

## Operationalizing the Syntactic Complexity: A Corpus Based Evaluation of Online Newspaper Editorials

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### Abstract

*The purpose of the study is to unfold the syntactic complexity of editorials in Pakistani online English newspapers (The Dawn, The Nation, Daily Times, The Express Tribune and Daily Pakistan). L2 syntactic complexity analyzer (L2SCA) is used to examine the data of five online English newspapers' editorials. All the editorials of the targeted newspapers are written by non-native writers. This study reveals that the editorials in the newspapers are aimed to impact the opinions of readers on various controversial issues. The findings of the study reveal fourteen syntactic complexity measures. Different production units and syntactic constructions are found out, for instance, the sentence structure of The Nation newspaper is more difficult as shown in their production unit length which associates with the greater level of proficiency. On the other hand, the highest level of subordination can be seen in Daily Times which shows more complexity at the start as well as at the intermediate proficiency levels.*

**Keywords:** Online newspapers, editorials, syntactic complexity

### 1. Introduction

A lot of facets of social life have been transformed as a result of technological advancements and due to a rapid advancement of technology, people use various means to share and access news bulletin, as Doyle (2015, p. 359) specified, "the reading patterns of people as news readers are shifting, print media is no longer as the only way to access news, people are spending their time more on online media and use their mobile devices". In addition to this, Collins and Halverson, (2018, p. 56) found that, "the introduction of digital technologies and growth of internet have altered the media landscape in

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recent years, blurring social and geographical boundaries.” People utilize a variety of tools to share and exchange information such as the Internet or the World Wide Web, which are referred as online media. All of these fall under the category of communication technology (Bullinger & Vie, 2017). Knox (2007) described that online newspapers are more convenient as they update information continuously unlike traditional newspapers. An online newspaper’s content has more dynamic, expressive and fluent writing. However, Sridhar and Sriram (2015) claimed that the online newspapers have more transparent reporting process because through internet people also have the ability to check the reporting process. In online newspapers, the readers have the access to see, hear and read the sources on which the reporters trust. Traditional newspapers rely on one-way daily distribution to gather and process information.

The home page is the entry point of an online newspaper. The function of homepage is to introduce the reader to newspaper and to give directional information and also the access to various other links. Further, online newspaper has other different section pages such as sport news pages, international news pages and domestic news pages. Story pages’ links are on the home and section pages. They have only one news story in the form of highlighted text, and it introduces the readers to other news categories like opinion articles, editorials, features and many more (Løvlie, Ihlebæk, & Larsson, 2018).

The description of an editorial is given as “an article in a newspaper that gives the opinion of the editor or publisher on a topic or item of news” (Matheson, 2004; Indarti, 2020). Editorials mainly present the viewpoints of the editors of the newspapers for which they write for the publishing industry on current events. Numerous research studies have been undertaken to investigate the editorial discourse since it is a fascinating area to investigate and study, given the significance of the findings. There is a research by Bonyadi (2011) which aimed to examine the linguistic manifestation of modality used in the different newspapers like the American newspaper, The New York Times, the Persian English newspaper and Tehran Times. According to the findings of the study, The New York Times has a higher number of predictive models, implying that future predictions seemed to be the principal focus of these newspapers' editorial

writers. The Tehran Times, conversely, focuses on the present and what measures should be taken right now.

The study conducted by Masroor and Ahmad (2017) aimed to examine the directives in the English language newspaper editorials among different cultures. They took 90 English language editorials from two Asian newspapers (Dawn and New Straits Times) and one American newspaper (The New York Times). The outcomes of the study showed that every newspaper have different stances. The New Straits Times' attitude with readers was less engaging and had more restraints, The New York Times' stance was more forceful but the Dawn's stance was to recognize the directions as directed. However, no study has been conducted which examined how complex are sentences and words of online editorials published in English newspapers in Pakistan. Researches which examined the syntactic complexity only brought in use the academic and student written products.

Lu and Ai (2015) investigated the differences in syntactic complexity in Essay writing. They have studied 200 argumentative essays which they collected from Louvain Corpus of Native English Essays (LOCNESS) and around 1400 compositions from International Corpus of Learner English (ICLE). For analyzing those essays in order to check syntactic complexity, they used L2 Syntactic Complexity Analyzer (Lu, 2020). The results of the research showed that concerning 14 measures of syntactic complexity, obvious variances are seen among local and non-local speaker groups. In another study on syntactic complexity, Wijayanti (2020) investigated the use of syntactic complexity to interpret English courses from a university viewpoint. The results showed that syntactic complexity could be brought in use as a measure for checking the writer's aptitude for producing different types of sentence constructions.

