Acquisition of Coordination Structure Constraint of Graduate Learners in Pakistani Public Sector Colleges

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The current research was designed to address the acquisition of coordinate structure constraint by the graduate learners of public sector colleges in Pakistan. Respondents were randomly selected from the population of public sector colleges situated at Lahore. Equal numbers of respondents from both genders were selected for the study and an equal ratio of students were chosen from three disciplines BA, BSc and BCom. The researcher specially was careful about the age of respondents so that the students selected from the population were of almost same age bracket. The idea was to check whether the graduate students have acquired the concept of coordinate structure constraint. The researcher used a questionnaire as a research instrument and administered a rigorous pilot study to validate the tool. Descriptive statistics were applied for knowing frequency measures and in order to determine gender-based differences independent sample t test was applied. The results show that males and females are not significantly different at using coordination structure constraint. One way ANOVA was applied was to analyse the variation of acquisition regarding different disciplines. It was shown that the students of BA showed better results; BCom students were second in creating coordinating constructions, whereas BSc students were at the last leg. They fail in using coordinate structure constraint in their writing.

Key words: *CSC (Coordination Structure Constraints), SLA (Second Language Acquisition)*

Acquisition research was started in 1980 but as a routine in Pakistan the new topics were researched very late. In our country almost no fundamental research is available in this domain. This research is going to find the use of coordination Structure Constraint in the writing of graduate Pakistani students as they are taught grammar as a subject component.

Background of the Research

Syntax is the core phenomenon of any language and is defined by Crystal (2008) as it is a term to study the sentence structure of a language and it also studies how the vocabulary items worked together to reach sentence level. In another way, it can be said that it is the knowledge of relationship of all those elements which are combined under some rules to make a sentence, so the study of those rules and relations is called syntax.

Ross proposed the coordinate structure constraint in his syntactic islands (1967). As per the constraint, no conjunct has the ability to move out of the coordination structure and no element that is part of the conjunct has the ability to move outside the conjunct (Ross, 1967). Grosu (1973) stated that CSC has two parts, in the part one, says that no conjunct may be moved, and the second part impose the same restriction on any element of that conjunct, both parts are named as CC and EC subsequently (Grosu, 1973).

The poet and (the) translator were present at the lecture[1].
The pop artist and (the) instrument of the masses thrived on irony[2].

This is simple coordination, and the constraint of coordination captures the principle behind this simple construction. Pakistani students having a minimal knowledge of coordination in English and are also lacking in its proper use in their writing. That may be due to either having no acquisition or faulty acquisition at the student level. Second language acquisition as a discipline was introduced by Karashan in 1980. Through that time abundant research has been done in this area.

As we know that we learn language from our environment without any conscious effort that linguistics names L1, but sometimes it happens that in our society that more than one language is being spoken and with the same effortless effort we gain that second language too, which is known as L2; yet the story is not over here, because sometimes there is more than one language being used either officially or normally for our social prestige or even for some other purposes; to excel in the social market one has to acquire that language as well. English has acquired the status of second language in Pakistan because most of the systems of our country are still codified in this language and one is compelled to become a proficient

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[1] Examples are taken from coordination in morphology and syntax: the case of copulative compounds by Susan Olsen (2001)

user of this language. The acquisition of coordination structure constraint of English under the SLA domain is the topic of this research.

Research Questions

Having a particular focus on a very little aspect of coordination in English syntax with respect of the L2 Pakistani learner, this study will attempt to answer the following research questions:

1. What is the level of Pakistani graduate students regarding the use of English CSC?
2. How second language learners acquire coordination constraints either in stages or wholly?
3. What are the effects of English language teaching to Pakistani graduates on their acquisition of CSC?

LITERATURE REVIEW

In Pakistan, English language is considered an official language (1973 constitution) and there is a hard-core debate on the status of English as a second or foreign language. To meet the needs of the country this language is taught from nursery to graduation as a compulsory subject (Govt. of Pakistan, 2009), but despite these efforts our students are lagging far behind the set standards.

First of all we will discuss the brief history and different approaches used in the study of SLA and after that Coordination Structure Constraints will be explored.

