English Word Formation Processes: The use of Affixations and the Implications on Second Language Learning:

A Case Study of Swedish Secondary Schools Grades 7-9

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Abstract

This work explains the types of affixation errors second language learners make when learning English word formation processes, especially derivational and inflectional affixations. The data for the study were collected as primary sources from two secondary schools in Sweden. The data were analyzed with the use of Error Analysis noted by Corder (1967) and the error analysis framework adapted by Ellis et al. (2005, p. 57). The method chosen was to identify, classify, describe, and evaluate derivational and inflectional affixation errors. In total 2,812 answers were retrieved. The results consist of some findings, for example, some of the derivational and inflectional affixations errors were noticed to be intralingual and interlingual. Also, the nature of the errors is such that they are either transferred, omissive, additive or substitutive errors. Moreover, the errors were also due to overgeneralization, including substitution errors, or additive errors. Previous research findings showed students make grammatical errors with letter insertions, letter omission, or substitution errors. This study made the same findings as students made errors of letter insertion, letter omission, substitution errors, and errors due to overgeneralization. Some of the most difficult derivational and inflectional affixation errors were also noticed across all the grades.

Key words: derivational and inflectional affixations, Error Analysis (EA).
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1. Introduction.

Learning a second language can be a challenge to many. Learners have to understand the importance of building vocabulary and one of the methods used in building vocabulary is through word formation processes. The researcher did a ten-week pre-study as a student teacher. This was between the periods of March to June 2020, in which the researcher observed grade 7–9 students in their English language classes. At the time of the observation, the researcher noticed students using deviant affixations when writing. This triggered the researcher’s interest in the study of derivational and inflectional affixations. In addition to these direct observations on students' affixation errors, other extraneous factors were noticed during the period of the pre-study. For example, a student had to explain the affixations found in the word ‘misfortune’. The student divided the word in three sections, ‘- mis - fortun - e’ Explaining that, ‘miss’ is a prefix, fortun is the root word and ‘e’ is the suffix. Another example experienced during the pre-study was how students use L1 to explain L2. A student, when asked to explain how affixations are formed, mentioned that the first meaning could be explained by using the example from the Swedish letter ‘o’. For example, the Swedish words ‘oönskad and obehaglig’. The student explained that English affixations play the same function as the letter ‘o’ in the Swedish language, for example in words like ‘oönskad’ - unwanted and ‘obehaglig’, ‘- unpleasant’. It is observed that teachers, and second language researchers still find many errors made by students in using English affixations. These errors affect students use of grammar in both written and oral production as previous research has shown. This appears not to be a surprise to applied linguists who have knowledge of the facts of interlanguage processes which learners must go through before attaining native - language like competence (Selinker, 1992, p. 225).

In line with this present study, these errors stemming from the teaching and learning of derivational/inflectional affixation can provide feedback to the English language learners and teachers in Sweden. Corder, (1967, p. 24) rightly points out that “errors provide feedback”. Therefore, the study is also important for students learning English as a second language in Swedish secondary schools. This is because one of the requirements for English is that the students before completing grade 9 should have the knowledge of connecting words to linguistically coherent entities, according to the English Course plan designed by the Swedish National Agency for Education (Skolverket, 2011). Likewise, English language teachers in Sweden may lay more emphasis on teaching the word formation processes by giving different English affixation tasks for students' reinforcement. This may be done by allocating more
contextualized drills and exercises on word formation processes. Lennon (1991:180) remarks that error analysis serves as a “monitoring device” to the learner. In line with the present study, an analysis of learners' errors on affixations may help learners work harder to correct the errors by putting more effort on the difficult affixation processes. It is further in line with this that Corder (1967, pp. 19–27) emphasizes the importance of addressing errors in the language learning process.

1.1. Aim and Research Questions

The aim of the study is to analyze derivational and inflectional affixation errors second language learners make in a grammar text or when writing essays. The aim is also to identify, classify, describe, explain, and correct the errors within the framework of error analysis. In view of these objectives, the following questions have to be answered.

- What are the types of derivational and inflectional errors made by second language learners of English in Swedish secondary schools, grades 7 - 9?
- What factors contribute to the derivational and inflectional errors in some of the grade 7,8 and 9 written production?

2. Literature Review.

In line with the above research topics, some prominent linguists have contributed to the understanding of the English word formation process. Bauer (1993, p.20–27) mentioned that suffixes and affixes can change words' meanings or the words' grammatical meaning. Adding that suffixes and affixes are the most used word formation processes for language learning and acquisition. In line with the above argument, Laufer (1997, p.139–42) suggests one of the most essential language acquisition processes is learning vocabulary. However, this could be a difficulty for students because the morphemes that are not frequently used may create problems for second language learners in the process of language acquisition. The second language learner needs to be familiar with the root word to use the correct morpheme. For example, the root word ‘believe’ could become ‘unbelievable’ having the prefix ‘un’ and a suffix ‘able’, Bauer, (1993, p.22).

Moreover, to carry out this research project, it is important to review various kinds of literature related to the present study. For example, Taher (2011) research focusing on error analysis and the grammar knowledge of Swedish high school students. The study examines
transfer errors, omission errors, and insertion errors in students' written essays. The study also explains the students’ difficulties with English grammar. The study identifies some of the problematic aspects underlying grammar usage and grammar errors in Swedish students' written text. The researcher used the error analysis method to examine how students use grammar in subject - verb- agreement. For example, in identifying the grammatical error ‘We slepted in the bus’ (Taher, 2011, p. 12). The essay method identifies and categorizes grammar errors. The recommendation from the research indicates teachers need to have tools that could help students work with more complex grammar to improve the student's proficiency (Taher, 2011, p. 20).

Svartvik et al. (1996 p. 85) did research on the acquisition of grammatical knowledge by second language learners. The study suggested that students produce verb related errors because the second language learner could not distinguish the endings of past tense regular verbs as in ‘play - played’ and irregular verbs as in ‘eat - eaten’. The problems also arise with the use of progressive ‘ing’, in for example ‘walking’. It is therefore more important to discuss second language acquisition.

However, Pienemann (1999) affirms there is a natural order occurring in second language learning. The above viewpoint is in accordance with different language acquisition research done in Sweden, Japan, Germany, on the process of second language acquisition. The research reveals there is a natural order in the acquisition of syntax and morphology in the process of second language acquisition irrespective of the learner's first language (Pienemann et al. 1999). As a result, the argument that grammatical morpheme acquisition by second language learners, could also occur in different stages in the process of second language acquisition. For example, there are some similarities among second language learners in the acquisition of progressive ‘ing’, the regular past tense ‘ed’ and the possessive singular ‘s’ (Tornberg, 2001, p 124). However, the language order, acquisition order or acquisition sequence could be difficult if both languages have very different grammar rules and quicker if the language rules of the first language were almost identical to the language rules of the second language (Tornberg, 2004, pp.111–113)

Furthermore, another study examines the form of the natural order hypothesis. Kreshen (1982, p .45) examined second language acquisition using a natural order hypothesis. Kreshen explains that there is a certain natural order in language learning both for L1 and L2 learners, especially in the acquisition of grammatical rules when using morphemes. For example, the morpheme ‘ing’ in ‘drawing’ and the plural morpheme ‘s’ in for example ‘books’ are the earliest morphemes acquired by both L1 and L2 learners (Krashen, 1982, p. 112). Khor
(2012) also investigates Swedish students' second language learning difficulties in the acquisition of English morphemes. Khor, (2012, p. 30) concludes that one of the difficulties is the use of inappropriate affixations. This could be due to the complexity of English words and morphemes. For example, Khor mentioned that in the written text, the students use the word ‘ghost’ both in the singular form and the plural form ‘ghosts’, indicating that the students haven’t developed an understanding on how to distinguish the singular form from the plural form. Khors findings showed that the acquisition of grammatical morphemes is also influenced by L1 (Khor, 2012, p. 26). The research method used to examine students' written text in the study is also error analysis.

