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Article

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Statistical Profile of Holy Quran and Symmetry of Makki and Madni Surras

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Abstract

In this paper, probabilistic approach has been made in the study of Makki, Madani and Mixed Suras of the Holy Quran. Using the word-size and word-length of Ayats, these Suras are categorized by word-length and a frequency distribution is obtained. The paper highlights the constructional characteristics of the two types of Suras in the Holy Quran. We have also discussed the dispersion and shapes of word-size and word-length of Makki and Madni Surras at other compositions of Surras as introduced by Quran Mufassirs and scientists.

Keywords: Quran, Statistical profile, Frequency distribution of Ayats.

1. Introduction

Muslims and non-Muslims have done tremendous work on various aspects of the Holy Quran in respect of its detailed Tafseers, its indexing counting of words, letters vowels number of occurrences of certain words, numerical wonders of Quranic texts including miracles. The Quran provides laws and regulations of living in a society, educating Muslims on relations with relatives, neighbors, friends and foes, working relations with others, management of jobs etc. It guides people on almost every human activity. It is full of knowledge.

Quran is such a Holy book which has numerous purposes and objectives for different people. One may study the Holy book with specific questions in mind and will find answers during its reading. It has been noted by many Mufassirs that the Ayats and Suras are not arranged in chronological order but are placed at appropriate locations by the will of God and as such the chronological order is not important for the present study as compared to the placement of Ayats and Sura in the Quran.

Al-Dargazelli (2004) had identified numerical pattern of the Holy Quran based on verses, he has only used basic descriptive statistics and computed frequency tables of verses. He has given number of verses for each Sura and identified the Suras by Makki and Madani. Al-Dargazelli. (2004) has also worked on Muntasir Mir groupings. In this paper, we have made an attempt to study various Suras, Manzils and Groups of Holy Quran statistically on the basis of lengths of words. The purpose is to find underlying statistical structures of Suras. The similarities and differences among Makki, Madani and other groupings of Suras in Quran are highlighted.

It needs to point out that numerical study of Quran does not display the beauty of Quran. The beauty of Quran lies in the Ayat structure and their meanings. The beauty of Quran given in the Quran lies in the construction of Ayats and Surras. No earthly human being can produce a single Ayat or Surra even with the help of Jins. However it is possible for any one to induct any number of word(s) in to any document in any language of same size. For example letter "is" can be written in a couple of hundred times that are divisible by any other number say 7 or 9. One may count all "is" and if it is not divisible by 7 then some sentences can be added with letter "is" so it is divisible by 7. As such beauty of Surras does not lie in numbers but its beauty is in the Ayat and Surras meanings. We have also attempted to look at the symmetry of Makki and Madni surras by studying the Skewness and Kurtosis.

Authors numerical miracle pointed out are given bellow.

Table 1: Pair of Words in Quran

Sr. #	Pair of Words with Frequency		
1.	Muhammad (saw)	4	Sharee'ah
2.	Eblees	11	Seek refuge from Eblees
3.	Miss lead people	17	Dead people
4.	Speaking publicly	18	Publicizing
5.	Men	24	Women
6.	Tongue	25	Sermon
7.	Zakat	32	Barakah
8.	Muslimeen	41	Jihad
9.	Mind	49	Noor
10.	Benefit	50	Corrupt
11.	People	50	Messenger
12.	Magic	60	Fitnah
13.	Spending	73	Satisfaction
14.	Museebah	75	Thanks
15.	Al-Mala'ikah	88	Al-Shayateen
16.	Hardship	114	Patience
17.	Al-Dunya	115	Al-Akhira
18.	Al-Hayat	145	Al-Mout

(See Al-Suwaidan 2006).

2. Some Basic Statistics of Suras and Verses

The Holy Quran is divided in to 30 Chapters (Paras) and each chapter is subdivided in to sections (Rukus) and each section is further divided into Ayats (Verses). There are a total of 114 Suras in Holy Quran. The Sura is identified as Makki and Madani Sura. The Suras, chapters and sections are sometimes overlapped. Sura and sections can be continued (run) over chapters, but Suras are complete units. Suras are subdivided into Ayats. The Suras and Ayats and their placements in the Quran are ordained by God.

From these 114 Suras of Quran, 89 are Makki Suras and 25 are Madani Suras. Similarly there are 6236 Ayats of which 4725 Ayats are Makki and 1511 are Madani Ayats. The mean number of Ayats per Sura is calculated to be 51.72, whereas Makki Suras have a calculated mean of 41.87 and Madani Suras have the mean 82.56 showing that Madani Suras are larger than Makki Suras with respect to lengths of Ayats. The range of Madani Sura, Ayats size is also larger than Makki Suras which mean that the variation in Madani Suras are more than the Makki Suras (See Al-Dargazelli 2004). This fact has also been noted by many Mufassirs.