Second Language Acquisition (SLA)

The current study is focusing on an aspect of syntactic acquisition of a second language; as Susan et.al (2008) says that SLA is a young field having just 40-45 years (now 50-55 years) history. In the words of Gass & Selinker (2008) SLA is the way or method of creating a new language system in the minds used by the learners, but Savillie-Troike (2006) defines it as a process of learning a new language by the young learners.
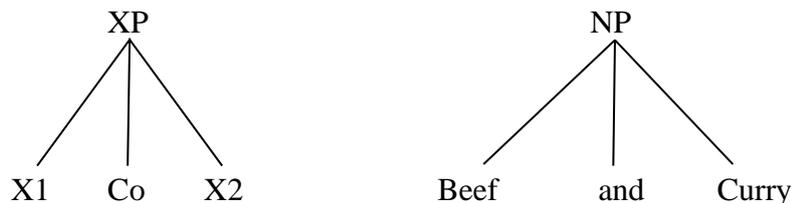
SLA Theories

McCarthy (2001) opined that scholars have been interested in the learning and use of a second language for centuries, but it happened in the 60s that the research scholars devised a systematic way in the shape of theoretical models to study SLA. The basic questions which are related to the field of learning and acquiring another language are a) what is that knowledge which a common L2 student knows?, b) what are those ways through which the learner leads towards that knowledge or how does the student know that knowledge? c) what

are those reasons which give success to one learner but another fails or why is the level of success in learning another language different in different people? The approaches which are being used in the field of SLA are sequenced under some particular discipline: psychological, linguistic and social.

Coordinate Construction

Coordinate constructions are defined by that all the elements which are coordinated have same category syntactically and the resultant constituent belongs to the syntactic category of the elements which participated in the coordination (Haspelmath 2004). Quirk et al. (1985), stated that coordination is considered a kind of link in which the resulting construction is structurally equal to each of its members. The structure is explained in the following figure; in which two nouns form a noun phrase.

