

LEXICAL INSIGHTS INTO ‘EMBRACING CHANGE’ IN PAKISTANI TEDx TALKS: A CORPUS-BASED STUDY

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ABSTRACT

This study examines the lexical features utilized by Pakistani male and female speakers in relation to 'embracing change,' employing a corpus-based approach. The research aims to uncover linguistic patterns, specialized terminology, and the significance of keywords in Pakistani TEDx Talks. This research focused on 'change' to enhance understanding of how language influences accessibility, context, and effect in these impactful public discussions. The data for this research is drawn from five transcribed Pakistani TED Talks centered on the theme "Embracing Change." The primary tool used for data analysis is Voyant Tools, an accessible online platform that facilitates advanced text exploration and visualization. A mixed-methods approach was adopted, combining quantitative lexical frequency counts with qualitative analysis to provide an in-depth understanding of lexical trends and speaker intentions. The findings revealed a rich vocabulary within the corpus, consisting of 10,007 words and 1,652 unique forms, reflecting linguistic diversity that enhances audience engagement. The vocabulary density was found to be moderate at 0.165, striking a balance between clarity and engagement for a general audience, while the readability level was assessed at 7th grade, ensuring the talks remain accessible and interesting for a wide range of age groups.

Keywords: *Lexical analysis, Pakistani English, TEDx Talks, voyant tool, corpus-based study, online spoken discourse*

INTRODUCTION

TEDx Talks have emerged as powerful platform for sharing ideas, often addressing transformative themes such as social changed, personal development, and innovation. This research aims to investigate how language reflects and reinforces the theme of ‘change’ in contemporary Pakistani TEDx discussions, focusing on the lexical choices made by speakers and how specialized vocabulary and recurring linguistic expressions encapsulate these notions. Utilizing a corpus-based approach, the study analyzes common keywords and contextual phrases to reveal the impact of language on the readability and accessibility of TEDx Talks for a wide audience. Founded by

Richard Saul Wurman in 1984 with the help of Harry Marks, TED initially concentrated on Technology, Entertainment, and Design, but has since expanded its focus to include global issues like education and health. Technology has had an immense influence on society (Akram et al., 2021a, 2021b; 2022; Ramzan et al., 2023). In the field of education, technology has brought about online learning platforms (Akram & Abdelrady, 2023; Al-Adwan et al., 2022) and educational apps (Abdelrady & Akram, 2022; Ma et al., 2024; Ramzan et al., 2023), making knowledge accessible to a wider audience. TED Talks, known for their succinct delivery, feature speakers from various fields who present their

ideas in 18 minutes or less. TEDx events serve as locally organized extensions of this global platform, fostering discussions about innovation, education, and social issues within diverse communities. Categorized topics within TED Talks include significant ideas, social transformation, personal narratives, innovation, performances, discoveries, and historical insights—all aimed at inspiring audiences with "Ideas Worth Spreading." In his book 'TED Talks: The Official TED Guide to Public Speaking,' Anderson (2016) stresses the importance of emotional connection with the audience, asserting that a speaker's main goal is to convey what genuinely matters to them in a way that resonates with listeners. TED speakers leverage voice, emotion, and connection to engage their audience, with social media amplifying these messages beyond the event itself. Anderson notes that today, expressing an impactful idea can spread rapidly and broadly through speech rather than traditional media. This research seeks to uncover how TEDx speakers linguistically articulate and promote the concept of change, providing insights into the evolving narratives surrounding progress in Pakistan.

In an increasingly connected world, social media plays a vital role in communication and influence, especially in regions like Pakistan (Ramzan et al., 2023). Platforms such as Facebook, Twitter, and YouTube offer a global platform for individuals to share their ideas and engage with diverse audiences. For TED Talks in Pakistan, social media significantly enhances the dissemination of ideas, enabling them to cross geographic lines and resonate with both local and international viewers. The accessibility provided by these platforms allows Pakistani TED speakers to tackle critical social issues like educational reform and technological advancement, while fostering community involvement. Furthermore, social media's viral nature encourages broader participation in conversations crucial for the nation's future. By integrating social media into their strategies, TED speakers in Pakistan can amplify their messages of change and progress, widening their

reach and impact (Javaid et al., 2024; Ramzan et al., 2023).

Lexical features are crucial when analyzing gender differences in speech patterns, including word choice and frequency (Ahmad et al., 2022; Amjad et al., 2021), which can provide insights into how speakers construct narratives and engage their audiences (Li & Akram, 2023, 2024; Ramzan et al., 2023). These linguistic decisions often highlight underlying themes and values, showcasing how language is used to communicate ideas, inspire action, and emphasize concepts related to change, while also revealing implicit messages through distinct lexical strategies tailored to connect with audiences based on cultural expectations. Luntz (2007) in 'Words That Work: It's Not What You Say, it's What People Hear' notes the significance of effective communication, suggesting that how an audience perceives a message is often more impactful than the speaker's self-perception. The Cambridge Handbook of Stylistics indicates that contractions are commonly analyzed in lexical studies as they reflect an informal tone, hinting at specific speech styles or target audiences (Javaid et al., 2023; Stockwell, Whiteley, 2014). Lexical features encompass vocabulary choices and formations within a text, where contractions like "it's" and "that's" play a role in distinguishing formal from informal writing, significant for understanding linguistic registers in spoken vs. written formats (Javaid et al., 2024; Jurafsky & Martin, 2020; Ramzan et al., 2023). This research on lexical insights regarding 'embracing change' in Pakistani TEDx Talks is vital for grasping how language informs public discourse on transformation. By exploring the lexical choices of male and female speakers, this study offers insights into how gender influences the discussion of change, authority, and engagement, reflecting embedded cultural values. The analysis enhances sociolinguistic understanding by revealing how gender shapes linguistic strategies, contributing to public speaking training, discourse analysis, and media studies, and assisting TEDx speakers and content creators in refining their language for greater audience engagement and inclusivity.