The total number of letters in Holy Quran is 322,564 and total words are 86,872 showing the mean number of letters per word is 3.71. In Madani Suras the total number of letters is 124755 and the total number of words is 33,247 showing the mean number of letters per word is 3.75. In Makki Suras, the total number of letters is 197,809 and the number of words is 53,625 showing the mean is 3.69. Details are given in the Tables at Appendix A

2.1 Analysis of Verses

Al-Dargazelli (2004) has discussed the basic statistics of verses, but he has made some unintentional mistakes in applications of the methods. In this section, various aspects of the verses are presented. This study shall hereafter refer verses as Ayats. The Ayat-size by words and Ayat-size by letters is calculated. This gives a comprehensive insight into the structure of Ayats. The Table 1 below exhibits the number of Ayats, words, letters and words per Ayat, letters per Ayat and letter per word.

Table 2: Numbers of Ayats, words , letters and Ayat-size by word, Ayat-size by letters and word-size by letters of Makki and Madani Sura

Suras	No Ayats	No. letters	No words	Ayat-size by letters	Ayat-size by words	Word-size words
Makki	4725	197,809	53,625	41.87	11.34	3.69
Madani	1511	124,755	33,247	82.57	22.00	3.75
Total	6236	322,564	86,872	51.73	13.93	3.71

It is noted by all early authors that Madani Ayats are longer than the Makki Ayats. It is evident this characteristic by Ayat-sizes by letters and by words from the Table 1. Madani Ayats are almost twice as much as Makki Ayats both by letters and by the words. Similarly the Madani word size is also larger than Makki word. In fact the Madani Ayat size is larger than all Ayats in the Holy book.

If we further examine the distribution of Suras over Ayat sizes by words, we find some interesting aspect of the Suras as shown in Table 2 below. We note that 58 of 89 Makki Suras have smaller Ayats of size 1 to 10 Ayats per Sura whereas 23 of 25 Madani Suras have larger Ayats of size 15 and above. This confirms early authors work that Madani Suras have longer Ayats than Makki Suras. One thing is different that the word sizes by letters are almost similar. Further, we may note that of 32 Suras of Ayat size 1 to 5. Thirty one (31) Suras are Makki and only one Sura is Madani. On the other side of the Ayat size of 20 and above, of 17 Suras, 15 Suras are Madani and only 2 are Makki Suras.

Table 3: Distribution of Suras by Ayat-size by words

Ayat Size	Makki	Madani	Total
1-5	31	1	32
5-10	27		27
10-15	11	1	12
15-20	18	8	26
20-25	2	12	14
25-30	-	3	3
31 and above			
Total	89	25	114

4. One-letter and Two-letter Words

In this section a study of the words with one letters and two letters per word is conducted. In the Holy Quran, there are 9,398 words with one letter per word and 14,646 words with two letters per word. It shows that there are 10.82% of words with one letter and 16.96% words with two letters per word, showing that there are 27.78% words with two- and one - letters word. It may be noted that there are more than one fourth of words that have 1 and 2 letter-words in the Holy Quran. The distribution of 1and 2 letter -words of Makki and Madani Suras may be seen in the Table 3 below:

Table 4: Word size by type of Suras

Word size	All Suras		Makki Suras		Madani Suras	
One	9,398	(10.82%)	5,558	(6.40%)	3840	(4.42%)
Two	14,646	(16.96%)	9,286	(10.69%)	5,360	(6.27%)
One & Two	24,044	(27.78%)	14,844	(17.09%)	9,200	(10.69%)

Similarly, we may study the largest word sizes. Words containing 9 or 10 letters are the largest words. There are 23 words in all Suras that have 10 letters each, whereas there are 129 words with 9 letters each in the Holy Quran. Of all Suras, 46 Suras have 9 letter -words and 14 Suras have 10 letter -words. Of Makki Suras, 31 Suras have 9 letter-words and similarly of Madani Suras, only 15 Suras have 9 letter words and of Makki Suras, only 8 Suras have 10 letter-words and of Madani Suras only 6 Suras have 10 letter -words. The following Table 4 summarizes the information:

Table 5: Word sizes by Makki and Madani Suras

Word Size	Makki	Madani	Total
Nine	31	15	46
Ten	8	6	14
Nine & Ten	39	21	60

It is important to see that Makki Suras have more number of 9 and 10 letter-words in the Holy Quran. If we look at the number of words with 9 or 10 letters, we note that there are 152 such words of which 129 words have 9 letters and 23 words have 10 letters. Of 9 letter-words, there are 76 words in Makki Suras and 53 in Madani Suras. Makki Suras have more number of 9 letter-words as compared to Madani Suras. Similarly, of 23 words of 10 letters, there are 13 in Makki Suras and 10 words are Madani. In 10 letters -words, Makki Suras have more 10 letter-words than Madani Suras. This may be seen from the Table 6:

Table 6: Letter sizes by Makki and Madani Suras

Letter Size	Makki	Madani	Total
Nine	76	53	129
Ten	13	10	23
Nine & Ten	89	63	152

Statistical tools can be used to understand the numerical beauty of the Holy Quran. This study has provided a basis for conducting further analysis of the Holy book on similar lines. The present study is still under progress and it is anticipated that further relationships will be identified from the data collected for the research.