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        XP                        NP
       /|\                       /|\
      / | \                     / | \
     /  |  \                   /  |  \
    X1  Co  X2              Beef  and  Curry
```

Structure of Coordinate Construction (adopted from Lehman, 2004)

Coordination

Coordination is a process by which two independent clauses are joined together with a coordinating conjunction to make it a single whole clause and result is called a compound sentence.

Coordinate Structure Constraints

Ross (1967) proposed that neither an element of a conjunct nor a conjunct itself may be taken out of that coordinate structure. He named this restriction as a constraint to the structure of coordination (CSC – coordinate structure constraint).

As per the information given by Ross (1967) the constraint has two parts: first is restricting the movement of any element of a conjunct and second is about movement restriction of the conjunct itself.

Islands

Islands are different sentence structures which can be separated from the remaining sentence to satisfy different syntactic rules. Those particular rules are known as movement rules e.g. making of wh-questions are making relative clauses.

The islands are defined with their relation to different constraints which are applicable on rules of movement. This is basically the constraint which decides about the category of the island. CSC is one such constraint in which one conjunct cannot be moved out of that structure as per the restriction of CSC.

Islands are described in terms of constraints on "movement" rules, each constraint describing an island category. Below are a few examples of only one island constraints i.e. CSC. It is a coordinate structure made by the use of coordinating conjunctions, like *and, or, but,* etc. An element from one conjunct cannot be moved out of that structure according to CSC:

- o Khalida cooked dinner.   What did Khalida cook?
- o Khalida washed the plates.   What did Khalida wash?
- o Khalida cooked chicken and washed the plates.
- o *What idid Khalida cook and wash the plates?
- o *Whatdid Khalida cook dinner and wash ____i?

i.e, coordinate structures are islands. There are some interesting exceptions to this, such as

- o Khalida washed the plates_i and her husband dried those plates_i
- o What_did Khalida wash ____i and her husband dry ____i?

Violation of CSC

There are essentially two types of violations

a. complement type: entered in the store and purchased, walk and address, work and complete
b. adjunct type: eat and stay smart, eat and (therefore) live to be 200

Extraction possibilities

	Extracting from 1st Member	Extracting from 2nd Member
Type a	*	✓
Type b	✓	*

a. Across-the-board (ATB): I wonder who [Usman likes — and Arshad hates —]
b. Scene-setting: the whiskey I [entered in the store and purchased —]
c. Contiguous: the troops she wanted to [walk and address —]
d. Conative: the project she wanted to [work and complete —]
e. Such that 1: not the kind of person who [eat — and stay smart]
f. Such that 2: the stuff those people in the Europe [eat — and live to be 200]
(Ross 1967, Schmerling 1972, Goldsmith 1985, Lakoff 1986, Na & Huck 1992, Kehler 2002)

Violation of CSC at physical level

(i) [[every professor]$_1$ [every associate professor]$_2$

[$_{TP}$ a student respects t_1 and hates t_2]]
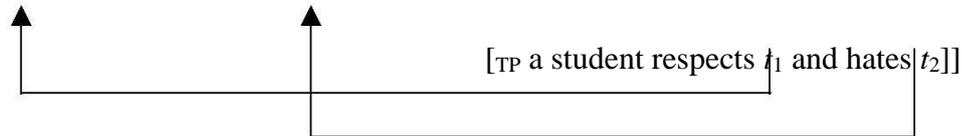
What rules out the derivation given in (i)? The Parallelism Requirement would allow the derivation in (i) because the both conjuncts have variables and hence they are semantically similar. In contrast, the CSC in (1) can rule out the derivation in (i) because elements are extracted out of the conjoined phrases. In order to rule out the derivation given in (i), it is proposed that the CSC rules out the derivation given in (i) and then reformulate the second part of the CSC as follows.

(h) The second part of the Coordinate Structure Constraint (Revised) Extraction of elements out of both conjuncts is not possible.

According to (h), if a sentence has extraction out of both conjuncts, then the sentence will be ruled out. If a sentence has extraction out of one of the conjuncts, then the sentence cannot be ruled out by (h). In other words, under the present analysis, the interpretation in (c) where objects take wide scope over subjects is not ruled out by (h) because they involve extraction out of one of the conjuncts, that is, the first conjunct. I propose that they are ruled out independently from the revised CSC.

No Violation of CSC

In his thesis, Ross (1967) proposed the *Coordinate Structure Constraint* (CSC) which prohibits movement of any constituent out of coordinated syntagm two:
(1) "In coordinate structure in the conjunct may be moved, nor may any element contained in the conjunct be moved out of conjunct". (ROSS, 1967, p. 98-9).

As shown in the claim (1), the SSC is comprised of two parts: the first ensures that no terms of the coordinated sentence can be extracted. Sentence (2) is ungrammatical precisely because of the terms of the coordinate (the second) has moved to the top of the verdict. And the second part of the assertion in (1) ensures that no element within any of the terms of the coordinate to be extracted, which explains the agramaticalness.

Decisions such as those of (4) were detected by Ross; to prevent the CSC being discarded formulated the *Across-the-Board* extraction (ATB) as the only way of breaking the CSC. ATB states that one can extract information from within the coordinate, provided that its element is extracted from both terms, sentences as in (4) above.

Acquisition of CSC in Pakistan