Aryati (2014) examined students' use of affixation in Indonesien schools. Aryati suggests some of the problems faced by students in English grammar is the use of affixations in written text. Aryatis research focuses on use of affixations in written text. The research concludes that the reason students have difficulties in using affixation is because students are unaware of English affixation varieties. For example, the students overuse of the ‘s’ plural’ in ‘make my parents smiles’. This type of grammatical procedure is complex to many second language learners. Thus, the students' failure to master these affixations has a great impact on students' writing skills. However, Aryati concludes that the advantages of knowing how to use affixations are many. The mastery of affixations could generate knowledge in vocabulary. The students could be more creative in their writing. Another impact is that students could be able to use fewer grammatically correct words in writing if they know how to use affixations (Aryati, 2014, p. 30). The following research analyzes the framework of the English word formation process.

Quirk et al. (1985, p. 133) defines word formation as a process which deals with “the creation of new lexemes from a given bases.” Adding that, the base or root of a word is any form to which affixes of any kind can be added. In other words, such processes deal with the creation of new words from roots to build up a rich vocabulary system in any given language or the manipulation of existing linguistic resources in a language to form new words. Word formation processes in English include affixations, among others. Crystal (2004, p. 19) defines word formation as a process in which the base is combined with other lexemes to form a new word, adding that sometimes the word changes its class. Affixations consist of adjoining a bound morpheme to a stem to form a new word. However, it is certain that even though learning a second language may be difficult, students with the direction of teachers should be able to master different aspects of English word formation (Crystal, 2004 pp. 24–25).
Furthermore, Lightbown, et al. (1990, p. 58) noted that the teachers could eliminate word formation errors by identifying the students' areas of difficulty. It is also important that the teachers include a wide variety of word formation rules, spelling, pronunciation of words, and lexical semantics. However, in the context of second language learning, no one method of teaching is sufficient to ensure reasonable learning outcomes (Harmer, 1998, p. 25). Learning affixations involves forming new words, changing word meanings, learning various spellings, and pronunciations through students' exposure in different contexts. Through different stages, the students will then develop a fuller understanding of the functions of word formation processes (Harmer, 1998, p. 130).

2.1. The History of Error Analysis.

Corder (1967, p. 161) estimates that the knowledge of error analysis (EA) came from the earlier method of contrastive analysis hypothesis (CAH). Therefore, it is important to have a short description of contrastive analysis (CA) as a starting point for a possible understanding of error analysis (EA). Contrastive analysis interprets students' language learning with the view that the student's first language largely affects the student's second language. Moreover, CA argues that these errors from the first language L1 structure are reflected in the second language L2 structures. The term or word for this is called negative transfer or interference. In the case where the structures in both languages are the same, there will be positive transfer. It is important to indicate here that the idea of contrastive analysis CA was introduced by Lado (1957). CA claims are closed to the behaviorist standpoint.

Littlewood (1984 p.5) recommends the behaviorist methodology use to explain language acquisition. Language learning depends on behavior, that is language is learned through habit formation. The habit formation occurs during the process of language learning. Habit formation in language learning is the reason why second language learners make errors due to interference from the first language. This is because of habit formation that has become automatic, and language is used without learners' perception. Consequently, interference from the first language is an important concept in the behaviorist theory of second language learning. The first language L1 prevents the correct learning of the second language L2 (Ellis, 1996, p. 22). Therefore, the contrastive analysis hypothesis (CAH) has to be incorporated with the error analysis hypothesis EA to identify which errors are due to interference (Ellis, 1996, p. 24). However, although error analysis EA has a lot in common with contrastive analysis CA, EA
moves beyond to explain that errors may not only occur because of interference or transfer from first language (Selinker, 1972, pp. 85–86).

Selinker (1972, p. 35) mentioned that CA could not prove that all students' errors were due to the first language L1. There are some second language L2 structures that could not be explained by the L1 influence. As a result, the new term intralingual errors or error analysis EA. Selinker (1972, p. 213) suggests intralingual errors occur when L2 learners make syntactical, lexical, and morphological errors. This distinction was also made in (Ellis et al., 2005, p. 58). Therefore, an overview is needed to better understand how EA works. The following sections include a brief discussion of concepts involved in second language learning and error analysis EA.

2.2. Types of Errors.

There are different types of learning and acquisition theories that explain why errors occur in second language learning. However, Corder (1967, p. 120) suggests errors analysis could be regarded as something positive, because error analysis could be evidence of learners' second language learning development. As a result, the errors could be used to test learners' progress in second language learning. Richards (1974, p. 204) also assumes that error analysis could prove that errors are due to first language L1 and second language L2 differences. The errors occur because of the failure to master the second language grammar rules, for example verbs, prepositions, and articles. From the above arguments, Corder, (1967, p 30) suggests three types of grammatical errors, notably omission errors, additive errors and substitutive errors. Omission errors occur when the students lack grammatical knowledge. The student could omit word elements due to the lack of L2 grammatical rules. According to Crystal (1997, p. 56) word elements are words that constitute two or more constituents or words that contain smaller morphological components for example, the different components in ‘un-read-able’ gives the word ‘unreadable’, ‘re -fresh’ – ‘refresh’, ‘book-ish-ness’ – ‘bookishness’ (‘ish’ and ‘ness’, are derivatives), ‘forget-ful-ness (‘ful’ and ‘ness’ are derivatives). However, omitting some of the word elements can make the word ungrammatical. Likewise, substitutive errors occur when the student misuse the correct grammatical element for example affixes that have many grammar functions such as number functions for example ‘book’, ‘books’ (-s plural) tense function for example ‘admire’ – ‘admi res’, (‘s’ third person singular). The suffixes can also indicate the degree of comparison. For example, ‘finest’ (‘est’ indicates the superlative degree). If these morphemes are substituted with other words, the words and sentences may become
ungrammatical. Meanwhile, additive errors occur when the student adds unnecessary grammatical elements that make the word or language ungrammatical, for example adding the prefix ‘under’ in the word ‘conduct’ instead of the prefix ‘mis’.

Carter (1997, p. 22) also states that if one was to understand how grammar works, the best thing to do is to start by understanding how grammar is used in a good way and how it is used in an inappropriate way for students to have a full understanding of the reasons for their errors to develop their language skills. Thus, students could easily recognize the errors they make in their speech and writing. Corder, (1967, p. 28) suggests teachers need to be better equipped, and be aware of the origins of the errors, to be able to help guide the students with difficulties that students encounter when learning. Errors are unavoidable especially for second language learners, because all errors cannot be explained using only one or two examples, it is therefore important for teachers to know the origin of error (Crystal, 2004 p. 32). However, it is also important to understand the sources of the errors.