5. Symmetry of Makki and Madni Suras.

In order to study the Skewness and kurtosis of Makki and Madni Suras, we have constructed bivariate table of β_1 and $\beta_2 -3$ in tables 1 and 2 below. It is seen that Makki Suras are closer to symmetrical functional from than Madni Suras. There are 41/89 Makki Suras whose β_1 and β_2 lie between (-1 to +10 and (+2 to +4) respectively whereas 7/25 Madni Suras β_1 and β_2 lie in (-1 to +1) and (+2 to +4) respectively. Almost half of Makki Suras have β_1 (-1 to +1) and a little more than 50% Suras have $\beta_2 -3$ in (-1 to +1) interval. For Madni Suras, only 8 Suras out of 25 have β_1 in the interval (-1 to +1) and 10 out of 25 have $\beta_2 -3$ in the interval (-1 to +10).

Graphical representation of (β_1 , $\beta_2 -3$) are given in Fig (1) and (2).

Table 7: Bivariate Table of Makki Surras

B2 B1	-2 , - 1	-1 , - 0	0 , 1	1 , 2	2 , 3	3 , 4	4 , 5	5 , 6	6 , 7	Total
(-4 to -3)		1								1
(-3 to -2)		1								1
(-2 to -1)		2								2
(-1 to -0)		3	19							22
(0 to 1)	2	1	17	3						23
(1 to 2)		1	2	8						11
(2 to 3)				6						6
(3 to 4)			1	6						7
(4 to 5)				2						2
(5 to 6)				2	1					3
(6 to 7)				1	2					3
(7 to 8)				1						1
(8 to 9)					1					1
(9 to 10)					1					1
(10 to 11)					2					2
(19 to 20)							1			1
(24 to 25)						1				1
(50 to 51)									1	1
Total	2	9	39	29	7	1	1	-	1	89

Table 8: Bivariate Table of Madni Surra

B2 \ B1	(-1 to -0)	(0 to 1)	(1 to 2)	(2 to 3)	Total
(-4 to -3)					
(-3 to -2)					
(-2 to -1)	1	1			2
(-1 to -0)	1	3			4
(0 to 1)	1	2	1		4
(1 to 2)		1	4		5
(2 to 3)			1		1
(3 to 4)			3		3
(4 to 5)			2	1	3
(5 to 6)				1	1
(6 to 7)					
(10 to 11)				1	2
(11 to 12)				1	1
Total	3	7	11	3	25

Fig (1)

Graphical representation of $(\beta_1, \beta_2 -3)$ of Makki Surras

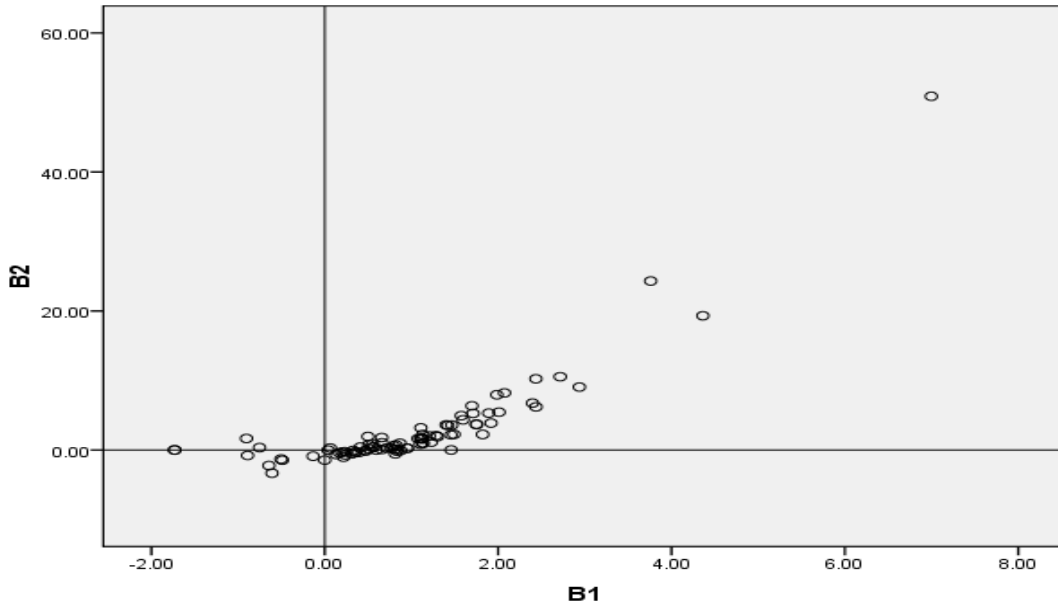
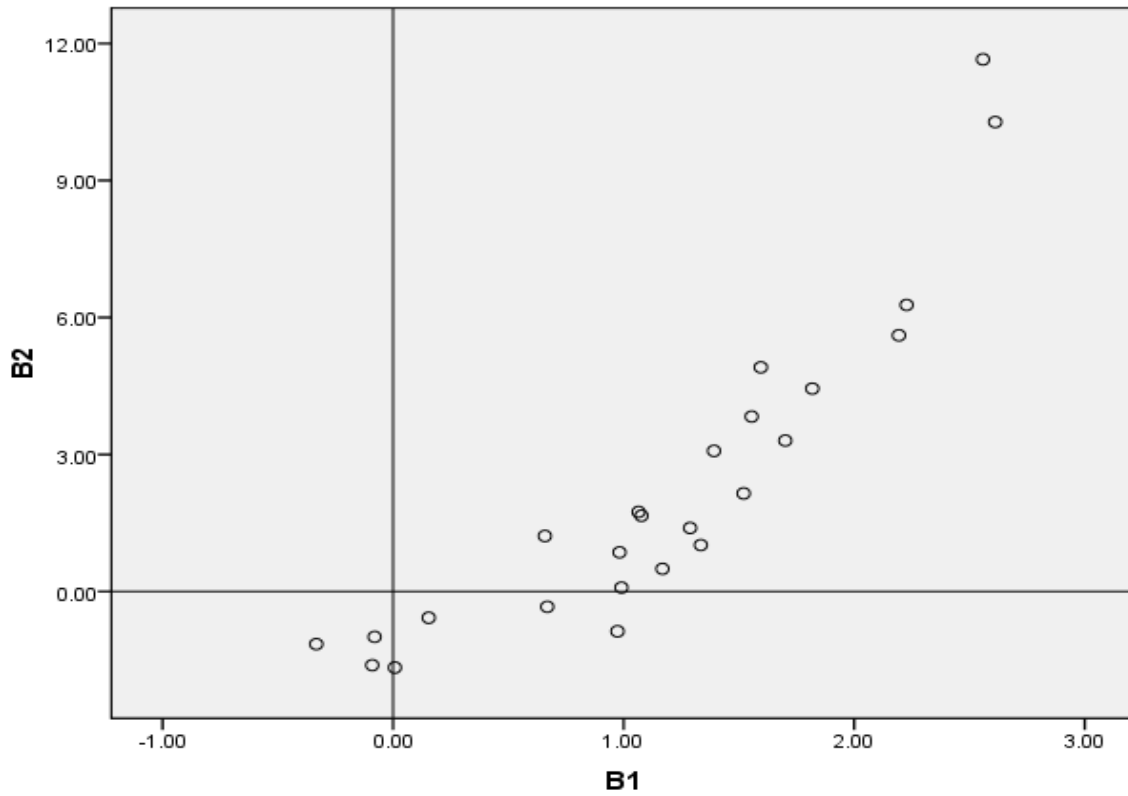