In Pakistan there is no work available on the acquisition of Coordinate Structure Constraints and the current study is an effort to fill this gap. As it is mentioned in the very start that English is a compulsory subject in Pakistan, so there are different studies conducted on the subject of error analysis in the writing of the English language, in which it is known that coordination is a weak area for the students (Bhatti, Parveen, & Ali, 2017; Gul & Rodrigues, 2012; Butt & Rasul, 2012; Sarfraz, 2011). That is why this research work will definitely help the teachers to know the percentage and relation of the acquisition level of Pakistani students and in this way they might be able to inculcate these things in a better way in their daily lesson plan and in the end the student's community will benefit out of this endeavour.

Population and Sampling

The population of this study comprises public sector college students in graduate classes in Lahore. Random sampling was used to draw samples, which consists of the following:

- 144 graduate students (72 each from Male and Female colleges)

The subdivision of these 60 students is as under:

- 24x commerce graduates
- 24x BSc graduates
- 24x BA graduates

Moreover, special care is taken by the researcher to ensure that the samples taken should be of almost the same age bracket.

Instrumentation

To explore the acquisition of the graduate student in the awareness of using coordination, a researcher made the questionnaire and administered it. The questionnaire is comprised of two sections as follows: -

Section 1:   to deal with the normal use of CSC practices in the writing of sentences

Section 2:   to deal with the violation of CSC to be applied by the students while making sentences

For the purpose of making the questionnaire the researcher had chosen different vocabulary items and jumbled them together in an anagrammatic shape and the students are asked to make sentences out of those jumbled vocabulary items written. In the first section, simple

coordination was used and in the last section, the sentences can only be made using the possible violation of CSC. In this section, there were two choices given and that had been told to the respondents that two possible sentences can be arranged from these words and if they had more than two choices, they could make those as well; in the case of their unawareness of even the second choice they were free to make just one sentence. So, in this way it was analysed whether the students were able to comprehend the concept of CSC or not.

DATA ANALYSIS

The response for the first ten sentences was required in only to make a single sentence, so the descriptive of these ten sentences are displayed in the first table.

		Frequency	Percent	Valid Percent	Cumulative Percent
One	Right	140	97.2	97.2	97.2
	Wrong	4	2.8	2.8	100.0
	Total	144	100.0	100.0	
Two	Right	56	38.9	38.9	38.9
	Wrong	88	61.1	61.1	100.0
	Total	144	100.0	100.0	
Three	Right	53	36.8	36.8	36.8
	Wrong	91	63.2	63.2	100.0
	Total	144	100.0	100.0	
Four	Right	83	57.6	57.6	57.6
	Wrong	61	42.4	42.4	100.0
	Total	144	100.0	100.0	
Five	Right	72	50.0	50.0	50.0
	Wrong	72	50.0	50.0	100.0
	Total	144	100.0	100.0	
Six	Right	63	43.8	43.8	43.8
	Wrong	81	56.3	56.3	100.0
	Total	144	100.0	100.0	
Seven	Right	102	70.8	70.8	70.8
	Wrong	42	29.2	29.2	100.0
	Total	144	100.0	100.0	
Eight	Right	98	68.1	68.1	68.1
	Wrong	46	31.9	31.9	100.0
	Total	144	100.0	100.0	
Nine	Right	70	48.6	48.6	48.6
	Wrong	74	51.4	51.4	100.0
	Total	144	100.0	100.0	

	Right	121	84.0	84.0	84.0
Ten	Wrong	23	16.0	16.0	100.0
	Total	144	100.0	100.0	

The first sentence was quite easy; that is why there were only four respondents who produced wrong sentences, that is, only 2.8%.

The frequency for the second jumbled words group was 56 who produced right sentences but 88, that is 61.1%, who were unable to make a sentence.
According to the table, 53 students (36.8%) have given the correct answer in response to the 3rd group and 91 students (63.2%) were unable to make right choice.

In the fourth group of words 42.4% i.e. 61 students failed to produce right sentences but 57.6% (83 out of 144) students produced correct sentences.

Sentence 5 produced 50% right answers and 50% wrong answers by the respondents as the number of students were equal in both right and wrong domains i.e. 72, 50% for each side.

The students were asked to make sentence 6 from the jumbled word list and 81 students out of 144 were unsuccessful i.e. 56.3% out 100% and the remaining 43.8% students i.e. 63 in number, were successful in making the right series of jumbled words.

According to the frequency measures applied on the 7th sentence, the percentage shows more samples produced the right result, that is 70.8%, that is the highest as compared to the wrong responses i.e. 29.2%.

There are 68.1% students (98 out of 144) who succeeded in making right sentences while 31.9% students (46 out of 144) failed in the 8th group of jumbled words.

To make sentence out of the 9th group of jumbled words 51.4% (74 out of 144) failed in the construction while 70 students (48.6%) constructed the right sentence.

In response to the tenth group of words, the frequency shows that 84 % respondents passed in this sentence construction while only 16 % failed in creating this sentence.

For the next ten words groups needed to make two sentences out of each group, the result is given in the under-mentioned table:

Table: 2

		Frequency	Percent	Valid Percent	Cumulative Percent
Eleven	both right	8	5.6	5.6	5.6
	both wrong	66	45.8	45.8	51.4
	one right	70	48.6	48.6	100.0
	Total	144	100.0	100.0	
Twelve	both right	15	10.4	10.4	10.4
	both wrong	64	44.4	44.4	54.9
	one right	65	45.1	45.1	100.0
	Total	144	100.0	100.0	

According to the frequency measures applied on the jumbled word series number 11 the percentage is shown that more samples produced only one correct response that is 48.6% that is the highest as compared to both wrong and both right as consecutively 48.8%, and 5.6%,from highest to lowest.

