

# Assessment and analysis of writing ability of undergraduate students

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■ **ABSTRACT :** Three hundred UG students were chosen at random from randomly selected 5 Colleges of Parbhani town. For this study purpose, a passage of 12 lines containing 155 words was chosen and individual students were given the printed passage to copy it down while seeing it, in small groups of 10 UG students each, within given time and without time limit. The data related to study was collected from the UG students through structured cum open ended questionnaire, SES scale, by administering IQ test, GQ assessment and non-participatory observation technique. For the analysis of writing ability, the parameters considered were number of words, positioning of letters, placement of words, spacing between words, shape and appearance of the words from the given written passage and were rated on the five point scale *i.e.* Excellent, Very good, Good, Fair and Poor through the subjective evaluation.

■ **KEY WORDS:** Writing ability, Under graduate students, Educational background

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Writing is an expression of self in the written form. Any deviation from the style being taught is acceptable as long as writing is legible. At present, illegible writing is commonly seen in most of the students. According to Tansley and Panckhurst (1981), illegibility of writing is defined as poorly formed letters, irregularity of slant and lack of uniformity in size of letters and or incorrect spacing between letters, words or sentences. The students writing ability was assessed by Burdick *et al.* (2013) on a computer-analytic development scale. It was reported that low writing ability was associated with their poor academic performance in school and a variety of other undesirable personality factors. In addition Bhise and Desetty (2000) reported

that irrespective of gender, a large proportion of girls and boys had committed errors in writing down dictated passage as additions (57%), deletions (82%) and substitutions (77%). Malhotra *et al.* (2009) reported that learning difficulties occur in students due to own constitution, temperament, cognitive abilities, quality of students' schooling and family related factors that affect interactions and emotional well being of the students. Rindermann *et al.* (2011) studied association between children's writing ability and parental education, mental speed, intelligence and verbal ability. The path analysis found that there was significant relation between writing ability and their mental speed, intelligence, educational level of parents and number of books provided to children

for reading. Problems in writing ability among school children were assessed by Kingston *et al.* (2000) revealing many reasons for writing disability such as language difficulties, parental poor support and health problems of the students leading to failure.

As youth are the most precious wealth of any nation they deserve best care and opportunities for development to their fullest potential. During college education, the students focus on getting good grades in their courses. While writing ability of students is one of the basic academic skills required for higher levels achievement, as it is essential for effective written communication. Therefore the research work was carried out with objectives to assess and analyze the writing ability of under graduate students in copying down the typed passage within time and without time limit.

### ■ RESEARCH METHODS

Three hundred UG students in the age range 18 to 21 yrs were chosen at random from randomly selected 5 Colleges of Parbhani town. For this study purpose, a passage of 12 lines containing 155 words was chosen and typed in font type Times New Roman, size-12, having single line spacing. The individual students were given the printed passage and a ruled A/4 size, 70 GSM paper and were requested to copy it down while seeing it, in small groups of 10 UG students each and soon after 6 minutes, the students were instructed to stop the copying it down. For assessing copying down the typed passage without time limit, these students were asked to rewrite the whole passage with their routine speed without any time limit. As and when each student completed this exercise of copying down the whole passage, the time taken for completion of this exercise by each student on their paper was marked accurately. For the analysis of writing ability, the parameters considered were number of words, positioning of letters, placement of words, spacing between words, shape and appearance of the words from the given written passage. The writing ability of the UG students were rated on the five point scale *i.e.* Excellent, Very good, Good, Fair and Poor through the subjective evaluation. The data was collected from the UG students through the structured cum open ended questionnaire, SES scale, by administering IQ test, by taking their body measurements for GQ assessment and non participatory observation technique. The collected data were pooled, analyzed, tabulated and discussed.

### ■ RESEARCH FINDINGS AND DISCUSSION

Table 1 illustrate about the background of the selected UG students and their parents. The sample students consisted of 50 per cent each of males and females. The majority of the sample UG students were in the age range of 19 to 20 yrs and were from middle SES (69 and 72%), nuclear(55 and 60%), small size families (57 and 49%) and having monthly family income Rs. 15,000 – Rs. 30,000. Very few significant differences were recorded in the background of UG students based on their gender.

Table 2 pertains to the school educational information of the selected UG students.

The majority of the UG students learnt in Marathi medium (55 and 38%), semi Govt. (40%) and private schools (39%). Most of the undergraduate students (63 and 65 %) received coaching for improvement of English language during their schooling still nearly similar per cent of students felt need of improving their hand writing skills. Nearly fifty per cent of the UG students reported of using good quality stationery (45 and 58%), satisfactory school learning environment (48 and 54%), provision of furniture like desk and bench(58 and 50 %) or table and chair(55 and 60%) for studying purpose.