Fig (2)

Graphical representation of $(\beta_1, \beta_2 -3)$ of Madni Surras



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Appendix A1

Table A1: Some Basic Statistics on Holy Quran

No of Sura	No of Ayat	No of Words	No of Letters	Mean letter per Word	Mean word per Ayat	S.D	C.V
1	7	27	117	4.33	3.86	1.73	39.97
2	286	6860	25637	3.74	23.99	1.70	45.39
3	200	3934	14642	3.72	19.67	1.73	46.59
4	176	4228	15971	3.78	24.02	1.75	46.32
5	120	3163	11894	3.76	26.36	1.70	45.29
6	165	3440	12458	3.62	20.85	1.71	47.08
7	206	3694	14071	3.81	17.93	1.74	45.64
8	75	1436	5337	3.72	19.15	1.79	48.05
9	129	2846	10865	3.82	22.06	1.84	48.19
10	109	2018	7406	3.67	18.51	1.67	45.60
11	123	2127	7615	3.58	17.29	1.59	44.38
12	111	1956	7140	3.65	17.62	1.60	43.79
13	43	974	3461	3.55	22.65	1.63	45.87
14	52	929	3446	3.71	17.87	1.70	45.88
15	99	727	2809	3.86	7.34	1.85	47.87
16	128	2079	7655	3.68	16.24	1.74	47.20
17	111	1747	6491	3.72	15.74	1.70	45.73
18	110	1735	6407	3.69	15.77	1.60	43.39

19	98	1081	3828	3.54	11.03	1.58	44.55
20	135	1481	5292	3.57	10.97	1.56	43.67
21	112	1310	4904	3.74	11.70	1.76	47.02
22	78	1434	5161	3.60	18.38	1.64	45.64
23	118	1166	4372	3.75	9.88	1.74	46.44
24	64	1478	5596	3.79	23.09	1.76	46.46
25	77	1016	3721	3.66	13.19	1.66	45.41
26	227	1457	5498	3.77	6.42	1.82	48.16
27	93	1282	4683	3.65	13.78	1.68	45.89
28	88	1582	5802	3.67	17.98	1.66	45.21
29	69	1118	4188	3.75	16.20	1.78	47.52
30	60	918	3377	3.68	15.30	1.71	46.49
31	34	616	2118	3.44	18.12	1.55	45.02
32	30	409	1522	3.72	13.63	1.64	44.17
33	73	1501	5619	3.74	20.56	1.83	48.99
34	54	995	3512	3.53	18.43	1.65	46.87
35	45	872	3159	3.62	19.38	1.61	44.43
36	83	805	3002	3.73	9.70	1.72	46.01
37	182	954	3780	3.96	5.24	1.90	47.98
38	88	818	2993	3.65	9.30	1.69	46.36
39	75	1269	4731	3.73	16.92	1.64	43.94
40	85	1342	4986	3.72	15.79	1.64	44.05
41	54	896	3288	3.67	16.59	1.71	46.61
42	53	980	3422	3.40	18.49	1.44	42.22
43	89	941	3518	3.74	10.57	1.74	46.49
44	59	380	1437	3.78	6.44	1.70	44.86
45	37	552	1998	3.62	14.92	1.67	46.19
46	35	717	2610	3.64	20.49	1.66	45.74
47	38	615	2376	3.86	16.18	1.78	46.11
48	29	638	2463	3.86	22.00	1.81	46.93
49	18	386	1492	3.87	21.44	1.80	46.49
50	45	423	1475	3.49	9.40	1.56	44.84
51	60	395	1500	3.80	6.58	1.73	45.65
52	49	341	1290	3.78	6.96	1.74	45.96
53	62	407	1402	3.44	6.56	1.66	48.27
54	55	383	1442	3.77	6.96	1.62	43.08
55	78	383	1569	4.10	4.91	1.63	39.84
56	96	430	1696	3.94	4.48	1.90	48.23
57	29	670	2472	3.69	23.10	1.73	46.97
58	22	526	1993	3.79	23.91	1.69	44.55
59	24	499	1921	3.85	20.79	1.82	47.22
60	13	393	1531	3.90	30.23	1.86	47.86
61	14	244	942	3.86	17.43	1.74	45.00
62	11	194	743	3.83	17.64	1.66	43.24