For the twelve jumbled word group there were 45.1% respondents (65 out of 144) who produced one correct sentence. There were 44.4 % respondents who were unable to produce any sentence out of that series of words and the remaining 10.4% students produced two correct sentences.

Thirteen	both right	25	17.4	17.4	17.4
	both wrong	46	31.9	31.9	49.3
	one right	73	50.7	50.7	100.0
	Total	144	100.0	100.0	

The above given table is showing that 17.4% (25 out of 144) responses were in the production of both right sentences and 46 samples i.e. 31.9% were both wrong, whereas 50.7% students produced one correct sentence.

Fourteen	both right	29	20.1	20.1	20.1
	both wrong	60	41.7	41.7	61.8
	one right	55	38.2	38.2	100.0
	Total	144	100.0	100.0	

When frequency measures were applied on the responses of jumbled words series number 14, the above table was generated which shows that 41.7% students' response was both wrong, only 20.1% students were both right and 38.2% samples produced one right sentence.

Fifteen	both right	37	25.7	25.7	25.7
	both wrong	51	35.4	35.4	61.1
	one right	56	38.9	38.9	100.0
	Total	144	100.0	100.0	

In response to the series number 15, only 25.7% (37 out of 144) respondent were successful in producing both right sentences, but 38.9% students produced only one right sentence, and 35.4% (51 out of 144) respondents were unable to produce either sentence right.

Sixteen	both right	3	2.1	2.1	2.1
	both wrong	99	68.8	68.8	70.8
	one right	42	29.2	29.2	100.0
	Total	144	100.0	100.0	

The above given table is showing the frequency measure in response to the students' effort in producing sentences out of the series of jumbled words number 16. It shows only 2.1% students 3 out of 144 were able to generate both right sentences but 99 out of remaining 141 students failed to produce either sentence right and 29.2% i.e 42 only were able to write one correct sentence.

Seventeen	both right	8	5.6	5.6	5.6
	both wrong	117	81.3	81.3	86.8
	one right	19	13.2	13.2	100.0
	Total	144	100.0	100.0	

The aforesaid table is showing that only 8 students out of 144 i.e. 5.6% were able to write both correct sentences whereas 13.2% students 19 only produced one right answer and 117 remaining students (81.3%) produced both wrong sentences.

Eighteen	both right	5	3.5	3.5	3.5
	both wrong	123	85.4	85.4	88.9
	one right	16	11.1	11.1	100.0
	Total	144	100.0	100.0	

According to the above frequency table, 123 out of 144 respondents failed to produce either sentence right, while only 3.5% students were right in both sentences with a comparison to the 16 students whose one sentence was right and the other was wrong.

Nineteen	both right	6	4.2	4.2	4.2
	both wrong	95	66.0	66.0	70.1
	one right	43	29.9	29.9	100.0
	Total	144	100.0	100.0	

The result of frequency measures of the series of jumbled words – 19 produced the abovementioned results shown in the table, which shows that only 4.2% students i.e. 6 in number were able to write both correct sentences whereas 95 student out of the remaining 138 i.e. 66%, were unable to produce any one correct sentence but 29.9% students show one wrong answer.

Twenty	both right	18	12.5	12.5	12.5
	both wrong	68	47.2	47.2	59.7
	one right	58	40.3	40.3	100.0
	Total	144	100.0	100.0	

There are 40.3% people (58 out of 144) who responded with one correct response, and 12.5% total 18 students were in both right production whereas 68 out of 144 (47%) failed in producing any one correct answer.

Table: 11

Independent sample t-test statistics - 1

		N	Mean	Std. Deviation	T Value	Sig. (2-tailed)
group-1	Male	72	1.0417	.20123	1.011	.314
	Female	72	1.0139	.117785		
group-2	Male	72	1.5833	.49647	-.680	.498
	Female	72	1.6389	.48369		
group-3	Male	72	1.7361	.44383	2.636	.009
	Female	72	1.5278	.50273		

Male and female are not significantly different in solving the first series of jumbled words as the 2-tailed value is greater than .05 i.e. the cut value of significance that means males solve it quicker than the females as the means 1.04 and 1.01 with the std. Deviation .20 and .11 respectively of both gender are telling us. The second series of the jumbled words created the opposite result than the first one here; the mean value for the males is 1.58 with the std. Deviation .49 and the mean value for the females is 1.63 with std. deviation of .48 therefore the 2-tailed value is .498 which means that here both the genders are not significantly different regarding the construction of the second sentence. Males and females are significantly different with respect to the 3rd series of jumbled words.

Table: 12

Independent sample t-test statistics - 2

		N	Mean	Std. Deviation	T Value	Sig. (2-tailed)
group-4	Male	72	1.4722	.50273	1.178	.241
	Female	72	1.3750	.48752		
group-5	Male	72	1.5278	.50273	.663	.508
	Female	72	1.4722	.50273		

This is the result of applying the independent sample t test on two series and 4th series with the mean score of 1.47 with std. deviation .50 for male and for female, the mean score is 1.37 with std. deviation .48; this shows through the cut value of .241 that here both genders are not significantly different regarding the construction of sentence, but here again males are at quite ease in the construction process, the same as in series number 5 where males have 1.52 mean value with std. deviation is .50 but the mean value for the females is 1.47 with std. deviation .50 having a 2-tailed value of .508.

Table: 13

Independent sample t-test statistics - 3

		N	Mean	Std. Deviation	T Value	Sig. (2-tailed)
group-6	Male	72	1.5694	.49863	.167	.868
	Female	72	1.5556	.50039		
group-7	Male	72	1.2778	.45105	-.364	.716
	Female	72	1.3056	.46387		