2.3. Sources of Errors

Richards (1974, p. 219) posits that there are many factors contributing to students' errors. These factors include the complexity of the target language, lack of appropriate instructional materials, and insufficient exposure to the target language L2. However, some research has been done to distinguish the sources of errors. For example, Corder (1967, p. 272) suggests that an error occurs when there is a clear indication of deviation due to the learners’ lack of knowledge or the learners’ lack of competence in the language they are learning. Thus, the target language may be problematic when the L1 learner lacks total understanding or partly understands the use of the L2 (Corder (1974, p. 34). In addition, Lightbown et al. (1990, p. 48) emphasize second-language learners often have the problem of insufficient exposure to the target language. This results in limited opportunities to use the language productively and receptively. Weinreich (1953, p. 62) argues that knowing the differences in languages could help understand students’ language learning difficulties. Moreover, it is important to note that teaching and learning grammar can be complex, leading to morpheme errors (Weinreich 1953, p. 62). The next paragraph will explain second language learners' learning strategies in second language acquisition.

Kellerman, (1985. pp. 340–355) discusses the concepts of U-shaped learning in second language acquisition. The U- shaped learning approach emphasizes there are different stages of
L2 acquisition. In the first stage, the learners have an attitude of transferring figurative, prototypical items directly to L2. For example, Gluckberg (2001, p.26) noted that the use of figurative language could be for example idioms and metaphors that exist in many languages. Idioms and metaphor could be termed figurative language where the meaning of the words does not correspond directly to the literary language meaning. Figurative language is language such as, personifications, allusions and all that could be related to metaphor categories. Prototypical language transfers involve a sequence of language acquisitions which describe habitual stages of language acquisition. For example, in the acquisition of the present progressive, the learner acquires 'easy language' first then increases the language proficiency to learn non-prototypical language which is more complex (Gabriele et al. 2015 pp. 37–57). The broad term ‘transfer of learning’. The second language learner uses previously acquired skills to apply in new learning situations (Haskell 2001 p. 175). Kelleman (1986, p. 36) confirms the transferability of figurative and prototypical language. This is because it is easier to use every day common language to refer to objects, than complex language for a second language learner at the early stage of learning. Thus, revealing that it is easier for second language learners to use language similarities to understand situations in a second language context. The prototypical and figurative transfer occurs especially when the L1 is almost identical to the L2. In the second stage of learning the learner has noticed the differences between the L1 and L2, and in the third and last stage the learner has acquired enough knowledge of the target language lexical representations (Kelleman, 1986, p. 72). However, EA has its limitations, error analysis always points at errors, forgetting what the learners know (Ellis et al 2005, p.70). The next section would explain the concepts of affixations.

2.4 Definition of Affixation.

Researchers have different definitions and explanations of what affixations are. Quirk et al. (1985, p. 153) noted that affixations could be defined in many ways, firstly, affixations take place in the process of adding an affix to the base of a word. Secondly, sometimes it can lead to a change of the word class, sometimes without a change of the word class. This word formation process is called word - class suffixes. Thirdly, these affixations could have two forms; they could either be prefixes, that is, a bound morpheme attached to the beginning of the base, or they could be suffixes, which are bound morphemes attached to the end of the base word. However, Muller et al. (2015, p. 42) suggest, affixations account for specific sections in second language learning, which are syntax and grammar. Affixations are used mostly as
inflections to root words in syntax, the concept is called inflectional morphology. However, it will be necessary to look at the different types of affixations.

2.5. Derivational and Inflectional Affixations

Crystal (2004, p. 123) describe derivational affixes as words that can formed new words to give new meanings or categories from the original meaning of the base word. Derivational affixation is an affixation process which brings about a change in word class and eventually a change in meaning. For instance, adjectives can be derived from nouns. Verbs can be derived from nouns as stated by (Thomson, et al. 2012, p. 59). Some examples include three types of derivational prefixes, namely: negative prefixes as ‘in’, ‘anti,’ ‘un’, ‘mis’, ‘dis’, number prefixes, ‘uni’ (indicating one) ‘bi’ (two) ‘tri’ (three). Relation prefixes such as ‘pre’, ‘post’, ‘trans’. Some examples of suffixes include the person suffixes such as ‘ant’, ‘ist’ (accountant, biologist), adverb suffixes as ‘ly’, noun suffixes ‘ism’, ‘ment’, adjective suffixes as ‘able’, ‘ful’ verb suffixes ‘ing’.

Meanwhile, the inflectional suffix only leads to changes in form. For example, inflections within nouns could lead to a change in form, from singular to plural. For examples mango - mangoes, flower - flowers, berry - berries, book - books and boy - boys, (Baurer, 2004, p. 161). The two tables below show the different types of affixations and what occurs when prefixes and suffixes are added to root words. Table 1 below shows some of the suffixes that cause changes in word class, when the attached suffix changes the noun to a verb, it becomes a verb and when the attached suffix to a verb changes it to an adjective it becomes an adjective suffix. Sometimes the attached suffix on a verb changes to a noun it becomes a noun suffix. The table below is an example of how derivational affixes are formed.
Table 1. Derivational Suffixes

<table>
<thead>
<tr>
<th>The Formation of derivational suffixes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Verb suffixes</strong></td>
</tr>
<tr>
<td>Beauty (N) ________ Beautify(V)</td>
</tr>
<tr>
<td>Deaf (N) ______Deafen (V)</td>
</tr>
<tr>
<td>Hospital (N) ______ Hospitalize (V)</td>
</tr>
<tr>
<td><strong>adjective suffixes</strong></td>
</tr>
<tr>
<td>Help (V) ______Helpful / helpless (adj.)</td>
</tr>
<tr>
<td>Use (N/V) _____Useful /useless (adj.)</td>
</tr>
<tr>
<td>Philosophy (N) ______ Philosophical (adj.)</td>
</tr>
<tr>
<td><strong>Noun suffixes</strong></td>
</tr>
<tr>
<td>Waste (V)______Wastage (N)</td>
</tr>
<tr>
<td>Found (V) _____Founder / Foundation (N)</td>
</tr>
<tr>
<td>Auction (N/V) _____auctioneer (N)</td>
</tr>
</tbody>
</table>

Table 2 below shows inflectional suffixes attached at the end of the root word. The number suffixes show the numerical changes of the root word. The verb suffixes change the verb functions to progressive, perfect past tense, or present tense, and noun suffixes indicate the genitive case or possession, and adjective suffixes identify comparisons.
Table 2. Inflectional suffixes

<table>
<thead>
<tr>
<th>Parts of speech</th>
<th>Inflection</th>
<th>Grammatical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun</td>
<td>s, es (boys, houses)</td>
<td>Plural/number</td>
</tr>
<tr>
<td>Noun Pronoun</td>
<td>'s' (dog’s, dogs’)</td>
<td>Genitive (Case) possession</td>
</tr>
<tr>
<td>Verb suffixes</td>
<td>ing, ed, s (Playing, played, plays)</td>
<td>Progressive, Perfect Past tense, Present tense</td>
</tr>
<tr>
<td>adjective suffixes</td>
<td>'est', 'er' (big, bigger, biggest)</td>
<td>Superlative / comparative</td>
</tr>
</tbody>
</table>

3. Method

The present research examines derivational and inflectional errors Swedish Secondary School students make in grade 7, 8, and 9 and what factors contribute to the errors. This section is about the methodology of the work, it reports on material collected and how the data collected will be analyzed. It also examines issues such as the population of the study, the sources or instruments of data collection, the method of data analysis, the reliability and validity.

