



Gender Differences in the Use of Pronouns in Asynchronous Computer-Mediated Communication: A Corpus-Based Analysis of Pakistani English E-Newspaper Blogosphere

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ABSTRACT

This paper analyses gender differences in the use of pronouns by men and women bloggers of five leading Pakistani English e-newspaper blogs. For this purpose, 11258 blog posts from 1674 men and 1212 women bloggers were collected and two gendered corpora, comprising around nine million tokens (men=5.6 million; women=3.3 million), were built and subjected to analysis with the help of two automated text analysis tools: Linguistics Inquiry and Word Count 2015 and AntConc 3.4.4. Preliminary results, so obtained, were further worked out for descriptive and inferential statistics with XLSTAT and MS Excel. The results show that preference for pronouns is a gender marker in a text while results for particular pronouns vary. The examination of frequencies, concordances and collocates of various pronouns also revealed some other similarities, differences and cultural nuances in gendered language.

Keywords: Language and Gender, Computer Mediated Communication, Pakistani English E-Newspaper

Introduction

A controversy exists over whether differences in language use by men and women are a *reality* or a *myth*. While some researchers, e.g., Locke believes that such differences really exist (5), others regard it a product of popular myth (Cameron). This controversy has given birth to what Thimm et al. refer to as the “sex-dialect hypothesis” (531) which views gender-specific language use as a reality, and the “sex-stereotype hypothesis” which advocates gender-specific language use as a myth.

This elusive *reality-myth* enigma has pervaded diverse dimensions of research in linguistics, including studies on English pronouns. There are several possible reasons for this conundrum. First, previous researchers have adopted a piecemeal approach towards English pronouns i.e., one study dealing with only one or a limited number of pronouns at a time. Therefore, they failed to capture a holistic picture of gender differences and similarities. Furthermore, previous research on gendered language based its findings on “inappropriate or unconvincing sources” such as fictional texts or small-scale empirical data (Baker 20) from which authentic conclusions were hard to draw. Secondly, very limited research has been conducted to analyse the relationship between language and gender in online fora. With the availability of computer-mediated communication (CMC) platforms, rich repositories of large linguistic data are accessible online to build language data sets. Furthermore, it would be interesting to see how CMC platforms resonate with the differences and similarities between men and women in the use of English pronouns. Finally, this kind of research has taken place largely in Western contexts, leaving a gap for studies from other cultures. The cultural context of Pakistan has close similarity to Tannen’s notion of two gendered cultures where children predominantly grow in gender-specific sub-cultures. Since culture and language are inextricably linked, previous research (such as Sánchez-Cuenca 225; Yu et al. 311; Rusieshvili 155; Kashima and Kashima 470) reported the use of personal pronouns as a marker of different social groups or cultures. It could, therefore, be argued that if gendered communication in Pakistan is *cross-cultural* in nature, pronouns would expectedly serve as indicators of separate gendered cultures.

One way to investigate this is to conduct an analysis of all English pronouns and their variants in big CMC data using Corpus Linguistics (CL) tools, as Sunderland observes, “a corpus is an excellent source of data for quantitative ‘gender differences’ studies” (57), which can potentially scale up metrics of analysis to naturally occurring large linguistic data sets. This paper analyses two

gendered corpora of five leading Pakistani English e-newspaper blogs to discover differences and similarities in the use of English pronouns by men and women bloggers. To this end, the paper sets out to test the following hypotheses:

H₀: There is no significant difference in the use of pronouns by men and women bloggers of English e-newspapers in Pakistan.

H₁: There is a significant difference in the use of pronouns by men and women bloggers of English e-newspapers in Pakistan.

In these hypotheses, the words “use of pronouns” denote use of pronouns as grammatical words in everyday communication. The dependent variables, i.e. pronouns, encompass all pronouns and their variants included in LIWC2015 in-built sub-dictionaries.

Methodology

Two gendered corpora of bloggers (GenCorB)—corpus of men bloggers (MenCorB) and corpus of women bloggers (WenCorB)—were built from blogs maintained by five leading English e-newspapers of Pakistan: *Dawn*, *The Daily Times*, *The Express Tribune*, *The Nation*, and *The News*. Using non-probability (purposive) sampling, Pakistani bloggers from different professional backgrounds were included in the study. The bloggers’ genders, nationalities and professions were determined from their online profiles. Bloggers from homogeneous professions were grouped under separate headings to give them representation in the sample: Analysts (1.47%), Business Persons (2.72%), Consultants (1.85%), Doctors (1.59%), Electronic Media (1.73%), Engineers (3.65%), Journalists (22.58%), Law (2.25%), Marketing (1.59%), Music/Film (1.59%), Politics (0.30%), Private-Sector Employees (4.57%), Public Servants (1.69%), Social Workers (2.31%), Sport (1.73%), Students (23.98%), Teachers (4.57%), and Writers (10.08%). In some cases, information on the bloggers’ genders, nationalities and professions was either missing or not clearly stated. In such instances, the bloggers’ genders and nationalities were ascertained from their pictures and names whereas professions were left out as “Not Available” (2.09%) and “Not Clearly Stated” (9.03 %).

Blog posts between November 01, 2008 and August 31, 2015 were retrieved from the e-newspaper blog-archives. Each blogger’s posts were initially stored as separate MSWord Documents (.doc files) for clearing noise, which were subsequently converted into Text Documents (.txt files), through a custom-built file converter “FileAttributeReader”. In total, 11258 blog posts from 1674 male and 1212 female bloggers were retrieved and stored in this way. The GenCorB comprised around nine million words (MenCorB=5.6 million; WenCorB=3.3

million) with the average size of a blog post comprising 3386 and 2801 tokens per blogger in the MenCorB and the WenCorB, respectively.

After building the GenCorB, the corpora were analysed with the help of two automated text analysis tools: Linguistic Inquiry and Word Count (LIWC) 2015 and AntConc 3.4.4 (Anthony), together with statistical package XLSTAT (Addinsoft) and MS Excel. Initial percentages of word count obtained for different LIWC2015 pronoun categories were further processed for descriptive and inferential measures such as means, standard deviations, effect sizes (Cohen's *d*), data normality (Jerque-Berra test; QQ plots; PP plots), Mann-Whitney U-test for *p-values* (two-tailed) and Bonferroni's Correction. Following the two-tailed hypothesis test (Mann-Whitney U-test), detailed analysis at word-choice level was made for frequencies, concordances and collocates of various cases of pronouns captured by LIWC2015 with the help of AntConc 3.4.4.

Since analysis of all the concordances generated for an expression was not possible, a systematic random sample of 100 concordances in each corpus was subjected to examination. In the same way, the range of collocates was obtained at a minimum raw frequency occurrence of 10 in each corpus, which were subsequently normalised to one million. Moreover, given the enormous number of nouns as immediate right collocates (R1) of possessive cases, the analysis was limited to the R1 noun collocates that referred to family members only, which were segregated on the basis of their grammatical genders, i.e. masculine, feminine and neuter (e.g., *father, mother, cousin*). For ethical considerations, names of persons, places or other information in concordances that could potentially disclose bloggers' identity were replaced with four asterisks (****). Similarly, three continuous dots (...) were used to represent omitted text from the concordances during adjustment of the text to printable space.

Results and Discussion

Table 1 sets out combined results of means, standard deviations, U-test (after Bonferroni's Correction) and effect sizes (Cohen's *d*) for the GenCorB¹. The table is divided into five major columns. Following the first two columns give serial numbers and nomenclature of LIWC2015 pronoun categories. The third column is bifurcated into the MenCorB and the WenCorB for summary statistics: means

¹. A part of these results has already been reported by the authors in another article titled "'He blogged vs She blogged': A Corpus-Based Language Analysis of 11,000 Blog Posts", published in Volume 22 Issue 1 of *Kashmir Journal of Language Research*.