Literature Review

In recent years, TEDx Talks have become an influential platform for public discourse, providing a unique opportunity to examine how speakers use language to convey complex themes like “Embracing Change. For TED Talks in Pakistan, social media plays a crucial role in amplifying the reach of these ideas, allowing them to transcend geographic boundaries and resonate with local and international audiences. The accessibility of social media platforms enables Pakistani TED speakers to address pressing social issues such as education reform, technological innovation and social change while fostering community engagement. Existing literature on TED and TEDx Talks has explored a range of linguistic and rhetorical elements, including gendered language patterns, figurative language use, emotional and persuasive strategies, and pedagogical applications in various contexts. Many studies apply corpus-based methodologies to analyze lexical choices, yet research focused specifically on the theme of “Embracing Change” in the context of Pakistani TEDx Talks remains limited.

A research by Azher, Riaz, and Ikram (2022), investigated challenging stereotypes about gender roles in TED Talks by analyzing language use by gender in TEDx Talks, and identifying shifts in stereotypical speech patterns. Using Lakoff’s Deficit Model, the researchers analyzed TEDx talks from two male and two female speakers on “learning,” focusing on hedges, intensifiers, and super-polite forms. The findings showed that both genders adopted language features previously attributed to the opposite gender, suggesting evolving gender norms in communication. However, women still used more polite forms. Limitations include the small sample size, which was restricted to two speakers per gender.

In a recent research Munir, Sultan, and Kunwar (2023) explored the ‘Loose Use’ of figurative language in Pakistani TEDx Talks using a relevance theory. The research aimed to analyze the effectiveness of figurative language in Pakistani TEDx Talks, specifically metaphor, hyperbole, and irony, within Relevance Theory.

The objectives were to explore the functions of these figurative elements in enhancing public speaking and conveying strong implicatures for comprehension. Using Wilson and Sperber’s Relevance Theory framework, data were drawn from two TEDx talks in English, focusing on motivational themes by Pakistani speakers. The study used qualitative textual analysis, with approximately 5,000 words analyzed manually. Findings reveal that figurative language aids clear communication, with metaphors linking main ideas, hyperboles enhancing emotional impact, and irony clarifying speaker attitudes. The conclusion emphasizes that such language supports effective comprehension without complicating meaning. Limitations included the small sample size and specific focus on motivational TEDx talks.

The study titled “The Multimodal Representation of “Ideas Worth Spreading” Through TED Talks by Masi (2020) aimed to examine how TED talks use multimodal elements to enhance the impact and attractiveness of the ideas presented. The objectives were to analyze how subjective adjectives, gestures, and visuals combine to support the speaker’s stance and to investigate domain-specific differences in multimodal strategies. Using a multimodal analysis framework and theories by Thompson, Hunston, and Kress, data were collected from 15 TED talks across Business, Law, and Technology domains, totaling 30,000 words. The methodology included quantitative and qualitative analyses of adjective use, gesture types, and visuals, with analysis conducted through Sketch Engine and manual coding. Findings showed domain variations in multimodal density and highlighted the use of gestures and visuals to convey subjectivity and engagement. The study concluded that these elements reinforce the persuasiveness of TED talks, with a limitation on verbal focus needing broader non-verbal analysis.

A research has been done by Azlia (2022) on Interactional Discourse of Male and Female Motivational Speech in TED Talks by using a Corpus-Based methodology. The purpose of this study was to analyze gender differences in using discourse markers in motivational TED Talks.

Objectives included identifying how stance and engagement features differ between male and female speakers. The research framework applied Hyland's (2005) stance and engagement model, examining TED motivational speeches as data sources. Using a mixed-method approach with the #Lancsbox 6.0 tool for corpus analysis, the study analyzed 49 transcripts (43,160 words for females, 51,873 words for males). Findings revealed that females used more stance and engagement features, showing expressiveness and audience engagement, while males preferred direct markers. Conclusions suggested gender influences in motivational speaking styles, with limitations due to the focus on TED talks alone. The study titled *Gender Difference in Hedging: A Corpus-Based Study to TED Talks about Emotion* by Li and Li (2020) aimed to explore gender-based differences in hedging strategies in TED Talks about emotions. Objectives included identifying hedging frequency and preference differences between male and female speakers. The framework was based on Hyland's (1995) hedging model, using 12 TED Talks (25,000 words) on emotions as data. Wordsmith software analyzed four hedging categories: approximative, self-mention, evidential verbs, and modal hedges. Findings showed men used more self-mention and evidential hedges, while approximative and modal hedges were similarly frequent across genders. The study concluded that men used hedges to enhance empathy, whereas women adopted assertive styles, with limitations due to small sample size and a single topic focus.