3.1. Material

The present research examines derivational and inflectional errors Swedish Secondary School students make in grade 7, 8, and 9 and what factors contribute to the errors. The data for this work consist of primary sources. Primary sources include raw materials from the field obtained through a fill-in-the-blanks language test and six classroom essays written by each student in each grade that did the language test. The test was divided into four sections with each section having one or more
derivational and inflectional affixations. Section A demanded students to add a prefix to complete each sentence. Section B demanded the students to complete the sentences by choosing between different prefixes and suffixes (‘dis’, ‘un’, ‘mis’) section C demanded the students to choose between suffixes (‘ful’, ‘ism’) and finally section D mainly required students to choose between suffixes (‘ing’ and ‘ed’) to complete the sentences.

The choice of the test implemented was taken from the model created by Nations (2001, p.399–416). The test model requires the researcher to choose target words for the test. The chosen words were familiar classroom words taken from different reading materials that the students use during classroom learning activities. There were nineteen target words in the test and most of the words had the same affixes. For example, section A and section D had the same suffixes. The other words, for example section B and section C (see appendix 1), did not have the same affixes. It was intentional to make the test a little difficult, to test the students’ knowledge in using word formation suffixes and prefixes when writing.

The present research also involves analyzing derivational and inflectional affixation from students’ essays submitted as written assignments for grading. The essays were all written inside the classroom using word document format without access to the internet or grammar and spell checkers. The reason and need for this data are to vary students’ use of affixations in different written materials. There were equal numbers of essays per grade and per student. The written assignments were at least one hundred to one hundred and fifty words taken from teachers’ data with teacher's permission. The researcher selected two essays from each student for each grade. Some of the essays involved students describing a dream house or home. Another essay required students to write about their favorite artist or write about their favorite online game. One of the essays was about house listing, another about family cooking and one about house swapping. However, all the essays were analyzed focusing only on derivational and inflectional affixation and the error analysis framework (Ellis et al. 2005 p. 60).

3.2. Participants.

The research is to examine derivational and inflectional errors Swedish Secondary School students make in grade 7, 8, and 9 and what factors contribute to the errors. The researcher distributed the test to two schools. The study used a non-random sampling method that enables the researcher to have a population with characteristics that are required for the research. The data collection for this study is predetermined. The data therefore involves a non-random
sampling, for the purpose of investigating the acquisition of derivational and inflectional affixation or word formation processes. The two schools will be called school A and school B for the purpose of anonymity of the population of the study. Another important criterion was the information ethics criterion. The participants were informed about the purpose of the test. The study consists of 50 grade 7 students, 45 grade 8 students and 53 grade 9 students. A total of 148 students participated in the test from both schools (see Table 4). The researcher worked with the teachers teaching English in both schools. Shohamy (1988, p. 165) suggests that the participants for the study should be chosen intentionally to fulfill the aims and objectives of the research. It is based on this that the population of the present study is chosen. Table 4 below presents the total number of students who participated the language test grades 7, 8 and 9.

Table 4. Number of students per grade.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>50</td>
</tr>
<tr>
<td>8</td>
<td>45</td>
</tr>
<tr>
<td>9</td>
<td>53</td>
</tr>
<tr>
<td>Total</td>
<td>148</td>
</tr>
</tbody>
</table>

As mentioned earlier two schools were selected as the population of the research. The reason why the schools were selected was because both schools were Swedish secondary schools and had grade 7, 8 and 9. Beside this criterion, most of the participants had Swedish as their L1. In selecting the criteria for the test some of the students were immigrants reading English for Beginners (Engelska Grund). These students were not included to take the test to respect the voluntary participation criterion and to eliminate imbalance in knowledge level during testing (Osterlind, 2002, p.35). The method also intended to eliminate multiple L1s in the system of testing to attain high validity and reliability. Again, among those who took the test five students from both schools were bilingual from other European countries and had Swedish as their L2. However, this number was very small to affect the results. The teachers
and the researcher informed the students the purpose of the test, and four students had language diagnoses. The four students decided they will not take the test. The participation was voluntary, not obligatory. The students were not to take the test to respect the voluntary participation criterion. Furthermore, a letter of consent was distributed to students’ parents for the reasons of research confidentiality (Vetenskapsrådet, 2017, s. 28). The entire process took a long time because of the heavy presence of Covid-19 in February 2021.

3.3. Data

The present research examines derivational and inflectional errors Swedish Secondary School students make in grade 7, 8, and 9 and what factors contribute to the errors. This section explains the instruments for the data that was collected. The questions for the test were taken from an existing test called Super Teacher Worksheets, (https://www.superteacherworksheets.com/prefixes-suffixes/prefixes-dis-un_DISUN.pdf). The questions were chosen because at this level the researcher had conducted a pre-study during an internship to get a better understanding of which terms to use during the test, and to make sure that most students understood the terms used in the language test. The gender of students was not part of the research because it was not considered to affect the results. Students in grade seven answered most of the questions showing the students understood the test with the help of their teachers. The test was conducted in a classroom setting during English lessons in both schools. Those who had difficulties understanding the terms had access to their English teachers to explain the terms. The test included derivational and inflectional affixes.

The nine affixes included are prefixes ‘un’, ‘mis’ ‘dis’ and suffixes ‘-ism’, ‘ant’, ‘ist’ ‘ful and ‘ing’ ‘ed’ (see Table 3). The students were familiar with the words since they are used to having the words in their reading comprehension and word list training.
Table 3. The table presents the selected affixations for the fill-in-the-blanks Language Test.

<table>
<thead>
<tr>
<th>Derivational</th>
<th>Inflectional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefixes: un, mis, dis</td>
<td>Suffix:</td>
</tr>
<tr>
<td>Suffix: ant, ing, ful, ism,</td>
<td>Progressive ‘ing’ present participle ed, past tense</td>
</tr>
</tbody>
</table>

3.4. Data analysis.

The present research examines derivational and inflectional errors Swedish Secondary School students make in grade 7, 8, and 9 and what factors contribute to the errors. The researcher has to find a strategy to carry out the investigation. There are mostly two research methods used in any research. The qualitative and the quantitative method. The quantitative methods refer to data collection from questionnaires, interview or tests that results to statistic data while the qualitative method is the interpretation of the data collected from various studies (Bryman et al. 2007, p. 21) The data could be primary data, that is data collected primarily by the researcher while secondary data is data collected from documents, articles, and literature (Bryman et al. 2007). The present study uses both quantitative and qualitative methods and the data is entirely primary data. The advantage of using both a quantitative and a qualitative method is to achieve a full understanding of the case being studied.