group-8	Male	72	1.3056	.46387	-.355	.723
	Female	72	1.3333	.47471		
group-9	Male	72	1.5694	.49863	1.333	.185
	Female	72	1.4583	.50176		
group-10	Male	72	1.1111	.31648	-1.595	.113
	Female	72	1.2083	.40897		

Males and females are not significantly different in solving the sixth series of jumbled words as the 2-tailed value is greater than .05 i.e. the cut value of significance that means males solve it slightly quicker than the females as the means 1.56 and 1.55 with the std. Deviation .49 and .50 respectively of both genders.. Series number 7 of the jumbled words created the opposite result than the first one; here, the mean value for the males is 1.27 with the std. Deviation .45 and the mean value for the females is 1.30 with std. deviation of .46; therefore the 2-tailed value is .716, which means that here both the genders are not significantly different regarding the construction of the second sentence. Males and females are not significantly different with respect to the 8th series of jumbled words. The 9th series with the mean score of 1.56 with std. deviation .49 for male and for female, has a mean score of 1.45 with std. deviation .50; this shows through the cut value of .185 that here both genders are not significantly different regarding the construction of sentence, but here again males are at ease in the construction process, the same as in series number 10 where males have 1.11 mean

value with the std. deviation of .31, but the mean value for the females is 1.20 with a std. deviation of .40 having a 2-tailed value of .113.

Table: 14
One Way ANOVA Test - 1
Group Statistics (Descriptive)   **ANOVA**

		N	Mean	Levene Stat. Sig.		Sum of Squares	Eta Square	df	F	Sig.
Group-11	BA	48	2.5417	.198	Between Groups	1.556	0.03	2	2.204	.114
	BSc	48	2.2917		Within Groups	49.750		141		
	BCom	48	2.4583		Total	51.306		143		
Group-12	BA	48	2.4792	.402	Between Groups	1.347	0.02	2	1.550	.216
	BSc	48	2.2500		Within Groups	61.292		141		
	BCom	48	2.3125		Total	62.639		143		
Group-13	BA	48	2.6250	.152	Between Groups	6.292	0.07	2	5.859	.004
	BSc	48	2.1458		Within Groups	75.708		141		
	BCom	48	2.2292		Total	82.000		143		
Group-14	BA	48	2.3958	.448	Between Groups	3.431	0.04	2	3.188	.044
	BSc	48	2.1042		Within Groups	75.875		141		
	BCom	48	2.0417		Total	79.306		143		
Group-15	BA	48	2.2083	.528	Between Groups	.431	0.004	2	.337	.714
	BSc	48	2.1042		Within Groups	90.063		141		
	BCom	48	2.0833		Total	90.493		143		

A one-way between groups analysis of variance was conducted to explore the impact of discipline on creating right sentences out of some jumbled words in 5 different series. Participants were divided into three groups according to their discipline (BA, BSc, and B Com). There was a statistically significant difference at the $p < .004$, level in creating correct sentences for three disciplines $F_{(2, 141)} = 2.20$, $p > .114$; $F_{(2, 141)} = 1.55$, $p > .216$; $F_{(2, 141)} = 5.85$, $p < .004$; $F_{(2, 141)} = 3.18$, $p < .044$; $F_{(2, 141)} = .337$, $p > .714$ respectively for all 5 series. Despite reaching statistical significance in series number 3 only, the actual difference in mean scores between groups was quite small, whereas statistical significance was not achieved in series 1, 2, 4, and 5 so the actual difference in the mean score between groups was large for 1st, 2nd and 5th series but for the 4th series the effect size was medium.

The effect size, calculated using eta squared, was 0.03, 0.02, 0.07, 0.04, and 0.004 respectively for all five series. Post-hoc comparisons using the Descriptive indicated that the mean score for BA(M=2.54),BSc (M=2.29) and B Com (M=2.45); BA (M=2.47), BSc (M=2.25), and B Com (M=2.31); BA (M=2.62), BSc (M=2.14), and B Com (M=2.22); BA (M=2.39), BSc (M=2.10), and B Com (M=2.04); BA (M=2.20), BSc (M=2.10), and B Com (M=2.08) respectively for series 1 to 5 were not significantly different from each other in every single series shown by the Levene Statistics Sig. of .198, .402, .152, .448, and .528 respectively from 1st series of words to the 5th series.

Table: 15
One Way ANOVA Test - 2
Group Statistics (Descriptives)   **ANOVA Main**

		N	Mean	Levene Stat. Sig.		Sum of Squares	Eta Square	Df	F	Sig.
group-16	BA	48	2.3750	.195	Between Groups	.792	0.02	2	1.659	.194
	BSc	48	2.2083		Within Groups	33.646		141		
	BCom	48	2.2292		Total	34.438		143		
group-17	BA	48	2.0417	.001	Between Groups	.931	0.03	2	2.600	.078
	BSc	48	2.0000		Within Groups	25.229		141		
	BCom	48	2.1875		Total	26.160		143		
group-18	BA	48	2.0208	.079	Between Groups	.222	0.01	2	.786	.458
	BSc	48	2.1042		Within Groups	19.938		141		
	BCom	48	2.1042		Total	20.160		143		
group-19	BA	48	2.2917	.516	Between Groups	.347	0.008	2	.625	.537
	BSc	48	2.1875		Within Groups	39.146		141		
	BCom	48	2.2917		Total	39.493		143		
group-20	BA	48	2.3958	.483	Between Groups	1.847	0.02	2	2.066	.131
	BSc	48	2.3125		Within Groups	63.042		141		
	BCom	48	2.1250		Total	64.889		143		

To explore the impact of discipline on creating right sentences from jumbled words series number 6 to 10, a one-way between group analysis of variance was conducted. Participants were divided into three groups as mentioned above. There was no statistically significant difference in creating correct sentences for the three disciplines F (2, 141) = 1.65, p > .194; F