(\bar{x}) and standard deviations (σ). All means are percentages of pronoun counts in the MenCorB and the WenCorB, worked out by LIWC2015. The fourth column shows *p-values* obtained for U-Test (after Bonferroni's Correction) while the final column reflects effect sizes (Cohen's *d*), with positive and negative values indicative of men's and women's preference of pronouns, respectively. All categories with *p-values* > .0005 (rounded-off)² are not significant (*ns*).

Table 1: Means, standard deviations, U-test and Cohen's *d* for pronouns in GenCorB

S No	LIWC Category	Summary Statistics				<i>p-value</i>	<i>d</i>
		MenCorB		WenCorB			
		\bar{x}	σ	\bar{x}	σ		
1	Total pronouns	10.11	3.34	12.03	3.74	<0.0001	-0.54
2	Personal pronouns	5.38	2.94	7.04	3.37	<0.0001	-0.53
3	1st person singular	1.36	1.76	2.28	2.27	<0.0001	-0.46
4	1st person plural	1.04	0.93	1.17	1.02	<0.0001	-0.13
5	2nd person	0.55	0.95	0.93	1.20	<0.0001	-0.35
6	3rd person singular	1.32	1.47	1.46	1.63	0.0414	<i>ns</i>
7	3rd person plural	1.12	0.76	1.21	0.81	0.0007	<i>ns</i>
8	Impersonal pronouns	4.73	1.20	4.98	1.16	<0.0001	-0.21

According to Cohen's classification, effect size—the magnitude of difference between means and standard deviations and an overlap of scores obtained for two observed groups—is considered *small* when $d = .2$ (85% overlap), *medium* when $d = .5$ (66% overlap) and *large* when $d = .8$ (<53% overlap). An effect size showing $d < .2$ is trivial (23). Table 1 shows that, except for the first-person plural pronoun, effect sizes (*d*) for remaining pronouns range between small to medium with no large effect size. These results are in line with those reported by studies conducted in other fields of research on various aspects of gender differences (Eagly 150; Hyde 581). These differences may be seen across a continuum—from zero to large-size—since both genders are “drawing on the same linguistic resources” (Johnson 11) and an overlap is inevitable.

These results show that except for third-person singular and third-person plural pronouns, women used all other pronouns more frequently. Since most of the pronouns are social (i.e., they relate to human beings), a stronger tendency to use them shows their users' socialisation. Pronoun preference in a text is also

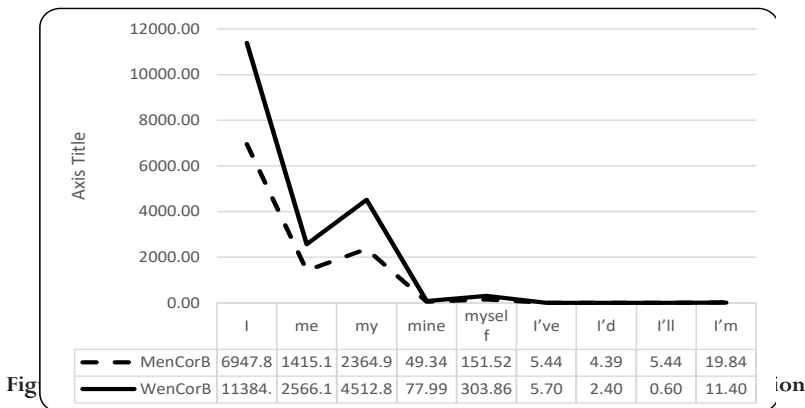
²The rounded-off *p-value* was obtained after Bonferroni's Correction was applied to $\alpha = 0.05/93 = .00053763441$. This *p-value* was worked out as part of a large-scale study conducted across all 93 variables of LIWC2015.

an indicator that their user(s) tends to make a stronger relationship with the intended readers and presumes a shared knowledge with them about who the referent of a pronoun is (Pennebaker, Psychological Aspects 555). Similarly, in Biber’s Multidimensional Analysis (MDA), first-person pronoun, second-person pronoun, demonstrative pronoun, and the pronoun *it* form linguistic features of Factor 1, i.e., informational vs involved production, and their use positively correlates with ‘involved’ discourse (Biber). Drawing on these studies, this paper argues that women bloggers of e-newspapers in Pakistan use a language style that shows greater awareness of human relationships. They participate in the blogosphere with a shared knowledge with the target readership and engage in a highly involved and interactive discourse.

After the hypothesis test, frequencies, concordances and collocates of some of the pronoun cases, captured by LIWC2015 dictionary, were studied with Ant-Conc 3.4.4 to uncover any subtle gender differences in language use. The results were then compared, where possible, with the previous research. For the ease of reference, the subsequent results and discussion are presented under the pronoun headings.

First-person Singular

The use of first-person singular pronoun indicates personalization in blog posts (Friginal and Hardy). The use of this pronoun in the present data shows the perspective that bloggers take to their posts, which puts them in the centre stage of the discourse. It not only reflects the inner states and actions of the bloggers but also shows their desire to convey their attitudes (feelings, ideas, reactions, etc.) to the reader.



By using LIWC2015, the researcher extracted *I*, *I'd*, *I'll*, *I'm*, *I've*, *me*, *mine*, *my*, and *myself* from the GenCorB. They are tokens of the first-person singular pronoun. A comparative view of their normalised frequencies is shown in Figure 1. Initial impressions from a high frequency of first-person singular pronoun indicate that women bloggers tend to be more self-focused in comparison with men bloggers. However, it can also be observed that, except for the construction *I've*, the men prefer all the contracted forms of this pronoun (e.g. *I'd*, *I'll*, *I'm*).

After studying these results, R1 collocates of the first-person singular possessive case (*my*) were scrutinised through the GenCorb, as shown in Figure 2. The overall results indicate that the women bloggers use more kinship words in their blog posts in comparison with men bloggers, except for *my grandfather*. These results also contrast with the study that analysed a corpus of 700 million words, phrases and topic instances from the volunteer Facebook users and found that the men preferred to precede the words ‘wife’ and ‘girlfriend’ with the first-person singular possessive case (*my*) more than the women did for ‘boyfriend’ or ‘husband’ (Schwartz et al.). In the current study, the expression ‘my wife’ (normalised frequency = 23.18) was found with less frequency in the MenCorB than ‘my husband’ (normalised frequency = 76.19) in the WenCorB. This tendency may be attributed to socio-cultural norms of Pakistan where frequent reference to one’s female relations by men is not considered a socially accepted practice. It is important to clarify here that the words ‘my husband’ in the MenCorB and ‘my wife’ in the WenCorB, as shown in Figure 2, occur where a male blogger quotes some females or vice versa.

