Spelling Performance of Phonemes /F/ and /P/ among Pashto Speaking Students in Mardan, Pakistan

Abstract:
This study is about the spelling performance of phonemes /f/ and /p/ among Pashtun students. It analyzes the role of the position of the target phonemes, the role of the level of education and that of gender on the spelling performance of the students. A questionnaire of 30 words was developed and was surveyed in a sample of 64 students equally divided between male and female respondents. 16 students (8 male and 8 female) were randomly selected from SSC, Intermediate, Graduate and Post Graduate classes, and their responses were analyzed. The results show that the Pashtun students find it difficult to differentiate between /f/ and /p/, however, with an increase in the level of education of the students, the spelling performance improves. Moreover, the position of the phoneme in words has less effect on the spelling performance of the students but, gender plays a significant role, and the male students have more difficulty in spelling the target phonemes than the female students.

Key Words:
Spelling Performance, Phonemes, Pashto Speaking Students, Position of Phoneme, Level of Education, Gender, District Mardan

Introduction
Spelling is as essential for English learning as writing and reading. In order to master literacy, one must not only be able to read and write but to spell as well (McCardle, Chhabra, & Kapinus, 2008). Spelling is “the encoding of linguistic forms into written forms (Perfetti, 1997, p. 22). Scholars differ in opinion about the factors and processes on which spelling relies. Two most important processes are phonological awareness and alphabetic knowledge. Goswami, Bryant, Rack, Snowling & Olson have proved that spelling success of a child depends upon the phonological knowledge (Wang & Geva, 2003). Moreover, McBride-Chang, Snow, Burns, and Griffin are of the opinion that the knowledge about letters and their sounds play an important role in spelling success (Treiman, 2006). Most of the previous research has focused on English monolinguals. Nevertheless, the literacy acquisition among English second language learners differs from first language learners because they use their knowledge of their first language in learning to read, write, and spell in their second language (Figueroedo, 2006).

Spelling is important for literacy because of its close relationship with reading and writing. Spelling supports reading because the two processes are reciprocally related, and they both follow a similar course of acquisition (Ehri, 2000). Furthermore, spelling supports writing. This is because “spelling and text production in later grades will require that students can automatically and legibly write alphabet letters and match sounds in words to associated spelling patterns” (Ritchey, 2008). In addition, writers who must think too hard about how to spell use up valuable cognitive resources needed for higher aspects of composition (Singer & Bashir, 2004, as cited in Moats, 2005).

According to Moats (2005), “spelling also plays an important role in our daily lives. It is necessary in various occasions which range from undemanding tasks such as: filing alphabetically; looking up words in a...
phone book, dictionary, or thesaurus; writing notes that others can read, and even playing parlor games to more complex tasks such as reading and writing”. It has been noted that the Pashto speaking students often find it difficult to differentiate between phonemes /f/ and /p/ while spelling words containing these two these phonemes, especially when they are used in consecutive words. This may be due to the socio-cultural background of the students or their knowledge of the first language. In the Pashto language, both alphabets /f/ and /p/ are present, and their phonemes are labial-fricative and labial-plosive. However, these two phonemes are still confused and often misspelled by the English language learners whose first language is Pashto. The focus of this study is to examine the spelling performance of phonemes /f/ and /p/ among the Pashto speaking students studying at different levels. This study will attempt to answer:

1) Do Pashto speaking students find it difficult to differentiate between phoneme (/f/ and /p/)?
2) Has the position of phoneme (/f/ and /p/) in the English words bear any effect on the spelling performance of Pashtun students?
3) Is there any effect of gender on the correct spelling of phoneme (/f/ and /p/)?
4) Is there any effect of study level on the spelling performance of Pashto speaking students while spelling phoneme (/f/ and /p)?

Research Methodology

The purpose of this study was to examine the performance of Pashto speaking students in spelling phoneme (/f/ and /p/). The methodology of the study is quantitative in nature. A simple dictation task was framed for data collection from a sample of respondents.