= (2, 141)=2.60, p > .078;F (2, 141) = 0.78, p < .45; F=(2, 141)= 0.625, p < .537; F=(2, 141)=2.06, p > .131 respectively for all 5 series. Statistical significance was not achieved in all five series from 6 to 10 so the actual difference in the mean score between groups was small for the 3rd and 8th and 9th series, but for the 6th, 7th and 10th series the effect size was medium. The effect size, calculated using eta squared, was 0.02, 0.03, 0.01, 0.008, and 0.02 respectively for all five series. Post-hoc comparisons using the Descriptive indicated that the mean score for BA (M=2.37),BSc (M=2.20) and B Com (M=2.22); BA (M=2.04), BSc (M=2.00), and B Com (M=2.18); BA (M=2.02), BSc and B Com (M=2.104); BA and B Com (M=2.29), BSc (M=2.18); BA (M=2.39), BSc (M=2.31), and B Com (M=2.12) respectively for series 6 to 10 which were not significantly different from each other in every single series shown by the Levene Statistics Sig. of .195, .001, .079, .516, and .483 respectively from the 6th to the 10th series of words.

FINDINGS

After the analysis of the data these are some of the findings: -

1. The study shows that only 35.14% students of graduation from public sector colleges of Lahore have acquired the Coordinate Structure Constraint.
2. The low percentage of acquisition shows that either they may not be properly trained in using CSC or they have lack of interest in this important grammatical aspect.
3. Male gender is at the better half regarding the acquisition of Coordinate Structure Constraints as shown in the independent sample t test.
4. As far as the difference of acquisition discipline wise is concerned the students of BA are good at making sentence with the use of Coordinate Structure Constraints, whereas BCom and BSc students respectively are after BA in making Coordinating constructions.
5. The research shows that the graduate students of Public sector colleges from Lahore city are not given enough understanding or practices regarding the use of CSC in sentences.
6. The research shows that the students are apt in creating simple and short sentences whereas they don't feel confident to do long sentences.
7. The inability to create long sentences also shows that they may be unable to parse long sentences in their minds.
8. The current research finds that BSc students are not giving much importance to CSC while studying as the result shows.
9. BA students are giving much importance to CSC as the high average of BA students are successful in making sentences with using CSC.
10. CSC is an important grammatical aspect which is not being given importance by the teachers as a very low percentage of students feel confident in making coordinating constructions.

Discussion and Conclusion

The current research project was a brain child of the researcher and his discussion with one of his class fellows during the class of applied linguistics and he thought to work on it as he has observed in his teaching career that most of his students are totally unaware of using coordination in their writings. So, he started working on it to analyse whether the graduate students are able to use conjunction in making different sentences.

Resultantly it was observed that mostly the graduate students are unable to use conjunction sufficiently in their writing and that is the reason of their inefficiency in the annual examination which is writing and memory based.

After going through all the rigorous analysis process of the data collected to check whether the public sector college students of graduation in Lahore City have acquired Coordination Structure Constraints or not and if they have succeeded in acquiring CSC, it is explored at what percentage of students are successful. Further, in this study the students were selected from three disciplines and of both genders in equal proportion.

The study shows that only 35.14% students of graduation from public sector colleges of Lahore have acquired the CSC; that is a very low percentage as far as the progress in the English language is concerned.

The findings of this research work show that CSC is a grammatical aspect of the English Language and its teaching and learning. Looking back on the history, the use of CSC in writing English essays or any paragraph is a must as it shows the smooth grip of the student on the mechanics of the English language. In this research the acquisition of Coordination Structure Constraint was checked in the final year graduate students from Lahore public sector colleges.

The research was started from some specific objectives in mind which were noted down in the very start; the first objective was to investigate the coordination constraints in accordance with its acquisition in the second language perspective. As we know, CSC was a constraint given by Ross (1967) in his acclaimed dissertation which says that in any coordinate structure no conjunct or any element of a conjunct may be moved out of the group; in this sense we can understand it as a kind of restriction put on the construction of a sentence by the grammar of that very language. In the curriculum of graduation English grammar is a necessary part of it (http://pu.edu.pk/page/show/course_ouline_ba_eng.html) and the students are provided with ample time and practice by their teachers so that they may understand this aspect, as coordination is a necessary part of grammar.

To meet this objective the researcher collected some words and jumbled in them in some series and the respondents were asked to produce sentences from each series. Some of the

students were successful in creating the sentences and most of the students badly failed to meet this requirement as only 37.14% of students made correct sentences. It shows that either the students are lacking expertise in this aspect or they are not giving any importance to coordination construction, but in either way they were unable to create correct sentences out of those jumbled words arranged in series.