63	11	201	782	3.89	18.27	1.85	47.52
64	18	287	1067	3.72	15.94	1.76	47.29
65	12	316	1173	3.71	26.33	1.58	42.52
66	12	283	1068	3.77	23.58	1.64	43.43
67	30	364	1315	3.61	12.13	1.52	42.17
68	52	327	1262	3.86	6.29	1.80	46.62
69	52	285	1114	3.91	5.48	1.73	44.20
70	44	240	943	3.93	5.45	1.74	44.29
71	28	264	950	3.60	9.43	1.73	48.02
72	28	320	1091	3.41	11.43	1.49	43.74
73	20	227	841	3.70	11.35	1.65	44.53
74	56	290	1012	3.49	5.18	1.62	46.55
75	40	180	665	3.69	4.50	1.58	42.64
76	31	278	1069	3.85	8.97	1.70	44.09
77	50	198	818	4.13	3.96	1.89	45.78
78	40	201	771	3.84	5.03	1.75	45.59
79	46	197	749	3.80	4.38	1.62	42.73
80	42	151	551	3.65	3.60	1.60	43.87
81	29	122	424	3.48	4.21	1.61	46.38
82	19	89	323	3.63	4.68	1.70	46.88
83	36	179	737	4.12	4.97	1.85	44.80
84	25	123	436	3.54	4.92	1.51	42.62
85	22	124	455	3.67	5.64	1.78	48.49
86	17	70	240	3.43	4.12	1.59	46.47
87	19	82	291	3.55	4.32	1.54	43.42
88	26	102	386	3.78	3.92	1.52	40.16
89	30	154	569	3.69	5.13	1.68	45.41
90	20	92	334	3.63	4.60	1.71	47.22
91	15	69	234	3.39	4.60	1.71	50.37
92	21	89	310	3.48	4.24	1.84	52.85
93	11	50	167	3.34	4.55	1.48	44.29
94	8	29	101	3.48	3.63	1.21	34.85
95	8	37	151	4.08	4.63	1.52	37.15
96	19	76	284	3.74	4.00	1.53	40.85
97	5	32	110	3.44	6.40	1.39	40.43
98	8	103	392	3.81	12.88	1.65	43.23
99	8	38	157	4.13	4.75	1.70	41.03
100	11	44	164	3.73	4.00	1.74	46.78
101	11	38	156	4.11	3.45	1.97	47.98
102	8	28	92	4.29	3.50	1.72	40.09
103	3	18	59	3.83	6.00	1.98	51.60
104	9	35	134	3.83	3.89	1.52	39.81
105	5	24	96	4.00	4.80	1.44	36.12
106	4	18	71	4.00	4.50	1.71	42.87

107	7	27	112	4.15	3.86	1.79	43.18
108	3	11	42	3.82	3.67	1.78	46.58
109	6	30	96	3.20	5.00	1.61	50.19
110	3	22	79	3.59	7.33	1.59	44.37
111	5	27	81	3.00	5.40	1.21	40.30
112	4	17	48	2.82	4.25	1.13	40.06
113	5	26	70	2.69	5.20	1.19	44.28
114	6	21	76	3.62	3.50	1.47	40.49
	6236	86872	322564	3.71	13.94		

Appendix A2

Table A2: Number of Ayats, Words, Letters Means and Standard deviations of Makki Surras