A dictation based test item was framed for the purpose, consisting of 15 words pairs, each for phoneme (/f/) and (/p/). Among the words for each phoneme, five words contained phoneme at the initial position, five at middle and five at the final position. The words pairs were randomly arranged on the basis of the phoneme, so that the phoneme may be (/f/) or (/p/); however, the position of phoneme was kept systematic so that words with phoneme at the initial position were followed by with those having phoneme at the middle and so on. The difficulty of the words was controlled by only selecting one-syllable words which did not have consonant clusters. All of the words were common to the students. All the students of District Mardan constituted the population of study; however, the number of participants was limited to 64 students, 32 male and 32 female students divided among various levels of study and gender. A sample of 16 students each was randomly selected for SSC, Intermediate, graduate and Postgraduate level. The spelling task was administered with 8 students in each class. The students were selected randomly.

Data was collected by the researcher himself through personal contacts with the students in each school. Eight students from each class were selected randomly, seated in rows, and the words were dictated by the researcher in their exact pronunciation. Cheating was strictly prohibited. A record was kept for how each participant spelled each of the two phonemes on the target words. Therefore, the answers were divided into three categories: correct phoneme, incorrect phoneme, and other answers. The correct phoneme category was restricted to the conventional spelling of the phoneme only. The phoneme pair category represented errors in which the phoneme was represented with its phoneme pair /f/ or /p/. The final category included all of the other errors. Errors other than spelling a phoneme with its phoneme pair were not frequent, and hence they were all included under one category. Moreover, Cuff and Cough were considered similar and were marked as correct responses. Since the aim of this study was to investigate the Pashto speaking students’ spelling of novel phonemes and their phoneme pairs, and not the accuracy of their spelling, each word was analyzed for the specific target phoneme only. All other spelling errors were neglected in the scoring.
Analysis of Data

This study was carried out with the help of a dictation task consisting of a word list of 30 words/15-word pairs of phoneme /f/ and /p/ arranged at initial, inner and final position on the basis of the position of target phoneme in the respective word. The word list was dictated to a sample of 64 students, equally divided between male and female students, from four levels of education- SSC, Intermediate, Graduate and Postgraduate level. A total of 1920 responses were collected including 960 male and 960 female students’ responses and were analyzed on an overall basis, on the basis of the position of target phoneme, on the basis of the level of education and also on the basis of gender.

Overall Spelling Performance of Students

An overall analysis of data shows that out of the total 1920 responses 261 spelling errors of the target phonemes were recorded, forming 13.6% of the total responses. The highest percentage of error occurred at Ripe which is 39.06 of the 64 responses followed by Depict 25%, Plea 21.9%, Flea 18.75% and Pry, Defend, Kept, and Rife 17.2% each. As percent of 261 errors, the figure was recorded as 9.57, 5.36, 4.59 and 4.21, respectively (Table 1).

Table 1. Over all Spelling Performance of Students (Out of 64 Responses)

| S. No | Word | Male Responses | Female Responses | Total | % Error for 64 responses | % by 261 Errors |
|-------|------|----------------|------------------|-------|-------------------------|----------------|
| 1     | Fat  | 0              | 3                | 4     | 6.25                    | 1.53           |
| 2     | Pat  | 1              | 4                | 5     | 7.8                     | 1.91           |
| 3     | Pry  | 8              | 3                | 11    | 17.2                    | 4.21           |
| 4     | Fry  | 14             | 2                | 16    | 25                      | 6.13           |
| 5     | Fan  | 8              | 0                | 8     | 12.5                    | 3.06           |
| 6     | Pan  | 7              | 1                | 8     | 12.5                    | 3.06           |
| 7     | Plea | 9              | 5                | 14    | 21.9                    | 5.36           |
| 8     | Flea | 8              | 4                | 12    | 18.75                   | 4.59           |
| 9     | Flight | 3            | 1                | 4     | 6.25                    | 1.53           |
| 10    | Plight | 7            | 3                | 10    | 15.6                    | 3.83           |
| 11    | Afar | 3              | 0                | 3     | 4.7                     | 1.14           |
| 12    | Apart | 2             | 2                | 4     | 6.25                    | 1.53           |
| 13    | Depend | 6            | 3                | 9     | 14                      | 3.44           |
| 14    | Defend | 7            | 4                | 11    | 17.2                    | 4.21           |
| 15    | Lift | 1              | 2                | 3     | 4.7                     | 1.14           |
| 16    | Kept | 9              | 2                | 11    | 17.2                    | 4.21           |
| 17    | Defect | 7            | 0                | 7     | 10.9                    | 2.68           |
| 18    | Depict | 13           | 3                | 16    | 25                      | 6.13           |
| 19    | Ripe | 16             | 9                | 25    | 39.06                   | 9.57           |
| 20    | Rife | 8              | 3                | 11    | 17.2                    | 4.21           |
| 21    | Roof | 6              | 2                | 8     | 12.5                    | 3.06           |
| 22    | Scoop | 1             | 2                | 3     | 4.7                     | 1.14           |
| 23    | Cup  | 5              | 4                | 9     | 14                      | 3.44           |
| 24    | Cuff | 3              | 2                | 5     | 7.8                     | 1.91           |
| 25    | Gap  | 5              | 2                | 7     | 10.9                    | 2.68           |
Figure 1: Comparison of Correct Incorrect and other Responses