A recent study on the exploration of lexical features in the TED Talk on Future Education has been done by Widyawati, Budhi, Daulay, and Toyyibah (2024) using a corpus-based methodology. This study aimed to analyze linguistic elements in Yılmaz Köylü's TED Talk on future education, exploring lexical choices and readability to understand its pedagogical impact. Objectives included examining word frequency, vocabulary density, and thematic keywords to reveal how language reflects educational themes. Using a corpus-based framework, the researchers employed Voyant Tools to analyze a 2,740-word corpus, assessing

frequency and contextual word use. Findings show a vocabulary density of 0.258 and a readability suited for a 10th-grade level, with prominent themes like "language," "students," and "skills." The study concludes that lexical diversity and readability enhance engagement, though technical sentence division posed limitations on data interpretation.

A research on gender differences in the use of emotive language in TED Talks by Taib and Suppiah (2024) explored gender-based variations in emotive language use in political TED Talks. The study aimed to analyze emotive language differences between male and female political figures to understand gendered communication styles. Jakobson's (1960) framework was applied to analyze two TED Talks, with a focus on emotive expressions like dissatisfaction, pleasure, gratitude, and hope. Findings showed that female speakers used emotive language more frequently, especially for expressing dissatisfaction and hope. The study concluded that female speakers exhibited higher expressiveness, while limitations included a small data sample confined to two speakers.

Another study has been done on the education related TED Talks between native and non-native speakers by Do, H. (2021) using a corpus-based methodology. This study aimed to analyze the frequency and types of words used by native speakers (NS) and non-native speakers (NNS) in education-focused TED Talks. Objectives included identifying top frequency word lists to compare functional and content word usage between NS and NNS. Using a corpus-based analysis framework, data consisted of four TED Talk transcripts (two by NS and two by NNS). AntConc software was used for word frequency analysis, listing the top 10, 20, and 100 most frequent words separately for each group. Findings indicated both groups predominantly used functional words, though content words were crucial for conveying full meaning. The study concluded that word choice patterns reflect both groups' speaking styles, but it was limited by the small sample size and focus on only education-related TED Talks.

A research titled ‘Gender Aspects in the Use of Self-mentions’ based on the genre of TED Talks by Viktorova (2020) examined gender differences in self-mentions (e.g., I, we, me) in TED Talks across fields like medicine, psychology, and business. The study aimed to analyze how men and women use self-mentions to build credibility and connection with audiences. Using quantitative and qualitative methods, findings showed men favored individualistic I-phrases and expert-focused we-phrases, while women preferred inclusive we-phrases to promote solidarity. The study concluded these patterns reflect typical masculine and feminine communication styles, though the focus on TED Talks limits broader applicability.

Another research on the analysis of male and female speakers' word choices in public speeches by Hossain & Samin (2022) aimed to examine gender-based differences in word choices among TED Talk speakers. The study's objectives included analyzing the frequency of word types such as parts of speech, and linguistic, psychological, cognitive, and social terms to identify gender-specific language use patterns. Using a statistical framework for comparative analysis, data were sourced from TED Talk transcripts delivered by both male and female speakers. The methodology involved quantitative analysis of word frequency, focusing on various linguistic categories. Findings indicated that male speakers used linguistic, psychological, cognitive, and social terms more frequently than female speakers. The study concluded that distinct language patterns reflect gendered communication styles, though it is limited by its exclusive focus on TED Talks.

Another study titled ‘Stories That Are Worth Spreading: A Communicative Model of TED Talk Narratives’ by Nadeem (2021) aimed to conceptualize narrative functions within TED Talks by building a communicative model based on Bamberg’s positioning theory. Objectives included examining how genre features shape TED Talk narratives, analyzing speakers' narrative positioning and multimodal performance, exploring audience engagement, and understanding TED narratives as a scaffold

for potential individual and social change. Using a multimodal discourse analysis framework, data were drawn from Guy Winch’s TED Talk (Winch, 2015). The methodology involved analyzing narrative positioning, semiotic cues, and audience interaction to understand the narrative’s rhetorical impact. Findings highlighted TED narratives as “small stories” performed to fulfill specific rhetorical aims, facilitating engagement and signaling change. The study concluded that TED narratives dynamically engage audiences, though limited by the analysis of a single TED Talk example.

Another recent research has been done on Language and Gender vs. Public Speaking by doing an Analysis of TED Talks by Krzysztoń (2021) explored gender-based language differences and rhetorical strategies in TED Talks. The study aimed to show how men and women vary in speech style and persuasion, analyzing 20 TED Talks (10 male, 10 female). Using a genderlect framework, it found women use personal, emotional appeals (ethos), while men favor factual, humorous approaches (logos). Conclusions highlight genderlect differences in language and persuasion styles, though the small sample size limits generalizability.

