

CONCORD AND SELECTIONAL RESTRICTION RULES: A STUDY OF THE ENGLISH VERB SYSTEM AMONG SENIOR SECONDARY III STUDENTS IN NSUKKA EDUCATION ZONE

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Abstract

The fact that the English verbs have semantic features that project meanings which determine the company that words keep in sentences is without doubt. The basic objective of this study is to examine the violation of the principles guiding the co-occurrence of the English verbs and other grammatical elements in sentence among senior secondary school students. The effects of the violation on language communication were also investigated. The investigation is based on errors and deviant patterns of the English verbs in sentences resulting in the violation of the rules of selectional restrictions. The problem which this study investigated is therefore the violation of selection restriction rules which results in anomalous sentences in written expressions of senior secondary school students. Senior Secondary School students III in Nsukka education zone are thus used for the study. The population lacks competence in the concord and selectional restrictions imposed by the English verbs to their arguments. The study also indicates that there is a hierarchy of difficulty encountered by the population in the division of the verbs studied. Though the population showed competence in some areas, the overall analysis shows the population to be incompetent.

Background of the study

The knowledge of the rules of grammar is important for meaningful communication, since there is a strong connection between meaning and communication. Communication, which is made possible through language, is the exchange of information between, and among people. Language, on the other hand, is a system which uses a set of symbols; and for the symbols to be meaningful, they must be organized in a systematic way. Meaning itself is the content conveyed in communication by language; the thought in the mind of the speaker or writer or reader who decodes it (Magwa & Matasa 12).

Confucius, according to Eyisi, asserts: "If the language is not correct, then what is said is not what is meant, then what ought to be done remains unknown; ... hence, there must be no arbitrariness in what is said..." (xi).

From the foregoing, it is apparent that communication is made possible through language and any user's command of the language in general and vocabulary in

particular hinges largely on his/her knowledge of the rules establishing the acceptable structural patterns of the linguistic resources. Onuigbo (105) observes also that a structure of the thought pattern, that is a sentence, may be unacceptable not just because of the grammatical errors, but also because of the violation of general principles of grammatical co-occurrence.

The rules of concord govern the relationships of the various parts of the English sentence. There are grammatical concord, notional concord, pronoun antecedent agreement, coordinated subjects with *and*, coordinative appositive, agreement between personal adjective and verb and other special forms of agreements such as amounts and measurements, names and titles, games and diseases (Drennan 3).

Apart from these concord types, there is another special factor that plays a role in how grammatical units can relate to one another in sentences. This factor is the principle of *Selectional Restriction Rules* (SRR), which is the major concern of this study. Selection restrictions, also referred to as *selection constraints* or *sortal constraints*, can be defined as “semantic constraints which a predicate imposes on its arguments” (Soehn 1). The phenomenon of Selectional restriction rules was first described by Chomsky (114) as a “selection relation between two propositions in a sentence”. To Myres and Blumstein (4), selection restrictions are “those semantic restrictions that any verb places on the argument of the verb”. For instance, the verb ‘to mail’ in “Chika mailed the letter” requires that the noun in subject position for the verb, that is, the ‘mailed’ must have certain semantic characteristics. The ‘mailer’ must be animate, human, and capable of volitional action. Likewise, the noun in object position must be something ‘mailable’ – it must be an object that does not exceed the size and weight restriction of the postal service.

According to McCarvley in Artley (1), selection restriction is a “constraint upon the possible messages which one can convey in a language”. Aarts (94) sees it also as “the restriction imposed by the predicates of the sentence on their arguments which can be handled in terms of thematic roles”. Onuigbo (105) explains it as the rule that determines the co-occurrence of grammatical elements on the fact that “one element of a sentence just projects a feature which determines the other elements to be selected”.

The violation of the rules of selection restriction, according to Yankson (*Better English* xiii), “tends to elicit very unfavourable responses from both the native and non-native speakers and hearers (of the English language) alike”. Such errors reflect badly on the speaker’s personality; they mirror his educational background and portray his interlanguage as a developing grammar that borders on lack of proper linguistic awareness. We agree with Yankson who says that nobody learns a language without goofing. However, the violation of selection restriction rules by the users of the English language points to the fact that they are yet to show

mastery of the language. In order to communicate effectively in both speech and writing, therefore, they should master the rules of the language.

However, the users of English language, in our area of study, seem to be ignorant of the semantic features projected by some grammatical elements such as verbs and nouns. The features projected determine the co-occurrence of the grammatical units in sentences. According to Chomsky (1965), Wagner (2005) and Fromklin and Rodman (2007), a noun may possess the following features: [\pm concrete, \pm animate, \pm human, \pm plural, \pm abstract, \pm masculine] while a verb may possess such feature as [\pm animate, \pm human, \pm concrete, \pm movement, \pm liquid, \pm surface].

Most often, users mismatch these features resulting in unnatural, anomalous sentences. Such sentences are deviations from the norm; they violate the rules of selectional restrictions and therefore lack grammaticality and acceptability; problems of intelligibility vis-à-vis lack of communication result. This is the problem which this study investigates.

It is important to note at this point that this type of study on selection restriction rules has not been carried out among secondary school students. Evidence available from research conducted shows that previous studies on selection restriction rules violations were carried out among university undergraduates and aphasic patients. In addition, previous studies involved subject, verb and object violations and extensively made use of active, passive and prepositional sentences which the study population was asked to interpret. Previous studies also made use of lines of poetry with a wide range of combinations of linguistic rule violations. The studies were designated to investigate the extent to which a coherent syntactic form is necessary to compute or analyse semantic relationships between verbs and their arguments specifically. The studies were also designed to explore the processing of selection restrictions in both normal persons and aphasics.