This section describes how the primary data collected is treated and how the material is selected. Firstly, the fill-in-the-blanks language test, that involves the selection of specific derivational and inflectional affixations. The data is to facilitate the transcription of students' answers, this is called the constructed responses method for testing (Downing, 2009, p 30). The reason why the researcher used the constructed responses method for testing, is because this is an English language testing method used to assess student’s ability of vocabulary and grammar in the form
of a fill-in-the-blanks (Osterlind, 2002, p.33). This method requires the researcher to provide specific material for the students to complete the missing information (Douglas, 2010, pp. 169–204). The researcher collects the responses and uses a counting method for the correct answers (Downing, 2009). The researchers are recommended not to have any personal bias or to make personal judgment because this can affect the results (Osterlind, 2002, p.31). The rationale of this test method is that this type of test may help to analyze students' mean scores and the results obtained may indicate how the testing administered affects the validity and reliability (Osterlind, 2002, p.35).

Apart from the constructed responses method for testing, the method used for identifying and counting derivational and inflectional errors is the Error Analysis method to provide the knowledge of the students' learning process in L2 acquisition. Corder (1973, 1977,1981), likewise Ellis (1994) and Gass et al. (2008), recommend the following three steps for error analysis.

According to Ellis (1994) and Gass et al. (2008), the first step is the identification stage which lists the different errors. For example, in this research an error identification in section B, where the students are required to complete the sentence choosing between the provided prefixes ‘mis’, ‘dis’- or ‘un’. In question (6) I do my best, not to mismanage my time, but I did not pass the math test. The root word provided to be completed is ‘manage’. Students complete the sentence with; I do my best, not to unmanage my time, but I did not pass the math test. The example above shows a derivational prefix error due to the substitution of the correct prefix ‘-mis’ with other derivational negations ‘un’. This is identified by the researcher as incorrect prefix, the correct prefix response is ‘mismanage’. The correct response is ‘I do my best, not to mismanage my time, but I did not pass the math test’.

The second step is the categorization stage which involves arranging the errors based on their types. For example, additive errors; where the learners add an unnecessary item, which make the sentence or word grammatically incorrect. Another example of error categorization is substitution errors, where the wrong morpheme is used or selected in the place of the right one. For example, section B question (4) the student completes the sentence choosing between the provided prefixes ‘-mis’, ‘-dis’- or ‘-un’ in the root word ‘conduct’. Alis misconduct was painful for his parents. (Does not have good conduct). The correct prefix which is ‘mis’ is left out and the student selects ‘un’ that is using an incorrect prefix ‘un’ instead of the correct prefix 'misconduct'
The third step is the explanation and description stage which includes the explanation and description of the errors based on their sources or contributory factors such as, overgeneralization errors, error of addition or omission errors. The explanation and description involve different categories according to (Corder (1967), as cited in Jabeen et al., 2015). Richards (2015, p.34) suggests the researcher has to use certain features to facilitate the explanation of the types of errors. For example, overgeneralization errors, where the learners are overusing certain grammatical rules to apply them in areas where they cannot be applied, like using the past tense ‘ed’, in for example ‘sleeped’ instead of ‘slept’. This will be explained in detail in the discussion section.

3.5. Method Validity and Reliability

This section aims to interpret the validity and reliability of the work. Harrison, et al. (1998, p. 121) defines reliability as the consistency or applicability of a test across different groups of learners anywhere and at any time. It is therefore important to discuss the internal and external validity of the study. Creswell, (2009, pp 116–118) suggests internal validity has to do with the accuracy of the research method that is the qualitative and the quantitative methods accuracy. Internal validity is mostly concerned with whether the results could rightly support the cases, population, or topic that is being studied. Internal validity also affirms that the results of the research method could be replicated by other researchers and if the same phenomena could be replicated in similar cases. The concern for external validity is whether the results could be generalized to a larger population. The research method of the present study to some extent could be generalized to a larger population and the research methods could be replicated by other researchers (Campbell et al. 1966) p. 38).

However, there could be certain problems that may affect the external and internal validity of a research. For example, the difficulty faced with the population, or group being studied through randomization because the random test method can affect scores and affects internal validity, and a random population can affect external validity. The present research has a non-random method, that is the population was intentionally selected. Thus, the external conditions will not be the same if the study was to be applied to the same schools and the same group of students at another period. Other factors could affect the results, such as the time or period of the tests. However, the two schools that were selected could cause bias factors that could result to external invalidity because of the limited number of students. The results could not be applied to all secondary school students studying English in Sweden. Furthermore, the threat to internal validity is the group, the groups proficiency, the duration of the tests, reliability
in calculation (Campbell et al. 1966). However, even though the present study has a non-random population sample selection. Internal reliability could be difficult to obtain due to other extraneous factors such as the limited population, students maybe nervous, the time maybe another factor, which may suggest that the results cannot be generalized (Shadish, et al., 2002).

4. Results

The research is to examine the derivational and inflectional errors Swedish second language learners of English make in grade 7, 8 and 9 and what factors contribute to the errors. This section presents the results of the data obtained from the fill-in-the-blanks language test and the selected essays. The derivational and inflectional errors result of the fill-in-the-blanks language test and the written essays are also presented in the tables below.

4.1. Error Analysis - Fill-In-The-Blanks Language Test.

This section presents the derivational and inflectional affixation errors found in students' fill-in-the-blanks test. The method used for Error analysis also explains how the errors are identified, classified, described, and evaluated according to the error analysis framework. The identification stage lists the different errors. The classification stage involves arranging the errors based on their types. The evaluation of the errors involves making a judgement on the implication of the errors to accompany the EA in the discussion section. The description is based on the error's sources or contributory factors such as overgeneralization, transfer errors as already presented above.

To begin with, these tables below present results of derivational and inflectional affixation errors in the fill-in-the-blanks language test for grades 7, 8 and 9. Table 5 below presents the number of questions students answered on derivational and inflectional affixations in the fill-in-the-blanks test. It presents the maximum points or scores in each section of the test for each student. The derivational and inflectional affixations were divided into four sections (see the appendix for the different sections of the test). Section A ‘-un’ Section B ‘un’, ‘mis’, ‘dis’, Section C, ‘ism’, ‘ant’, ‘ist’ ‘ful’ Section D ‘ing’, ‘ed’ (See Table 3). The test was divided into four sections with each section having one or more derivational and inflectional affixations. In the test, section A demanded students to add a prefix to complete each sentence. The second section B demanded the students to complete the sentences by choosing between different prefixes and suffixes (dis, un, mis) section C demanded the students to choose between suffixes
(ful, ism) and finally section D requires students to choose between suffixes (‘ing’ and ‘ed’) to complete the sentences, each section had a maximum point or score as shown in the table below.

<table>
<thead>
<tr>
<th>Section A</th>
<th>Section B</th>
<th>Section C</th>
<th>Section D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 5. Number of questions – maximum points – per section and per student

The method used as mentioned above to calculate students’ results was a systematic counting method. The researcher collects the response samples and uses a counting method for the correct answers (Downing, 2009).