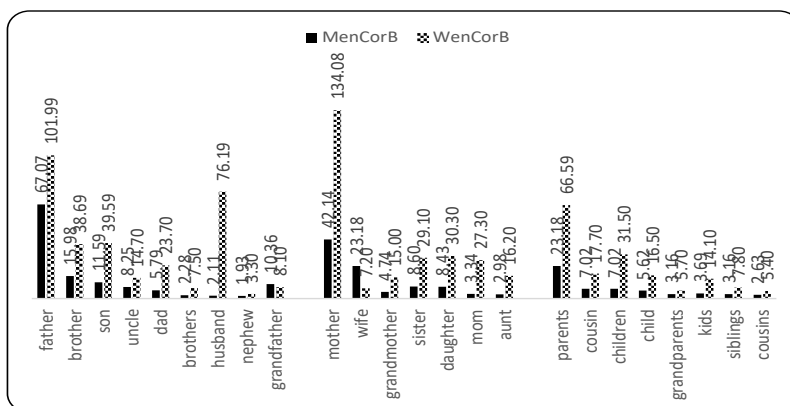


Figure 2. R1 referents to family members with *my*: Frequencies normalized to one million

Another point to observe was a higher frequency of the words *my grandfather* in the MenCorB (normalised frequency = 10.36) in comparison with the WenCorB

(normalised frequency = 8.10). This trend was further corroborated with the use of words such as ‘my ancestors’ (normalised frequency = 2.45) and ‘my elders’ (normalised frequency = 1.75) which occurred more frequently in the MenCorB than in the WenCorB. One possible explanation for this can be that family histories are traditionally traced through male ancestors and seen through the male perspective (Ancestry), especially, in patriarchal societies, such as Pakistan, where clans and tribes are named after common male ancestors (Metlo).

First-person Plural

The results for the use of the first-person plural pronoun were consistent with those observed for the first-person singular pronoun cases and their contracted forms. It was found, as shown in Figure 3, that except for one case, i.e. *we’ve*, men tended to use more pronoun contractions.

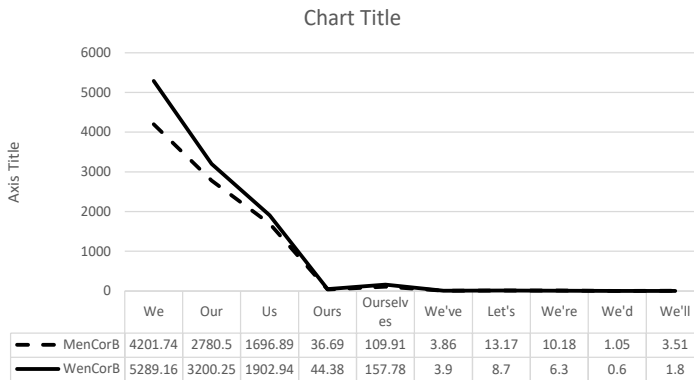


Figure 3. First-person plural pronoun: frequencies normalised to one million

Plural pronouns reflect their users’ tendency of identifying with or talking on behalf of a certain community (collective body). The concordances for first-person plural subjective case (*we*) from the MenCorB and the WenCorB were, therefore, analysed to unpack such trends. The first of these was the concept of ‘nationhood’ as exemplified by Concordances 1 and 2 from the MenCorB and the WenCorB, respectively.

people earlier, and they will continue to kill until	<i>we</i>	come forward and break the vicious circle of ignorance.
media and the myth-believing nature of Pakistanis,	<i>we</i>	grow up blaming the Central Ruet-i-Hilal Committee (...)
... unanimously that we are not perfect and also that,	<i>we</i>	are not the greatest nation in this world. Let's discuss

Concordance 1. In the sense of *nationhood*: MenCorB

prescribed by the World Health Organisation. While	<i>we</i>	show our commitment to combating drug abuse,
so hard for us to believe in **** magnificence if	<i>we</i>	were a nation of people who stood up when it felt
ousness that Pakistan is going down, you tell them that	<i>we</i>	Pakistanis are resilient enough to rebound!
the talent we have in our country but until and unless	<i>we</i>	start getting our act together, we are never

Concordance 2. In the sense of *nationhood* : WenCorB

The second collective body on behalf of which both men and women bloggers wrote was in the sense of 'ordinary citizen' as exemplified in Concordances 3 and 4.

exclusive? 3) Valentine's Day encourages obscenity	<i>We</i>	live in a world where we have to hide to make love,
on the basis of where they live and on their heritage.	<i>We</i>	all condemn that sort of activity but yet we practice it
we would be veracious in answering this question. Do	<i>we</i>	really act honestly in our daily life matters? Do we try

Concordance 3. In the sense of *ordinary citizen*: MenCorB

... whose fault do you think that is? Where should	<i>we</i>	put the blame? On the government I suppose! Uff that corrupt
a question on Facebook about lineage and why	<i>we</i>	should have to follow our forefathers' example. There were
... them for all the attacks that they have stopped?	<i>We</i>	don't even know how many have lost their limbs or even lives
... are, eating is a basic activity of everyday life.	<i>We</i>	need healthy food to function efficiently in all aspects of life

Concordance 4. In the sense of *ordinary citizen*: WenCorB

Besides these shared collective bodies, men and women bloggers also showed a tendency to represent different groups. As shown in Concordance 5, the men were found to represent the national *cricket team*.

strategies are changed. For example, I would understand if	<i>we</i>	play only seven batsmen to accommodate a third seamer.
nsorship appeal means hockey is given a back-seat, even if	<i>we</i>	are a winning team. Moreover, all the glamour and sca
top ranked Pakistani batsman in both ODI and T20 formats.	<i>We</i>	are wasting him at number 6 and number 7, he should bat

Concordance 5. In the sense of *cricket team*: MenCorB

However, none of the sampled concordances in the WenCorB showed that women bloggers wrote on behalf of the national cricket team. In the Pakistani context,

cricket is a popular sport for men and men’s national cricket team has been playing since 1952. It was only recently, i.e. in 1997, that women’s cricket team of Pakistan made its first entry. The tendency in men’s blog posts shows men’s liking for sports which has also been reported in the previous research (Bischooping; Rojo and Esteban 70; Newman et al. 230; Manjavacas 10). On the contrary, the women showed a tendency to speak on behalf of the same-sex group as reflected in Concordance 6 from the WenCorB. These observations complement somewhat similar findings by Ndambuki and Janks who concluded that women constructed their identity through the members of their own sex-group (80).

surrender to their manipulations regarding marriage.	<i>We</i>	can bring about a change with a little extra effort by s
I’m rambling. Just bear with me. Come on,	<i>We</i>	’re girls, we should confide in each other. I really like s
er, poverty, disease and exploitation – evils that	<i>we</i>	all aspire to see an end to. Not just that, if these young girls

Concordance 6. Spokesperson of same-sex group:WenCorB

Second-person Pronoun

While the overall use of the second-person pronoun was favoured by women bloggers in comparison with their male counterparts, a finer analysis of its variants revealed four categories (full forms, archaic forms, forms used in the internet language and contracted forms) for which a variety of observations were recorded. As shown in Figure 4, it was found that the women bloggers used more second-person pronoun in three variants: full forms (*you, your, yourself, and yourselves*), archaic forms (*thou, thy*) and non-standard forms of the second-person pronoun used in the internet language (*u, ur, ya, ye*). The only contracted form used more frequently by women bloggers was *you’d*. Men bloggers, on the other hand, were found to favour archaic forms (*thee and thyself*) and all the remaining contracted forms (*you’ve, you’ll, you’re*). However, the archaic forms were used by the bloggers where they made a reference to or quoted from scriptures and classical literary works. The forms used in the internet language show the features of netspeak, used in CMC communication including blogs. Thus, these results suggest that archaic forms of second-person pronoun were used by both men and women; however, in comparison with men bloggers, women bloggers favoured the non-standard forms of second-person pronoun variants used in netspeak. This observation complements some of the previous research (Herring and Zelenkauskaitė; Naveed et al. 9715), which has reported that women preferred non-standard language forms specific to netspeak. In addition, a further analysis

of the use of the second-person pronoun subjective case (*you*) in the GenCorB showed that it was used for two purposes: for the ‘addressee’ and for ‘everybody’ (Sacks; Malone), as given below in Concordances 7 to 10.