Worthy of note, at this juncture, is the fact that the rates at which the various rules of grammar are violated have been of great concern to language researchers. Available information in the existing literature therefore indicates that some scholars have carried investigations on the restrictional rules among users of the English language (Moore & Biederman 1979; Anyawu 1990; Hoffman & Honeck 1979; Myres & Blamstern 2008). However, none of such works has been studied using secondary school students, especially those in Nsukka educational zone of Enugu State of Nigeria, where English is used as a second language. Again, the instrument for data collection, methods of data elicitation and analysis of those earlier studies are at variance with the present one. The foregoing scenarios, together with the variations existing between previous studies and this one, not only underlie the cause of the present research endeavour, but validate it – to fill the lacuna.

Objectives of the Study

The basic objective of this study is to examine the violation of the principles or rules guiding the co-occurrence of the English verbs and other grammatical elements in sentences by the SSS III in Nsukka education zone. The effects of the violation on language communication were also investigated. The investigation was based on errors and deviant patterns or forms of the English verbs in sentences resulting in the violation of the rules of selectional restrictions.

Research Problem

The English verbs and nouns project semantic features in sentences. These features determine the co-occurrence of the grammatical units in utterances. Experience of the researchers, however, shows that most of the English language users in the area of the investigation appeared to be ignorant of the constraints or restrictions that predicates impose on their arguments. As a result, they flout the restriction rules by matching these grammatical units or elements without due regard for the various semantic features of the verbs and nouns.

This violation of selection restriction rules results in anomalous sentences. The problem which this study investigates is this type of selectional restriction rules violations in written expressions of senior secondary school students in Nsukka education zone.

Theoretical Framework

The notion of selectional restriction rules was originally introduced with the transformational grammar paradigm in the sixties by Chomsky in his book, *Aspect of the Theory of Syntax* (1965). He refers to it as "selection relation between two propositions in a sentence ... and such selection relations determine grammatical relations (114). A particular controversial issue in the discussion of selectional restriction rules at that time was whether they are syntactic or semantic phenomenon (Wagner 34). Chomsky (1965) models selection restrictions as a part of syntactic component. In his theory, nouns are characterized by features such as [\pm Animate, + Human, - Abstract]. Wagner (34) explains that a lexical entry for a word contains, apart from its phonological form, "a so-called complex symbol"; that is, a bundle of syntactic features as illustrated by the following entries for "sincerity" and "boy" respectively: (sincerity [+N, +Det⁻, -count + Abstract, +Inanimate . . .]) (boy[+N, +Det⁻, +Count, +Animate +Human . . .]). Features like [$-$ Count], [$-$ Abstract], [+Animate], and [+Human] are crucial for characterizing the selection restrictions that a verb imposes on its argument. For example, 'frighten' selects an abstract subject and an animate object. The lexical entry for this verb is: (frighten [+V, + NP, +[Abstract] Aux⁻Det[+Animate], [+Object . . .]). In this entry, selection

restrictions are expressed by the features: [+ (Abstract) Aux — Det [+Animate]]. According to Wagner, technically, these features encode restrictions for the deep structure context into which the verb 'frighten' occurs in a deep structure, then it must be immediately preceded by a category with the feature [+Abstract] and an auxiliary; and it must be immediately followed by a determiner and a category specified as [+Animate]. Chomsky's (106 – 7) base component provides the features [+Animate] and [— Abstract] for nouns. Furthermore, they introduce an obligatory auxiliary (Aux) category preceding the VP (verb phrase). The noun phrase (NP) which precedes auxiliary is the subject, the NP which follows the main verb is the object of the sentence. Thus, the restriction [+Abstract] refers to the head of the subject of the subject NP, while the restriction (+Animate) refers to the head of the subject NP, while the restriction (+Animate) also refers to the head of the object NP.

Generally, the violation of the selectional restrictions results in an unnatural, anomalous sentence. Though Chomsky models selection restriction as a part of syntactic component, he does not reject the alternative possibility to treat them as part of semantic component, because he states that the final decision on this issue requires deeper knowledge about syntax and semantics (159 – 160).

In contrast to Chomsky (1965), Katz and Fodor, cited in Wagner (37), treat selection restriction as semantic phenomenon. In their framework, selection restriction plays a crucial role for solving ambiguities during semantic interpretation of syntactic structures. They agree that the different senses of a word are encoded in its lexicon entry by semantic features.

We wish to observe that semantic markers are the systematic features of the semantic structure of language. They are capable of delimiting the different word senses, while the distinguishers provide idiosyncratic aspects of each sense.

Yankson (*An Introduction 2*) states: "The violation of collocation rules is also very common in literature". He makes a reference to Ayi Kwei Armah's *Fragments*, where Armah refers to Accra as "a prolific crater . . . , a physical destruction ... and broken bodies". Juana, a character in that novel wonders why she would care for the mental wreck in her care which could eventually be 'aborted' by the cruel social system as a woman aborts an unwanted fetus. In this novel, 'aborted town', a noun with the feature [— Animate] has been given features [+Animate], [+Human]. In the words of Yankson, "conferring animate and human features on a normally inanimate noun 'town' is a breach of selection restriction rule". This is so because, according to Yankson, the English language code, the verb 'abort' selects as its subject a noun phrase, a lexical item with the feature [+Human].

Unlike Chomsky (1965) and Katz and Fodor in Wagner (2005), McCawley (125 – 136) cited in Wagner (2005) claims that selectional restrictions refer to semantic, not to syntactic properties. He observes that there is no English verb which

requires that its subject is syntactically classified as feminine; that is, pronominalised to 'she' which is the gender for women and countries. McCawley also discusses some apparent counter-examples, one of which is that 'count' seems to require a plural object:

- a. I counted the boys, but not
- b. I counted the boy.