Table 6 below presents the mean scores across the three grades for those students who took the fill-in-the-blanks test on derivation and inflectional affixations in all the grades, grade 7, 8 and 9. The test is in the appendix, and one point was given for the correct derivational and inflectional affixation. A total of 2,812 answers were retrieved from all the grades and the results showed that the number of correct answers or points was 47%. The correct answers or points for all the grades were highest in section D, with a total of 68% while the correct answers or points were lowest in section C, with only 32%. The percentage of correct answers or points was lowest in section C for all grades, which may suggest that because all the grades performed poorly in section C students had the most difficulties in using this derivational and inflectional affixations. On the contrary the percentage of correct answers or points was highest in section D for all grades. The interpretation of the findings is that the 7, 8 and 9 graders had highest performance in section D with the suffix ‘ing’, according to the results showing the easiest, and straightforward affixations for students to understand. The 9 graders rank highest in all the sections (see Appendix I). The results for section A showed the highest with 67% for grade 9, followed by 52% for grade 8 and 52 % for grade 7. The results for section B are also highest with 53% for grade 9, followed by 44 % for grade 7 and 35% for grade 8 (see the discussion section for more details). The results for sections C showed highest with 37% for grade 9, followed by 35 % for grade 7 and 22% for grade 8. However, there is no straightforward reason
why the grade 7 did better in section C (see discussion section). The results for section D, are highest with 77% for grade 9, followed by 73% for grade 8 and 54% for grade 7. Significantly, the total scores, and maximum points of correct derivational and inflectional affixation errors shows only a slight difference for grade 8 compared to grade 7. The table presents the mean scores for each section and mean scores for each grade. Each section contains a given number of derivation and inflectional affixations (see Appendix I).

Table 6. The mean scores and the percentage of correct answers/points and mean scores in each grade and each section

<table>
<thead>
<tr>
<th>Grade</th>
<th>Section A</th>
<th>Section B</th>
<th>Section C</th>
<th>Section D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean score</td>
<td>% mean score</td>
<td>% mean score</td>
<td>% mean score</td>
<td>% mean score</td>
</tr>
<tr>
<td>7</td>
<td>2.1</td>
<td>52</td>
<td>2.7</td>
<td>44</td>
<td>2.1</td>
</tr>
<tr>
<td>8</td>
<td>2.1</td>
<td>52</td>
<td>2.1</td>
<td>35</td>
<td>1.3</td>
</tr>
<tr>
<td>9</td>
<td>2.7</td>
<td>67</td>
<td>3.2</td>
<td>53</td>
<td>2.2</td>
</tr>
<tr>
<td>Total</td>
<td>2.3</td>
<td>57</td>
<td>2.7</td>
<td>45</td>
<td>1.9</td>
</tr>
</tbody>
</table>

As shown above in table 6 the total mean score for correct derivational and inflectional affixations in all the grades and all the sections is 8.9 points. The percentage of correct derivational and inflectional affixations for total mean scores was again highest for grade 9, ranking first with 55%. Grade 9 mean score is also highest with 10.4 points, grade 8 mean score is 7.7 points, and grade 7 mean score is 8.4 points (see discussion section). It is however important to mention here that the above table shows differences in mean scores for derivational and inflectional affixations for all grades. The mean scores in the sections also vary. This may indicate the differences in the learning process. This may also be an indication that the learning process of derivational and inflectional affixations has many different stages. The explanation
to the phenomena is in the discussion section. However, as mentioned earlier, this is a small research enquiry with insufficient data. The above results need to be tested with a larger amount of population. The following section presents how the errors in the fill-in-the-blanks were identified, categorized, explained, and described.

4.2. Error classification and categorization.

As earlier mentioned, the errors were identified through the fill in the blank’s language test using a counting method. Below are some classifications of the derivational and inflectional error types.

4.3. Substitution Errors - prefix ‘mis’,

Most derivational prefix errors occur due to substitution errors. For example, the students insert another morpheme instead of the derivational prefix ‘mis’. The derivational prefix errors also occurred because students substituted the prefix ‘mis’ with other derivational negation prefixes such as ‘dis’, ‘un’ and ‘under’. For example, instead of the word ‘mismanage’ the students turn to use other prefixes such as ‘dis’, ‘un’ ‘under’ as prefixes to the word ‘manage.’ Additionally, the error occurred when students had to complete the word ‘misunderstand.’ The students used the prefix ‘dis’, as a prefix to the word ‘understand’. Also, 'instead of ‘misconduct’ students used ‘dis’ as a prefix. See the discussion section for further explanations.

4.4. Substitution Errors suffix ‘ist’, ‘able’, ‘ant’

The results also showed substitution and overgeneralization errors in derivational suffixes as students tend to substitute and overgeneralize the use of certain suffixes, for example the suffix ‘able.’ The suffix ‘able’ was used instead of the suffix ‘ant’ in the word ‘accountant.’ Thus, turning the word into an adjective instead of a noun. As a result, making the sentence grammatically incorrect by using the suffix in contexts which need other suffixes such as ‘ant.’

Another example of derivational suffix overgeneralization error is when derivational person suffix errors occur as in the word ‘chemistry.’ Students had to add the suffix ‘ist’ that derives the word ‘chemist’. The students' responses showed students use other suffixes for example ‘tryist’, to form the derivational person suffix. Thus, the students' words are formed without following the grammar rule, with the deletion of the root words' last syllables. In this case, the right derivational suffix is obtained when the last syllables of ‘chemistry’ are deleted to derive
‘chemist’. Students also substituted the person suffixes using other suffixes as, ‘trist’, ‘tyist’ ‘triant.’ There has been no further suggestion why these types of errors occur, it may be wise to suggest further studies. The only suggestion the researcher could use was that students may extend the rule of derivational suffix ‘ist’ on similar words such as “biology” = “biologist”. As noted, this is a suggestion that needs further investigation.

4.5. Letter Insert, suffix ‘ism’,

Other derivational errors were letter insertion errors. For example, the use of the derivational suffix ‘ism’ in ‘criticism’. Students complete the word with the suffix ‘ist’. Thus, substituting the suffix ‘ism’ with another suffix ‘ist’. The suggestion that students have written these forms because they think there is a one-to-one correlation between a word’s ending or the words last syllable in word formation processes. As indicated, this is a suggestion that requires further investigation. The error could also be regarded as a letter insertion error as indicated in previous sections. The students by omitting the letter ‘m’ and inserting or replacing it with another letter ‘t’ was mostly noticed among 7th and 8th graders, showing an area of difficulty in suffixes in the fill-in-the-blanks language test. Further investigation is needed to explain the reasons for such errors.

4.6. Errors in Students’ Essays

This research focuses on derivational and inflecti onal affixation errors secondary school students make in grade 7, 8 and 9 when writing. Therefore, it will be necessary to look at a few written essays to find out the derivational and inflectional errors in essays from the same grades 7–9. The essays are written by the students who wrote the grammar test in the schools selected for the survey. The table below presents the derivational and inflectional affixation errors found in the essays students submitted as written assignments for grading. All the essays were analyzed focusing on the EA framework. The results of the derivational and inflectional affixations errors found in students’ essays are presented using a table for better analysis. Furthermore, the presentation in the table is linked to the EA framework mentioned earlier in section two. The researcher uses the response items to measure specific features selecting only derivational and inflectional affixations used by students in the essays (Downing, 2009).
Table 7: Presents derivational/inflectional affixation errors in students’ essays.