Table 3 depicts H S C educational background of UG students. Hundred per cent male and female students completed their Higher Secondary Certificate (H S C) education in English medium. While majority of the sample students had not received coaching for improvement of English language (79 and 86%) although they were satisfied with their handwriting (88 and 82%) and about college learning environment (76 and 86%). Very few significant differences were recorded in the HSC educational background of UG students.

Table 4 deals with the assessment of writing ability of UG students in copying down the typed passage within time and without time limit. It was found that 38 per cent male students copied down 130-155 words while most of the female students (43%) could complete only 80-105 words within 6 minutes time limit. Comparatively 72 and 77 per cent of the male and female students copied down maximum words without time limit, respectively. With regard to passage copied down within time limit, more percentage of male and female students (35 and 38 %) were assessed in fair category for positioning of letters while little more percentage of UG students (38 and 40%) were ranked in good category for scripts written

**Table 1 : Background information of the UG students and their parents**

Background variables of UG students	Percentages of students		Z values
	Male (n=150)	Female (n=150)	
<b>Age (yrs)</b>			
18 – 19	28.00 (42)	20.66 (31)	1.62 <sup>NS</sup>
19 - 20	56.00 (84)	49.33(74)	1.21 <sup>NS</sup>
20 – 21	16.00 (24)	30.00 (45)	1.74 <sup>NS</sup>
<b>Ordinal position</b>			
First born	30.00 (45)	24.00 (36)	1.17 <sup>NS</sup>
Middle born	37.33 (56)	35.34 (53)	0.36 <sup>NS</sup>
Last born	32.66 (49)	40.66 (61)	1.44 <sup>NS</sup>
<b>Family type</b>			
Nuclear	55.33 (83)	60.00 (90)	0.87 <sup>NS</sup>
Joint	44.67 (67)	40.00 (60)	0.70 <sup>NS</sup>
<b>Family size (members)</b>			
Small (Below 4 members)	56.67 (85)	49.33 (74)	1.21 <sup>NS</sup>
Medium (4-8 members)	29.33 (44)	41.33 (62)	2.19 <sup>NS</sup>
Large (Above 8 members)	14.00 (21)	9.33 (14)	1.36 <sup>NS</sup>
<b>Stay of the students</b>			
In homes	20.00 (30)	40.00 (60)	3.87**
In hostels	80.00 (120)	60.00 (90)	3.87**
<b>Socio-economic status (SES)</b>			
Low	21.33 (32)	16.00 (24)	1.11 <sup>NS</sup>
Middle	68.67 (103)	72.00 (108)	0.75 <sup>NS</sup>
High	10.00 (15)	12.00 (18)	0.55 <sup>NS</sup>
<b>Parental monthly income (Rs.)</b>			
5,000 to 15,000	22.00 (33)	27.33 (41)	1.00 <sup>NS</sup>
15,000 to 30,000	51.33 (77)	55.33 (83)	0.69 <sup>NS</sup>
30,000 to 45,000	21.33 (32)	9.33 (14)	2.95**
Above 45,000	5.33 (08)	8.00 (12)	5.73**

Table 1 contd..

Parental education	Paternal	Maternal	Z values	Paternal	Maternal	Z values
	Non literates	-		2.00 (3)	-	
School educated	63.33(95)	77.33(116)	2.67**	44.00(66)	75.33 (113)	5.76**
College educated	36.67(55)	20.67(31)	3.13**	56.00(84)	21.33 (32)	6.67**
<b>Occupation</b>						
Farmers	62.00 (93)	-	-	50.66 (76)	-	-
Govt. job holders	21.33 (32)	3.33 (5)	1.79*	31.33 (47)	11.33(17)	4.38**
Businessman	08.66 (13)	-	-	14.00 (21)	-	-
Agril labourers	8.00(12)	05.00(8)	1.05 <sup>NS</sup>	4.00 (6)	6.00 (9)	0.79 <sup>NS</sup>
Home makers	-	91.33 (137)	-	-	82.67 (124)	-
<b>Efforts for training to have good handwriting at home</b>						
Parents	57.33 (86)		74.67 (112)		3.14**	
Family members	20.00 (30)		16.67 (25)		0.90 <sup>NS</sup>	
None	22.67 (34)		8.66 (13)		3.46**	

