CHAPTER 4

RESEARCH DESIGN

With theoretical foundations firmly set and having related the same to the present research problem, various aspects and procedures of conducting research have been designed. The research design presents an overall structure for data collection and analysis. It provides a logical solution to overcome the research problems of a study. An appropriate research design ensures the researcher to satisfactorily answer the research questions through the evidences and observations gathered from the research findings (Kirshenblatt-Gimblett, 2006).

In formulating the research design for the present study, the issues of sampling, methods of data collection and techniques and means of data analysis are focused. All these factors contribute to various evidences needed to answer the research questions framed for the study. So, the research design of this study consists of the logical structure of the inquiry involved in conducting the research. In order to derive a strong and convincing conclusion, the rationale behind the sampling, data collection and the techniques of data analysis should be justified appropriately.

The study seeks to gather justifiable evidence to answer the research questions outlined earlier in chapter 2. Along with this, the framework of the research study has been designed taking into consideration the detailed objectives of the study which are outlined below.

1. Objectives of the Study

The main objective of the study is to do an in-depth analysis of the readability of the editorials of the first five largest circulating English national dailies of India. The aim and objectives have been designed keeping in mind the rationale of the study, review of literature, research gaps and the conceptual and theoretical background of the study.
In order to do an in-depth analysis of the readability of newspaper editorial, the following sub objectives or specific objectives are framed:

1. To identify and categorise each newspaper editorial into three components, viz., code, content and treatment based on David Berlo’s ‘message’ structure.

2. To calculate the readability of the newspaper editorials by using Flesch Reading Ease Formula in order to explore the suitability of the newspaper editorials for its readers.

3. To ascertain whether newspapers with higher circulation have editorials with higher readability or not.

4. To identify the most popular type of newspaper editorial within each category of code, content and treatment.

5. To identify the most popular and least popular type of editorial with specific combination of code, content and treatment.

6. To compare the readability scores of different types of newspaper editorials.

7. To find out the difference between the readability scores of longer and shorter newspaper editorials.

2. Methodology

The study includes both qualitative and quantitative research methods. Inculcating both the qualitative and quantitative methods in the study, the research design is framed in two broad parts. In the first part, qualitative research is conducted by using content analysis methodology in order to categorise the newspaper editorials into different types. In the second part, quantitative research is conducted by measuring the readability of the different categories of newspaper editorials by using the Flesch Reading Ease Formula.

2.1 Content Analysis of Newspaper Editorials

The ‘message’ in any communication act forms the central element of the human interaction process. It is the connecting link that binds the sender and receiver in any
communication process. It is because of the message that the sender starts the communication process and simultaneously the receiver reciprocates the sender by comprehending the message. Content analysis, one of the most popular research methodologies in social sciences, analyses various forms of content – written texts, electronic documents, visuals, audio, etc. According to Walizer and Wienir (1978), content analysis is “any systemic procedure implemented to study the content of recorded information”.

Neuendorf (2002) depicted content analysis as a “the primary message-centred methodology” (p. 9). The present study is conducted to analyse the ‘message’, that is, the newspaper editorials in terms of its different structural content with their corresponding readability levels. According to Carley (1994), content analysis is determining what words or concepts are present in a text or set of texts. The study, being a message centric one, involves the analysis of the editorial content and its meaning to have an in-depth structural knowledge of the newspaper editorials. Hence, content analysis is the most appropriate methodology for this study.

According to Krippendorff (1980), “content analysis is a research technique for making replicable and valid inferences from data to their context”. Holsti (1969) offers a broad definition of content analysis as “any technique for making inferences by objectively and systematically identifying specified characteristics of messages”. Weber (1990) also pointed out that “content analysis is a research method that uses a set of procedures to make valid inferences from text” (p. 9). The present study draws inferences from the in-depth analysis of the ‘message’ (newspaper editorial) on how suitably it (editorial) was constructed for its audience (readers) by the sender (editor).

Content analysis methodology has become progressively popular in the field of media and communication studies (Berger, 2010). Since the early 20th century, researchers in diverse academic fields such as sociologists, psychologists, political scientists and anthropologists have shown keen interest in conducting content analysis in mass media content (Macnamara, 2005). Riffe and Freitag (1997) and Yale and Gilly (1988) also “reported that in the field of mass communication research, content analysis
has been the fastest-growing technique over the past 20 years or so” (as cited in Neuendorf, 2002, p.1). It is the ‘media messages or the content’ that is responsible for providing information, education, entertainment and many other aspects of monitoring and maintaining the society.