The study addresses a unique research gap, as previous studies have focused on varied aspects like exploring gender stereotypes, figurative language use, emotion analysis, and pedagogical applications within TED Talks, often through corpus-based methodologies. While past research has delved into specific themes such as education, none have specifically examined the lexical dimensions of the theme “Embracing Change” in Pakistani TEDx contexts. This study, therefore, aims to fill an unexplored niche, contributing new insights to the field.

Research Objective

The objectives of the current study are to:

- identify and analyze frequent linguistic expressions used by speakers across Pakistani TEDx Talks.
- examine how specialized vocabulary in TEDx Talks focused on 'change' impacts readability.

- explore the prominence of specific keywords in the word cloud of Pakistani TEDx Talks using Keywords in Context (KWIC) analysis.
- investigate the positioning and contextual use of keywords related to 'change' by Pakistani TEDx speakers.

Research Questions

The current research answers the following questions:

1. What are the frequent linguistic expressions used by speakers across Pakistani TEDx Talks?
2. How does specialized vocabulary in TEDx Talks about 'change' influence readability?
3. How are keywords related to Change Positioned and used in different contexts with by Pakistani TEDx speakers?
4. Why do certain keywords appear prominently in the word cloud of Pak TEDx Talks?

Theoretical Framework

This research employs a corpus based analysis to examine the lexical features across the Pakistani TED Talk titled "Embracing Change." The analysis predominantly uses Voyant Tools, an online platform specifically designed for text analysis that provides various functionalities for exploring and visualizing textual data. Voyant Tools can be accessed online without requiring registration and includes advanced statistical capabilities, making it cost effective solution for mixed methods research. According to Gay, mixed methods research combines both types of data to provide a fuller understanding of a phenomenon than either approach could achieve independently (Gay, 2012, p. 483). The corpus for this study was generated by transcribing the five TED Talks on "Embracing Change," with careful attention given to accuracy and completeness. The transcribed text was then uploaded to Voyant Tools for thorough analysis. This platform offers five primary tools: Cirrus, which creates word clouds to represent word frequency; Reader, for displaying and reading word lists; Trends, which tracks shifts in word usage throughout the text; Summary, which

supplies basic statistical data about the text; and Keywords in Context, which enables a detailed analysis of how particular words are utilized within the text. Through these tools, the study seeks to uncover and analyze key lexical features addressed in the Pakistani TED Talk, thereby contributing insights to discussions on speaker motivation.

Research type

The research type selected for this study is a mixed methods approach. Johnson, Onwuegbuzie, and Turner (2007) defined, "Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purposes of breadth and depth of understanding and corroboration." This approach is used to enhance the validity of the research by allowing for the confirmation of findings through multiple data sources and perspectives.

Population and Sampling

The study's target population comprises all TED Talks focused on the theme of "embracing change," presented by speakers from various backgrounds, irrespective of gender and age accessible on platforms like the TED website or YouTube. A purposive sampling method is utilized to select five TED Talks that appropriately reflect the study's thematic focus.

Sample Type and Sampling Technique

This research utilizes purposive sampling to choose five TED Talks that explore the topic of "embracing change." This method allows for a focused examination of lexical features by using Voyant tool across Pakistani TED Talks.

Sampling Criteria

The criteria for selecting samples in this research require that all chosen TED Talks concentrate on the theme of "embracing change." The selected talks must be publicly available on platforms like the TED website or YouTube.

Sample Size:

The sample for this study consists of five TED Talks on the theme of "embracing change," gathered from YouTube.

Data Collection:

The data for this study has been collected randomly from YouTube specifically from the website of TED.

Tool for data analysis:

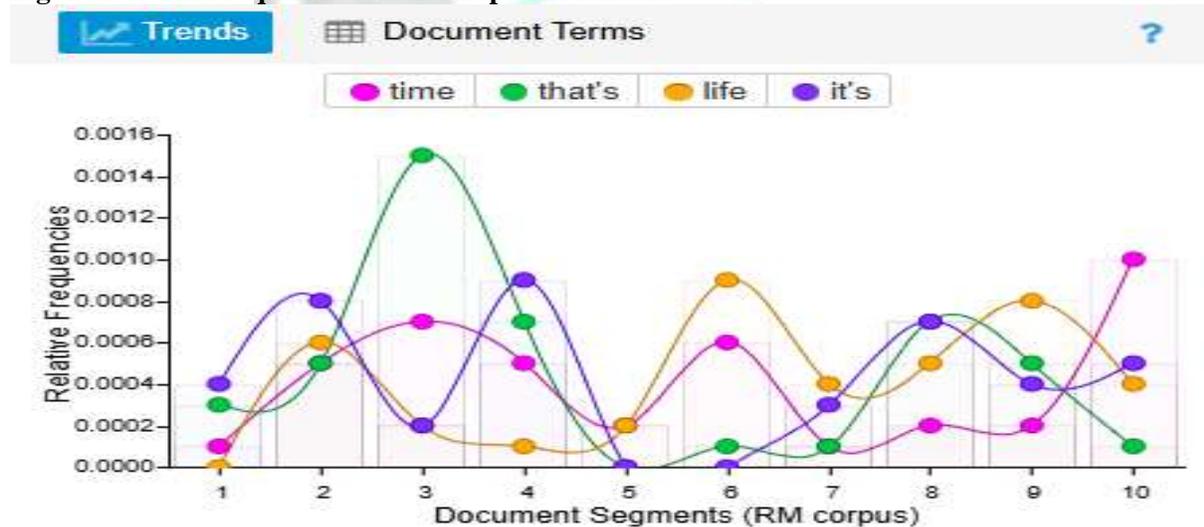
In this research voyant tool is used for numerical data analysis, focusing in word frequency,