Figures in parentheses indicate number of students

\*\* indicates significance of value at P < 0.01 level, NS=Non-significant

**Table 2 : School educational background of the UG students**

School educational parameters	Percentages of students		Z Values
	Male (150)	Female (150)	
<b>Medium of instruction</b>			
Marathi	55.34 (83)	38.66 (58)	2.99**
Semi English	30.00 (45)	34.00 (51)	0.74 <sup>NS</sup>
English	14.66 (22)	29.33 (44)	3.21**
<b>Category of schools</b>			
Run by Government	35.33 (53)	27.33 (41)	1.50 <sup>NS</sup>
Run by Semi Govt. agencies	40.00 (60)	33.34 (50)	1.26 <sup>NS</sup>
Run by Private agencies	24.66 (37)	39.33 (59)	2.83**
<b>Coaching for improvement of English language</b>			
Received	63.33 (95)	65.33 (98)	0.36 <sup>NS</sup>
Not received	36.67 (55)	34.67 (52)	0.36 <sup>NS</sup>
<b>Efforts taken by family and self for developing hand writing skills from childhood</b>			
Good and adequate efforts	63.33 (95)	75.33 (113)	2.26*
No efforts/ neglected	36.67 (55)	24.67 (37)	2.28*
<b>Remarks of teachers about handwriting</b>			
Satisfied	50.00 (75)	39.33 (59)	1.92*
Unsatisfied	50.00 (75)	60.67 (91)	1.74*
<b>Felt need of students to improve handwriting skills</b>			
Felt need	68.66 (103)	63.33 (95)	0.91 <sup>NS</sup>
Not felt need	31.34 (47)	36.67 (55)	0.91 <sup>NS</sup>
<b>Care taken for improving hand writing</b>			
Quality stationery	45.33 (68)	58.67(88)	2.27*
Good posture for writing	26.67 (40)	48.00 (72)	4.05**
Convenient furniture arrangement	32.67 (49)	42.67 (64)	1.80 <sup>NS</sup>
Space management	28.00 (39)	38.00 (57)	1.85 <sup>NS</sup>
<b>Proper coaching/training for development of writing skills</b>			
Given coaching	24.67 (37)	38.00 (57)	2.65*
Not given coaching	75.33 (113)	62.00 (93)	2.44*
<b>School learning environment</b>			
Satisfied	48.00 (72)	54.00 (81)	1.04 <sup>NS</sup>
Unsatisfied	52.00 (78)	46.00 (69)	1.04 <sup>NS</sup>
<b>Furniture felt feasible for writing</b>			
Desk and bench	58.67 (88)	50.67 (76)	1.39 <sup>NS</sup>
Table and chair	55.33 (83)	60.00 (90)	0.87 <sup>NS</sup>
On cot with writing pad	41.33 (62)	41.33 (62)	-
Any other	31.33 (47)	40.67 (61)	1.63 <sup>NS</sup>
<b>Achievements in school</b>			
Sports	22.00 (33)	19.33 (29)	0.64 <sup>NS</sup>
Cultural events	2.00 (3)	05.33 (8)	1.41 <sup>NS</sup>
Art and Crafts	23.33 (35)	28.66 (43)	0.99 <sup>NS</sup>
No achievements	60.00 (90)	46.66 (70)	2.46**

Figures in parentheses indicate number of students

\* and \*\* indicates significance of value at P < 0.05 and 0.01 level, respectively

NS=Non-significant

without time limit. Similar trend was seen for placement of words in both the rounds. While majority of them, irrespective of gender and time limit, except female students copied down the given passage without time limit (38%) were found in poor categories (ranging between 36-44%). On the other hand, when shape and appearance of words was assessed in the script, 38 and 41 per cent female students were assessed in good category while their counterparts in poor (38%) or either fair (36%) categories in both the rounds, respectively. With regard to positioning of letters, placement of words, spacing between words as well as shape and appearance of words assessed in students' script were found to be good (10-48%), fair (21-38 %) or mostly poor (20-46%) categories irrespective of gender and time constraint. Overall, irrespective of gender, both the UG male and female students showed better writing ability when copied down typed passage without time limit indicating more importance was given by the UG students to time than the writing ability.

Some of the significant differences were noted

down in writing ability of UG students while copying down typed passage within time limit as well as without time limit irrespective of their gender.