A number of media content such as advertisements, print articles, radio and television broadcasts can easily be analysed for various purposes through the content analysis methodology (Wimmer and Dominick, 2003). Content analysis was first conducted in the 18th century on religious historical documents and other printed documents (Wentworth, 2008). Analysis of media content was introduced by Harold Lasswell in 1927 to analyse the role of media content in spreading propaganda (Macnamara, 2005). Since then, media content analysis emerged to be a popular research methodology to analyse its impact on the society. The rapid expansion and popularity of various forms of mass media such as newspaper, radio, television, the vibrant medium, films and even the new online media forms encouraged researchers to conduct content analysis of media content.

In the first half of the 20th century when content analysis was a new research methodology, most of the content analysis studies focused on the contents of war related information and its role in propagating the masses. Radio and newspaper content were thoroughly used by researchers to analyse their content. “In the 1950s, media content analysis proliferated as a research methodology in mass communication studies and social sciences with the arrival of television. Media content analysis has been a primary research method for studying portrayals of violence, racism and women in television programming as well as in films” (Macnamara, 2005, p. 1).

Berelson (1952) in *Content Analysis in Communication Research* defined content analysis as “a research technique for the objective, systematic, and quantitative description of the manifest content of communication”. According to Budd, Thorp and Donohew (1967), content analysis is “a systematic technique for analysing message content and message handling – it is a tool for observing and analysing the overt communication behaviour of selected communicators”. According to Charles R. Wright
(1986) in *Mass Communication: A Sociological Perspective*, a content analysis is “a research technique for the systematic classification and description of communication content according to certain usually predetermined categories”.

Content analysis can be of two types: quantitative and qualitative. The use of quantitative content analysis studies during the first two decades of the 20th century dealt most exclusively (98%) with printed material (Ranstrom, 1998). During this phase a large number of quantitative newspaper content analysis were conducted to determine the content change in newspapers, by measuring subject matter into categories (Cruikshank, 1998; Krippendorff, 1980). The second phase of newspaper content analysis expanded from mere counting to qualitative analysis to find stereotypes, biases, attitudes, styles, and values (Wentworth, 2008). The expansion in the content analysis studies from mere quantitative to qualitative techniques started in the early 1950s.

The most important difference between quantitative and qualitative content analysis suggested by Kracauer in the early 1950s is that quantitative content analysis focuses on manifest, literal meaning whereas qualitative content analysis focuses on latent meaning, meaning that is not immediately obvious (Berelson, 1952; Groeben & Rustmeyer, 1994; Lisch & Kriz, 1978). Since manifest meaning is fairly obvious at first sight, it can be easily identified by analysing the surface text structures such as words, sentences, paragraphs, etc. whereas detecting latent meaning, which is usually hidden within the text, needs longer time to bring out the underlying meaning by taking the whole context of the text into account. A simple way to differentiate between manifest and latent content is that manifest content describes what the author writes whereas latent content depicts what the author intends to express.

The present study uses a subjective approach to examine the overall meaning of the editorials – both manifest and latent, its diverse themes and tone of presentation. Saunders et al., (2007) assert that content analysis is a form of qualitative research because of its tendency to be used to analyse non-numerical data. Qualitative content analysis research process entails identifying categories and patterns that emerge from the data under scrutiny (Leedy & Ormrod, 2005). So, qualitative content analysis with a
subjective approach is used in the present study to reveal the underlying meaning of the editorial texts. In-depth qualitative content analysis helps in understanding how the manifest and latent meanings of the text affect the readers.

Scholars have defined qualitative content analysis as:

- “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (Hsieh & Shannon, 2005, p.1278),
- “an approach of empirical, methodological controlled analysis of texts within their context of communication, following content analytic rules and step by step models, without rash quantification” (Mayring, 2000, p.2), and
- “any qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings” (Patton, 2002, p.453).

In the present study, an in-depth qualitative content analysis is conducted in order to identify and categorise each newspaper editorial into three components, viz., code, content and treatment based on David Berlo’s ‘message’ structure in his SMCR model. Berlo (1960) in his SMCR model predicted that in a communication process, message comprises of three parts - code, content and treatment properly constructed with the help of elements and structure for each parts. The ‘message’ as defined by David Berlo, in regard to the present study is the newspaper editorials. Each editorial (message) is segregated into its specific code, content and treatment with the help of the in-depth content analysis.