Role of the Position of Phoneme on Spelling Performance

Of the total 261 spelling errors, 91 at recorded at initial, 100 at inner and 70 at the final position of the target phoneme. A total of 640 responses were collected at each position. The percentage of error at initial, inner and final position was calculated as 34.86, 38.32 and 26.82, respectively (Table 2).

The reason behind the difference in the percentage of errors in the three positions is probably the arrangement of words at these positions and the knowledge of the students about some words. For example, at the initial position, students find it difficult to spell *Pry, Flea, Plea*. Similarly, students find it difficult to spell *Defect* and *Depict* at the inner position and finally, *Cuff, Pup, Gap* and *Gaffe* posed similar problems for the students (Table 1).

Table 2. Comparison of Errors on Various Positions

| S. No | Position | Correct | Incorrect | Total responses | % of total responses | % of Total Errors |
|-------|----------|---------|-----------|-----------------|---------------------|------------------|
| 1.    | Initial  | 549     | 91        | 640             | 14.21               | 34.86            |
| 2.    | Inner    | 540     | 100       | 640             | 15.62               | 38.32            |
| 3.    | Final    | 570     | 70        | 640             | 17.93               | 26.82            |
| 4.    | Total    | 1659    | 261       | 1920            | 13.6                | 100              |

Figure 2: Comparison of Errors on Various Positions
Role of Level of Education on Spelling Performance

Spelling performance of students showed a marked improvement with ascending level of education, and a gradual decrease in spelling errors of the target phonemes was recorded while moving from one level to a higher level. Higher the level of education, lesser is the spelling errors of the target phonemes. This justifies that increase in the knowledge and vocabulary of the students due to education reduce the chances of spelling errors among students.

The percentage of errors for SSC students was 23.33 of the total 480 responses, declining to 14.58 at an intermediate level, then 10.83 at graduation level and reaching 5.62 at Post graduation level. Of the 261 errors, 42.92 % were made at SSC level, 26.82 % at an intermediate level, 19.92 % at graduation level and 10.34% at postgraduate level (Table 3).

Table 3. Spelling Performance on the Basis of Level of Education

| S. No | Level       | Correct | Incorrect | Total | % of Errors by Total Responses | % by Total Errors |
|-------|-------------|---------|-----------|-------|-------------------------------|-------------------|
| 1.    | SSC         | 368     | 112       | 480   | 23.33                         | 42.92             |
| 2.    | Intermediate| 410     | 70        | 480   | 14.58                         | 26.82             |
| 3.    | Graduation  | 428     | 52        | 480   | 10.83                         | 19.92             |
| 4.    | Post Graduation | 453 | 27        | 480   | 5.62                          | 10.34             |