The purpose of the current study is to add and support in previous literature regarding syntactic complexity. The main objective of this study is to compare the syntactic complexity of editorials published in five Pakistani English online newspapers. According to Lu and Ai (2015), the syntactic complexity measure could be brought in use for predicting the L2 writing's quality but this quality can be affected by different other factors like

planning, time, topic, genre and setting in which instructions are given. So by keeping the above explanation in mind, the goal of the present research is to compare and analyze the syntactic complexity of editorials published in five Pakistani English online newspapers.

## **2. Literature Review**

### **2.1 Professional Writing Genre**

According to Indarti (2020), professional writing is essential for written communication in professional context or workplaces. The purpose of professional writing is to encourage, instruct and to persuade the action. Different researchers give different definitions for professional writing. Like, Connor (1999) described that professional writing has diverse purposes and audiences. There is a difference in Professional writing and academic writing as it is practiced in newspaper offices, government organizations, and businesses and in other work places. He categorized the professional writing in the following way: business writing, political discourse, resumes and editorials. On the other hand, Couture (1992), divided the professional writing in three types namely: technical writing, administrative writing and engineering writing.

According to Gunnarsson (1997, p. 3), “professional genres are a reflection of the political ideologies and power structure within the society studied as well as of the actual knowledge level of the field and of the social patterns of the professional group studied”. Goins, Rauh, Tarner and Holten (2016) wrote a book on professional writing and the title of book is “Workplace writing: A handbook for common workplace genres and professional writing”. In that book they presented professional writing types like brief proposal, record and documents, brochures, policies, processes, directives, advancement and job applications. A lot of discussions have been done in researches regarding different types of professional writing which do help in getting important conclusions. A research conducted by Jenkins and Hinds (1987) to study the content and business letters of request’s forms in different languages like English, Japanese, French etc. The results of this study explored that the different business letters have different orientation. Like French business letters have been found to be writer centered, American business letters have been found to be reader centric while letters

written in Japanese have been found to be more concerned with the gap among the writer and the reader.

A research paper by Al-Harahsheh and Obeidat (2014) aimed to highlight the obstacles which hinders in doing the translation of political reporting into Arabic language from English and vice versa. For translation of political reports, they used theoretical framework by using linguistic methodology. They concluded that during the translation of political reports from one language to another language, the translators face syntactic and semantic obstacles. Meanwhile, a study published in The Jakarta Post by Indarti (2018) looked into the various forms of rhetorical structure used in opinion articles. He discovered that the majority of writers employed a thesis statement in the beginning of their thesis in the form of a paragraph having only one sentence or paragraphs having two or more sentences. These studies demonstrated that professional writing genre research can contribute and add to the area of linguistics by examining textual distinctions as well as contrastive rhetoric in languages.

## **2.2. Newspaper Editorials**

According to Richardson and Lancendorfer (2004), the news coverage provides a balanced, objective summary of the incidents and events of the day, whereas the editorial content serves as objectives and purposes that are different from news reporting. Furthermore, (ibid) discussed the editorials' evolution since the time they first appeared during 1970s, when they were extremely personal and littered with propaganda, to when they developed overtime into a tool for newspapers as an entity providing information and details to the readers by the mid of the 20<sup>th</sup> century. Till then the editorials became much more probable to be taking debatable and dubious stands using rational arguments, and articulate reactions or demands for actions (Hynds, 1994).

Another research was conducted on two local Hong Kong newspapers (Lee & Lin, 2006), facing a significant and delicate political problem while crafting two overall distinct narratives. They brought in use two distinct types of discursive practices in their editorials in order to effectively manage the political pressure, credibility and reputation in the market, and journalism integrity at the same time. A comparison has been done between newspaper

Ming Pao that is elite oriented and the newspaper Apple Daily that is mass oriented. The results showed that for the purpose of portraying itself as an unbiased arbitrator, Ming Pao created a narrative about the debate being a factional struggle, whereas a narrative was created by Apple Daily about sovereign people whose interests and rights had been infringed upon by a powerful entity. Directives in 90 English editorials were examined by Masroor and Ahmad (2017) drawn from Dawn and New Straits Times that are Asian, and The New York Times (NYT) that is American. They investigated their rate of recurrence, form, and co-text. Dawn's position when carrying out commands was straightforward, whereas the narrative of NYT was found to be imposing while New Straits Times was found to be not as much engaged and vigilant.