No of Sura	No of Ayat	No of Words	No of words per Ayat (mean)	No of Letters	Mean Letter per word	S.D	C.V
1	7	27	3.857	117	4.33	1.7321	39.97040325
6	165	3440	20.848	12458	3.62	1.7052	47.08437743
7	206	3694	17.932	14071	3.81	1.7386	45.64172519
10	109	2018	18.514	7406	3.67	1.6734	45.59734397
11	123	2127	17.293	7615	3.58	1.5890	44.38390941
12	111	1956	17.622	7140	3.65	1.5984	43.78816401
14	52	929	17.865	3446	3.71	1.7018	45.87784334
15	99	727	7.343	2809	3.86	1.8495	47.86830694
16	128	2079	16.242	7655	3.68	1.7380	47.20163901
17	111	1747	15.739	6491	3.72	1.6989	45.72541167
18	110	1735	15.773	6407	3.69	1.6022	43.38720631
19	98	1081	11.031	3828	3.54	1.5777	44.55436875
20	135	1481	10.970	5292	3.57	1.5606	43.67318853
21	112	1310	11.696	4904	3.74	1.7586	47.02479789
23	118	1166	9.881	4372	3.75	1.7414	46.44292425
25	77	1016	13.195	3721	3.66	1.6625	45.40723076
26	227	1457	6.419	5498	3.77	1.8174	48.16295654
27	93	1282	13.785	4683	3.65	1.6761	45.89477858
28	88	1582	17.977	5802	3.67	1.6582	45.21298016
29	69	1118	16.203	4188	3.75	1.7802	47.52273163
30	60	918	15.300	3377	3.68	1.7103	46.49140331
31	34	616	18.118	2118	3.44	1.5480	45.02101002
32	30	409	13.633	1522	3.72	1.6436	44.16860578
34	54	995	18.426	3512	3.53	1.6542	46.86513625
35	45	872	19.378	3159	3.62	1.6097	44.43355825
36	83	805	9.699	3002	3.73	1.7158	46.0100804

37	182	954	5.242	3780	3.96	1.9012	47.98241912
38	88	818	9.295	2993	3.65	1.6918	46.3605376
39	75	1269	16.920	4731	3.73	1.6383	43.94334833
40	85	1342	15.788	4986	3.72	1.6365	44.04630744
41	54	896	16.593	3288	3.67	1.7104	46.60873084
42	53	980	18.491	3422	3.40	1.4355	42.22003309
43	89	941	10.573	3518	3.74	1.7381	46.49061636
44	59	380	6.441	1437	3.78	1.6966	44.86358062
45	37	552	14.919	1998	3.62	1.6719	46.18952338
46	35	717	20.486	2610	3.64	1.6629	45.73548519
50	45	423	9.400	1475	3.49	1.5636	44.83986629
51	60	395	6.583	1500	3.80	1.7334	45.64533818
52	49	341	6.959	1290	3.78	1.7388	45.96310698
53	62	407	6.565	1402	3.44	1.6628	48.27004925
54	55	383	6.964	1442	3.77	1.6219	43.07771954
55	78	383	4.910	1569	4.10	1.6320	39.8378119
56	96	430	4.479	1696	3.94	1.9024	48.23388116
67	30	364	12.133	1315	3.61	1.5234	42.16739998
68	52	327	6.288	1262	3.86	1.7994	46.6245543
69	52	285	5.481	1114	3.91	1.7276	44.19805565
70	44	240	5.455	943	3.93	1.7402	44.29030162
71	28	264	9.429	950	3.60	1.7281	48.02405051
72	28	320	11.429	1091	3.41	1.4912	43.73880053
73	20	227	11.350	841	3.70	1.6499	44.53408284
74	56	290	5.179	1012	3.49	1.6243	46.54570897
75	40	180	4.500	665	3.69	1.5753	42.63938239
76	31	278	8.968	1069	3.85	1.6956	44.09393973
77	50	198	3.960	818	4.13	1.8912	45.77683209
78	40	201	5.025	771	3.84	1.7487	45.58836962
79	46	197	4.378	749	3.80	1.6246	42.72862086
80	42	151	3.595	551	3.65	1.6008	43.87023007
81	29	122	4.207	424	3.48	1.6120	46.38319629
82	19	89	4.684	323	3.63	1.7015	46.88298079
83	36	179	4.972	737	4.12	1.8471	44.80091771
84	25	123	4.920	436	3.54	1.5109	42.62402679
85	22	124	5.636	455	3.67	1.7794	48.49310465
86	17	70	4.118	240	3.43	1.5932	46.46848013
87	19	82	4.316	291	3.55	1.5408	43.41836891
88	26	102	3.923	386	3.78	1.5197	40.15758339
89	30	154	5.133	569	3.69	1.6777	45.40753346
90	20	92	4.600	334	3.63	1.7143	47.22039437
91	15	69	4.600	234	3.39	1.7083	50.37182395
92	21	89	4.238	310	3.48	1.8409	52.85167988
93	11	50	4.545	167	3.34	1.4792	44.28874711

94	8	29	3.625	101	3.48	1.2136	34.84690403
95	8	37	4.625	151	4.08	1.5162	37.15140627
96	19	76	4.000	284	3.74	1.5264	40.8466893
97	5	32	6.400	110	3.44	1.3898	40.42957811
100	11	44	4.000	164	3.73	1.7436	46.77972895
101	11	38	3.455	156	4.11	1.9699	47.98478119
102	8	28	3.500	92	4.29	1.7182	40.09248567
103	3	18	6.000	59	3.83	1.9778	51.59525656
104	9	35	3.889	134	3.83	1.5240	39.80693912
105	5	24	4.800	96	4.00	1.4446	36.11575593
106	4	18	4.500	71	4.00	1.7150	42.87464629
107	7	27	3.857	112	4.15	1.7911	43.17788631
108	3	11	3.667	42	3.82	1.7787	46.58398896
109	6	30	5.000	96	3.20	1.6060	50.18822331
110	3	22	7.333	79	3.59	1.5934	44.37349207
111	5	27	5.400	81	3.00	1.2089	40.29803499
112	4	17	4.250	48	2.82	1.1311	40.06017609
113	5	26	5.200	70	2.69	1.1923	44.28479262
114	6	21	3.500	76	3.62	1.4655	40.49340769
Total	4725	53625	11.34	197809	3.69		