Thus, the restriction here is not that the object has to be syntactically classified as plural, but that it denotes a set of entities as opposed to a singular entity. This is a semantic property, argues McCawley. This example, like many others, suggests that selectional restrictions only refer to semantic information.

On the other hand, Wagner (40) argues that apart from the treatment of selection restrictions as a semantic phenomenon, "there is an additional reason for favoring the approach of Katz and Fodor over that of Chomsky". He comments: "While Chomsky regards selectional restrictions as relating to lexical items, (for example, a verb and the head noun of its subject), Katz and Fodor model them as relating to a lexical item and a constituent (for example, a verb and its subject NP)".

Onuigbo also avers that there are other factors that determine the co-occurrence of grammatical elements in a sentence in order to achieve meaningful communication "apart from grammatical concord, notional concord and the law of proximity" (105 – 6). The rule that governs such a relationship, according to him, "is not based on the concord of person or gender or number" but on the fact that "one element in a sentence just projects a feature that determines the co-occurrence of other elements to be selected". The rule that governs the relationship between the grammatical units in a sentence he calls "selectional rule". This rule governs the kind of subject, object or prepositional complement that occurs with a given verb. The two grammatical elements, according to Onuigbo, "may not necessarily share the same feature as plurality". He illustrates his point with the following sentences:

- a. The protesting student scattered in different directions.
- b. Many communities suffer the ravages of coal spilling.

He concludes that the two sentences are grammatically well-formed, but express oddity in their meanings. This is so because one student cannot scatter in different directions just as a coal, a solid mineral, cannot spill over a surface. The two sentences are therefore unacceptable for violating selectional restriction rules.

Soehn (2) is another theorist who argues that there is a diversified view about selection restrictions. This view notwithstanding, he asserts: "There is a general agreement about the central point of compatibility between verbs and their arguments." He illustrates his points with the following sentences:

- a. Kim ate a motor-bike.
- b. There is an apple bathing in the river

He explains that the verb 'eat' requires an edible object and the action of 'bathing' can only be fulfilled by an animate actor. There is therefore no compatibility between

the verbs 'ate' and its object, 'motor-bike' and 'bathing' with its argument, the actor, that is an apple. The above examples violate the rules of selectional restrictions. Soehn (4) also comments that selection restriction rules violation can be 'repaired' or 'neutralized'. According to him, information from selection restrictions mark sentences as odd only if one has in mind the lexical meaning of the word and a 'normal' context utterance. In addition, there are certain contextual features that render expressions like: 'ate a motor-bike' perfectly grammatical. Thus, a violation of selectional restrictions is highly context sensitive.

It can be deduced from the above arguments that selectional restrictions are part of the lexical information, and that violations of selection restrictions are not totally un-interpretable or meaningless especially if the expression can be referred to, or neutralized by a suitable context of utterance.

The above view is not different from Kempson's view as expressed in Akwanya (*Semantics & Discourse* 99 – 103). She identifies some areas of problems with the concept of selectional restrictions. She argues that "when embedded as a complement to verbs such as 'say', the selection rules can be violated without giving rise to an oddity of the entire sentence in which they occur". Akwanya illustrates with the sentence: "Someone says that Uche flows smoothly in Onitsha." Another point Kempson made is that in negative sentences or environments, strings that violate the selection restriction rules may prove acceptable. Akwanya illustrates this point also with the examples: "A shout can't walk down the street"; "flowers neither sew nor spin".

Akwanya, in another development, notes: "Rule violation as a problem encountered at the interface between sub-categorisation rule proposed by Chomsky that talks about lexical insertion or syntactic well-formedness cannot account for ambiguity and anomaly in expression. According to him, "Ambiguity and vagueness arise from the devices of the language itself" (*Semantics & Discourse* 97 – 101). He further says that Chomsky's sentence, "colorless green ideas sleep furiously" has neither sense nor reference, but that there are sentences which may be considered to be syntactically well-formed and even attempt to preserve some meaning, yet they violate selection restriction rules. He illustrates with the following:

- a. Uche flows smoothly at Onitsha.
- b. I can see the shout walking down the street.

The two sentences above, according to him, from the syntactic analytical point of view are well-formed but meaningless, because they describe impossible situations and their truth-value cannot be verified. Sub-categorisation rule states that a verb should come between the subject noun phrase, but it is the duty of selectional (*Semantics & Discourse* 97 – 101) restrictions to determine and specify the kind of verb that can be acceptable in that position. Akwanya avers that there is a "mismatch between the subject noun phrase and the verb" in the above sentences. 'Uche' is an animate subject, and not a mass noun, it must select a kind of verb that is not the

“flow-type”. ‘Walk’ would also be described as occurring in a subject noun phrase containing an animate noun. So ‘Uche’ can neither ‘flow’ nor can ‘shout walk’. The verb ‘flow’ has the following features: [+Liquid, —Animate, —Count]; ‘walk’ has [+Animate, +Human].

Akwanya (*Semantics & Discourse* 100) and Onuigbo (106) are agreed that some restrictions may be imposed on the subject and the predicate of a sentence based on established historical facts. This is so because according to them a proposition is required not just to have a sense, but also reference, where its truth-value will be tested or verified for acceptability. When the restriction imposed by the predicate of this type on a proposition is violated, historical records are distorted. This is so because the selectional restriction imposed on the agreement between two units, that is, the subject and predicate based on established historical facts have, been violated. For example:

- i. General Abacha’s headquarters is in Lagos.

In the above sentence, it is true that Abacha once had a headquarters in Lagos. However, the truth-value of the sentence according to Akwanya (2007) and Onuigbo (2005) depends on whether Abacha still has a headquarters in Lagos at the present. So, the tense of the verb is the problem with the sentence because its truth-value is false.