The writing style based on the language structure of the newspaper editorial depicts the code in the entire study. Content is the information that relates to the subject theme of the message (editorial). The way the message is presented in view of its tone is the treatment of the newspaper editorial. On the basis of the results of the pilot study, we can categorise each newspaper editorial into three layer/level categories. A single newspaper editorial will have a specific code, content and treatment. (The final categories of the three layer/level classification of newspaper editorials are given in Chapter 5).
2.1.1 Pilot Study

In conducting a content analysis, a pilot study is first required to get an idea of categorizing content into various categories. A pilot study can be defined as “a small scale version or trial run in preparation for a major study” (Polit, Beck & Hungler, 2001, p. 467). It is essential to conduct a pilot study in content analysis because it enables the researcher to have an idea of the different content categories. “The first step in category construction is preliminary examination of the communications by the researcher on a small-scale or as a pilot study so that such examination will result in the identification of possible content categories into which material can be coded” (Devi Prasad, 1994, p. 12).

Neuendorf (2002) states that a pilot study must be completed as part of the content analysis process and it should be conducted on a sample of applicable content before the final study takes place. So, in the present research, a pilot study was first conducted with the time frame of 1 week among the three English national dailies The Times of India, The Hindu and Hindustan Times which have high popularity and circulation nationwide (these newspapers are also among the newspaper sample selected for the final study). In the pilot study of the present research, a content analysis of the three newspapers was conducted to get an idea of the different categories of newspaper editorials in terms of its code, content and treatment (on the basis of David Berlo’s “message” structure).

A content analysis of 34 newspaper editorials (of one week duration randomly selected) from the three newspapers was conducted. The unit of analysis is the single editorial appearing in every issue of the daily newspaper. A fresh coder was also trained to find out intercoder reliability in the categorisation system. With acceptable intercoder reliability results, the coding process was completed. In the pilot study, the three layer components – code, content and treatment are further divided into respective sub categories. The different categories of the three layers – code, content and treatment were nor predetermined but were derived inductively from the content analysis itself. The findings of the pilot study are presented in table no. 1.
Table no. 1: Pilot study of three layer categorisation of newspaper editorials.

<table>
<thead>
<tr>
<th>Date</th>
<th>Editorial</th>
<th>The Times of India</th>
<th>The Hindu</th>
<th>Hindustan Times</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Code</td>
<td>Content</td>
<td>Treatment</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Inter.</td>
<td>C/P/LO</td>
<td>Arg</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Per.</td>
<td>C/P/LO</td>
<td>Did.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>15.4.12</td>
<td>No</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sunday</td>
<td>editorial</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>16.4.12</td>
<td>1</td>
<td>Inter.</td>
<td>Pol.</td>
<td>Arg.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Des.</td>
<td>ND/Acc.</td>
<td>J/A/P</td>
</tr>
</tbody>
</table>

91
On the basis of the results of the pilot study, each newspaper editorial can be
categorised into three different layer/level categories. This means that each editorial is
composed of three layer components – code, content and treatment. Code, which depicts
the writing style of the editorial, can be further divided into 3 categories, content, which
depicts the subject theme into 7 categories and treatment which depicts the tone of the
editorial into 6 categories. So, a single editorial will have a specific code, content and
treatment.

The different categories of message code, content and treatment along with their
sub categories are presented in the form of a graphical description in fig. 1.

Fig 1: Graphical representation of the three layer categorisation of newspaper
editorials on the basis of pilot study.

<table>
<thead>
<tr>
<th>Layer I (Code)</th>
<th>Each Editorial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive</td>
<td>Interpretative</td>
</tr>
<tr>
<td>Persuasive</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Layer II (Content)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B &amp; E</td>
</tr>
<tr>
<td>C/P/L/O</td>
</tr>
<tr>
<td>Edu.</td>
</tr>
<tr>
<td>Enter.</td>
</tr>
<tr>
<td>ND/Acc</td>
</tr>
<tr>
<td>Pol.</td>
</tr>
<tr>
<td>S &amp; T</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Layer III (Treatment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arg.</td>
</tr>
<tr>
<td>Did</td>
</tr>
<tr>
<td>J/A/P</td>
</tr>
<tr>
<td>Sat.</td>
</tr>
<tr>
<td>S/S/D</td>
</tr>
<tr>
<td>Sugg.</td>
</tr>
</tbody>
</table>

Full forms of abbreviated terms used:
1. Des. = Descriptive
2. Inter. = Interpretative
3. Per. = Persuasive
4. B&E = Business & Economy
The different categories of code, content and treatment evolved after the pilot study are presented in table no. 2.