Figure 3: Comparison of Errors on Various Levels

Performance of SSC Level Students

At SSC level, out of total of 480 responses, 112 errors were recorded. It constituted 33% of the total responses and 42.92% of the total errors. The highest number of error occurred at *Ripe* 68.75%, followed by *Flea* 50%, *Fry* and *Defend* 43.75%, *Fry* and *Rife* 37.50%, *Pan, Kept, Depict, Gaffe, Pup* and *Safe* 31.25 %, *Fan* and *Defect* 25% and so on (Table 4)

Table 4. Spelling Performance of SSC Level Students (Out of 16 Responses)

| S. No | Word | Total Responses | Incorrect Responses | % of Errors |
|-------|------|-----------------|---------------------|-------------|
| 1.    | Fat  | 16              | 1                   | 6.25        |
| 2.    | Pat  | 16              | 2                   | 12.50       |
| 3.    | Pry  | 16              | 6                   | 37.5        |
| 4.    | Fry  | 16              | 7                   | 43.75       |
| 5.    | Fan  | 16              | 4                   | 25          |
Performance of Intermediate/HSSC Level Students

At Intermediate level of education, 70 spelling errors of target phonemes were recorded with a percentage of 14.58 for 480 responses and 26.82 for 261 responses. The higher percentage of error was 56.25% at Depict, 43.75% at Ripe, 31.25 % at Plight and Fry, 25% at Kept and Cup and 18.75% at Fan, Pan, Plea, Flight, Gap and Gaffe (Table 5).

Table 5. Spelling Performance of Intermediate Level Students (Out of 16 Responses)

| S. No | Word  | Total Responses | Incorrect Responses | % of Errors |
|-------|-------|-----------------|---------------------|-------------|
| 1.    | Fat   | 16              | 0                   | 0           |
| 2.    | Pat   | 16              | 0                   | 0           |
| 3.    | Pry   | 16              | 2                   | 12.50       |
| 4.    | Fry   | 16              | 5                   | 31.25       |
| 5.    | Fan   | 16              | 3                   | 18.75       |
| 6.    | Pan   | 16              | 3                   | 18.75       |
| 7.    | Plea  | 16              | 3                   | 18.75       |
| 8.    | Flea  | 16              | 3                   | 18.75       |
| 9.    | Flight| 16              | 3                   | 18.75       |
| 10.   | Plight| 16              | 5                   | 31.25       |
| 11.   | Afar  | 16              | 0                   | 0           |
12. Apart 16 0 0
13. Depend 16 2 12.50
14. Defend 16 2 12.50
15. Lift 16 1 6.25
16. Kept 16 4 25
17. Defect 16 3 18.75
18. Depict 16 9 56.25
19. Ripe 16 7 43.75
20. Rife 16 1 6.25
21. Roof 16 1 6.25
22. Scoop 16 1 6.25
23. Cup 16 4 25
24. Cuff 16 1 6.25
25. Gap 16 3 18.75
26. Gaffe 16 3 18.75
27. Puff 16 1 6.25
28. Pup 16 1 6.25
29. Safe 16 1 6.25
30. Sap 16 2 12.50
Total 480 70 17.1

Performance of Graduate Level Students

Out of 261 spelling errors, 52 errors were recorded at graduate level, forming 19.92% of the total errors and 10.83% of the total 480 responses. At the graduate level, spelling difficulty was observed at item Ripe and Rife which came to be 25 % of the 16 responses for the item followed by 18.75% for Pat, Pry, Fry, Defend and Depend. At Fat, Apart, Depict, Cup, Cuff, Gaffe and Safe 12.5% was recorded (Table 6).

Table 6. Spelling Performance of Graduation Level Students (Out of 16 Responses)