Appendix A3

Table A3: Numbers of Ayats, word, letters and Means and Standard deviations of Madani Suras

No of Sura	No of Ayat	Average No of words	No of Words	No of Letters	Mean Letter per word	S.D	C.V
2	286	23.99	6860	25637	3.74	1.6984	45.388402
3	200	19.67	3934	14642	3.72	1.7342	46.593296
4	176	24.02	4228	15971	3.78	1.7498	46.321240
5	120	26.36	3163	11894	3.76	1.7030	45.288010
8	75	19.15	1436	5337	3.72	1.7857	48.046026
9	129	22.06	2846	10865	3.82	1.8396	48.188129
13	43	22.65	974	3461	3.55	1.6299	45.867810
22	78	18.38	1434	5161	3.60	1.6426	45.640223
24	64	23.09	1478	5596	3.79	1.7591	46.460663
33	73	20.56	1501	5619	3.74	1.8338	48.986261
47	38	16.18	615	2376	3.86	1.7814	46.110272
48	29	22.00	638	2463	3.86	1.8116	46.926744
49	18	21.44	386	1492	3.87	1.7968	46.486064
57	29	23.10	670	2472	3.69	1.7331	46.973116
58	22	23.91	526	1993	3.79	1.6878	44.545418
59	24	20.79	499	1921	3.85	1.8179	47.221248

60	13	30.23	393	1531	3.90	1.8645	47.860591
61	14	17.43	244	942	3.86	1.7371	44.995125
62	11	17.64	194	743	3.83	1.6562	43.243489
63	11	18.27	201	782	3.89	1.8488	47.519603
64	18	15.94	287	1067	3.72	1.7582	47.292778
65	12	26.33	316	1173	3.71	1.5784	42.521807
66	12	23.58	283	1068	3.77	1.6390	43.429971
98	8	12.88	103	392	3.81	1.6453	43.231196
99	8	4.75	38	157	4.13	1.6953	41.033230
Total	1511	22.00	33247	124755	3.75		

Appendix A4

Table A4: Words per Ayat, Standard deviations, coefficient of variation, β_1 and β_2 of Makki Suras

Surra	Mean	S.D	C.V	β_1	β_2
1	3.8571	1.3452	34.8752	0.3521	-0.3025
6	20.8485	10.0745	48.3224	1.1287	0.9412
7	17.9320	10.2088	56.9305	1.1022	0.8326
10	18.5138	8.7174	47.0860	1.1311	1.6758
11	17.2927	7.2697	42.0390	0.8681	0.9757
12	17.6216	8.5089	48.2866	1.1200	1.6606
14	17.8654	9.0338	50.5658	1.2986	1.9168
15	7.3434	2.9903	40.7211	1.2047	2.0264
16	16.2422	6.6649	41.0346	0.6599	0.0853
17	15.7387	5.4784	34.8084	0.7691	0.2582
18	15.7727	8.2946	52.5885	1.1344	1.0126
19	11.0306	4.8065	43.5739	1.6976	6.3581
20	10.9704	6.4112	58.4411	1.1033	1.6856
21	11.6964	4.2614	36.4331	0.8014	0.1119
23	9.8814	5.3576	54.2192	2.0102	5.4461
25	13.1948	4.8802	36.9861	0.8215	0.7136
26	6.4185	2.8959	45.1174	2.0730	8.2165
27	13.7957	5.9720	43.2886	1.5954	4.3431
28	17.9773	7.0335	39.1246	0.4098	0.4132
29	16.2029	6.9379	42.8190	0.5075	0.1911
30	15.3000	7.0140	45.8433	0.5617	0.4573
31	18.1176	9.0110	49.7360	0.1307	-0.6546
32	13.6333	5.5490	40.7021	0.0624	0.2823
34	18.4259	8.0578	43.7309	0.9510	0.2347
35	19.3778	9.3597	48.3012	0.3109	-0.5623
36	9.6988	3.9346	40.5683	0.6578	1.7916
37	5.2418	2.4420	46.5873	3.7596	24.3203
38	9.2955	5.4734	58.8821	2.7161	10.5436
39	16.9200	8.5531	50.5503	0.9494	0.2602
40	15.7882	7.6222	48.2775	1.1191	1.5642