<table>
<thead>
<tr>
<th>SI. No.</th>
<th>Code (writing style)</th>
<th>Content (subject theme)</th>
<th>Treatment (tone)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Descriptive</td>
<td>Business &amp; Economy</td>
<td>Argumentative</td>
</tr>
<tr>
<td>2</td>
<td>Interpretative</td>
<td>Crime/Police/Law &amp; Order</td>
<td>Didactic</td>
</tr>
<tr>
<td>3</td>
<td>Persuasive</td>
<td>Education</td>
<td>Joy/Appreciation/Praise</td>
</tr>
<tr>
<td>4</td>
<td>Suggestive</td>
<td>Natural Disaster/Accident</td>
<td>Satirical</td>
</tr>
<tr>
<td>5</td>
<td>Science &amp; Technology</td>
<td>Entertainment</td>
<td>Joy/Appreciation/Praise</td>
</tr>
<tr>
<td>6</td>
<td>Didactic</td>
<td>Politics</td>
<td>Argumentative</td>
</tr>
<tr>
<td>7</td>
<td>Satirical</td>
<td>Science &amp; Technology</td>
<td>Suggestive</td>
</tr>
</tbody>
</table>

It is to be noted that the categorisation of newspaper editorials presented in table no. 2 is based only on the results of the pilot study. In the actual content analysis for the study, the categories are progressive in nature owing to larger sample size. So, there is a progression in the categories presented in table no. 2.
slight change in the categorisation of the newspaper editorials in the final content analysis. The final categories evolved after the final content analysis is presented in the next chapter. The results of the pilot study data help us in assuming the possible content categories that can be evolved after the final content analysis process with the actual sample.

Taking into consideration that the categorical variables used in the study during the content analysis (pilot study and the final content analysis) are mutually exhaustive, the variables are operationally defined. The operational definitions of the terminologies, concepts and categories and variables used in the present research study are given in the annexure (part A).

2.1.2 Final Data

- Type of Data
  In-depth analysis of media content requires primary data. For the present study, primary data is collected and used. As newspapers are the first hand sources of information for the general public, newspaper editorials considered for the study are primary data. The newspaper editorials of the first five largest circulating English national daily newspapers of India are the requisite data considered for the study.

- Universe
  A time frame of 1 year starting from 1st January, 2011 to 31st December, 2011 is considered for the study. So, the universe of the study will be all the editorials of English national dailies of India for 1 year starting from 1st January, 2011 to 31st December, 2011. The year 2011 is selected because the latest circulation data of English national daily newspapers of India that can be obtained for the study from the Audit Bureau of Circulation (ABC), India at the time of the data collection process was for the year 2011.

- Sampling Technique
  A multi-stage sampling technique consisting of two stages is used. When more than one step is used in selecting a sample, it is known as multi-stage sampling. In
the present study, the first stage of sampling is the selection of newspaper sample
and the second stage is the selection of newspaper editorials from the selected
newspaper sample.

i. Stage I Sampling

In the first stage of sampling, purposive sampling is conducted. Purposive
sampling is used for both the pilot and the final study. Taking into account the
purpose of the study, the first five largest circulating mainstream English national
dailies of India are selected for the study. Circulation figures are taken into
consideration because it is often assumed that a highly circulating newspaper is
highly readable. The measurement of readability of the editorials of these highly
circulating newspapers will prove or disprove this assumption.

As per the latest ABC (Audit Bureau of Circulation) figures (ABC India, 2011), the top
five largest circulating mainstream English national dailies of India are:

1. *The Times of India* : With a total circulation of 4,090,195, *The Times of India* is the
   largest circulating mainstream broadsheet English national daily of India. *The Times of
   India* is published by media group *The Times Group* from Mumbai. It has its
editions from various cities of the country, that is, Mumbai, Chennai, Delhi, Kolkata,
Hyderabad, Bengaluru, Jaipur, Indore, Ahmedabad, Madurai, Pune, Patna,
Coimbatore, Kochi, Mysore, Nagpur, Nashik, Lucknow, Goa, Mangalore, Hubli,
Visakhapatnam, Chandigarh, Bhubaneswar, Raipur, Guwahati, Ranchi, Trivandrum,
Kolhapur and Aurangabad. Founded in 1838, *The Times of India* is the most popular
and widely circulated newspapers all across the country with predominance from the
western region. As per the *International Federation of Audit Bureaux of Circulation*
(IFABC), 2011, it is the third largest selling newspaper in any language in the world.