Sholay, a Bugs Life) are inspired by this movie, and if	<i>you</i>	watch it yourself, you will find many other movies will come to
travel. “They never ask anyone to show the money. But	<i>you</i>	[are] the only Pakistani passport in the entire flight. They [will]
nobody told me? Well, you’re a TV news anchor, aren’t	<i>you</i>	?Yes, that I am, with great ratings! Breaking News! Pakistani
... able to prepare for the impending final exams. “Can	<i>you</i>	please bring him to my home so I can give him lessons there?”

Concordance 7. *you* in the sense of ‘addressee’: MenCorB

... “You don’t have to make a decision right now,	<i>you</i>	can tell me tomorrow.” **** stopped eating, and his
for treatment. Hopefully, they will survive. I am telling	<i>you</i>	all of this because contrary to what you may believe, no
after the match when he randomly stated, “No, I think	<i>you</i>	are wrong. There is no way they couldn’t see.” Even now
in it. When she lost her first tooth, she asked me, “Do	<i>you</i>	think I look weird?” I said NO! Why? She said, “I don’t

Concordance 8. *you* in the sense of ‘addressee’: WenCorB

have a field day with that one. The formula is so simple: all	<i>you</i>	have to do is send out a mob of camera men and reporters
tch. You know that feeling in the pit of your stomach when	<i>you</i>	see **** batting ever since the semi-final? How it
took your date to or where you found one. That was where	<i>you</i>	hung out with your friends. There was no cyber space, no
procedure. How can you ensure free and fair elections	<i>you</i>	don’t identify the culprits of rigged elections and punish

Concordance 9. *you* in the sense of ‘everybody’: MenCorB

dies. Your best childhood teachers are the ones who nurture	<i>you</i>	, and the best current teachers are the ones who give you
that the moment one turns around to look back at the things	<i>you</i>	have loved with such passion, the essence of which you
living and create an art out of it. But you can’t dish out what	<i>you</i>	can’t receive in return. Would you put your parents in
two if you trust your gut. A casual friendship shouldn’t make	<i>you</i>	uncomfortable – and that should always be your red flag.

Concordance 10. *you* in the sense of ‘everybody’: WenCorB

Another important observation is the use of *you* for ‘everybody’ where men and women bloggers used it in the sense of ‘a man’ or ‘a woman’, i.e. a gender-directed sense of ‘everybody’ as shown in Concordance 11 and 12 below. They show that the language of men and women bloggers reflects gender polarisation.

cinema in Karachi, Cineplex is restricted to families. So	<i>you</i>	can’t be a guy and watch a movie in a cinema. No, this
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Concordance 11. *you* as gender-directed ‘everybody’: MenCorB

girls are taught that being skinny and ... pearly white skin gets	<i>You</i>	love and acceptance. A media-frenzied world
... what you have studied so far, or what your career plans are	<i>You</i>	may also be asked ... of all household chores.
... your chosen husband and in-laws. If they decide to pound	<i>You</i>	to unconsciousness, that’s just your problem.

...girl is beautiful' guy: This guy's bio and picture will tell you all	You	need to know about him. He thinks you're beautiful.
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Concordance 12. you as gender-directed 'everybody': WenCorB

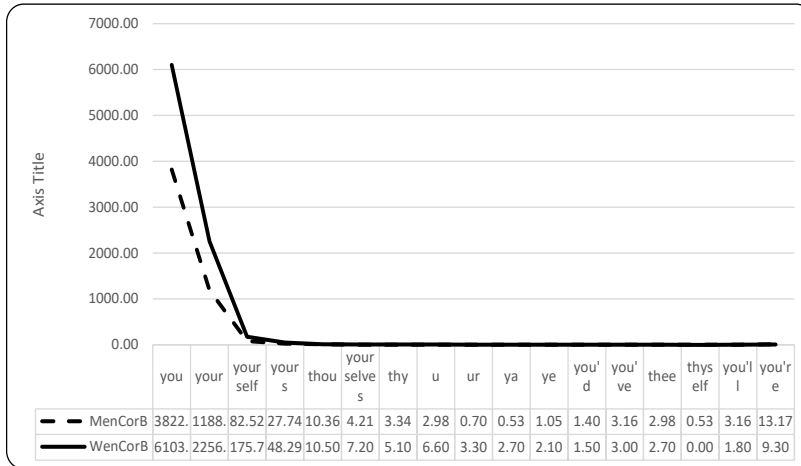


Figure 4. Second-person pronoun variants: frequencies normalized to one million

Third-person Singular Pronoun (*he/she*)

Figure 5 indicates that both men and women bloggers scored higher on their *own* gender-directed personal third-person singular pronouns. The men scored higher on the use of third-person singular pronoun *he, his, him, himself* and the women favoured *she, her, hers, and herself*. These results support the findings by Ahmad and Mehmood (11). This tendency may be attributed to the socio-cultural make-up of Pakistan where a mention of or reference to the opposite gender is not considered culturally appropriate.

Another observation is the consistency in men bloggers' higher score on the contracted forms of this pronoun even if it is the pronoun referred to the feminine gender (e.g., *she's*). This was consistent with previous observations made in this paper regarding men's preference for contracted forms of pronouns. A more detailed evaluation of differences in the use of possessive cases of the personal third-person singular pronouns (*his/her*) yielded some interesting patterns as reflected in Figures 6 and 7. A combined examination of the two shows that, except for the noun 'uncle', men used more masculine nouns when talking about kinship-relations to other men (e.g. 'his father'; 'his son') but they used fewer feminine (e.g. 'his wife'; 'his sister') and neuter nouns (e.g. 'his family'; 'his parents') when writing about relations to other men or women with *his/her*.

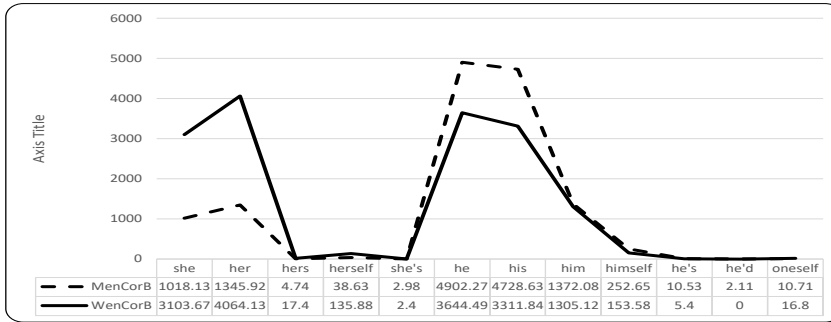


Figure 5. Personal third-person singular pronoun: frequencies normalized to one million

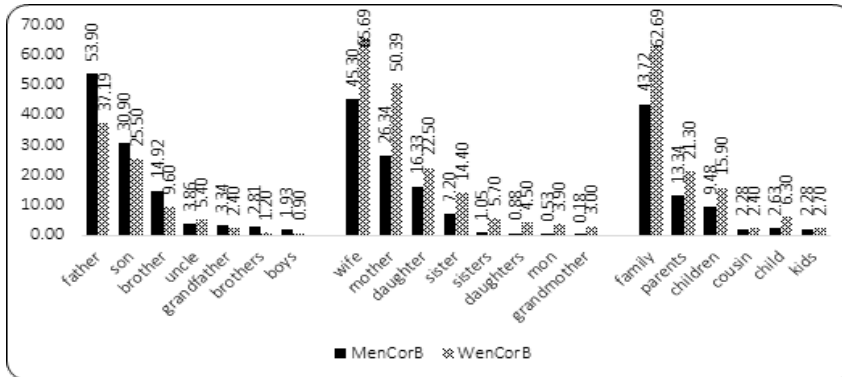


Figure 6. R1 referents to family members with *his*: frequencies normalized to one million

On the other hand, women used more feminine (e.g. *his* wife; *his* daughter) and neuter (e.g. *his* family) but fewer masculine nouns (e.g. *his* father; *his* son) when talking about relations to other men. They, however, used more masculine (e.g. *her* father; *her* husband), feminine (e.g. *her* mother; *her* daughter) and neuter (e.g. *her* family; *her* children) nouns when referring to relations with other women. This tendency, again, signals, gender polarisation in the blogosphere- rooted in the socio-cultural make-up of Pakistani culture.