document length, vocabulary density, readability and collocations provided by the tool. This tool provides insights into key themes, cultural context, and accessibility of Pakistani TEDx talk on "Embracing Change". Word frequency and collocations highlight central ideas and culturally significant phrases. Document length and vocabulary density reveal the scope and complexity of language, while readability indicates audience accessibility. Together, these analyses offer a nuanced understanding of how change is communicated within a Pakistani context.

Findings

1-Trends and Frequency of words.

Figure 1. Term Frequencies Chart of specific lexical t



The graph presented in this analysis represents the relative frequencies of specific lexical terms across five document segments from the TED Talk "Embracing change". Higher frequencies of lexical items like "time" and "life" in a TED Talk suggest that these concepts are central to the speaker's message and thematic focus.

Frequent use of "time" may indicate discussions around urgency, progression, or the significance of timing in relation to change or growth. Similarly, "life" often emphasizes personal experience, the journey of transformation, or reflections on broader human experiences.

2- Words Clouds

3.1. Cirrus

Figure 2. Word Clouds for most frequent words

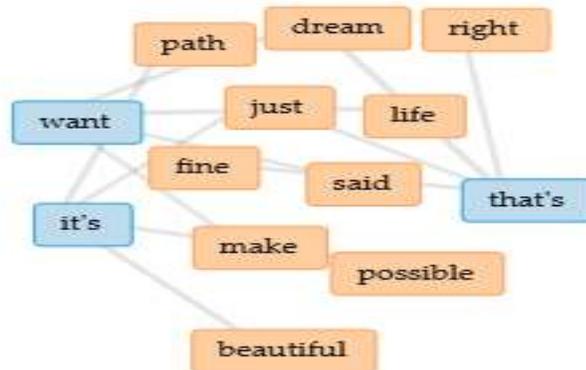


The Cirrus tool creates a word cloud that showcases the most frequently used words in a corpus. The word cloud in Figure 2 visually

represents the most frequently occurring terms in the TED Talk "Embracing change."

3.3. Links:

Figure 3. Words Link



Links show the relationships between high-frequency words through a dynamic network

graph. This graph aids in visualizing how these frequently used words interact and connect.

3.4. Keywords in Context (KWIC):

Table.1. Context Analysis Table

Context (Left)	Phrase	Context (Right)
A beautiful life? Do I	Want	To live that life? And
right to dream, whatever you	Want	to dream, like whatever you
to dream, like whatever you	Want	to think, whatever you want

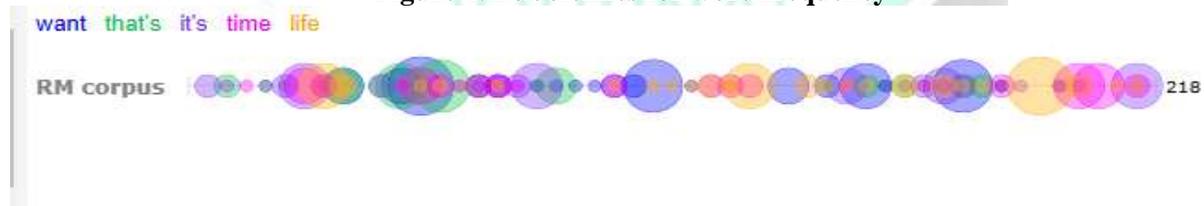
want to think, whatever you	Want	to create in your mind
I am thinking that I	Want	to get very rich because
vague dreams, don't say I	Want	to be rich, that's not
dream would be that I	Want	to get this much dollar
write down what do you	Want	to become in your life
down exactly how much I	Want	. So I wrote down 7.2
I was like no, I	Want	to make 7.2 million dollars
make 7.2 million dollars, I	Want	to travel the world, I
going to Iran, so I	Want	To do acting. They said
I tell him that I	Want	to do acting, I want
married then do whatever you	Want	to do in life after
want to do this, I	Want	to be an actress, I
to be an actress, I	Want	to go here, I want
want to go here, I	Want	To go there." We can't
boy said to me, 'I	Want	To marry you.' I said
I can understand who I	Want	to marry. This single decision
and, more importantly, what they	Want	from themselves. And then what
I am and whom I	Want	to. Thank you! Hello and
help you achieve where you	Want	to be in life. Even

Keywords in Contexts display lines of text that show how frequent words are used in sentences. This helps understand the context in which these

common words appear by showing the words and phrases around them.