| S. No | Word | Total Responses | Incorrect Responses | % of Errors |
|-------|------|-----------------|---------------------|-------------|
| 1.    | Fat  | 16              | 2                   | 12.5        |
| 2.    | Pat  | 16              | 3                   | 18.75       |
| 3.    | Pry  | 16              | 3                   | 18.75       |
| 4.    | Fry  | 16              | 3                   | 18.75       |
| 5.    | Fan  | 16              | 1                   | 6.25        |
| 6.    | Pan  | 16              | 1                   | 6.25        |
| 7.    | Plea | 16              | 0                   | 0           |
| 8.    | Flea | 16              | 1                   | 6.25        |
| 9.    | Flight | 16          | 1                   | 6.25        |
| 10.   | Plight | 16         | 1                   | 6.25        |
| 11.   | Afar | 16              | 1                   | 6.25        |
| 12.   | Apart | 16           | 2                   | 12.5        |
| 13.   | Depend | 16         | 3                   | 18.75       |
| 14.   | Defend | 16         | 3                   | 18.75       |
| 15.   | Lift | 16              | 0                   | 0           |
| 16.   | Kept | 16              | 1                   | 6.25        |
| 17.   | Defect | 16         | 1                   | 6.25        |
| 18.   | Depict | 16          | 2                   | 12.5        |
Spelling Performance of Phonemes /F/ and /P/ among Pashto Speaking Students in Mardan, Pakistan

Performance of Post Graduate Level Students

Spelling performance was far better at postgraduate level. Out of 480 responses, only 27 errors were recorded, forming 5.62% of the total responses and 10.34% of the total errors. Students’ difficulty of spelling was observed at Pup, which accounted for 25% of the 16 responses for the item Pup. Depend, and Safe showed 18.75% error while Pry, Defend, Depict, Ripe, and Roof showed 12.5% errors (Table 7).

Table 7. Spelling Performance of Post Graduate Level Students (Out of 16 Responses)

| S. No | Word  | Total Responses | Incorrect Responses | % of Errors |
|-------|-------|-----------------|---------------------|-------------|
| 1.    | Fat   | 16              | 0                   | 0           |
| 2.    | Pat   | 16              | 0                   | 0           |
| 3.    | Pry   | 16              | 2                   | 12.5        |
| 4.    | Fry   | 16              | 1                   | 6.25        |
| 5.    | Fan   | 16              | 0                   | 0           |
| 6.    | Pan   | 16              | 0                   | 0           |
| 7.    | Plea  | 16              | 1                   | 6.25        |
| 8.    | Flea  | 16              | 1                   | 6.25        |
| 9.    | Flight| 16              | 1                   | 6.25        |
| 10.   | Plight| 16              | 0                   | 0           |
| 11.   | Afar  | 16              | 0                   | 0           |
| 12.   | Apart | 16              | 0                   | 0           |
| 13.   | Depend| 16              | 3                   | 18.75       |
| 14.   | Defend| 16              | 2                   | 12.5        |
| 15.   | Lift  | 16              | 0                   | 0           |
| 16.   | Kept  | 16              | 1                   | 6.25        |
| 17.   | Defect| 16              | 0                   | 0           |
| 18.   | Depict| 16              | 2                   | 12.5        |
| 19.   | Ripe  | 16              | 2                   | 12.5        |
| 20.   | Rife  | 16              | 0                   | 0           |
| 21.   | Roof  | 16              | 2                   | 12.5        |
| 22.   | Scoop | 16              | 1                   | 6.25        |
| 23.   | Cup   | 16              | 1                   | 6.25        |
| 24.   | Cuff  | 16              | 1                   | 6.25        |
Role of Gender in Spelling Performance

This study showed a marked difference in the spelling performance of phonemes /f/ and /p/ among the Pashtun students. Of the total 261 spelling errors recorded, the female students made 82 errors (31.42% of the 261 errors) which is less than half of 179 errors (68.58% of the 261 errors) made by the male students. Similarly, the number of errors made by the female students as percent of 960 responses was 8.54, which is far less than the errors made by the male students. The percent error of male students out of their 960 responses was 18.64 (Table 8). This analysis shows that female students find it less difficult to spell phonemes /f/ and /p/ than male students.

The spelling performance of female students shows a uniform pattern with 26 errors out of 82 errors at the initial position, 29 at the inner position and 27 at the final position, while the results of male students show 55 errors at the initial position, 71 at inner and 43 at the final position. The difference in spelling performance is 29 at the initial position, 42 at the inner position and 16 at the final position (Table 9 & 10).