Table 5 details on the parental involvement in academic activities of the UG students during school years. Irrespective of gender; the parents who were always involved in supervising the studies, taking feedback of classmates and teachers and analyzing the progress made in studies during school yrs of UG students were ranging between 11 to 24 per cent. A significantly higher percentage of female students' parents (24%) were involved regularly in analyzing the academic progress made by their daughters than the counterpart. The parents who were sometimes involved in taking feedback about academic activities of their ward were seen more in females (43%) again. On the other hand, the 50 and 68 per cent students' parents were rarely involved in taking feedback from classmates and teachers. Relatively more percentage of parents involved rarely in academic activities of UG students during their school yrs (34% to 68%) followed by sometimes (21%-

**Table 3 : H S C educational background of UG students**

H S C Educational parameters	Percentages of students		Z Values
	Male (150)	Female (150)	
<b>Medium of instruction</b>			
Marathi	-	-	-
Semi English	-	-	-
English	100 (150)	100 (150)	-
<b>Category of college</b>			
Run by Government	16.66 (25)	11.33 (17)	1.27 <sup>NS</sup>
Run by Semi Govt. agencies	62.00 (93)	65.33 (98)	0.53 <sup>NS</sup>
Run by Private agencies	21.33 (32)	23.33 (35)	0.41 <sup>NS</sup>
<b>Coaching for improvement of English language</b>			
Received	20.66 (31)	13.33 (20)	1.64 <sup>NS</sup>
Not received	79.34 (119)	86.67 (130)	1.60 <sup>NS</sup>
<b>Remarks of self about handwriting</b>			
Satisfied	88.00 (132)	82.00(123)	1.46 <sup>NS</sup>
Unsatisfied	12.00 (18)	18.00 (27)	1.46 <sup>NS</sup>
<b>College learning environment</b>			
Satisfied	76.00 (114)	86.66 (130)	2.22*
Unsatisfied	24.00 (36)	13.33 (20)	2.47**
<b>Achievements in college</b>			
Sports	38.00 (57)	28.67 (43)	1.85 <sup>NS</sup>
Cultural events	4.00 (6)	16.66 (25)	3.53**
Art and Crafts	12.67 (19)	11.33 (17)	0.27 <sup>NS</sup>
No achievements	45.33 (68)	43.33 (65)	0.34 <sup>NS</sup>

Figures in parentheses indicate number of students

\* and \*\* indicate significance of values at P < 0.05 and 0.01 level, respectively

NS=Non-significant

**Table 4 : Assessment of writing ability of UG students in copying down the typed passage within time limit and without time limit**