3.5. Bubblelines:

Figure 4. Bubblelines for word frequency



Bubblelines displays varying levels of word frequency through animated bubbles that differ in size and color. The bubbles symbolize the frequency of word appearances, with larger and differently colored ones signifying higher or

lower frequencies. This approach provides an accessible and visually captivating method for comparing the usage frequency of various words.

3.6. Collocations

Table 2. Collocates Summary

Term	Collocates	Count
Want	Want	26
	Dream	12
	That's	11
	Life	10
	Said	7
That's	That's	14
	Want	10
	Dream	9

	Just	7
	Fine	7
It's	It's	16
	Going	9
Time	Time	10
Good	Salesperson	17
	Good	16

Collocates generates a list that indicates which words frequently coexist, highlighting their relationships and connections. The Collocates visualization feature in Voyant Tools presents the term, its collocate, and the frequency of their occurrences within a particular context.

Discussion

Summary Tools

The Summary tool provides an overview of key statistics in the corpus, such as total word count, unique words, longest documents, and vocabulary density (Sinclair & Rockwell, 2016). This part helps in understanding the corpus size, linguistic diversity, and text complexity. The analysis indicates that the text consists of a single document with 10,007 words, featuring 1,652 unique word forms. This suggests a rich variety of vocabulary, as unique word forms account for distinctions such as “want” and “wants”, counting different forms of the same word as a separate entity (Kushnir et al., 2018). Such diversity implies a wide-ranging vocabulary, which may enhance engagement by showcasing different expressions and concepts.

Vocabulary density is a metric indicating the diversity of vocabulary in a text. It is calculated by dividing the number of unique words by the total number of words in the text. A high vocabulary density (closer to 1) suggests a rich or varied vocabulary, often seen in formal or literary texts, while a lower vocabulary density indicates more repetition, which is common in conversational or instructional language (Sinclair & Rockwell, 2016). This metric helps in assessing the linguistic variety of a text, potentially offering insights into its complexity and style. The vocabulary density is measured at 0.165, meaning that about 16.5% of the words are unique. This level of diversity reflects a moderate choice of vocabulary, often seen in spoken communication, where repeating certain terms helps in clarity and

reliability, especially in presentations aimed at general audiences. It helps to make ideas in talks more interesting, elaborative, and easy to understand.

The readability index is a measure used to estimate the reading difficulty level of a text, often factoring in elements like sentence length, word length, and syllable count. Popular readability indexes include the Flesch-Kincaid and Gunning Fog index, which provide a grade level or score. A high readability score indicates an easier-to-read text, suited to a broader audience, while a low score suggests a text may be more challenging, typically requiring higher literacy or education levels for full comprehension (Klare, 1963). With a readability score of 7.018, the document corresponds to a 7th-grade reading level. According to the Flesch–Kincaid reading ease metrics, this makes the content accessible and clear for a broad audience, ensuring that it is simple enough for younger listeners yet still engaging for adults (Lipovetsky, 2023).

The average sentence length is 16.7 words, which is common in spoken discourse, creating a natural flow that enhances understanding and engagement. Additionally, common words in the document include "want" (49 occurrences), "that's" (45 occurrences), and "it's" (42 occurrences), highlighting a focus on informal language and relatable subjects.

2- Trends and Frequency of words

The Trends tool displays word frequencies over segments of the text, making it easier to track how certain terms appear or disappear throughout a text (Rockwell & Sinclair, 2016). This temporal view is valuable for tracing the development of themes or concepts across a work or series of texts as shown in figure 1. This section presents the findings from Voyant Tools, which display the relative frequencies of chosen terms across five

TED Talks "Embracing change." The x-axis denotes the segments of the document (numbered 1 to 10), while the y-axis shows the terms' relative frequencies. The analyzed terms include "time" (pink), "that's" (green), "life" (golden), and "it's" (purple). The trends represented by the lines reveal the distribution of these terms throughout the talk, emphasizing key focus areas and shifts in theme.

The figure 1 in this analysis showcases the relative frequencies of specific lexical terms across five Pakistani TED Talk on topic "Embracing Change". The terms analyzed include "time," "that's," "life," and "it's," represented by different colored lines. The findings present unique patterns in the usage of these terms throughout the conversation. For instance, the term "time" (pink) represents sporadic usage with peaks in segments 3, 6, and 10, indicating points where the discussion might focus more broadly on change. In contrast, the term "life" (golden) peaks significantly in segments 2, 6, 8 and 9, focusing on change and how life is unpredictable and dynamic. Ups and downs are a part of life. A person is always learning from something, bringing continuous change throughout their life. By using intentionally these specialized words, speaker influence the reader thoughts. The term "that's" (green) shows varying usage with notable peaks in segments 3 and 9, implying specific language styles and audience targeting. The term "it's" (purple) exhibits the highest peak in segment 2, 4 and 8, indicating a focused discussion on language which could indicate its use in explanations or descriptions. These lexical trends are illustrating how specific topics and terms are distributed and highlighted throughout the presentation within the TED Talk (Dang & Webb, 2014).