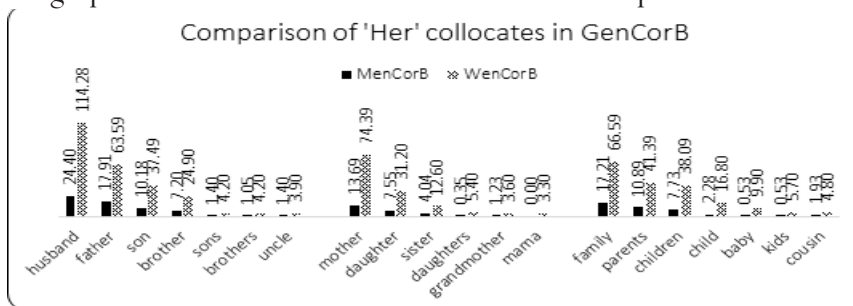


Figure 7. R1 referents to family members with *her*: frequencies normalized to one million

Another subtle difference was the collocation of the term *grandfather* with the third-person possessive pronoun *his/her*. The noun *grandfather* collocated with the masculine third-person singular possessive case *his* more in both the MenCorB and the WenCorB than with the feminine third-person singular possessive case *her*. Thus, in both the corpora *his grandfather* occurred 27 times (19 times in the MenCorB and 8 times in the WenCorB) whereas *her grandfather* occurred 5 times (once in the MenCorB and 4 times in the WenCorB), which confirmed the findings given in this paper; in a patriarchal society such as Pakistan, ancestral referents are generally used more frequently for men than women. Besides, other patterns in the use of the terms *his grandfather* and *her grandfather* were also observed as shown in the concordances 13 and 14 below.

<i>grandfather as an ancestor</i>		
... lived there for hundreds of years. He can call it	<i>his grandfather</i>	's house. It would be cruel to kick him
relative of **** It was ***** who told me that	<i>his grandfather</i>	's first name was ****, while
...father sent him, his mother and sister to Delhi, where	<i>his grandfather</i>	was very well-entrenched. His father stay
wrong time. Even though his statement made	<i>his grandfather</i>	instantly popular, it certainly cannot help his
<i>grandfather as an authority</i>		
... but stopped every passer-by to offer them water.	<i>His grandfather</i>	had mastered the craft of foretelling the loca
... For example, my cousin told me a saying of	<i>his grandfather</i>	after his Janaza prayer: "You cannot compare
... left him unharmed. He loved every part of that.	<i>His grandfather</i>	would say that the morning prayers would
<i>grandfather as someone to be emulated</i>		
... Although many debate that he is aping	<i>his grandfather</i>	**** in the slapstick comedy scenes, w
... He does have football blood after all. From	<i>his grandfather</i>	to his father to now the youngest ****, t
ly exudes charisma like his mother **** and	<i>his grandfather</i>	****, but also presides over a r
out of him. Had **** copied	<i>his grandfather</i>	's style, he might have been able to
of Pakistan. Baby **** might dress like	<i>his grandfather</i>	in his signature awami shalwar suit with
<i>grandfather as ordinary family elderly relation</i>		
... his speech everything was common between him &	<i>his grandfather</i>	**** not only this but
... stand currently, he will not be present in Pakistan for	<i>his grandfather</i>	's death anniversary and this is something ...

Concordance 13. *his grandfather* occurrences in GenCorB

As shown in Concordance 13, it was observed that the use of *his grandfather* in the GenCorB was mainly focussed on the role of this relationship as a source of lineage for the men referred to. In this sense, *grandfather* was used as an *ancestor* to be recalled, an *authority* to be quoted, a *model* to be emulated and an *ordinary family elder*.

<i>grandfather as ordinary family elderly relation</i>		
... the scarf and she smiled at me and requested	<i>her grandfather</i>	to bring some more colorful headscarves fo
... be characterized as the suburbs of Lahore.	<i>Her grandfather</i>	had died when she was very young, but she
... she has no one to call 'papa' anymore since	<i>her grandfather</i>	had also passed away due to an illness a mont

Concordance 14. *her grandfather* occurrences in GenCorB

In contrast, as indicated by Concordance 14, in all occurrences of *her grandfather*, the relationship of *grandfather* was presented as an *ordinary family elder* in the GenCorB. Correspondingly, the occurrence of *his/her grandmother* was also studied. It was found that the word *grandmother* occurred with *her* more in the GenCorB (7 times in the MenCorB and 12 times in the WenCorB) in comparison with its occurrence after *his* (once in the MenCorB and 10 times in the WenCorB). Thus, taken together, *her grandmother* was used 19 times whereas *his grandmother* was used just under half of its frequency, i.e., 11 times in the GenCorB. Besides this quantitative analysis, the concordances of *his grandmother* and *her grandmother* were also studied and some subtle patterns emerged, as indicated by Concordances 15 and 16.

<i>grandmother as ordinary family elderly relation</i>		
he was born and to have a cup of tea with	<i>his grandmother</i>	. So, we went there to have a harmless cup ...
... the spouse in this case. Her not letting him attend	<i>his grandmother</i>	's funeral, must it be shelved as the ...
... Said to be a particular childhood favourite of ****,	<i>his grandmother</i>	, the ****, made sure the chocolate biscuit ...
oblivious of their father's plans to take him away and	<i>his grandmother</i>	is not strong enough to retaliate against her son.

Concordance 15. *his grandmother* occurrences in GenCorB

<i>grandmother as an authority</i>		
to go to the United States. ****, on the insistence of	<i>her grand-mother</i>	, agrees to accompany ****. **** is still emo
until she is a young adult. Out of everything that	<i>her grand-mother</i>	ever told her, one thing definitely stands out in
mbers the life lessons that her Uncle **** and	<i>her grand-mother</i>	had taught her. In fact, both had told her to
s recipes for whitening her skin, provided to her by	<i>her grand-mother</i>	, like turmeric or saffron, only then will she be te
<i>grandmother as someone to be taken after</i>		
ine of **** and **** and inherited	<i>her grand-mother</i>	, **** striking good looks. 7. ****
mom. It would have been better if she resembled	<i>her grand-mother</i>	."With these comments, you can't help thinking
<i>grandmother as a family elderly relation</i>		
shawl from the wooden box, a wedding gift from	<i>her grand-mother</i>	. Like half a million displaced tribesmen, their to
Video blog: Stepping into the slums With	<i>her grand-mother</i>	by her side, an innocent girl, ****, stared at me.

ound. **** also shares a unique relationship with	<i>her grandmother</i>	, who is a rather spirited, graceful woman. She tells
grandmother as a symbol of tradition		
She soon revolted against tradition and questioned	<i>her grandmother</i>	on why she kept the utensils of her father's
re, and their tailor stitched it. Meeha was decked in	<i>her grandmother</i>	's jewellery on her big day. Her sister supervis

Concordance 16. *her grandmother* occurrences in GenCorB

It can be seen that, for the words *grandfather* and *grandmother*, the concordances for third-person singular pronouns *his/her* presented a contrasting pattern. With third-person singular possessive cases occurring with nouns of the opposite gender, the noun was used in one sense only. Thus, the word *grandmother* occurred with *his* in one ordinary sense, i.e. an elderly family relation as did the word *grandfather* with *her*. However, where the third-person possessive case was used with nouns of the same gender, the noun was used in divergent connotations. Thus, the words *grandfather* and *grandmother* occurred with *his* and *her* respectively in some additional senses besides their ordinary sense of an elderly family relation.