Izadi and Saghaye-Biria (2007) looked at three prominent American newspapers' editorial reporting the nuclear program of Iran by using Said's notion of orientalism and the ideological square notion of Van Dijk. From 1984 through 2004, according to this study, six oriental themes emerged from editorials' CDA in *The New York Times*, *The Washington Post*, and *The Wall Street Journal*. *The Wall Street Journal* and *The Washington Post* relied upon orientalist opinions more frequently as compared to *The New York Times*. Hence, the literature confirms the importance of editorials that are widely regarded as some of the finest examples of convincing and persuasive writings; a high bar is set through writing in terms of influence and persuasion (Connor, 1999).

### **2.3. Syntactic Complexity**

Syntactic Complexity is defined as "the range and degree of syntactic structures that surface in language production recognize as a very important construct in second language writing teaching and research" (Ortega, 2003, as cited in Ai and Lu, 2013, p. 3). According to Wijayanti (2017), a significant syntactic complexity could be demonstrated through regular usage of compound and complex sentences; that are precisely composed of independent and dependent clauses. *Computerized profiling* (Ehrensberger-Dow & Perrin, 2013), *Cohmetrix* (Graesser et al., 2014), and the *D-level Analyzer* are a few devices that could be used to determine the syntactic complexity (Lu, 2017). The L2 Syntactic Complexity Analyzer also

known as the D-Level Analyzer including fourteen metrics scale for one of the five syntactic complexity dimensions mentioned below.

Complex nominals per clause (CN/C), complex nominals per T-unit (CN/T), and verb phrases per T-unit (VP/T) are the three ratios that make the fifth and final type exploring the relation between certain syntactic structures and bigger production units (Ali & Lu, 2015). Below are the measures, definitions, and aspects of syntactic complexity.

**Table 1: Measures, Definitions, and Aspects of Syntactic Complexity**

<i>Measure</i>	<i>Code</i>	<i>Definition</i>
Length of production unit		
Mean length of clause	MLC	#of words/#of clauses
Mean length of sentence	MLT	#of words/#of sentences
Mean length of T-unit	MLS	#of words/#of T-units
Amount of subordination		
Clauses per T-unit	C/T	#of clauses/#of T-unit
Complex T-units per T-unit	CT/T	#of complex T-units/#of T-units
Dependent clauses per clause	DC/C	#of dependent clauses/#of clauses
Dependent clauses per T-unit	DC/T	#of dependent clauses/#of T-units
Amount of coordination		
Coordinate phrases per clause	CP/C	#of coordinate phrases/#of clauses
Coordinate phrases per T-unit	CP/T	#of coordinate phrases/#of T-units
T-units per sentence	T/S	#of T-units/#of sentences
Degree of phrasal sophistication		
Complex nominals per clause	CN/C	#of complex nominals/#of clauses
Complex nominals per T-unit	CN/T	#of complex nominals/#of T-units
Verb phrases per T-unit	VP/T	#of verb phrases/#of T-units
Overall sentence complexity		
Clauses per sentence	C/S	#of clauses/#of sentences

The products of academic writing are the main concerns of all syntactic complexity researches. Vyatkina (2013), for instance, used a developmental profiling approach on an indexed learner corpus in order to perform a longitudinal analysis of two beginner's level, learning second language (German) in college for four semesters. The findings revealed that the normal developmental pattern for the frequency and range of syntactic complexity elements were increased in students. Ortega (2003) reviewed the evidence for using syntactic complexity metrics as indication of L2 writers' general competency in the aimed language at the college level.

Lowrey (2008) also took three trials to look into the syntactic complexity's impacts on promotion's persuasion. It was revealed by 1<sup>st</sup> experiment that, in the context of broadcasting publicity, the syntactic complexity influenced memory and identification; however, it did not influence persuasion. The 2<sup>nd</sup> experiment revealed that the persuasion of an advertisement in the context of a print was influenced by the syntactic complexity. Moreover, the 3<sup>rd</sup> experiment showed that the persuasion of print advertising could be determined by the desire to comprehend the information with syntactic complexity. According to the findings, the effect of syntactic complexity on advertisement efficacy is a lot more complex as compared to previously believed.