Table 8. Spelling Performance of Target Phonemes on the Basis of Gender

| S. No | Gender | Correct | Incorrect | Total | % of Errors |
|-------|--------|---------|-----------|-------|-------------|
| 1.    | Male   | 781     | 179       | 960   | 18.64       |
| 2.    | Female | 878     | 82        | 960   | 8.54        |

Figure 4: Comparison of errors on gender basis

Spelling Performance of Male Students

Data analysis shows that the spelling errors made by the male students are 68.58% of the total 261 errors. The highest percentage of error occurred at Ripe 50% and Fry which is noted to be 43.7% of the 32 responses for the item followed by 40.62% for Depict, 28.12% for Plea and Kept and 25% for Fan, Flea, Rife, Pup and Gaffe.

Surprisingly, Fan, Kept, and Cup shows a higher rate of errors despite their knowledge to the students due to common nature and frequent use in our daily lives.
Table 9. Spelling Performance of Male Students (Out of 32 Responses)

| S. No | Word | Total Responses | Incorrect Responses | % of Errors |
|-------|------|-----------------|---------------------|-------------|
| 1.    | Fat  | 32              | 0                   | 0           |
| 2.    | Pat  | 32              | 1                   | 3.12        |
| 3.    | Pry  | 32              | 8                   | 25          |
| 4.    | Fry  | 32              | 14                  | 43.7        |
| 5.    | Fan  | 32              | 08                  | 25          |
| 6.    | Pan  | 32              | 07                  | 21.87       |
| 7.    | Plea | 32              | 09                  | 28.12       |
| 8.    | Flea | 32              | 08                  | 25          |
| 9.    | Flight | 32          | 03                  | 9.37        |
| 10.   | Plight | 32          | 07                  | 21.87       |
| 11.   | Afar | 32              | 3                   | 9.37        |
| 12.   | Apart| 32              | 2                   | 6.25        |
| 13.   | Depend| 32             | 6                   | 18.75       |
| 14.   | Defend| 32            | 7                   | 21.87       |
| 15.   | Lift | 32              | 1                   | 3.12        |
| 16.   | Kept | 32              | 9                   | 28.12       |
| 17.   | Defect| 32            | 7                   | 21.87       |
| 18.   | Depict| 32             | 13                  | 40.62       |
| 19.   | Ripe | 32              | 16                  | 50          |
| 20.   | Rife | 32              | 08                  | 25          |
| 21.   | Roof | 32              | 6                   | 18.75       |
| 22.   | Scoop| 32              | 1                   | 3.12        |
| 23.   | Cup  | 32              | 5                   | 15.62       |
| 24.   | Cuff | 32              | 3                   | 9.37        |
| 25.   | Gap  | 32              | 5                   | 15.62       |
| 26.   | Gaffe| 32              | 8                   | 25          |
| 27.   | Puff | 32              | 2                   | 3.12        |
| 28.   | Pup  | 32              | 8                   | 25          |
| 29.   | Safe | 32              | 1                   | 3.12        |
| 30.   | Sap  | 32              | 5                   | 15.62       |
| Total |      | 960             | 179                 | 18.64       |

Spelling Performance of Female Students

Spelling errors of female students are recorded to be 31.42% of the total errors with a higher rate of error at Ripe 28.15% for 32 responses, followed by Plea 15.62% and Fat, Flea, Defend, Cup, Safe and Sap 12.5% each (Table 10).

Table 10. Spelling Performance of Female Students (Out of 32 Responses)

| S. No | Word | Total Responses | Incorrect Responses | % of Errors |
|-------|------|-----------------|---------------------|-------------|
| 1.    | Fat  | 32              | 3                   | 9.37        |
| 2.    | Pat  | 32              | 4                   | 12.5        |
| 3.    | Pry  | 32              | 3                   | 9.37        |
| 4.    | Fry  | 32              | 2                   | 6.25        |
| 5.    | Fan  | 32              | 0                   | 0           |
| 6.    | Pan  | 32              | 1                   | 3.12        |
Findings and Conclusion

Findings

1. Out of the total 1920 responses by 64 students, 261 errors were identified, constituting 13.6% of the total responses for each word.

2. The highest percentage of error occurred at Depict 25% and the least percentage was for Afar, Lift and Scoop which was 4.7% of the total responses for each word.