3- Words Clouds

3.1. Cirrus

The Cirrus tool visualizes the most frequently occurring words in a text or corpus as a word cloud, allowing users to see prominent terms at a glance (Sinclair & Rockwell, 2016). This visualization can help identify recurring themes or key ideas by emphasizing the words' size according to their frequency as shown in figure 2.

The word cloud in Figure 2 visually showcases the most frequently occurring terms in the TED Talk "Embracing Change". The size of each word correlates with its frequency in the text, with larger words appearing more often. Key terms such as "time," "life," "it's," and "that's" are prominently featured, indicating their importance in the talk.

"Want", "time", "life" and "that's" are the most dominant term, suggesting that discussions around these terms play a central role in the TED Talks on theme of "Embracing Change". Other notable terms include "dream," "know," "people," "good," "going" and "just," which reflect key themes related to Change. This visualization complements the trend analysis by providing a broad view of the lexical focus areas in the TED Talk, highlighting the emphasis on Embracing Change - related terms.

3.2. Terms

Terms identify all words that are exclusive to a specific text. In examining the TED Talks on Embracing Change by five Pakistani speakers, several important terms were identified that shed light on the themes presented. The word "want" was the most frequently mentioned, appearing 49 times, which emphasizes a central idea of desire and ambition. This high frequency indicates a focus on individual and social goals, as well as a collective motivation to adapt and evolve in the face of change (Khan & Baig, 2023). Its prevalence may also highlight the role of aspiration as a key driver in dealing with shifting situations. Next, the term "that's" was utilized 45 times, reflecting the conversational style characteristic of TED Talks. Its frequent use likely aims to enhance relatability, as speakers seek to connect with their audience and clearly communicate their thoughts. This approach aligns with TED's objective of engaging a diverse audience through straightforward language. Likewise, "it's" appeared 42 times, further contributing to the talks' engaging and conversational nature. The regular use of this term suggests that speakers often present ideas in an inclusive manner, encouraging listeners to accept the changes discussed.

The term "time" was mentioned 41 times, indicating a focus on the timing of change. This may imply that the speakers perceive change as requiring prompt action or that they consider time itself an essential resource for adaptation. The repetition of "life," also with 41 occurrences, underscores a comprehensive perspective where embracing change encompasses not just isolated events but a broader transformation of one's lifestyle and mindset. Other significant terms such as "going" and "dream" reflect essential concepts regarding adjusting attitudes toward change and preparing for future challenges. This indicates a trend in these TED Talks that promotes an adaptive mindset as crucial for successfully navigating both personal and societal shifts.

3.3. Links

The dynamic network graph below depicts the relationships between frequently used words in Pakistani TED Talks centered on Embracing Change. This visual representation as shown in Figure 3. clarifies how key concepts relate to and reinforce one another. Created with Voyant Tools, the graph identifies "want" as a central term linked to words such as "that's," "it's," and "time." The prominence of "want" indicates a collective emphasis on ambition, desire, and the pursuit of change, highlighting a motivational aspect present in the discussions. The repeated use of "that's" and its links to terms like "want," "life," and "time" showcases the conversational tone characteristic of TED Talks. This engaging style makes complex concepts regarding embracing change easier to grasp audience interaction (Gems, 2019). The significance of words like "it's" and "time" further points to a discussion around timely action and the impact of time on change.

Additionally, terms like "life" and "dreams" are interconnected, underscoring a consistent theme of personal transformation and adaptability. This implies that the speakers advocate for embracing change as a fundamental aspect of life philosophy and an open mindset essential for ongoing growth and adjustment. The analysis indicates that the concept of embracing change in these talks transcends specific objectives, focusing instead on altering one's overall approach to life.

Keywords in Context (KWIC)

3.4. Context

Contexts shows words in their immediate textual surroundings, which helps with understanding word usage and patterns within their original sentence or phrase (Sinclair & Rockwell, 2016). This is particularly useful for investigating word collocations or understanding contextual meanings as shown table 1. In these results of KWIC for the Embracing Change Ted Talk, the analysis focuses on the term "want." This analysis reveals diverse usages and themes within the corpus.

The table 1 examines the use of the word "want" throughout various sections of the document, emphasizing key themes and examples. It illustrates how the idea of "want" is central to the concept of embracing change, often signifying a desire for improvement, growth, and adaptability. For example, "want" is frequently associated with discussions surrounding personal goals, societal advancement, and the drive to adopt new perspectives. This emphasis on "want" highlights the fundamental motivation to pursue change and develop in an evolving environment. The document further highlights into how the concept of "want" is linked to themes such dream, think, and create demonstrating a shared aspiration to make significant choices. By tracking the term "want," the table offers a coherent narrative of ambition and purpose in the context of change.

3.5. Bubbliness

The Bubbles tool is a visual representation of word associations, showing the connections between commonly co-occurring words in a corpus (Sinclair & Rockwell, 2016). This part is useful for identifying networks of meaning and patterns of word usage within thematic contexts as shown in figure 4. The Bubbliness visualization from Voyant Tools demonstrates the occurrence and distribution of the terms "want," "that's," "it's," "time," and "life" in the TED Talks about Embracing Change. Each term is shown in a different color, with the size of the circles reflecting their frequency.