### 3. Methodology

Quantitative method is used in this research as the data is in numeric. "Quantitative method involves data collection procedures that results primarily in numerical data, which is then analyzed by statistical methods" (Dörnyei, 2001, p. 24). Table 2 shows the data of the research, compiled from five editorials published in Pakistani online publications from January 1, 2022 to January 31, 2022. The study deals with second language writing; therefore, it made sure during data collection that the editorials must be collected against those editors whose second language is English.

**Table 2: Online Newspapers**

<i>Online Newspaper</i>	<i>Links</i>
The Dawn	<a href="https://www.dawn.com/newspaper/editorial">https://www.dawn.com/newspaper/editorial</a>
The Nation,	<a href="https://www.nation.com.pk/opinion/editorials">https://www.nation.com.pk/opinion/editorials</a>
Daily Times,	<a href="https://dailytimes.com.pk/editorials/">https://dailytimes.com.pk/editorials/</a>
The Express Tribune	<a href="https://tribune.com.pk/opinion/editorial">https://tribune.com.pk/opinion/editorial</a>
Daily Pakistan	<a href="https://en.dailyakistan.com.pk/editorial">https://en.dailyakistan.com.pk/editorial</a>

The data was collected and analyzed in a number of ways. Every editorial piece copied and pasted into compressed files. The number of words that each file has is between 50 to 2000 words. Also, the maximal number of files that could be handled is 30. The zip files uploaded first and then the 'submit' button is to be clicked. A written sample in English carrying text file format is taken by the L2 Syntactic Complexity Analyzer and the occurring frequency of nine constructions in the writing/text is calculated i.e. words (W), sentences (S), verb phrase (VP), clauses (C), T-units (T), dependent



clauses (DC), complex T-unit (CT), coordinate phrases (CP), and complex nominal phrases (CN). Further, the coordinate phrase is a phrase, in which three constituents are involved having second constituent a coordinator whereas the first and the third constituents must be conjuncts. However, complex nominal phrase is a phrase in which more than one noun is present and their relation can be coordinating or subordinating.

The findings include the text syntactic difficulty indicators such as (1) production units' length, (2) coordination levels, (3) subordination levels, (4) phrasal sophistication levels, and total sentence complications. The research uses the *batch mode* present on internet as a free online platform. The application generates a CSV file with the results, which may be imported into spreadsheets and statistical packages for additional study (Ai & Lu, 2013). Furthermore, the author looked at variances and differences in syntactic complexity among editorials from other countries' online newspapers.

## 4. Results and Discussion

### 4.1 Results

Once five editorial texts were input into the L2SCA program, the analyzer counted the frequency of nine structures in the text.

**Table 3: Syntactic Production Unit**

<i>N</i> <i>o</i>	<i>Country</i>	<i>W</i>	<i>S</i>	<i>VP</i>	<i>C</i>	<i>T</i>	<i>DC</i>	<i>CT</i>	<i>CP</i>	<i>CN</i>
1	The Dawn	5.410	130	132	123	105	25	10	23	190
2	The Nation,	6.012	118	123	110	90	25	14	22	177
3	Daily Times,	4.470	105	122	107	82	22	10	12	138
4	The Express Tribune	4.896	97	115	105	82	23	12	25	135
5	Daily Pakistan	5.010	100	95	92	76	19	7	15	150

The syntactic production units and syntactic structures are presented in Table 3. We can observe that *The Nation* editorial online newspaper has the highest number of words (6.012), whereas *Daily Times* editorial online newspaper has fewest words (4.470). Furthermore, *The Dawn* editorial online daily has the maximum sentences (130), whereas *The Express Tribune*

editorial online newspaper has fewest sentences (97). *The Dawn* contains the most verb phrases including both finite and non-finite verbs (132), whereas *The Daily Pakistan* editorial online has the least verb phrases (95).