<table>
<thead>
<tr>
<th>No</th>
<th>Identification of Derivational/inflectional affixations errors</th>
<th>Derivational/inflectional affixations</th>
<th>Derivational/inflectional affixations</th>
<th>Derivational/inflectional affixations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Error correction</td>
<td>Error description and Error Evaluation</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1. A handy buyer was a person who buyed things in a store.</td>
<td>1. A handy buyer was a person who bought things in a store.</td>
<td>Overgeneralization error</td>
<td>Inflectional suffix (past tense) ‘ed’ using past tense suffix ‘ed’ instead of the grammatical past tense of buy (bought) or confusing when to use the past tense suffix ‘ed’.</td>
</tr>
<tr>
<td></td>
<td>2. When rich people buyed houses they had like two or three rooms in one house.</td>
<td>2. When rich people bought houses, they had two or three rooms in one house.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>In modern houses they also use exact measure.</td>
<td>In modern houses they also use exact measurement / measurement(s)</td>
<td>omission of suffix ‘s’ to indicate the plural. The suffix ‘ment’ is also left out. Errors in both derivational (ment) and inflectional ’s’(plural)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>And instead of a pillow they slepted on wooden headrests</td>
<td>And instead of a pillow they slept on wooden headrests.</td>
<td>Overgeneralization of inflectional suffix - past tense ‘ed’</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I’m writing to you again because i was wanting to ask you to stop mowing your lawn at 03:00.</td>
<td>I am writing to you again because I wanted to ask you to stop mowing your lawn at 03:00.</td>
<td>Progressive form, inflectional error due to the wrong use of tense and suffixes ‘ing’. The</td>
<td></td>
</tr>
</tbody>
</table>
The section identifies the errors in students' essays. The errors are analyzed using subheadings considering the EA framework already discussed in previous sections.

| 5 | Some of the children thinks it is okay "it looks okey, | Some of the children think it is okay "it looks okey, | overgeneralization with inflection of suffix ‘s’ (overgeneralization of 3rd person singular in plural context) |

The section identifies the errors in students' essays. The errors are analyzed using subheadings considering the EA framework already discussed in previous sections.

### 4.7. Omission errors, suffix ‘ment’

The derivational suffix errors were also due to morpheme omission. Students omitted the use of the derivational suffix ‘ment’. The students are unaware of which language form to use when the form to be chosen has an affixation. Students forget the grammar rule to add the derivational noun suffix ‘ment’ for example in the word ‘measure’- ‘measurement’. Thus, also omitting to add the suffix ‘s’ to indicate the plural as in ‘measurements.’ This could be a complex word formation process. The students have not mastered how the words are formed using suffixes. The discussion section explains other researchers’ ideas on complexity of grammar and word formation to second language learners.

### 4.8. Substitution Errors - (Past Tense) ‘ed’ and ‘s’ (3rd Person Singular)

The inflectional past tense suffixation errors that occurred in students' essays was because students struggle with tenses, for example the suffix ‘ed’. Students overgeneralize the use of the past tense ‘ed’. Students use ’ed’ in ‘buy’ instead of ‘bought’. In the essays, students overgeneralize the use of the past tense suffix ‘ed’ in words like ‘sleep’ instead of ‘slept’. Also, overgeneralization occurred with the use of inflectional suffix ‘-s’ in words like ‘think’ which
changes the forms of the verb. The research reveals students are having problems understanding grammatical rules as a result student in the survey made overgeneralization errors, by substituting ‘ing’ with ‘ed’. For example, adding ‘ing’ in words like ‘want’ when the intended sentence was to be written in the past tense using ‘ed’. The frequencies of students' errors are shown in the table below. This section’s general conclusion, subsequently, shows similarities between the errors in the fill-in-the-blanks test, and errors that occur in students' essays.

4.9. Frequency of the different error categories

The following table is a presentation of the frequencies of the different error categories.

<table>
<thead>
<tr>
<th>No</th>
<th>Error Types</th>
<th>Frequency of errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Omissive errors</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>Substitutive errors</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>Additive errors</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Overgeneralization errors</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>Transfer errors</td>
<td>0</td>
</tr>
</tbody>
</table>

The table shows the highest errors were substitution errors, errors of addition and omission then overgeneralization errors. There were no transfer errors that could directly be connected to the students' responses. The next section therefore is a discussion section. It also includes suggestion for future research that could be done in relation to the present study.

5. Discussion

The present research aimed to examine derivational and inflectional errors Swedish Secondary School students make in grade 7, 8, and 9 and what factors contribute to the errors. This section compares the results of the present study to results of previous studies. Thus, the contribution of the present study to the already existing knowledge. It also examines how different this work is from the other related literature. However, in analyzing the data some discoveries about the types of errors and their possible causes were made. The main errors generated were errors related to past tense suffix ‘ed’ and the plural suffix ‘s’.
Ellis et al. (2005), Taher (2011), Ayati (2019), Tornber (2001), Khor (2012), Svartvik et al. (1996) and Krashen 1982) mentioned, some of the difficulties students have are related to the use of morphemes and grammar. This stems from the fact that second language learners have difficulty with grammar rules that apply in the second language (Richards, 1974). For example, the use of plural endings ‘s’ and the use of regular past verbs endings ‘ed’. The present study shows the students had the same difficulties with the use of the suffix past tense ‘ed’. The suffix ‘s’ indicating the plural of a noun. This could suggest that derivational and inflectional affixation is still a difficult area for many L2 learners in secondary schools in Sweden. This difficulty may continue if teachers ignore the origins of the error (Corder, 1997). However, it may not be easy to find a solution for these errors. Further research is required to address the difficulties of grammar.

Likewise, Kellman (1986), Harmer (1998), Pienemann (1999) and Ellis, et al. (2005), explain it is frequent with developmental errors during the process of second language learning. This may justify why students have difficulty in understanding grammar rules, and why they have problems understanding English tenses (Tornberg, 2004). The outcome of the present study is in accordance with previous research findings, since the present study has revealed students have difficulties in understanding the use of derivational and inflectional affixations that have to do with the use of ‘ed’ and plural ‘s’ and the progressive ’ing’. The errors in tenses make the student’s written production ungrammatical (Crystal, 1997). However, these errors may be related to the language learning stages as noted above.

Furthermore, when looking at problems related to affixation errors, the present study’s observations are in accordance with the idea that errors may be due to the differences in L1 and L2 (Svartvik et al., 1996, p. 145). The students have not yet mastered the grammar rules of the second language. Also, Richards (1974, p. 30), and Corder (1967) describe that error analysis is proof that there are differences in L1 and L2. The errors identified in EA is evidence that the learners are in the process of learning. The present study explains the difficulties in the use of derivational and inflectional affixation may occur because of the complexity of the second language. For example, ’chemist’ and ’chemistry’ ’accountant’ and accountable’ are words that change the part of speech or words that change the tenses may be complex language situations for second language learners to understand. It was obvious that students are still in the stage of a learning process. The acquisition of word elements in English for L2 learners is complex (Thomson et al. 2012). They did not know which affixation to use in different language situations (Khor, 2012).
Lado (1957), Selinka (1972), and Littlewood (1984) maintain that errors are due to transfer from L1 to L2. The present study could not find any error directly connected to transfer. For example, the students’ substitution of ‘ed’ in ‘wanted’ with a progressive ‘ing’ ‘wanting’ could not be described as transfer. The students have not been affected by L1 in this case of substitution. The students are rather mixing the verbs and the tenses. It is also the case when students prefer to use ‘able’ to complete the word ‘account’. The word becomes an adjective ‘accountable’ instead of the required noun ‘accountant’. This error could not be regarded as a transfer error. Students have not mastered the grammar knowledge of the second language. However, some language errors could not be explained using L1 justifications (Selinka, 1972). Consequently, no transfer errors were found in the present research. This could be an interesting area for further research.