In order to explain selectional restrictions rules, Aarts (98 – 99) uses the sentences:

- a. The keyboard designed some clothes.
- b. The stapler took a break.
- c. My colleague broke his feelings.

He states: keyboards are not in the habits of designing clothes, staplers do not take breaks, and feelings are not entities that can be broken”. He adds further that we refer to the restrictions imposed by the predicates of the sentences above on their arguments as selection restrictions. He suggests that one possible way to deal with selection restrictions is to assign features to their predicates and arguments. Thus, he assigns the feature [+Animate] to the verb ‘design’ and maintains that the subject must also carry the feature [+Animate]. If the subject does not carry the feature [+Animate], the resulting sentences above are deviants, because ‘keyboard’ is not an animate entity [—Animate], ‘stapler’ is odd because of the same [—Animate], whereas ‘break’ in the third sentence takes an object that carries the same feature, but the objects in the last two sentences above are abstract noun phrases. So, they are deviant.

Van Valin, in Alba and Briones (1), also maintains that selection restrictions are “not expressed directly in logical structures, but are stipulated on an adhoc basis.” He goes on to argue that there is a general lexical principle to account for the fact that the first argument in the logical structure of verbs of perception, cognition, proposition attitude, emotion and internal experience must be a sentient, animate

entity. Valin illustrates his point with the verb 'EAT'. The concept of the English verb 'EAT', according to him, is codified as being prototypically human or animal, and to be consistent with our world model; our commonsense knowledge tells us that in order to eat, one needs a mouth which only human beings or animals have. The English verb 'EAT' has the features [+Animate, +Human, +Animal, +concrete].

We wish to observe that metaphorical expressions typically imply the violation of selectional restrictions. For example, 'drink' selects a human being or an animal as its agent. However, in the sentence: "fast cars drink petrol", in the traditional analysis, this is regarded as a straightforward metaphorical interpretation of the sentence, namely: "fast cars consume (a lot of) petrol". This is compatible with the categorical model of selectional restrictions. Chomsky, himself points out that violations of selectional restrictions can often be interpreted metaphorically, particularly as personification or within an appropriate context (Chomsky 149).

Again, in idiomatic expressions and phrasal verbs, selectional restriction rules can also be violated and the expressions will be acceptable. An example to illustrate this point is:

a. The defense lawyers are going to 'eat' you alive tomorrow.

To eat alive as used in the above sentence is an idiomatic expression meaning to defeat somebody completely in an argument or criticize or punish somebody severely.

b. The coastline is being eaten away year by year. 'Eaten away' as used above in the above expression is a phrasal verb. It means to reduce or destroy something gradually.

From the above discussions, it is clear that there are areas of exception, where selectional restriction rules can be violated. It is also important to note, as Yankson puts it, that when these types of constructions or expressions appear in any other instances, it will be regarded as violations that are not acceptable.

From the above review of related theories, we would like to observe as follows:

Meaningful communication is the goal of every speaker or writer. In view of this, attention is demanded to be given not only to the syntax of an expression, but also to the semantic features of the grammatical elements, especially the verbs in order to avoid ambiguity. Thus, the selectional restrictions of the verbs are very important. The semantic roles of a verb can be realized by different patterns of syntactical components. Accordingly, a certain grammatical relation can express different semantic roles of a given verb. Therefore, it seems more appropriate to model selectional restrictions as referring not only to the surface syntactic relation, but also to the underlying semantic roles.

Also, rather than well-formedness or syntactic correctness, observation of established historical facts makes for intelligibility in communication. We agree with Onuigbo (2005) and Akwanya (2007) who believe that the violation of the restrictions imposed by historical records distort the information being conveyed. It is expedient

therefore that what is intended is what is communicated even as we crave credibility through words; otherwise, we would produce anomalous strings of words.

More importantly, the theories of selectional restriction rules just reviewed throw a lot of insights into the present study. They also provide indispensable impetus to the researchers. In addition to explicating the concept of restrictional restriction rules, they significantly expound the features of the concept. The theories are therefore anchors on which this investigation rests.

The Study Population and Sampling Technique

The study population consists of SS 3 students in Nsukka Education Zone. It is made up of about eight thousand, one hundred and twenty-five students (Ministry of Education, Enugu State, Nsukka Zone, 2011). The SS 3 students are chosen because their level of study marks an end to secondary education. The students are expected to have acquired enough knowledge on the nature and usage of the English verbs that would enable them to use the English language for both general and specific purposes. They are therefore considered to be the best subjects for use in a test of language competence at secondary school level.

We also deem it fit to choose a size that is large enough to be a true representative of the population. The sample is made up of five hundred (500) students that are drawn from twenty-three randomly selected government and private secondary schools in Nsukka Education Zone. There are three local government areas with sixty-one (61) government and twenty-nine (29) private secondary schools respectively.

In order to avoid bias and to achieve our objectives, we adopted a systematic random sampling technique for the selection of the secondary schools from which the sample of the population was drawn. The systematic random sampling technique gave each element of the population an equal and independent opportunity of being part of the sample. The number of secondary schools selected from each of the local governments was based on proportionate stratification random sampling. This ensured that each stratum of the population was proportionately represented in the sample. Thus, each local government was classified as a stratum to ensure a proportionate representation of sampled schools in relation to their population.

Research Instrument

The instrument for this study was an objective test made up of fifty (50) questions. The questions were constructed by the researchers using the recommended texts for the students. The testing instrument was therefore constructed in line with the syllabus of the SS 3 students on the English verbs. This is to ensure that the test items were presumably within the competence level of the study population.