2. *The Hindu* : With a total circulation of 1,500,365, *The Hindu* is the second largest
circulating mainstream broadsheet English national daily of India. *The Hindu* is
published by The Hindu Group from Chennai. It has its editions from various cities of
the country, that is, Chennai, Coimbatore, Bangalore, Hyderabad,
Madurai, Noida, Visakhapatnam, Thiruvananthapuram, Kochi, Vijayawada, Mangalore, Tiruchirapalli, Kolkata, Hubli, Mohali, Allahabad, Kozhikode and Lucknow. Founded in 1878, *The Hindu* is one of the most popular and widely circulated newspapers in Southern India. It is also emerging to be one of the most popular newspapers in Northern India as well.

3. *Deccan Chronicle*: With a total circulation of 1,458,037, *Deccan Chronicle* is the third largest circulating mainstream broadsheet English national daily of India. *Deccan Chronicle* is published by *Deccan Chronicle Holdings Ltd.* from Hyderabad. It has its editions from various cities of the country, that is, Hyderabad, Vijayawada, Rajahmundry, Vishakapatnam, Anantapur, Karimnagar, Nellore, Chennai, Coimbatore, Bangalore and Kochi. Founded in 1938, *Deccan Chronicle* is one of the most popular and widely circulated newspapers in Southern India.

4. *Hindustan Times*: With a total circulation of 1,262,990, *Hindustan Times* is the fourth largest circulating mainstream broadsheet English national daily of India. *Hindustan Times* is published by KK Birla Group from Delhi. It has its editions from various cities of the country, that is, Delhi, Mumbai, Kolkata, Lucknow, Patna, Ranchi, Bhopal and Chandigarh. Founded in 1924, *Hindustan Times* is one of the most popular and widely circulated newspapers in Northern India.

5. *The Telegraph*: With a total circulation of 5,62,079, *The Telegraph* is the fifth largest circulating mainstream broadsheet English national daily of India. *The Telegraph* is published by the ABP Group from Kolkata. It has its editions from various cities of the country, that is, Kolkata, Siliguri, Guwahati, Jorhat, Patna, Jamshedpur, Ranchi and Bhubaneswar. Founded in 1982, *The Telegraph* is one of the most popular and widely circulated newspapers in Eastern India.

All the five selected newspapers are located in different geographical areas of the country (though they have several editions in various parts of the country). For instance, *The Times of India* (which is published from Mumbai) represents the western zone, *Deccan Chronicle* (which is published from Hyderabad) and *The Hindu* (which is published from Chennai) represent the southern zone, *Hindustan Times* (which is published from the
capital, Delhi) represents the northern zone and *The Telegraph* (which is published from Kolkata) represents the eastern zone. So, the selected newspapers have high chances of covering diverse news and issues from all the different areas of the country in their editorials. This may be helpful in getting exposed to diverse issues of the country in the content analysis of the editorials.

The selected newspapers and their corresponding circulation figures (of 2011) are given in Table no. 3

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Newspaper</th>
<th>Circulation Figures*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The Times of India</td>
<td>4,090,195</td>
</tr>
<tr>
<td>2.</td>
<td>The Hindu</td>
<td>1,500,365</td>
</tr>
<tr>
<td>3.</td>
<td>Deccan Chronicle</td>
<td>1,458,037</td>
</tr>
<tr>
<td>4.</td>
<td>Hindustan Times</td>
<td>1,262,990</td>
</tr>
<tr>
<td>5.</td>
<td>The Telegraph</td>
<td>5,62,079</td>
</tr>
</tbody>
</table>

*As per ABC, 2011 circulation data.