Writing abilities of UG students	Percentages of students						Z Values	
	Copied down the typed passage within time limit			Copied down the typed passage without time limit			a Vs c	b Vs d
	Male (150) (a)	Female (150) (b)	Z Values a Vs b	Male (150) (c)	Female (150) (d)	Z Values c Vs d		
<b>Number of words</b>								
80 – 105	27.33 (41)	43.33 (65)	2.94**	-	-	-	-	-
105 – 130	34.66 (52)	25.33 (38)	1.71 <sup>NS</sup>	32.00 (48)	22.66 (34)	1.96*	1.09 <sup>NS</sup>	1.77 <sup>NS</sup>
130 – 155	38.00 (57)	31.33 (47)	1.27 <sup>NS</sup>	72.00 (108)	77.33 (116)	0.99 <sup>NS</sup>	7.13**	10.54**
<b>Positioning of letters</b>								
Excellent	-	0.66 (1)	-	0.66 (1)	1.33 (2)	0.32 <sup>NS</sup>	0.99 <sup>NS</sup>	0.32 <sup>NS</sup>
Very good	5.33 (8)	8.00 (10)	1.05 <sup>NS</sup>	5.33 (8)	8.66 (13)	1.05 <sup>NS</sup>	-	-
Good	26.66 (40)	30.00 (45)	1.77 <sup>NS</sup>	38.00 (57)	40.00 (60)	0.35 <sup>NS</sup>	2.24*	1.82 <sup>NS</sup>
Fair	35.33 (53)	38.00 (57)	0.53 <sup>NS</sup>	30.66 (46)	30.00 (45)	-	0.92 <sup>NS</sup>	1.46 <sup>NS</sup>
Poor	32.66 (49)	24.66 (37)	1.54 <sup>NS</sup>	25.33 (38)	20.00 (30)	1.03 <sup>NS</sup>	1.34 <sup>NS</sup>	0.83 <sup>NS</sup>
<b>Placement of words</b>								
Excellent	-	1.33 (2)	-	0.66 (1)	1.33 (2)	0.32 <sup>NS</sup>	0.99 <sup>NS</sup>	-
Very good	6.00 (9)	5.33 (8)	0.37 <sup>NS</sup>	6.00 (9)	8.00 (12)	3.87**	-	1.05 <sup>NS</sup>
Good	10.00 (15)	33.33 (50)	5.05**	38.66 (58)	48.66 (73)	1.75 <sup>NS</sup>	6.00**	2.67**
Fair	38.00 (57)	32.66 (49)	1.09 <sup>NS</sup>	32.00 (48)	21.33 (25)	2.17*	1.09 <sup>NS</sup>	2.17*
Poor	46.00 (69)	27.33 (41)	3.48**	27.33 (41)	24.66 (37)	0.59 <sup>NS</sup>	3.84**	0.59 <sup>NS</sup>
<b>Spacing between words</b>								
Excellent	-	0.66 (1)	-	0.66 (1)	1.33 (2)	0.32 <sup>NS</sup>	-	-
Very good	4.66 (7)	6.00 (9)	0.79 <sup>NS</sup>	6.66 (10)	10.00 (15)	1.28 <sup>NS</sup>	0.79 <sup>NS</sup>	1.28 <sup>NS</sup>
Good	12.66 (19)	22.00 (44)	2.32*	26.00 (39)	38.66 (58)	2.24*	3.14**	3.07**
Fair	38.66 (58)	31.33 (47)	1.27 <sup>NS</sup>	30.00 (45)	28.00 (42)	0.38 <sup>NS</sup>	1.46 <sup>NS</sup>	0.57 <sup>NS</sup>
Poor	44.00 (66)	39.33 (49)	0.87 <sup>NS</sup>	36.66 (55)	22.00 (33)	2.70**	1.41 <sup>NS</sup>	3.25**
<b>Shape and appearance of words</b>								
Excellent	-	-	-	0.66 (1)	1.33 (2)	0.32 <sup>NS</sup>	-	-
Very good	7.33 (11)	12.00 (18)	1.48 <sup>NS</sup>	6.00 (9)	10.00 (15)	1.28 <sup>NS</sup>	-	0.55 <sup>NS</sup>
Good	24.66 (37)	38.00 (59)	2.65**	33.33 (50)	41.33 (62)	1.43 <sup>NS</sup>	1.73 <sup>NS</sup>	0.53 <sup>NS</sup>
Fair	30.00 (45)	32.00 (48)	0.37 <sup>NS</sup>	36.66 (55)	29.33 (44)	1.29 <sup>NS</sup>	1.10 <sup>NS</sup>	0.56 <sup>NS</sup>
Poor	38.00 (57)	16.66 (25)	4.42**	23.33 (35)	18.00 (27)	1.07 <sup>NS</sup>	2.85**	1.53 <sup>NS</sup>

Figures in parentheses indicate number of students

\* and \*\* indicate significance of values at P<0.05 and 0.01 level, respectively

NS=Non-significant

**Table 5 : Parental involvement in academic activities of the UG students during school years**

Types of parental involvement	Percentages of parents (300)								
	Always		Z values a Vs b	Sometimes		Z Values c Vs d	Rarely		Z values e Vs f
	Male (150) (a)	Female (150) (b)		Male (150) (c)	Female (150) (d)		Male (150) (e)	Female (150) (f)	
Supervising the studies	13.33 (20)	12.00 (18)	0.26 <sup>NS</sup>	24.00 (36)	30.00 (45)	1.17 <sup>NS</sup>	62.66 (94)	58.00 (87)	0.70 <sup>NS</sup>
Taking feedback of classmates	16.66 (30)	23.33 (35)	1.53 <sup>NS</sup>	30.00 (45)	42.66 (64)	2.18**	50.00 (75)	34.00 (51)	2.84**
Taking feedback of teachers	10.66 (16)	16.66 (25)	1.55 <sup>NS</sup>	21.33 (32)	30.00 (45)	1.79 <sup>NS</sup>	68.00 (102)	53.33 (80)	2.68**
Analyzing the progress made in studies	13.33 (20)	24.00 (36)	2.47**	31.33 (47)	30.00 (45)	0.18 <sup>NS</sup>	55.33 (83)	46.00 (69)	1.56 <sup>NS</sup>

Figures in parentheses indicate number of students

\*\* indicates significance of value at P < 0.01 level, NS=Non-significant

42%) and lastly always involved parents in academic activities (11%-24%). Few significant differences were noticed among the male and female students' parents involvement in their academic activities.

Similarly Samantha *et al.* (2014) revealed that parental proper support during early years for learning writing skills, early literacy, language and fine motor skills found to have positive influence on their writing as well as on their letter forming abilities.

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