We needed this type of instrument because the study hung specifically on academic performance and the data needed should necessarily reflect learning and its environment. We needed data that would show evidence of knowledge or the absence

of it, since the crux of the study was to show evidence of knowledge or lack of it. We therefore used this kind of data that would show how many of the population sampled possessed this knowledge and how many did not. It was the availability of such data that gave us the impetus to make claims of competence or incompetence on our subjects.

The instrument was constructed to cover the important areas of the semantic features of the English verbs such as: \pm concrete, \pm abstract, \pm animate, \pm liquid, \pm surface, and \pm movement.

The objective type instrument had only one correct answer. Each of the fifty objective questions tested the subjects' knowledge on specific semantic features of the English verb.

The instrument for the study was competence-motivated and was designed to restrict the freedom of the user or testee from avoiding the difficult semantic features of the English verbs in order to determine the testee's competence in the language. Each item in the instrument was made up of only two options – A and B, because it was not a performance-motivated test that allowed the testees the freedom to choose their vocabulary, sentence and meaning. Thus, the instrument was designed to pin down the testees to a particular feature of the English verb to ascertain their competence.

After constructing the objective test used to elicit information from the subjects on the difficult areas of the selection features of the English verbs, we sought advice from two experts in the English language. They evaluated the extent to which the items in the instrument were relevant to the objective of the study. They also examined whether the instrument was capable of generating relevant data needed for the investigation. Their suggestions helped to improve the quality and reliability of the instrument.

Also, in order to ensure the reliability of the instrument, some of the students were pre-tested with the instrument for a trial before administering it.

The researchers had discussions with the authorities of each school selected, obtained their permission to administer the test, and subsequently administered it under examination condition. The students were given forty minutes to complete the test after which the researchers collected the test for analysis.

Relevance of the Study

The results of this work will be valuable to second language students in secondary schools, tertiary institutions and language teachers. It is believed that those who read the findings of this research work will become aware of the demands of language on correctness and how the various grammatical elements could co-occur in sentences. The knowledge will help them to correctly use the English language for effective communication and mutual intelligibility. This is because "certain repeated

errors become confirmed and unless the learner is made aware of them, he cannot learn from them" (Yankson, *Better English* 1).

The Study Design

The design adopted for this study is the descriptive survey research design. This study design is preferred to others for this study because it:

- i. permits a systematic collection of data on a sampled population such as ours,
- ii. makes provision for the analysis of data to arrive at the characteristics of a given population from a sample considered to be true representative of the entire group, and
- iii. describes certain variables like the central tendency, dispersion and variability in relation to the population by studying the responses of a sample population.

These features of descriptive research characterize our investigation; thus the choice of the design out of others.

Method of Data Analysis

We were attracted to use those measures that are simple and which can be appreciated by the readers who might not be statisticians. We also used simple and clear measures that would provide us with the proper information needed. We, therefore, adopted statistical measures for the analysis of our data. They include: the central tendency, dispersion and variability.

The measure of central tendency included the mode which had the highest number of persons studied, the median which showed the score in a middle position, and mean which indicated the average performance of the population. Only the mean proved important in the study, because it is the arithmetic average which we depended on to measure the performance of the population studied. We also used two measures of dispersion or variability to complement the statistical information the mean yielded: the range which showed the difference between the highest and lowest scores, and the standard deviation which showed the variability from the mean obtained.

Each of the statistical analysis was presented in a table. In each table, we gave the class width showing the range of grouped scores. We also gave the mean required for competence to be established as existing. This is the condition upon which competence was statistically determined. At the end of the table, we listed the mean, range and standard deviation, summed up the columns the quotients of which were relevant to our study. We further reduced the mean to the nearest whole number, and the standard deviation to the nearest two decimal points.

In as much as our study was that of competence, we expected an ideal situation where every member of the population would score 50 marks; that is, each member should be able to score the whole test. However, dispersions which occurred were located around a mean of 40 marks. Once these scores were available, we were able to make claims of competence about the population. The farther away from the

optimum score the mean was, the worse the achievement of the population. A mean of 45 and above means complete mastery which was the competence we were concerned with. Anything less than 40 was incompetence. The grades and values we made use of are given below:

1. 45 – 50 = A (Excellent),
2. 40 – 44 = C (Good),
3. 39 – 35 = D (Fair),
4. 34 – 25 = E (Poor) and
5. 24 and below = F (Very poor)

We wish to note here that the letter grades and values attached to them were adopted from the Ministry of Education, Enugu State grading system based on 100%. The scores here reflected the number of item in our study and have been grouped to reflect the standard set by the Ministry of Education, Enugu State. In order words, we classified A – C as competence, D as near competence, and E – F as incompetence when we presented the mean score.

The range was added to the information given by the mean. It presented the difference between the highest and the lowest scores. Due to this, if the range was 20 for a population of 500 over a test of 50 items, it then meant that many people must have clustered around some marks between the highest and the lowest scores. In order to determine the range where the scores were discrete numbers, we simply subtracted the lowest score from the highest. If, however, the scores were grouped, we calculated the range by subtracting the lowest mid-score from the highest mid-score to arrive at the range.

The next measure we adopted was the standard deviation which was also a measure of variability or dispersion. In any group of scores taken from academic output of learners, some scorers earned the same mark as the mean; yet, others earned more while some earned below the mean. This was therefore the possibility to deviate from the mean in the learning group. The level of deviation may not be the same among the group, and the more the differences existed, the more the tendency deviated from the mean of the class.

Standard deviation meant the extent of variability of values or scores; hence, we used it here to complement the information from both the mean and the range. The calculation of standard deviation used almost all the values in the distribution and was therefore described as the most reliable of the measures for determining the level of variability of values. The standard deviation supplied the information on the degree of variation from the class mean. It was hoped that the standard deviation would conclude our statistical analysis.