3. Of the total 261 errors, 91 errors were recorded at the initial position of the target phoneme, 100 at the inner position and 70 at the final position.

4. The percentage of an error on the list of words with the initial position of the target phoneme was 34.86, 38.32 at the inner position and 26.82 at the final position.

5. The data collected from the SSC level students accounted for the highest number of errors forming about 23.33% of the total 480 responses while the intermediate, graduate and postgraduate level showed a gradual decrease, i.e. 14.58%, 10.83% and 5.62% respectively.

6. The percentage of error for SSC as a percent of 261 errors was recorded as 42.92, intermediate 26.82%, graduate 19.92% and postgraduate 10.34%.

7. At SSC level the highest spelling error occurred at Ripe 68.75% of the total 16 responses and the least error occurred at Flight, Scoop and Safe as zero.
8. At the intermediate level, the highest spelling error occurred at *Depict* 56.25% of the total 16 responses and the least error occurred at *Fat, Pat, Afar* and *Apart* as zero.

9. At the intermediate level, the highest spelling error occurred at *Depict* 56.25% of the total 16 responses and the least error occurred at *Fat, Pat, Afar* and *Apart* as zero.

10. At graduation level the highest spelling error occurred at *Rife* 25% of the total 16 responses and the least error noted as zero occurred at *Flea, Lift and Pup*.

11. At Post graduation level the highest spelling error occurred at *Pup* 25% of the total 16 responses and the least error noted as zero occurred at *Fat, Pat, Pan, Fan, Plight, Afar, Apart, Lift, Rife, Gap, Gaffe* and *Sap*.

12. Out of 261 errors, the female respondents made 82 errors as compared to 179 errors made by male students.

13. The highest number of a spelling error by male students was at *Ripe* 50%, *Fry* 43.7% and *Depict* 40.62% while zero error was recorded for *Fat*.

14. Among the female respondents, the highest percentage of spelling error was for *Ripe* 28.15% and zero for *Fan, Afar* and *Defect*.

**Conclusion**

1. Pashto speaking students have 13.6% difficulty in spelling phonemes /f/ and /p/.

2. The position of target phonemes in words has less effect on the spelling performance of the students. However, students find it comparatively easier to spell words with target phonemes at the final position.

3. Spelling performance of students is affected by the level of education. This study shows that higher the level of education, less are the chances of spelling errors of /f/ and /p/. This is due to the increase in the background knowledge of the students about words.

4. Gender affects the spelling performance of the students and the female students find it much easier to spell /f/ and /p/ than the male students.
References

Ehri, L. (2000). Learning to read and learning to spell: Two sides of a coin. *Topics in Language Disorders, 20*(3), 19–49.

Figuero, L. (2006). Using the known to chart the unknown: A review of first-language influence on the development of English-as-a-second-language spelling skill. *Reading and Writing, 19*, 873–905.

McBride-Chang, C. (1998). Phonological transfer in Chinese and English. *Psychologia, 41*, 249–258.

McCardle, P., Chhabra, V., & Kapinus, B. (2008). Reading research in action: A teacher’s guide for student success. *Baltimore: Brookes*.

Moats, L. C. (2005). How spelling supports writing. *American Federation of Teachers: American Educator, Winter 2005-2006*, 12–43.

Ritchey, K. D. (2008). The building blocks of writing: Learning to write letters and spell words. *Reading and Writing, 2*, 27–47.

Treiman, R. (2006). Knowledge about letters as a foundation for reading and spelling. In R. M. Joshi & P. G. Aaron (Eds.), *Handbook of orthography and literacy* (pp. 581–599). Mahwah, NJ: Lawrence Erlbaum Associates.

Wang, M., & Geva, E. (2003a). Spelling acquisition of novel English phonemes in Chinese children. *Reading and Writing: An Interdisciplinary Journal, 16*, 325–348.

Wang, M., & Geva, E. (2003b). Spelling performance of Chinese children using English as a second language: Lexical and visual-orthographic processes. *Applied Psycholinguistics, 24*, 1–25.