The second objective of the study was to make an explicit statement about the Pakistani Graduate Students' acquisition of Coordination Structure Constraint for which the frequency measures were used to get the percentage of the graduate students regarding their level of syntactic acquisition; as aforementioned the total percentage of the successful students is very low only 37.14% out of 100%, which means 62.86% of the students: a lot failed to comply with the questionnaire. With respect of each statement there was only first series of words for which the 97.2% students were able to create correct sentence; that is highest ratio of solving questions, but in other series the percentage was gradually becoming lower to the lowest. It is not understandable why the students, despite being given ample time and resources, are not overcoming the grammatical concept of the English language. As we know that the English language is taught as a compulsory subject in Pakistan but still our students are lagging far behind the standard regarding the use of different grammatical elements in their writing. That is the reason of most of the students are failing in the exams because our exams require the ability of writing.

To explore the gender and discipline based differences in the acquisition of CSC by the Graduate learners of Pakistan was the last objective of this study for which the researcher had included 2 demographic variables vis-à-vis gender and discipline. So to determine the gender- wise differences, an independent sample t test was used, which shows that at most the male gender is good at acquisition level of CSC but females are not up to the standard. Female folk are considered more prone towards language proficiency but the result shows that at least in this syntactic element they are behind the men folk on the ladder of acquisition.

Mostly three disciplines are offered in the public sector colleges at graduation level namely, BA, BSc and BCom. For the discernment of difference at discipline level one way ANOVA was used, which gives a good result regarding discipline-wise differences in the acquisition of CSC. The result shows that the students of a BA are good at creating coordinating construction; after that the successful discipline was a BCom and a BSC, which is considered the most intelligent lot of graduation, but they failed badly in using coordination structure constraint. Getting admission in BSc requires much effort and very good grades but it seems they give less importance to the English language. The reason might be that BA and BCom students study English grammar continuously for two consecutive years in which the syllabus of BA and BCom is divided into literature and language but BSc students study English language for just one year and the syllabus of that year is riddled with literary aspects. That

is why they did not perform well in grammar completion tasks required to fill this questionnaire.

The study concludes that Coordination Structure Constraint is a very important aspect of English grammar. The students of graduation at public sector colleges are being taught English grammar in the classrooms as per the agreement of the syllabus proposed for the BA, BSc and B Com by the concerned universities. Classroom teaching at public sector colleges for graduation is divided into grammatical and literary aspects, which means ample time is provided for the preparation of English grammar at graduation level. It also means that most of the students see English grammar as a fatigue and a waste of time, so they are not focusing on its details; resultantly they failed in such types of tasks as required for this study and the same reason is behind their getting low grades in the annual examination in the subject of English. The study also concludes that males are working hard to meet the requirements of English grammar which is shown in the results of independent sample t test, as males outperform females in creating coordinating constructions.

Recommendations

The current research study recommends the following:

1. The teachers should spend more time in teaching and practising different grammatical points because only lecturing did not prove fruitful.
2. Curriculum setters must peep through the teaching practices and lacking found in the syllabus, and they should revise it.
3. Students should enhance their grammar practice activities at home and in the classroom so that they may be fluent in the use of English grammar.
4. Teachers should include activities for the practice of English grammar in the classroom and they may assign home tasks to the students as well.
5. Teachers should assess their students now and then in grammatical knowledge.
6. Teachers should give classroom-based evaluation near before the final examination.
7. Students must consult the teacher in any case of difficulty regarding the elaboration of any grammatical point.
8. Students' and teachers' interaction is necessary for any type of learning because without positive interaction, there will be no positive results.
9. The syllabus of English for BSc students must be revised to include sufficient grammar points so that they should feel confident in dealing with English grammar.
10. The government should revise the syllabus of the BA, BSc and B Com to augment grammatical portion and practise points in line with the international standards.
11. The government should constitute a syllabus revision committee that must revise the syllabuses after a stipulated time slot, so that the syllabuses must be aligned with the needs of the students and requirements of the practical world.

12. Coordinate Structure Constraint is a grammatical aspect and should be studied from some other angles.

13. Any other syntactic elements can be studied from the point of acquisition based upon the current study.

14. Other grammar point must be studied from the same population to know whether the students are really lagging behind only in this aspect or in the whole English grammar.

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