A subtle difference in the use of the words *grandfather* and *grandmother* in another sense was also observed. The word *grandfather* was used in the sense of a family ancestor but the word *grandmother* was not used in the same sense. Moreover, *grandfather* was used by men in the sense of a model to be copied or followed in some skills, style (e.g., oratory or dressing up) or socio-political orientation. In contrast, the word *grandmother* was used by women as a symbol of tradition as well as in the sense of someone to be taken after by women for qualities that relate to beauty and physical appearance.

Third-person Plural Pronoun (*they*)

Figure 8 indicates an interesting case in the use of third-person plural pronoun. The men bloggers favoured the contracted forms of this pronoun in comparison with women bloggers. This observation was consistent with previous observations highlighted in this paper for other personal pronouns. Similarities and differences in the use of possessive cases of the personal third-person plural pronouns (*their*) were also seen in R1 noun collocates of *their* that referred to family members based on grammatical gender.

As shown in Figure 9, it was observed that women bloggers used nouns for all family relations more than men bloggers except for the last two instances of ‘their predecessors’ and ‘their ancestors’. This tendency in men bloggers was

consistent with their preference for the nouns *elders*, *grandfather*, and *ancestors* with the first-person singular possessive case *my* and the word *grandfather* with *his*. This trend corroborates the findings of the present paper that men tend to focus more on nouns that refer to ancestry and heads in family lineage. The data was also scrutinised for the use of the third-person subjective case (*they*) by men and women to see who they refer to with this pronoun. As Martin Malone observes, third-person pronouns are used for creation of an object that a speaker or writer desires to talk about in a particular manner (161). Unlike the first- and second-person pronouns, third-person pronouns point to *who we are not*. As a research points out that third-person plural (*they*) and its variants can be used for comparison between self and others, as institutional markers, or as agents of some organisation (Sacks).

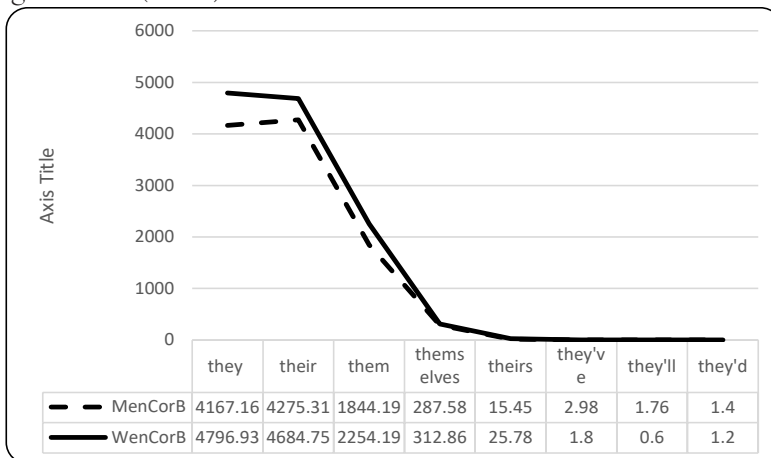


Figure 8. Comparison of third-person plural pronoun variants

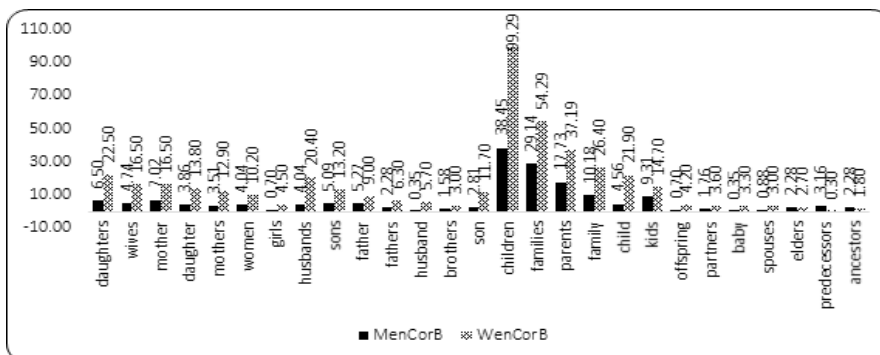


Figure 9. *their* with nouns for family members: frequencies normalised to one million

In the present study, following Lenard, the data of the GenCorB was analysed for

the purpose of comparison between self and others in three contexts, i.e., the construction of ‘other’ in the *affiliative*, *oppositional* and *neutral* contexts (171). In the *affiliative* context, men and women make a positive evaluation of ‘they’ to create an affiliation with the group referred to by the pronoun. Conversely, in the *oppositional* a negative evaluation of ‘they’ is made and the effect is a disaffiliation with the group referred to by *they*. However, in a *neutral* context, *they* is evaluated neither positively nor negatively; that is, the bloggers of both the genders take up a neutral position in relation to the group being referred to as *they*.

In the *affiliative* context, the instances represented by Concordances 17 and 18 show how men and women take up a positive position towards others invoked by ‘they.’

Someone against unjust system		
weren't protesting against the murderer, who is an individual;	they	were expressing their contempt and hatred towards a system

Concordance 17. Affiliative context of *they*: MenCorB

Animals		
... to have someone speak on their behalf. That is one thing	they	are dependent on us humans for and we should not let them down.
Children		
... reports that poured in the figure s of causalities as though	they	were mere numbers and not children. Without confirmed reports...
... them to talk about or share these things with a trusted adult.	They	will suffer in silence for years with the effects of it continuing...
same sex group		
... loosely, they are “too masculine” and must be a “dyke”. If	they	wear makeup or fancy clothes, they are trying to “impress other...
... about the “ripe” age for a girl's marriage, claiming that	they	become “too fast and out of control” or “get Western ideas” if...
not give up in the face of any opposition. Not too long ago,	they	stood along men to demand independence from the British rule...
victimised group		
... by the horrific incident that took place in ****.	They	are victims of the madness of intolerance that overtakes Pakistan ...

Concordance 18. Affiliative context of *they*: WenCorB

It can be seen from the above concordances that both men and women used ‘they’ in the affiliative context for groups who suffer from some kind of injustice. In particular, unlike men, women bloggers appear to be concerned more with the social status and problems faced by the members of their own sex-group. Furthermore, they seem to sympathise with members of other dependent groups like animals and children.