The term "want" (purple) appears frequently, highlighting a key theme of aspiration and desire, while "that's" (green) groups in specific areas,

indicating conversational segments where speakers clarify or emphasize their points. "It's" (blue) is also clustered, contributing to the informal and engaging style characteristic of TED Talks. The term "time" (pink) appears regularly, emphasizing its significance in the discussions, and "life" (light blue) frequently recurs, suggesting a comprehensive perspective on change as a part of life's journey. The prominent clusters of purple and light blue signify focused discussions on personal ambitions and life changes, whereas the green clusters indicate informal and relatable sections where speakers connect deeply with the audience.

3.6. Collocations

Collocations are pairs or groups of words that frequently appear together in a language, creating predictable word partnerships, as it contributes to natural and fluent language use (Sinclair, 1991). The term "want" is often linked to aspirations and desires, typically associated with concepts like "dream" and "life," which underscores a focus on ambition and personal objectives. It also pairs with verbs like "said" and "life," indicating moments of reflection or self-affirmation. Next, "that's" frequently indicates agreement or confirmation, working alongside terms like "want" and "just," which emphasize straightforwardness in these discussions. Additionally, "dream" often emerges in combination with "want" and "fine," pointing to a theme of striving for an improved life. The word "it's" appears in various contexts, often accompanying phrases like "going," which reflects a conversational tone as speakers discuss ongoing actions, making the message relatable and accessible.

The visualization of collocates in table 2 reveals significant themes within the text. "Want" and "dream" are pivotal in discussions, frequently symbolizing ambitions, personal goals, and the pursuit of self-improvement. The use of "it's" across different contexts illustrates its role in creating a conversational atmosphere, while "that's" enhances clarity and agreement, laying the groundwork for relatable, informal conversations about embracing change.

The analysis of "Embracing Change" in Pakistani TED Talks reveals a thoughtfully varied vocabulary, with 10,007 words and 1,652 unique forms that enhance engagement through linguistic diversity. The moderate vocabulary density of 0.165 strikes a balance, ensuring clarity for a general audience while maintaining an engaging style. The talks are accessible at a 7th-grade readability level, broadening their appeal across age groups. High-frequency terms like "want," "that's," and "it's" establish an informal, relatable tone, while peaks in the usage of "time" and "life" reflect thematic focal points on the importance of timing and personal growth amid change. Word clouds emphasize the prominence of terms like "want," "time," and "life," signifying their central role in discussions about ambition, resilience, and the journey of change. Collocational analysis further shows that "want" is often linked to aspirations, "that's" enhances clarity, and "it's" supports a conversational style, creating a motivational, accessible discourse. Visualization tools, such as Bubblelines and Trends, reveal the strategic distribution of key terms, demonstrating how speakers emphasize interconnected themes of ambition and adaptability to inspire audiences through relatable language.

Conclusion

The analysis of Pakistani TED Talks from on "Embracing Change" showcases a deliberate selection of vocabulary and an approachable conversational style that boosts relatability, engagement, and thematic consistency. Commonly used words such as "want," "time," and "life," along with casual phrases like "that's" and "it's," foster an engaging dialogue about individual aspirations, the unpredictability of life, and the necessity of adjusting to change. These linguistic choices illustrate the speakers' efforts to establish a strong connection with their audiences through clear and informal language that effectively communicates motivational and transformative ideas. This study highlights that the choice of language in TED Talks serves not only to present concepts but also to create a conversational environment that encourages reflection and inspires action. It fills a unique gap in the current literature, as no prior research has

specifically explored the theme of "Embracing Change" in Pakistani TED Talks. Additionally, it creatively utilizes the Voyant tool to analyze linguistic features, offering a visual and statistical insight into language patterns. This method enhances the understanding of TED Talks within the Pakistani context and lays the groundwork for future inquiries into public discourse. Subsequent studies could broaden these findings by examining TEDx Talks from various cultural backgrounds to gain international insights on change. Incorporating multimodal discourse analysis, which considers nonverbal cues like gestures and tone, could provide a more comprehensive perspective on communication. Longitudinal research could investigate how language use in TEDx Talks changes alongside societal shifts, while comparative studies involving speeches from different settings, such as political addresses, educational talks, or social media interactions, could further illuminate how linguistic strategies are tailored to different contexts, thereby enriching the field of discourse analysis in public communication.

Limitations

- The study is limited to five TEDx Talks, which may not comprehensively represent the linguistic trends in all Pakistani TEDx Talks.
- The research does not consider non-verbal communication, such as gestures or tone in Pakistani TED Talks.
- The study primarily examines lexical features, leaving out broader syntactic or pragmatic analyses.

Delimitations

- Due to limited time and access, this research focuses exclusively on TEDx Talks only with the theme "Embracing Change."
- The study is confined to Pakistani TEDx Talks, limiting its generalizability to other cultural contexts.
- The use of Voyant Tools confines the analysis to features and functionalities available within the software.

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