*The Dawn* editorial online newspaper has maximum clauses (123), T-units (105), and complex nominal (190), whereas *The Daily Pakistan* editorial online daily has fewest clauses (92), T-units (76), and complex T units (107). Editorial online newspaper *The Dawn* and *The Nation* generate the most dependent clauses (25). *The Nation* contains the maximum complex T-units (14) and *Daily Pakistan* contains the least complex T-units (7). Last but not least, *The Express Tribune* editorial online has the most coordinate phrases (27), whereas *The Daily Times* editorial has the fewest coordination phrases (5).

**Table 4: comparison of Syntactic Structure**

	<i>The Dawn</i>	<i>The Nation</i>	<i>Daily Times</i>	<i>The Express Tribune</i>	<i>Daily Pakistan</i>
<b>Length of Production unit</b>					
MLC	43.98	54.65	44.30	46.63	54.45
MLS	41.62	50.95	45.14	50.47	50.10
MLT	51.52	66.80	57.80	59.71	65.92
<b>Amount of Subordination</b>					
C/T	1.17	1.22	1.30	1.28	1.21
CT/T	0.95	0.16	0.12	0.15	0.09
DC/C	0.20	0.23	0.21	0.22	0.21
DC/T	0.24	0.28	0.27	0.28	0.25
<b>Amount of Coordination</b>					
CP/C	0.19	0.20	0.11	0.24	0.16
CP/T	0.21	0.24	0.15	0.30	0.20
T/S	0.81	0.76	0.78	0.84	0.76
<b>Degree of phrasal Sophistication</b>					
CNC	1.54	1.61	1.29	1.28	1.63
CNT	1.81	1.97	1.68	1.65	1.97
VP/T	1.26	1.37	1.49	1.40	1.25
<b>Overall sentence Complexity</b>					
C/S	0.95	0.93	1.02	1.08	0.92

Table 4 presents the findings of a syntactic complexity of editorials from Pakistani online newspapers. MLC, MLS, and MLT score are included in the

length of production unit for the first kind. *The Nation* earned the greatest MLC (Mean Length of Clause) score (54.65), second highest score is of *Daily Pakistan* (54.45), *The Express Tribune* with (46.63) is at third, followed by *Daily Times* (44.30) at fourth place, while *The Dawn* got the least MLC score (43.98). It signifies that *The Nation's* online newspaper editorial includes the most clauses with "a subject and a finite verb".

Moreover, according to the MLS (Mean length of sentence) values, *The Nation* has the greatest MLS score (50.95), second highest score is of *The Express Tribune* (50.47), *Daily Pakistan* (50.10) is at third, followed by *Daily Times* (45.14) at fourth place, and *The Dawn* had the least MLS score (45.14). In comparison to such other online newspaper editorials, *The Nation* online editorial has the greatest number of lengthiest sentences. MLT's (Mean Length of T-Unit) score is also shown in Table 4. *The Nation* editorial online newspaper obtained the top MLT score (66.80), second highest score is of *Daily Pakistan* (65.92), *The Express Tribune* (59.71) was at third, *Daily Times* (57.80) was at fourth place, and *The Dawn* editorial online newspaper obtained the least MLT score (51.52). It shows that there are a least number of T-units present in the sentence of "a main clause and any dependent clause of non-clausal structure", in *The Dawn* editorial online newspaper.

The 2nd kind displays the subordination scores like C/T, CT/T, DC/C, and DC/T. Table 4 shows, *The Daily Times* editorial online newspaper (1.30), *The Express Tribune* (1.28), *The Nation* (1.22), and *Daily Pakistan* (1.21) have the largest C/T (T-unit complexity ratio), and *The Dawn* editorial has smallest C/T (T-unit complexity ratio) (1.17). This indicates that *The Daily Times* editorial has the most complex clauses compared to other countries. Meanwhile, Table 4 gives the CT/T score (Complex T-unit ratio).

*The Dawn* editorial has greatest score (0.95), second highest score is of *The Nation* (0.16), *The Express Tribune* (0.15) is at third, with *Daily Times* (0.12) at fourth place, and *The Daily Pakistan* editorial has the least score (0.07). It indicates that *The Daily Pakistan* editorial has the fewest T- units. *The Nation* (0.23) has the greatest DC/C score, *The Express Tribune* (0.22) is at second place, with both *Daily Times* and *Daily Pakistan* (0.21) coming after that, and *The Dawn* (0.20) is at the last place. It indicates that *The Dawn* editorial has the fewest dependent clauses. Last but not least, there is the DC/T score

(Dependent clauses per T-unit). *The Nation* and *The Express Tribune* editorial online newspapers obtained the top DC/T score (0.285), *Daily Times* (0.27) follows it at second place, *Daily Pakistan* (0.25) is at third, and *The Dawn* (0.24) has the least score. It shows that *The Dawn* editorial has fewest T-unit dependent clauses.