The following information was expected to be obtained at the end of the analysis: the class average (the mean), the difference between the highest score and the lowest score (the range), and the extent of variability from the average (standard deviation). These would show the competence or incompetence represented by our

population on the concord and selectional restrictions of the English verbs. Where incompetence arose, it meant that there were errors and we showed the errors following the method involved in error analysis. We grouped the errors according to types in order to show the semantic features of the verbs tested — animate, inanimate, movement, concrete, abstract, liquid, surface, the rule flouted and the sentences that belong to the type.

Data Analysis

In this section of this study, we present tables of statistical analyses which examine the population's overall performance and competence in the selectional restrictions of the English verbs. We further compare the analysis of the mean achieved by the population with our own required mean for competence. If the population's mean equals or exceeds our own required mean, it implies competence. We show also the competence of the population in the six divisions of the semantic features of the verb: \pm Animate, \pm Abstract, \pm Movement, \pm Liquid, \pm State, and \pm Edible.

This analysis helps to indicate the population's best and least competent areas. This aims at giving us a clearer view of the population's competence in the various divisions of the verb. We first present the population's overall competence.

i) The Population's Overall Competence

In order to determine the population's overall competence in the selectional restrictions of the English verbs, we analyse the scores recorded for the entire population. The analysis takes into account all the six divisions of the semantic features of the English verbs that pose restrictions to either the subject or the object. All the 50 items of the test and the whole population are inclusive here.

For competence to be accepted, we required a mean of 40 marks from the population. The table below supplies our statistical observations. We wish to emphasize that if the competency mean is attained, we shall deem it that our population is competent in the use of the selectional restrictions imposed by the English verbs. However, if the competency mean is not attained, we shall regard it that the population does not have competence in the restrictions of the verbs and are therefore ignorant of their usage.

Table 1: The Overall Competence table**Maximum Possible Mark = 50, Required Mean = 40**

Class interval	True limit	Class mark (x)	F	Fx	$x - \bar{x}$	$(x - \bar{x})^2$	$F(x - \bar{x})^2$	CF
40-49	39.5-49.5	44.5	153	6,808.5	10.54	111.09	16,997.01	497
30-39	29.5-39.5	34.5	200	6,900	0.54	0.29	58.32	344
20-29	19.5-29.5	24.5	108	2,646	-9.46	89.49	9,665.09	144
10-19	9.5-19.5	14.5	360	5220	-19.460	378.640	13,632.84	360
0 - 9	-0.5-9.5	4.5						
Total			497	16,876.5			40,353.26	

Mean = 33.96, Range = 30, Standard Deviation = 9.01

Our statistical table shows the achieved mean of the population to be 33.96 with a standard deviation of 9.01. Compared with the target, this mean falls short of the required mean of 40 which is our competency level. We have no option than to say that our population is incompetent in the selectional restrictions of the English verbs. This is because the class mean is less than the mean set for competence. A close examination of the scores shows that only 153 members of the population are in the range of competence 40 – 49. The greater number of the population (344) is below the target. The mode of the population is 34.5. This reveals also that the majority of the population is found in the mean area which is below the level of competence. We can therefore state that our population is incompetent in the selectional restrictions of the English verbs and their usage.

It is also important to note that no member of the population scored the maximum possible mark of 50. With the highest score as 49 and the lowest score as 9, the population has a scoring range of 30. We have therefore established the statistical incompetence of our population with respect to their overall performance in the test. We shall now consider the competence of the population in the various divisions of the semantic features of the English verbs that pose restriction to the argument.

ii) Competence in the Divisions of the Verb Study

At this level of analyses, we are concerned with the competence of the population in the various divisions of the verb. The analyses give us a comprehensive view of the population's standing in the verb test. They also clarify the population's best or worst area.

Competence in the \pm Animate Feature of the Verb

In studying the population's competence here, we have 21 questions. The competency mean required is 18. The result is shown below:

Table 2: Competence in the ± Animate Feature of the Verb

Maximum possible score = 21, required mean = 18

Class interval	True limit	Class mark (x)	F	Fx	$x - \bar{X}$	$(x - \bar{X})^2$	$F(x - \bar{X})^2$	C F
14-20	13.5-	17	336	5,712	1.28	6.43	2,160.3	497
7-13	20.5	103	122	1,220	-4.18	17.47	2,131.6	161
0-6	6.5-13.5		39	117	-11.18	127.99	4,874.7	39
	-0.5-6.5							
Total			497	7,049			9,166.6	

Mean = 14. 18, Range = 14, Standard Deviation = 4. 29.

From the table above, we observe that whereas we require a mean of 18 for competence, the population has a mean of 14. 18 which is below the standard we set. The population also has a standard deviation of 4. 29. The achievement of the population here is still that of incompetence. None of the members of the group managed to score up to the mean we required for competence. The performance here is that of near competence.

iii) **Competence in the ± Abstract Feature of the Verb**

In order to determine the population's competence here, we have 10 questions. The competence mean required is 7. The result is presented below:

Table 3: Competence in the ± Abstract Feature of the Verb

Maximum Possible Score = 10. Required Mean = 7.