However, even without cases of transfer, the research is significant because with EA teachers could understand second language learners needs for more exposure to L2 grammar rules to avoid certain errors in their written production (Richards, 1974). Teachers need to equip themselves with error analysis to be able to help second language learners improve their language proficiencies (Corder, 1967). Moreover, teachers need to help second language learners understand the differences in L2 structures (Weinreich (1953). And lastly, this EA reveals teachers have a duty to teach second language learners how grammar works (Carter (1997). It is worth mentioning that EA only advocates on the errors of second language learners and dismiss what the second language learners do accurately (Elis et al. 2005, p.69–70).

Based on the above discussion, the work is however limited because it examines only a few derivational and inflectional affixations. There are many other derivational and inflectional affixation or word formation processes like conversion, duplications, and compounding that have not been treated in the study. Future researchers may have to continue to study how students find difficulties deriving these word formation processes mentioned here. Also, this work is limited because of the population of the study. The data has limited itself to only two schools. Other researchers could carry out the same study with other school populations for a comparative study. A different kind of comparative study could be to find out how derivational and inflectional affixation is formed in the Swedish language and compared them with the formation of affixations in English. This may lead to the discovery of positive or negative transfer depending on how similar the Swedish language is to the English language.
6. Conclusion

The paper aimed to investigate derivational and inflectional errors in a grammar test and written essays of Swedish second language learners in grade 7, 8 and 9. The major findings of the research reveal that student errors are mostly errors of omission, overgeneralization errors and substitutive errors that result in ungrammatical structures. However, while the 9th graders have improved their acquisitions of derivational and inflectional affixations, the 7th and 8th graders appear to make similar derivational and inflectional affixations errors. Also, the results reveal that the use of derivational and inflectional affixation is still a problem for Swedish secondary school students learning English as a second language. The study therefore suggests the importance of further research on derivational and inflectional affixations errors for second language learners in Swedish secondary school.
References

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**Appendices**

**Appendix I**

**ENGLISH LANGUAGE TEST:**

Date: ____ 2021

FILL - IN - THE - BLANKS.

AFFIXATION - SUFFIX AND PREFIX

GRADE 7, 8 AND 9
Section A).
Add a prefix to each word in parenthesis ( ) to complete each sentence.
1. Tricia was ________ to visit her friend because she had a lot of homework to do. (able)
2. Mrs. Sieracki was ___________________ with the low Social Studies test scores. (happy)
3. Christian ____________________ his jacket when he came inside the house. (buttoned)
4. Please help your mother ________ the groceries from the car to the kitchen. (load)

Section B).
Write a single word with mis-, -dis- or un- to complete each sentence.
1. My shoe is ____________________. (not tied)
2. Carl feels he is being__________________. (people do not understand him)
3. Abby is ____________________ to beat me in the video game. (not able)
4. Alis ____________is painful for his parents. (does not have good conduct)
5. Mrs. Wu said she does not want _______ homework handed in. (not finished)
6. I do my best, not to ________my time, but I did not pass the math test. (manage)

Section C).
Write a single word with -ant, -ist, -ful, -ism to complete each sentence.
1. I am ______________ to have such a loving family. (full of thanks)
2. Willy saw a man who was working as a___________ wandering around the pharmacy. (chemistry)
3. Carla, you look _____________________ in that dress. (full of beauty)
4. The squirrels in the backyard are ______________. (harm)
5. Did you see your _____________ to manage your bills? (account)
6. This broken political system is a _________ to the government. (critic)

Section D).
Add ed or ing to the verbs in parenthesis () to complete each sentence.
1. Bart is ____________ on his little sister. (spy)
2. The baby is always__________ when he is hungry. (cry)
3. My friends are _________ tickets to the baseball game. (buy)

Answer Key
A). Add a prefix to each word in parenthesis ( ) to complete each sentence.
1. Tricia was unable to visit her friend because she had a lot of homework to do. (able)
2. Mrs. Sieracki was unhappy with the low Social Studies test scores. (happy)
3. Christian unbuttoned his jacket when he came inside the house. (buttoned)
4. Please help your mother unload the groceries from the car to the kitchen. (load)

Answer Key
B). Write a single word with mis, dis, un- to complete each sentence.
1. My shoe is untied. (not tied)
2. Carl feels he is being misunderstood. (people do not understand him)
3. Abby is unable to beat me in the video game. (not able)
4. Alis misconduct is painful for his parents. (does not have good conduct)
5. Mrs. Wu said she doesn't want unfinished homework handed in. (not finished)

Answer key

C). Write a single word -ant, - ist, -ful, - ism, to complete each sentence.
1. I am thankful to have such a loving family. (full of thanks)
2. Willy saw a man who was working as a chemist wandering around the pharmacy. (chemistry)
3. Carla, you look beautiful in that dress. (full of beauty)
4. The squirrels in the backyard are harmful (harm)
5. Did you see your accountant to manage your bills? (account)
6. This broken political system is a criticism to the government. (critic)

Answer key

D). Add ed or ing to the verbs in parenthesis () to complete each sentence.
1. Bart is spying on his little sister. (spy + ing)
2. The baby is always crying when he is hungry. (cry + ed)
3. My friends are buying tickets to the baseball game. (buy + ing)

Appendix II

Consent Letter - Parental consent letter

Date 2021 03 08

Dear parents, I am a student in Gävle University. As part of my training, I am carrying out a study looking at how students can learn English words formation processes. I hope that this information will help suggest ways that schools and teachers can support their education in English word formation processes. I am writing to ask if you would be willing to give permission for me to ask your son/daughter if he/she would like to take part in my research.
This will involve your son/daughter filling in a task in order for me to find out what he/she finds difficult in word formation processes in English.

This project will be supervised by professors in Gävle University. The English test is to take place during normal school hours and will take between twenty to thirty minutes of your son’s / daughter’s time. Your son’s/ daughter’s participation in this research will be treated confidentially and all information will be kept confidential, meaning that no one will be able to work out what it is your son/daughter has written. If you have any comments or questions about this research please contact my supervisor, Jessika Nillson, using the contact details provided. The research has been approved by the Gävle University Ethics Committee. If you wish you can contact the Gävle ethics committee by telephone __________ or by email ______________ if you have any complaints about this research.

Many thanks in advance, please let me know if you need more information. I would appreciate it if you could complete the attached permission slip and return it to the English teacher at your son / daughter’s school.

Regards,

Jeannette Håkansson.