The third category includes the score of coordination CP/C, CP/T, and T/S. From highest to lowest, the CP/C score could be ordered as follows: *The Express Tribune* (0.24), *The Nation* (0.20), *The Dawn* (0.19), *Daily Pakistan* (0.163), and finally *The Daily Times* (0.11). It means that, compared to other editorials, *The Daily Times* editorial online newspaper shows the fewest per clause coordinate phrases. Meanwhile, from highest to least, the CP/T score could be ordered as follows: *The Express Tribune* (0.30), *The Nation* (0.24), *The Dawn* (0.21), *Daily Pakistan* (0.20), and finally *The Daily Times* (0.15). It indicates that among all editorial online newspapers, *The Express Tribune* editorial has by far the most coordinate phrases per T-unit. Lastly, the Table shows the score of T/S (sentence coordination ratio), which are as follows: *The Express Tribune* (0.84), *The Dawn* (0.81), *Daily Times* (0.78), and finally *The Nation* and *Daily Pakistan* have a score of (0.76) respectively. This suggests that the editorials in *The Nation* and *Daily Pakistan* have the fewest coordinate sentences compared to other similar editorials.

The 4th category is degree of phrasal sophistication, which is represented by the scores CN/C, CN/T, and VP/T. It can be seen in the Table 4 that *Daily Pakistan* (1.63) has the utmost CN/C (complex nominal per clause) score, *The Nation* (1.61) is at second place, *The Dawn* (1.54) at the third place, followed by *Daily Times* (1.29) at the fourth place, with *The Express Tribune* (1.28) at the last place. This implies that, *The Daily Pakistan* editorial online has greatest complex nominal per clause as compared to all other editorial online newspapers. Furthermore, from highest to lowest, the CN/T (complex nominal per T-unit) score could be ordered as follows: *The Nation* and *Daily Pakistan* (1.97) are at the first place, *The Dawn* (1.81) is at second place, *Daily Times* (1.68) at third, and finally *The Express Tribune* (1.65) is at the last place in terms of score.

This implies that among all editorials, *The Nation* and *Daily Pakistan* editorials have the most complex nominal per T-unit numbers. Last value in

the Table is of, the VP/T (Verb phrases per T-unit), which could be ordered maximum to least as follows: *Daily Times* (1.49) is at first place, *The Express Tribune* (1.40) is at second place, *The Nation* (1.97) is at third, followed by *The Dawn* (1.26) at fourth, and finally *Daily Pakistan* (1.25) at the last place. It suggests that, comparing with other editorials, the *Daily Pakistan* editorial online newspaper has the fewest per T-unit-verb phrases.

The overall sentence complexity ratio (C/S) is the final category, which can be ordered maximum to least as follows: *The Express Tribune* (1.08) is at the first place, *Daily Times* (1.02) is at the second place, *The Dawn* (0.95) at third, followed by *The Nation* (0.93) at fourth, and finally *Daily Pakistan* (0.92) at the final place. It suggests that the *Daily Pakistan* editorial online newspaper has fewer complex sentences as compared to other online newspapers' editorials.

#### 4.2 Discussion

The findings reveal that how syntactic complexity is demonstrated in 2nd language writing relative to how much diverse as well as refined are production units or grammatical constructions (Divsar, 2021; Ortega, 2003; Wolfe-Quintero & Brown, 1998; Lu, 2020). Production unit's length for first category is made up of three parameters that determine the production length at clausal, sentential, or T-unit. *The Nation* displays the utmost point of production unit length for this instance. This implies the notion that *The Nation* editorial online has maximum mean clause lengths, mean sentence lengths, and mean T-unit lengths.

Definition of a sentence given by Hunt (1965) is that it is a group of words that are delimited by a punctuation mark signaling the end of the sentence, whereas a construction having a subject along with a finite verb is a clause. Furthermore, the T-unit has a structure having one main clause along with a subordinate clause or a non-clausal construction that has been attached with it or rooted in it. Lu and Ai (2015) have made an argument that the lengthier production units are linked with greater proficiency degrees. A conclusion could be made that the syntactic complexity levels are higher in the editorials which are published in *The Nation* online newspapers.