41	16.5926	7.7155	46.4997	0.5530	0.3464
42	18.4906	8.7346	47.2381	0.6613	1.0348
43	10.5730	4.5524	43.0571	1.0765	1.6419
44	6.4407	2.5139	39.0316	0.3284	-0.0663
45	14.9189	5.9971	40.1981	0.0392	-0.0108
46	20.4857	9.7268	47.4808	1.1082	3.1948
50	9.4000	3.3056	35.1664	0.5940	-0.0068
51	6.5833	2.5465	38.6804	0.1992	-0.3076
52	6.9592	3.2975	47.3830	1.9857	7.9494
53	6.5645	5.8467	89.0657	2.9370	9.0645
54	6.9636	1.9623	28.1788	0.2357	-0.6898
55	4.9103	2.4345	49.5804	2.4349	10.2465
56	4.4792	1.9028	42.4809	1.4652	3.5912
67	12.1333	3.3086	27.2690	0.1682	-0.3965
68	6.2885	3.1644	50.3202	0.8752	-0.0781
69	5.4808	2.7260	49.7373	1.7100	5.2672
70	5.4545	2.3373	42.8506	0.8387	0.1044
71	9.4286	5.0216	53.2599	0.8140	-0.5563
72	11.4286	2.8078	24.5680	0.5084	0.7915
73	11.3500	18.8882	166.4163	4.3614	19.3145
74	5.1786	8.7430	168.8306	6.9975	50.8998
75	4.5000	1.0622	23.6038	0.4730	-0.0615
76	8.9677	2.3019	25.6691	0.4977	1.9482
77	3.9600	1.5513	39.1742	1.2309	1.1386
78	5.0250	3.1743	63.1705	2.4366	6.2089
79	4.2826	1.7469	40.7908	1.4012	3.6262
80	3.5952	0.9642	26.8195	0.2306	-0.2447
81	4.2069	1.3464	32.0047	1.5754	4.9456
82	4.6842	1.7655	37.6903	1.4189	3.5451
83	4.9722	1.8281	36.7669	-0.1349	-0.8902
84	4.9200	1.7059	34.6722	1.2844	2.0737
85	5.6364	3.9345	69.8062	1.8212	2.2384
86	4.1176	1.2690	30.8179	0.7931	0.5957
87	4.3158	1.7014	39.4225	2.3959	6.7502
88	3.9231	1.2304	31.3627	0.7153	0.2905
89	5.1333	2.4738	48.1903	1.4910	2.2507
90	4.6000	1.9574	42.5531	1.8919	5.3072
91	4.6000	1.3522	29.3967	1.4559	2.1770
92	4.2381	1.8413	43.4470	0.8346	-0.1709
93	4.5455	1.1282	24.8193	-0.9033	1.6575
94	3.6250	0.5175	14.2772	-0.6441	-2.2400
95	4.6250	2.4458	52.8831	1.7514	3.6586
96	4.0000	1.3333	33.3333	0.4715	-0.1355
97	6.4000	2.0736	32.4007	1.9178	3.8778
100	4.0000	1.5492	38.7298	0.3945	-0.3472
101	3.4545	1.4397	41.6754	-0.5037	-1.2992
102	3.5000	1.1952	34.1494	0.0000	-1.4560
103	6.0000	5.2915	88.1917	1.4579	0.0000
104	3.8889	0.7817	20.1018	0.2160	-1.0413
105	4.8000	1.4832	30.9008	0.5516	0.8678

106	4.5000	2.5166	55.9247	1.1293	2.2271
107	3.8571	1.3452	34.8752	0.3521	-0.3025
108	3.6667	0.5774	15.7459	-1.7321	0.0000
109	5.0000	1.2649	25.2982	-0.8894	-0.7813
110	7.3333	1.1547	15.7459	-1.7321	0.0000
111	5.4000	1.5166	28.0847	1.7488	3.7240
112	4.2500	1.7078	40.1841	-0.7528	0.3429
113	5.2000	1.0954	21.0663	-0.6086	-3.3333
114	3.5000	1.2247	34.9927	-0.4899	-1.4667

Appendix A5

Table A5: Words per Ayat, Standard deviations, coefficient of variation, β_1 and β_2 of Madni Suras

Surra	Mean	S.D	C.V	β_1	β_2
2	23.9860	15.8920	66.2551	2.5585	11.6524
3	19.6700	10.4252	53.0004	1.5947	4.9094
4	24.0227	13.9644	58.1301	1.8183	4.4431
5	26.3583	14.4768	54.9229	1.5203	2.1470
8	19.1467	8.9980	46.9953	1.5551	3.8307
9	22.0620	8.6112	39.0317	1.3919	3.0790
13	22.6512	11.0602	48.8284	0.9821	0.8574
22	18.3846	11.0445	60.0744	2.6115	10.2816
24	23.0938	15.2114	65.8682	2.1938	5.6098
33	20.5616	13.1667	64.0350	2.2272	6.2748
47	16.1842	9.9807	61.6692	1.7010	3.3044
48	22.0000	12.2066	55.4843	1.0646	1.7415
49	21.4444	9.7873	45.6402	0.6688	-0.3351
57	23.1034	10.7349	46.4647	0.9906	0.0858
58	23.9091	12.8356	53.6851	1.2881	1.3909
59	20.7917	9.9301	47.7600	1.3347	1.0169
60	30.2308	18.0100	59.5750	0.9731	-0.8729
61	17.4286	8.6799	49.8027	1.1684	0.4961
62	17.6364	5.8185	32.9913	0.0074	-1.6668
63	18.2727	4.6710	25.5627	-0.3331	-1.1517
64	15.9444	5.5357	34.7186	0.6584	1.2152
65	26.3333	10.7478	40.8144	0.1544	-0.5745
66	23.5833	10.3261	43.7857	1.0770	1.6588
98	12.8750	6.5995	51.2584	-0.0800	-0.9937
99	4.7500	1.1650	24.5256	-0.0904	-1.6133