Class interval	True limit	Class mark (x)	F	Fx	$x - \bar{X}$	$(x - \bar{X})^2$	$F(x - \bar{X})^2$	CF
8-10	7.5-	9.5	153	1,453.5	3.43	11.76	1,800.02	497
4-7	11.5	5.5	262	1,441	-0.57	0.32	85.12	344
03	3.5-7.5	1.5	82	123	-4.57	20.88	1,712.56	82
	-0.5-							
	3.5							
Total			497	3,017.5			3,597.70	

Mean = 6. 07, Range =8, Standard Deviation = 2. 69

It can be observed here that the achievement of our population is below expectation. We required a mean of 7, but our population's mean is 6. 07 which is below the required mean. The standard deviation of the population is 2. 69. Though the performance of the population here is that of incompetence, it is near mastery. So the

difficulty encountered here by our population is less than the difficulty encountered at \pm Animate. The population performed fairly well here.

iv) Competence in the \pm Movement Feature of the Verb

Here we employed 8 questions in order to study the population's competence. We required the competency mean of 5. The result is presented in the table below:

Maximum Possible Score = 8 Required Mean = 5

Table 4: Competence in the \pm movement feature of the verb

Class interval	True limit	Class mark (x)	F	Fx	$x - \bar{x}$	$(x - \bar{x})^2$	$F(x - \bar{x})^2$	CF
6-8	5.5-8.5	7	261	1,827	1.91	3.65	952.15	497
3-5	2.5-5.5	4	157	628	-1.09	1.19	186.53	263
0-2	-0.5-2.5	1	79	79	-4.09	16.73	1,321.5	79
							2	
Total			497	2,534			2,460.	20

Mean = 5.09, Range = 6, Standard Deviation = 2.22

The table above indicates that the population's performance here is that of competence. This is contrary to the population's achievement in the previous divisions. Our population has exceeded our required competency mean of 5 with .09 causing us to conclude that there is competence here among the group.

v) Competence in the \pm Liquid Feature of the Verbs

We used 6 questions to study the competence of the population here. The competency mean required is 4, and the result is presented in the table below.

Table 5: Competence in the \pm Liquid Feature of the Verbs

Class interval	True limit	Class mark (x)	F	Fx	$x - \bar{x}$	$(x - \bar{x})^2$	$F(x - \bar{x})^2$	CF
4-6	3.5-7.5	5.5	369	2,029.5	1.03	1.06	391.47	497
0-3	-0.5-3.5	1.5	128	192	-2.97	8.82	1,129.08	128
Total			497	2,221.5			1,520.55	

Mean = 4.47, Range = 4, Standard Deviation = 1.75

Table 5 shows that our population has also exhibited competence here. This agrees with the population's performance in the \pm movement feature of the verb test. Our population has exceeded our required competency mean of 4 with .47. Our required competency mean is 4, but our population has achieved a competency mean of 4.47.

This also compels us to believe that our population is competent in the ± liquid feature of the English verbs. The population performed excellently well here.

vi) Competence in the ± State Feature of the Verb

In order to determine competency level of our study group here, we made use of just 3 questions. We also required a competency mean of 2. The result is shown in the table below.

Table 6: Maximum Possible Score = 3, Required Mean = 2

Class interval	True limit	Class mark (x)	F	F x	$\frac{\sum}{N}$	$\left(\frac{\sum}{N}\right)^2$	$F\left(\frac{\sum}{N}\right)^2$	CF
2-3	1.5-3.5	2.5	346	865	0.61	0.37	128.75	497
0-1	-0.5-1.5	0.5	151	75.5	-1.39	1.93	291.75	151
Total			497	940.5			420.50	

Mean = 1.89, Range = 2, Standard Deviation = 0.92

The result of our study as shown in the table above reveals that even though the population is near competency level here, it presents a picture of incompetence. The competency mean we required is 2, whereas the mean achieved by the population is 1.89. We regard it that our population is not competent in the ± feature of the English verbs as shown in the table above.

vii) Competence in ± Edible Feature of the Verb

Here, we made use of two questions only. The competency mean we require is 1.5 and the result in presented in the table below.

Table 7: Competence in the ± Edible Feature of the Verb.

Maximum Possible Mark = 2, Required Mean = 1.5

Class interval	True limit	Class mark (x)	F	F x	$\frac{\sum}{N}$	$\left(\frac{\sum}{N}\right)^2$	$F\left(\frac{\sum}{N}\right)^2$	CF
2-3	1.5-3.5	2.5	323	807.5	0.70	0.49	158.72	497
0-1	-0.5-1.5	0.5	174	87	-1.30	1.69	293.61	174
Total			497	894.5			452.33	

Mean = 1.80, Range = 2, Standard Deviation = 0.95

In the table above, we observe that our population's standing in the ± Edible feature of the verb test is that of competence. Our population has once again exceeded our required competency mean of 1.5 with 0.3 causing us to accept that they are competent here. There is competence here among the group.

Summary, Conclusion and Recommendations

Here, we elect to do a general discussion of the findings, to interpret the results and suggest new directions of emphasis for researchers in the field.

i) Summary of Findings

The Population's Standing and Competence

The overall analysis of the population's standing in the concord and selectional restrictions of the English verbs shows that competence is not a true feature of the population's use of the English verbs. The results show that there is no balanced understanding of the semantic features of the English verbs, their restrictions, and usages. The study population is required to score a mean of 40 in the entire test, but the population managed to score 33.96 (see first table). This makes us conclude that they are incompetent in the usage of the selectional features of the English verbs as a result of their semantic features. This phenomenon implies that the various restrictions imposed by the English verbs due to their semantic features have not been properly understood or mastered by the population.

We have also examined the six broad areas of our verb study to determine the competency and level of difficulty encountered by the group. The results show that the most difficult area of the semantic feature of the verbs and their restrictions for the group is the \pm animate verbs. It is followed by the \pm Abstract and \pm State. These areas are very difficult for the population as they could not achieve the required mean for competence.

The study also reveals that the population has its best results in the \pm liquid followed by \pm movement and \pm Edible. The results indicate that the study population scored 4.47 as against the required mean of 4, 5.09 as against the required mean of 5, and 1.80 as against the required mean of 1.5 respectively.