A clause per T-unit, complex T-unit per T-unit, dependent clause per clause, and dependent clauses per T-unit are four ratios which show the amount of subordination in the second category. In this case, the editorial online newspapers of *The Daily Times* obtained the top score for subordination. This also implies that *The Daily Times* has the highest dependent clauses number and complex T-units respectively. A dependent clause has been described to be a finite adjective, adverbial, or noun clause, according to Hunt (1965). A complex T-unit, on the other hand, is the one having a dependent clause, according to Casanave (1994). According to Lu and Ai (2015), the phrasal-level complexification emerges to be the predominant way of syntactic complexity, thus, the role of subordination is diminished.

The third category consists of three ratios determining the amount of coordination i.e. coordinate phrases per clause, coordinate phrases per T-unit, and a sentence coordination ratio. In terms of coordinate phrases, only adjective, adverb, noun, and verb phrases are included similar to the findings of Cooper (1976). *The Express Tribune*, in this scenario, has shown the top score in terms of coordination. As per Lu and Ai (2015), coordination is one of the most revealing and effective indicators regarding complexity at the starting as well as at the intermediate stages. Moreover, the higher usage of coordinate sentences is associated with lower or beginner stages of 2nd language skills (BardoviHarlig, 1992; Norris & Ortega, 2009; Ali and Lu, 2015). This implies the notion that *The Express Tribune's* editorials are more clear and readable than the ones published in editorials of *The Dawn* or *The Daily Times*.

The final category comprises of three ratios examining the relation among specific syntactic structures as well as bigger production units, such as complex nominal per clause, complex nominal per T-unit, and verb phrases per T-unit (Lu, 2020). As per Cooper (1976), the complex nominal consists i.e. (i) nouns with adjective, possessive, prepositional expression or phrase, relative clause, participle, or appositive, (ii) nominal clause, (iii) gerunds and infinitives in the subject location. The editorials in *The Nation* and *Daily Pakistan* have the highest phrasal sophistication. It signifies that the editorials i.e. *The Nation* and *Daily Pakistan* have an upper intermediate degree or levels of competency.

## 5. Conclusion

This research deals with the syntactic complexity of five Pakistani online newspapers' editorials. In second language writing, the syntactic complexity is measured by how diverse and complicated the production units or grammatical constructions are? (Iwashita, 2006; Ortega, 2003; Wolfe-Quintero et al., 1998; Lu, 2020). *The Nation* editorial received the greatest score of MLC, MLS, and MLT in regards of length production unit, whereas *The Daily Times* editorial scored the biggest amount of subordination (C/T, CT/T, DC/C, DC/T). *The Express Tribune*, conversely, had the most amounts of coordination (CP/C, CP/T, T/S) and similarly the highest sentence complexity ratio, whereas *The Nation* and *Daily Pakistan* displayed the greatest phrasal sophistication degree (CN/C, CN/T, VP/T).

Remarkably, this article's findings have differed from earlier syntactic complexity analyses based on academic written productions. Earlier researches of syntactic complexity in academic written production found that writers with L2 backgrounds write lengthier and more complicated sentences in English as compared to those having L1 background (Lu & Ai, 2015). According to the findings of this study, *The Nation* has the most complicated sentence structures as measured by the length of production units. As per Lu (2020), lengthier production units are associated with greater proficiency levels. *The Daily Times*, on the other hand, has the utmost levels of subordination.

The analysis also suggests that *The Express Tribune* has a higher syntactic complexity as compared to other online newspaper editorials in the professional writing field of editorials. Further investigation is required to look deeper into it. Conversely, the editorials from an edition of every online daily newspaper are included in this research. If the data sampling is done on a larger scale, then the findings may differ.

The objective of editorials in most of the newspapers is to impact readers' views on contentious matters. Non-native English speakers rarely require writing newspaper editorials in English language that might clarify the fact about the scarcity of research regarding cross-culture variances in editorials (Connor, 1999). As the quality of online newspapers improves in upcoming years, the language usage in newspapers may become more advanced as

well as diversified. This scenario leaves a huge amount of subjects and areas of linguistics to be researched.

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