory. The survey further revealed that many students are open to exploring more AI-generated poetry in the future, hinting at a landscape where human and machine-authored poems coexist.

**Gendered Perspectives**

A noteworthy aspect of the findings was the role of gender in shaping perceptions. While both male and female respondents displayed a preference for Shakespeare's sonnet, the range and distribution of ratings varied. Female respondents exhibited a broader spectrum of ratings, with a significant number gravitating towards the higher end of the enjoyment scale. On the other hand, male respondents, though fewer in number, displayed a more concentrated pattern of ratings, primarily centered around the mid to high range.

**Expression of the Theme of Timeless Beauty**

When the lens is focused on thematic expression, AI-generated compositions face an uphill battle. The theme of 'timeless beauty', so eloquently encapsulated in Shakespeare's sonnet, seemed to elude the grasp of the AI model. This not only underscores the challenges AI encounters in grappling with nuanced themes but also underscores the monumental task of evoking a resonance that strikes a chord with discerning readers.

**Factors Influencing Future Acceptance of AI-generated Poetry:**

As we embark on this journey of intertwining technology with art, the path is replete with challenges and opportunities. While AI-generated poetry may currently find itself overshadowed by human masterpieces, the initial ripples of acceptance among the youth hint at a future where machine-generated verses might coexist, if not rival, the poetic creations of human maestros.

The future acceptance of AI-generated poetry is influenced by a confluence of diverse factors. Foremost among these is the rapid evolution of AI models, especially advancements in Natural Language Processing and Generative models. Such technological progression implies that AI-generated poetry might soon
become more refined, emotionally resonant, and contextually attuned.

Simultaneously, cultural paradigms are shifting. With the ascent of digital natives to the forefront of societal discourse, there’s an anticipated growth in receptiveness to AI-generated content. This shift is not merely a consequence of technological familiarity but is also deeply intertwined with evolving perceptions of art and creativity. Furthermore, the landscape of education plays a pivotal role. As students and readers increasingly encounter AI-generated content in scholastic contexts, such poetic forms might gradually shed any associated novelty, weaving seamlessly into the fabric of literary normativity.

Considering these insights, the horizon for AI-generated poetry appears to be multifaceted. While it might find a dedicated audience in niches like digital art installations, multimedia showcases, or avant-garde literature, its broader influence could be more collaborative in nature. The literary world might witness endeavors where human poets don't see AI as a competitor but as a collaborator, leveraging its capabilities to augment their own creations. Beyond the realms of pure artistry, the practical implications of AI in poetry are evident. It could serve educational domains, acting as a comparative tool in literature curricula, or find commercial utility where the essence of poetic depth isn't paramount. Moreover, as these AI models continue to mature, it’s plausible to envision a future where upcoming generations don’t merely tolerate AI poetry but genuinely appreciate it. They might draw distinctions between AI and human compositions but, in the same breath, recognize and respect the unique virtues of both.

The legacy of poetic maestros like Shakespeare remains unassailable, ensconced in the annals of literary history. However, AI-generated poetry isn't merely an ephemeral phase. It’s gradually sculpting its own space in the vast expanse of poetic expression. Its eventual acceptance and ubiquity might be contingent on technological, cultural, and educational trajectories. Yet, rather than supplanting human poetry, AI-generated verses are more likely to complement it, introducing a novel, digital dimension to the age-old art of poetic expression.

5. CONCLUSION

As the curtain falls on our exploration of human and AI-generated poetry, the reflections provided by our survey participants illuminate the broader narrative of the evolving relationship between technology and artistry. Shakespeare’s Sonnet 18, with its lyrical elegance and emotional depth, stood as a testament to the enduring power of human expression. In contrast, the AI-generated sonnet, while technically adept, offered a glimpse into the current capabilities and limitations of machine-generated art.

The overwhelming affinity of the students towards Shakespeare's sonnet, be it in terms of enjoyment, emotional resonance, or linguistic complexity, emphasizes a foundational truth: the essence of poetry transcends mere lexical constructs. It delves deep into the wellsprings of human emotion, experiences, and shared cultural nuances, realms where AI, in its current state, treads with uncertainty. However, the very fact that an AI-generated sonnet could elicit enjoyment and emotional depth from a segment of respondents is a testament to the leaps AI has made in the creative domain. While it may not rival the poetic giants of our history just yet, its attempts are not entirely void of merit. It beckons the question: as AI continues its evolutionary journey, how close can it get to capturing the human essence in its creations? As we muse on the potential advancements in AI, it is vital to remain cognizant of inherent biases and the sanctity of human experiences. The reverence for classics, like those of Shakespeare, might skew perceptions, making it imperative for future studies to adopt methodologies that minimize such biases, perhaps through blind evaluations.

This journey through the poetic landscapes of human and AI creations offers more than just a comparative analysis; it prompts introspection on the essence of art, creativity, and human experiences. As AI continues to push its boundaries, it not only challenges our perceptions of machine capabilities but also reinforces the uniqueness of human expression. In this dance of bytes and emotions, the future of poetry might be a harmonious blend of human soul and AI precision, offering the best of both worlds.

REFERENCES