ii. Stage II Sampling

Here, the sampling of newspaper issues (edition dates) is undertaken. Predicting an effective and efficient sample size for analysing newspaper content is an important consideration in content analysis. Stempel (1952) compared samples of 6, 12, 18, 24, and 48 issues of a daily newspaper and discovered that 12 issues could effectively represent the content of an entire year (as cited in Wimmer & Dominick, 2003). Similarly, Riffe, Lacy and Drager (1996) and Lacy, Robinson and Riffe (1995) studied the optimum sample sizes for weekly newsmagazines and weekly newspapers and found that a monthly stratified sample of 12 issues (one issue from each month) was the most efficient sample for both magazines and newspapers.
For the present study, in the second stage of sampling, stratified sampling is conducted. Based on the sampling technique determined by Stempel (1952), a monthly stratified sample of 12 issues (one issue per month) for a single newspaper for one entire year is taken. So, for five newspapers, the total number of issues (edition dates) will be 60. One date is randomly selected from each of the 12 months of the year 2011 starting from the month of January till the month of December. The randomly selected dates are given below:

(i) 10\textsuperscript{th} January (Monday)
(ii) 3\textsuperscript{rd} February (Thursday)
(iii) 1\textsuperscript{st} March (Tuesday)
(iv) 5\textsuperscript{th} April (Tuesday)
(v) 26\textsuperscript{th} May (Thursday)
(vi) 7\textsuperscript{th} June (Tuesday)
(vii) 21\textsuperscript{st} July (Thursday)
(viii) 29\textsuperscript{th} August (Monday)
(ix) 22\textsuperscript{nd} September (Thursday)
(x) 13\textsuperscript{th} October (Thursday)
(xi) 30\textsuperscript{th} November (Wednesday) and
(xii) 31\textsuperscript{st} December (Saturday).

Considering the fact that each issue (daily issue) of the newspaper carries a single or 2 editorials depending on the day of the issue and policy of the newspaper organisation, the total number of newspaper editorials appearing on these days for the five newspapers are 108. So, the sample size of the study is 108 (\textit{The Times of India} has 23 editorials, \textit{The Hindu} has 22 editorials, \textit{Deccan Chronicle} has 18 editorials, \textit{Hindustan Times} has 23 editorials, and \textit{The Telegraph} has 22 editorials). Majority of the newspaper carries two editorials on weekdays, one on Saturdays and no editorials on Sundays.

- Unit of analysis

The units of analysis are the variables that are statistically analysed in order to accomplish the research objectives (Riffe et al., 2005). In the content analysis of
the present study, the unit of analysis is the single editorial appearing in every issue of the daily newspaper.

2.2 Calculation of Readability of Newspaper Editorials

Readability level is measured by using readability formulae meant for specific type of texts. DuBay (2004) has rightly said that “when texts exceed the reading ability of the readers, they usually stop reading” (p. 1). One of the main reasons for readers discontinuing the reading process is the lack of comprehensibility of the concerned reading text. According to DuBay, “the problem of reading has been discovered by the educators as early as 1920s initially by way of using vocabulary difficulty and sentence length to predict the difficulty level of a text. They embedded this method in their readability formulae, which have proven their worth in our 80 years of application. By the 1980s, there were 200 formulae and over a thousand studies published on the readability formulae attesting to their strong theoretical and statistical validity” (p. 2).

Readability formula uses various aspects of the language like word length (in syllables), sentence length, word familiarity etc., to calculate the readability of the printed text. “The complexity of written language, or readability, has been measured periodically in newspapers around the world since the 1940s using a variety of formulae – or indices – the results of which tend to be expressed as numbers of years of formal schooling required to comprehend a particular piece of written material” (McLellan and Dobinson, 2003, p. 7). In order to make the audience comprehend the news being communicated, the language used in news publications needs to be analysed. One way of quantifying this is to apply one or more readability measures to check the linguistic structure and ultimately the readability of the published news items.

Numerous readability formulae have been empirically developed to analyse the readability of different kinds of written material (Klare, 1964). For calculating the readability of the editorials of the five highest circulating mainstream English national daily newspapers, Flesch Reading Ease Formula is used. On the basis of the series of literature reviews studied for the purpose of analysing the preliminary stages of the
present research, it was found that Flesch Reading Ease Formula is the most popular and widely used readability formula for measuring the readability of concerned texts.

According to Stead (1977), probably the best known and most frequently used formula was produced by Rudolf Flesch who developed the Flesch Reading Ease formula. “Flesch’s Reading Ease formula became the most widely used formula and one of the most tested and reliable” (Chall, 1958, Klare, 1963, as cited in DuBay, 2004, p. 22). Using Flesch Reading Ease Formula will help in predicting to what educational level the editorials are written at.