The pronoun *they* has also been used in *oppositional* contexts, i.e., by taking a

negative position against others. In this sense, the pronoun *they* is used to create a them-and-us distinction as shown in Concordances 19 and 20.

the law breaker		
s locality is home to illegal **** and	<i>they</i>	must go back and (ii) the locality is breeding grou
the cruel		
spect for these creatures. During political rallies,	<i>they</i>	will often carry live lions and tigers across town in
the corrupt		
p fighting for control of economic resources, so	<i>they</i>	can mint money off the public. But the cruelest of
e who do not provide an affidavit confirming that	<i>they</i>	are not dual nationals should be disqualified. T
the personally opposed		
haters went ballistic this year more than ever. And	<i>they</i>	left their traces on my Facebook page as well sinc

Concordance 19. Oppositional context of *they*: MenCorB

the privacy intruder		
... that child birth is their key to a lock with which	<i>they</i>	have now access to the doors of your privacy. They...
... ones who inform you an hour before coming that	<i>they</i>	're dropping in for a cup of 'chai'! However, many...
the violator of women's rights		
... crazy extremist had said somewhere where	<i>they</i>	were still flogging women in the streets. Unfortunate...
... December 20, 1995 They're beating her again.	<i>They</i>	're punishing her for not succumbing to their "pure"...
the opposite sex		
Men in their 20s ... live in a bubble where	<i>they</i>	think ... will be young forever. But in their early 30s...

Concordance 20. Oppositional context of *they*: WenCorB

As shown in the above concordances, the use of *they* in the *oppositional* context creates a dichotomy. The men seem to use oppositional context for those who violate law, or engage in personal opposition. In the personal *oppositional* context, men do not create a dichotomy between *them* and *us* but between *them* and *me*. The focus of men's the *oppositional* context seems to pivot around socio-political and personal issues. In this context, men seem to speak either on their own behalf or on behalf of the society as a whole.

In contrast, the *oppositional* dichotomy created by women is between *us* and *them*. Unlike men, women do not use *oppositional* context in a personal oppositional sense. Moreover, in the instances given in Concordance 20, women create a dichotomy between them and others on the basis of privacy intrusion, violation of their rights and their relationship with the opposite sex-group, i.e., men. Thus, the focus of their oppositional context seems to pivot around the problems faced by their own sex-group. In this context, women do not seem to speak on behalf of the entire society but on behalf of their own sex-group.

Impersonal Pronouns

As shown in Figure 10, the results of this analysis are consistent with those found for other pronoun variants in the paper: men showed a tendency to use more contracted forms of the impersonal pronoun in comparison with women.

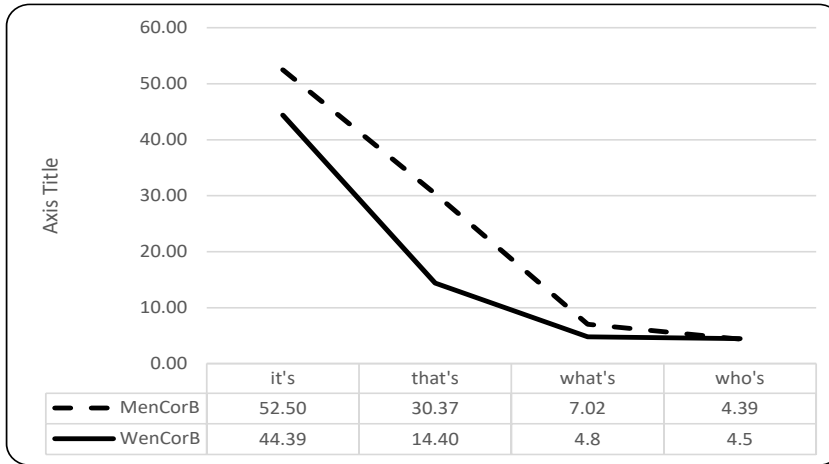


Figure 10. Contracted impersonal pronoun variants: frequencies normalised to one million

Conclusion

To sum up, this paper argues that there is no singular key to resolving the *reality-myth* enigma in gender differences in the use of English pronouns. In terms of pronouns as gender markers in communication, the present findings can be divided into two major parts: (a) those where pronouns consistently appear to be predictors of gendered language across diverse cultural contexts; (b) those where pronouns seem to reflect subtle Pakistani socio-cultural nuances.

The former part, in turn, can be divided into two groups: the one which supports the ‘gender-dialect’ hypothesis and the other which supports the ‘gender-stereotype’ hypothesis. The first group includes findings, such as women’s higher score on total pronouns, total personal pronouns and full forms of the pronouns, the last being in line with sociolinguistic truism that women prefer standard and formal language style (Labov 230; Schultz 63; Holmes). In contrast, the contracted forms of pronouns were found as male text markers. Men’s preference for discussion on sports and ancestry contrary to women’s preference for discussion on the same-sex group were also consistent with the findings of previous studies. In addition, the results of the present analysis concerning the magnitude of difference in the gendered use of pronouns—from small to medium with no large ef-

fect size—supported those reported by studies in other disciplines. As part of the second group, the contradictions with the previous research findings complement ‘gender-stereotype’ hypothesis.

The latter part of the findings highlights the use of pronouns as indicators of specific and subtle gendered cultural aspects embedded in Pakistani culture. For instance, as an indicator of the patriarchal perception, third-person singular masculine pronoun (*his*) collocated more frequently—in comparison with its feminine equivalent—with words referring to ancestry (e.g. ‘ancestors’; ‘grandfather’). Similarly, the gender-based use of the second-person singular (*you*) along with higher frequencies of masculine and feminine cases of the third-person singular pronouns by men and women respectively indicate social distancing and segregation between the two genders. Since, women are treated as the embodiment of men’s personal and familial honour in Pakistani society, this perception is indicated by the use of the genitive case of pronouns whereby men comparatively made fewer references to the female relations (e.g., ‘his/her daughter’) of other men.

Alongside gender, it was also interesting to see that the genre weblog, also intervened with the present data. Some differences in the use of pronouns (e.g. contractions and non-standard spellings) by men and women are also a feature of CMC. In this respect, while the men preferred contractions, the women favoured the use of non-standard spelling variants for the second-person pronoun (e.g., *u*, *ur*). The current study has attempted to bypass most of the limitations of previous research. Unlike previous studies, this rigorous CL analysis exclusively dealt with a detailed list of pronouns and their variants in a large data set of naturally occurring language, which could be a useful addition to the existing body of literature, especially in the context of Pakistan. However, following a top-down approach, this study could only examine a limited sample of pronoun collocates and concordances. Future studies are, therefore, encouraged to examine gendered texts in a more localised socio-cultural context with data from varied CMC genres and to analyse a greater number of pronoun collocates and concordances to find out further subtle nuances.

Works Cited

- Ahmad, Iqra, and Asim Mehmood. "Gender Differences in the Use of Parts of Speech in Pakistani English Newspaper Columns: A Critical Discourse Analysis." *New Media and Mass Communication* 36 (2015): 10-15. Print.
- Ancestry. "Tips for Finding the Stories of the Women in Your Family Tree." www.ancestry.com/cs/media/finding-women-stories.pdf (n.d.) Web.
- Anthony, Laurence. AntConc. Version 3.4.4., 2016. Web. www.laurenceanthony.net/. Accessed 23 November 2017.
- Argamon, Shlomo. et al. "Gender, Genre, and Writing Style in Formal Written Texts." *Text* 23.2 (2003):321–346. Web.doi: 0165–4888/03/0023–0321.
- Argamon, Shlomo. et al. "Mining the Blogosphere: Age, Gender and the Varieties of Self-Expression." *First Monday* 12.9 (2007): Web. www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2003. Accessed 11 January 2018.
- Baker, Paul. *Using Corpora to Analyse Gender*. Bloomsbury Academic, 2014. Print.
- Baron, Naomi S. "See You Online: Gender Issues in College Student Use of Instant Messaging." *Journal of Language and Social Psychology* 23. 4 (Dec. 2004): 397-423. Web. doi:10.1177/0261927X04269585.
- Biber, Douglas. *Variation Across Speech and Writing*. Cambridge UP, 1988. Print.
- Biber, Douglas. et al. *Corpus Linguistics: Investigating Language Structure and Use*. Cambridge UP, 1998. Print.
- Bischoping, Katherine. "Gender Differences in Conversation Topics, 1922-1990." *Sex Roles* 28.1 (1990):1-18. Web. doi: 10.1007/BF00289744.
- Bresnan, Joan, and Jessica Spencer. *Frequency and Variation in English Subject-verb Contraction*. Stanford UP, 2013. Web. www.web.stanford.edu/~bresnan/contraction.pdf Accessed 24 January 2018.
- Brownlow, Sheila. et al. "Gender-linked Linguistic Behavior in Television Interviews." *Sex Roles* 49.3 (2003):121-132. Print.
- Cameron, Deborah. "Gender, Language and the New Biologism." *Constellations* 17.4 (2010):526-539. Print.