The Population's Competency Mean

We have simply compared the mean score of our population with the mean we have already set in one to determine the competency mean of the population in our test. We discovered that in the overall analysis of the population's competence and in some divisions of the verb test such as \pm Animate, \pm Abstract and \pm State our population's mean does not equal our set mean let alone exceed the mean we require for competence to be accepted. In some divisions of the verb test, however, the population's mean exceeded our required mean for competence and that implies that the group is competent in these areas. The areas are \pm Movement, \pm Liquid and \pm Edible. The above phenomenon implies that the deviation of the population from the competency mean is significant in some areas, but insignificant in some other areas.

ii) Conclusion

The fact that the English verbs have semantic features that project meanings which determine the company that words keep in a sentence is without doubt. To achieve competence in them, due attention should be given to them.

Our study has given us reason to conclude that our study population is not yet competent in the use of the English verbs due to their semantic features. These features impose restrictions to other grammatical units of a sentence. The population lacks competence in the concord and selectional restrictions imposed by the English verbs to their arguments. There is also a hierarchy of difficulty encountered by the population in the division of the verbs studied. Though the population showed competence in some areas, the overall analysis shows the population to be incompetent.

The study identified the selectional rules violations and deviances involving the English verbs in written expressions of the study population. The study also revealed the intended meanings or messages that were distorted consequent upon the wrong matching of the English verbs and other grammatical elements in sentences by the sampled population.

iii) Recommendations

This study does not claim to have answered all the questions that have to do with concord and selectional restriction rules of the English verbs. This suggests that the reader is an active participant in investigating this topic. The researchers recommend that further research be carried out using other theoretical framework such as descriptive correlation study. Restrictions imposed by other grammatical units other than verbs could also be investigated to provide information for maximum and effective communication.

WORKS CITED

- Aarts, B. *English Syntax and Argumentation*: New York: Palgrave Publishers, 2001. Print.
- Akwanya, A. N. *Semantics and Discourse: Theories of Meaning and Textual Analysis*. Enugu: Acena Venture Ltd., 2007. Print.
- . *Verbal Structures: Studies in the Nature and Organizational Patterns of Literary Language* 2nd Edition. Enugu: Acena Ventures Ltd., 1997. Print.
- Antley, K. McCawley's Theory of Selectional Restrictions. [Http://www.jstor.org/stable/25000772](http://www.jstor.org/stable/25000772) 26/02/12.
- Anyanwu, P. A. *Restriction on the English Verb and Implication for English as Second Language (ESL) Users*. Ph. D Thesis, 1990.
- Briones, R. J. & Alba B. P. C. *An Account of Selectional Restrictions within a Conceptual Framework: Its Relevance for Role and Reference in Grammar*.

(2010) www.mendeley.com/.../account-selection-restricti...-United States-Cached. 26/02/12.

- Chomsky, N. *Aspects of the Theory of syntax*. Cambridge: MIT press, 1965. Print.
- Drennan, Marianne. "Concord" 2011. www.english.stackexchange.com/question/30/03/12.
- Hoffman, R. & Honeck, R. "Psycholinguistic Theory and Anomaly." *Journal of the Psychological Records* 29 (1979):321 – 328. Print.
- Magwa, W. & Mutasa, D.E. "Language and Development: Perspectives from Sub – Saharan Africa." *NAWA Journal of Language and Communication*. 2007. Print.
- McCawley, James. "The Role of Semantics in Grammar." In *Universals in Linguistic Theory*. Bach, E. & Harms R. eds. New York: Holt, Rhinehart and Winston Inc, 1968. Print.
- Moore, T. E. & Biederman, I. "Speeded Recognition of Ungrammatically Double Violations." *Journal of Cognition* 7 (1979): 285 – 299. Print.
- Myers, B. E. & Blumstein, S. E. *Selectional Restriction and Semantic Priming Effects in Normal and Broca's Aphasics*. (2005) Cog.brown.edu/emyers/Myers_JNL_o5.pdf 26/02/12.
- Nzerem, J. K. "Rules of Concord in English Language." *Journal of Nigerian Languages and Culture* 10 (2008):257 – 266. Print.
- Ogbologo Charles. *Problem Areas in English Grammar and Usage*. Lagos: Sam Ironsi Publications, 2004. Print.
- Ogidefa, I. *The Grammatical Errors Typical of Advanced Users and Learners of English as a Second Language*, 2010. <http://socyberty.com/languages/the-grammatical-errors-typical-of-advanced-user-and-learners-of-English-as-a-second-language/#ixzz16iHvcYsA> 27/02/12.
- Onuigbo, S. *English Language: A Grammatical Description*. Nsukka: Afro-Orbis Publications Ltd; 2005. Print.
- Ouhalla, Jamal. *Introducing Transformational Grammar, from Principles and Parameters to Minimalism*. London: Arnold, 1994. Print.
- Paducheva, E. V. *Semantic Features and Selectional Restriction*. 1991. Aclweb.org/anthology/E/E91/E91-1034.pdf 27/02/12
- Soehn, Jan-Philip. *Selectional Restrictions*. Stefan, M (ed), Libson: C SLI Publications, 2005. <http://www.csli-publications.stanford.edu/> 30/03/12.
- Ueberla, J. P. *On Using Selectional Restrictions in Language Models for Speech Recognition*. Burnaby: SFU Press, 2008. Print.
- Wagner, A. "Learning Thematic Role Relations for Lexical Semantic Nets." Ph. D Thesis, 2005.
- Yankson, K. E. *An Introduction to Literary Stylistic*. Obasi: Pacific college & press Ltd., 1987, rpt. 2002. Print.
- . *Better English through Concord for West Africa Students*. Obasi: Pacific College and press Ltd, 1989. Print.