Flesch readability formula can be applied manually on the text or through computerized Readability Calculator Tool which can automatically calculate the readability score of the particular text. Readability Formulas is a readability software program that calculates the readability score of textual materials by applying widely popular readability formulae such as the, Flesch Reading Ease formula, Flesch Grade Level (Flesch-Kincaid) formula, Fog Index, SMOG Index, Powers-Sumner-Kearl formula, the FORCAST formula, Spache formula, the Fry Graph and the “new” Dale-Chall formula. The present study calculated the readability of the newspaper editorials with the help of the Microsoft Word Readability Calculator Tool.

2.2.1 Flesch Reading Ease Formula

One of the most popular readability formulae, Flesch Reading Ease formula was developed by Rudolf Flesch in 1948. Flesch, who was born in Austria and later came to the U.S. was one of the most prominent researchers in the field of readability. Rudolf Flesch started his career in the field of readability with his Ph.D. dissertation titled, “Marks of a Readable Style” (1943) (DuBay, 2004). Since then, he had worked as a readability consultant and teacher of writing for many years.

Among Flesch’s popular books on readability and English writing, notable ones are “The Art of Plain Talk (1946), The Art of Readable Writing (1949), The Art of Clear Thinking (1951), Why Johnny Can’t Read —And What You Can Do About It (1955), The ABC of Style: A Guide to Plain English (1964), How to Write in Plain English: A Book
Flesch’s books were greatly acclaimed by many scholars concerned with readability studies.

Flesch Reading Ease (readability score) is determined by using the following formula:

\[
RE = 206.835 - (1.015 \times ASL) - (84.6 \times ASW)
\]

Where,

- \(RE\) = Reading Ease
- \(ASL\) = Average sentence length (i.e., the number of words divided by the number of sentences)
- \(ASW\) = Average number of syllables per word (i.e., the number of syllables divided by the number of words).

The formula produces a numerical score known as Reading Ease (RE), ranging from 0 to 100. A score of 100 depicts the highest readability (easiest) and a score of 0, the lowest readability (most difficult). Flesch considers a score between ‘60 to 70’ as a standard score which means highly acceptable and readable by the general readers (adults of average reading ability). Each score has its corresponding educational reading grade level. The interpretations of the readability score for each category are given through the Flesch Reading Ease Score Chart presented in table no. 4:

<table>
<thead>
<tr>
<th>Reading Ease score</th>
<th>Category</th>
<th>Reading Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 to 100</td>
<td>Very Easy</td>
<td>5(^{\text{th}}) Grade</td>
</tr>
<tr>
<td>80 to 90</td>
<td>Easy</td>
<td>6(^{\text{th}}) Grade</td>
</tr>
<tr>
<td>70 to 80</td>
<td>Fairly Easy</td>
<td>7(^{\text{th}}) Grade</td>
</tr>
<tr>
<td>60 to 70</td>
<td>Standard</td>
<td>8(^{\text{th}}) and 9(^{\text{th}}) Grade</td>
</tr>
<tr>
<td>50 to 60</td>
<td>Fairly difficult</td>
<td>10(^{\text{th}}) to 12(^{\text{th}}) Grade</td>
</tr>
<tr>
<td>30 to 50</td>
<td>Difficult</td>
<td>13(^{\text{th}}) to 16(^{\text{th}}) Grade</td>
</tr>
<tr>
<td>0 to 30</td>
<td>Very confusing</td>
<td>College Graduates</td>
</tr>
</tbody>
</table>
After applying the readability formula on the total number of newspaper editorials (final sample), the readability level and the academic reading level in which the editorials are written can be easily predicted. This will enable the researcher to check whether the newspaper editorials in general are written at the standard level (60-70) or below or above it. A score at the standard level indicates that the editorials are written at a level which can be easily understood by an adult of average reading ability. Moreover, a comparison of the readability scores of different types of newspaper editorials can easily predict the most efficient and suitable type of newspaper editorials for the readers.

After having discussed the theoretical framework and research design, this chapter provided useful insights on the research problems pertaining to the present study. The aims and objectives framed for the study reflected the areas which were not pursued in earlier studies. The research methodology provided ways and means to achieve the research goals set for the study. This chapter provided a holistic framework to overcome the research problems formulated for the study. In the next chapter, an overview of the data collected through the research methods employed will be presented. It highlights the findings and analysis of the present research work.