- Cohen, Jacob. *Statistical Power Analysis for the Behavioral Sciences*. 2nd ed. Lawrence Erlbaum Associates Publishers, 1988. Print.
- Eagly, Alice. H. "The Science and Politics of Comparing Women and Men." *American Psychologist* 50.3 (1995):145-158. Print.
- Friginal, Eric. *The Language of Outsourced Call Centers*. John Benjamin's Publishing, 2009. Print.
- Friginal, Eric, and Jack A. Hardy. *Corpus-based Sociolinguistics*. Routledge, 2014. Print.
- Herring, Susan C., and John C. Paolillo. "Gender and Genre Variation in Weblogs." *Journal of Sociolinguistics* 10. 4 (2006): 439-459. Print.
- Herring, Susan. C., and Asta Zelenkauskaitė. "Gendered Typography: Abbreviation and Insertion in Italian iTV SMS." *Gender in Language: Classic Questions, New Contexts*. Ed. Jason F. Siegel. et al. IULC Publications, 2008. 73-92. Print.
- Holmes, Janet. *An Introduction to Sociolinguistics*. 3rd ed., Routledge, 2013. Print.
- Hyde, Janet. S. "The Gender Similarities Hypothesis." *American Psychologist* 60.6 (2005): 581-592. Web. www.apa.org/pubs/journals/releases/amp-606581.pdf . Accessed 7 May 2019.
- Johnson, Sally. "Theorizing Language and Masculinity: A Feminist Perspective." *Language and Masculinity*, edited by Sally Johnson and Ulrike Hanna, Blackwell Publishers, 1997. 8-26. Print.
- Kashima, Emiko. S., and Yoshihisa Kashima. "Culture and Language: The Case of Cultural Dimensions and Personal Pronoun Use." *Journal of Cross-Cultural Psychology* 29.3 (1998): 461-486. Print.
- Koppel, Moshe, et al. "Automatically Categorizing Written Texts by Author Gender." *Literary and Linguistic Computing* 17.4 (2002): 401-412.
- Labov, William. "The Intersection of Sex and Social Class in the Course of Linguistic Change." *Language Variation and Change* 2 (1990): 205-254. Print.
- Lenard, Dragana. Bozic. "Gender Differences in the Personal Pronouns Usage on the Corpus of Congressional Speeches." *Journal of Research Design and Statistics in Linguistics and Communication Science* 3.2 (2017): 61-188. Web.www.bib.irb.hr/datoteka/861053.Gender_differences_

in_the_personal_pronouns_usage_of_the_corpus_of_congressional_speeches.pdf Accessed 01 February 2018.

Locke, John. L. *Duels and Duets: Why Men and Women talk so Differently*. Cambridge UP, 2011. Print.

Malone, Martin. *Worlds of Talk: The Presentation of Self in Everyday Conversation*. Polity Press, 1997. Print.

Manjavacas, Enrique. "Statistical Description of Gender-related Differences in Language Use in a Dutch Blog Corpus." *ResearchGate*. Web. www.researchgate.net/profile/Enrique_Manjavacas/publication/273462395/Statistical_description_of_genderrelated_differencesin_language_use_in_a_Dutch_blog_corpus/links/550432400cf231de07708a99.pdf. Accessed 12 February 2018.

Metlo, Zubaida. *The Perception of Honour Among the British-Pakistani Community in Watford, United Kingdom*. 2012. School of Modern Languages and Cultures. University of Leeds, PhD Dissertation. Print.

Naveed, Amna. et al. "Analysis of Cyber Language: Identifying Gender Boundaries." *European Academic Research* 2.7 (2014): 9706-9724. Print.

Ndambuki, Jacinta, and Hilary Janks. "Political Discourses, Women's Voices: Mismatches in Representation." *Critical Approaches to Discourse Analysis across Disciplines* 4.1 (2010): 73-92. Web. www.lancaster.ac.uk/fass/journals/cadaad/wp_content/uploads/2015/01/Volume_-4_Ndambuki__Janks.pdf. Accessed 24 January 2018.

Newman, Matthew L. et al. "Gender Differences in Language Use: An Analysis of 14000 text samples." *Discourse Processes* 53.3 (2008): 211-236. Web. doi: 10.1080/01638530802073712 Accessed 12 January 2018.

Pennebaker, James. et al. *The Development and Psychometric Properties of LIWC2015*. UP of Texas at Austin, 2015. Print.

Pennebaker, James. et al. "Psychological Aspects of Natural Language Use: Our Words, Our Selves." *Annual Review of Psychology* 54 (2003): 547-577. Web. www.annualreviews.org.ezproxyd.bham.ac.uk/doi/pdf/10.1146/annurev.psych.54.101601.145041. Accessed 14 January 2018

Rojo M., Luisa., and Concepcion Gomez Esteban. "The Gender of Power: The

- Female Style in Labour Organization.” *Feminist Critical Discourse Analysis*. Ed. Michelle M. Lazar. Palgrave Macmillan, 2005. 61-89. Print.
- Rusieshvili, Manana. “Modes of Address Between Female Staff in Georgian Professional Discourse: Medical and Academic Contexts.” *Politeness across cultures*, edited by Dániel Zoltán Kádár and Francesca Bargiela-Chiappini, Palgrave Macmillan, 2011. 149-168. Print.
- Sacks, Harvey. *Lectures on Conversations*. Blackwell, 1992. Print.
- Sánchez-Cuenca, Ignacio. *The Historical Roots of Political Violence: Revolutionary Terrorism in Affluent Countries*. Cambridge UP, 2019. Print.
- Schultz, Patrick. *Gender Variation in Writing: Analyzing Online Dating Ads*. 2013. Department of English. The UP of Texas at Austin, PhD Dissertation. Print.
- Schwartz, Andrew, H. et al. “Personality, Gender, and Age in the Language of Social Media: The Open-vocabulary Approach.” *PLoS ONE* 8.9 (2013): Print. doi:10.1371/journal.pone.0073791.
- Sunderland, Jane. *Language and Gender: An Advanced Resource Book*. Routledge, 2006. Print.
- Thimm, Caja. et al. “Communicating Gendered Professional Identity: Competence, Cooperation, and Conflict in the Workplace.” *The Handbook of Language and Gender*. Ed. Janet Holmes and Miriam Meyerhoff, Blackwell Publishing, 2003. Print.
- Yaefer-Dror, Malcah. et al. “It’s Not or Isn’t it? Using Large Corpora to Determine the Influences on Contraction Strategies.” *Language Variation and Change* 14.1 (2002): 79-118. Web. doi:10.1017/S0954394502141044.
- Yu, Feng. et al. “Cultural Value Shifting in Pronoun Use.” *Journal of Cross-Cultural Psychology* 47.2 (2016): 310-316. Web. doi:10.1177/0022022115619230.