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THE ENGLISH FRICATIVE CONSONANT /Z/ AS A CHALLENGE TO NORWEGIAN L1 EFL LEARNERS: AN ERROR ANALYSIS OF PHONEMIC TRANSCRIPTIONS

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Abstract. English fricatives, such as /z/, are thought to pose substantial challenges to the students of English as a Foreign Language (EFL) whose first languages (L1s) are characterised by phonetic repertoires that are dissimilar to that of English as far as fricatives are concerned (Kallio *et al*. 2021; Kanokpermpoon 2007). The absence of the fricative /z/ in the phonetic inventory of Norwegian is reported to impact negatively on the Norwegian L1 EFL learners' speech production in English (Rugesæter 2014). The study that is further presented in the article aims to analyse potential challenges associated with the English fricative consonant /z/ experienced by a group of Norwegian L1 EFL students (hereafter "participants") on the B2 level of proficiency in English according to the Common European Framework of Reference for Languages (The Council of Europe 2011). To that end, the participants were requested to execute a series of phonemic transcriptions in the International Phonetic Alphabet (IPA): one transcription at the end of the autumn semester (Task 1) and another one at the end of the spring semester (Task 2). The phonemic transcriptions in the study were regarded as a diagnostic tool (Fouz-González, Mompean 2021; Lintunen 2005) that provided an index of the participants' familiarity with /z/ and, indirectly, reflected their use of /z/. The error analysis of the participants' transcriptions revealed that the majority of them made mistakes by substituting /z/ for /s/. Considering that the substitution of /z/ for /s/ was common in Task 1 and persisted in Task 2, it was concluded that the participants, who were on the upper-intermediate level of English proficiency, found /z/ challenging. The linguo-didactic implications of the findings are discussed in the article.

Keywords: English as a Foreign Language (EFL), the English fricative consonant /z/, /s/ – /z/ contrast, upper-intermediate EFL learners, Norwegian L1

1. INTRODUCTION

Successful foreign language (FL) learners should master pronunciation in an FL and foster their awareness of individual sounds of the FL they study (Bjelaković, Čubrović 2021; Huensch, Thompson 2017; Verschik 2017). However, an FL learner's success in mastering pronunciation may be hampered by a host of variables (Szyszka 2017; Waniek-Klimczak, Klimczak 2005), such as individual sounds (also referred to as "segmentals") that pose significant problems to the learners of English as a Foreign Language (EFL) whose first languages differ significantly from English (Bjekić, Čubrović 2021; Kallio *et al*. 2021; Kanokpermpoon 2007; Roa *et al*. 2021; Waniek-Klimczak 2011; Zhang *et al*. 2021). For instance, English fricative consonants, e.g. /z/, are reported to be associated with substantial challenges to the EFL learners whose first languages (L1s) are not typologically related to English, such as Chinese, Thai, etc. (Kanokpermpoon 2007; Strange 1992). However, EFL learners whose L1s are genetically close to English also experience production and perception difficulties that involve English fricatives (Lersveen 2018; Rugesæter 2014). In particular, the English fricative consonant /z/ is found to be difficult to perceive and pronounce by Norwegian L1 and Swedish L1 EFL learners (Flege, Hillenbrand 1986; Haugen 1967; Lersveen 2018; McAllister *et al*. 2002; Rugesæter 2014). Whilst Norwegian and Swedish as Germanic languages are typologically very similar to English (Bech, Walkden 2016; Kapranov 2014), the absence of /z/ both in Norwegian and Swedish is argued to impact negatively on the Norwegian L1 and Swedish L1 EFL learners' speech production in English (Flege, Hillenbrand 1986; Lersveen 2018; McAllister 2007; Rugesæter 2014). In this regard, the literature indicates that a common /z/-related mistake made by Norwegian L1 EFL learners

involves the substitution of /z/ for its closest Norwegian equivalent, i.e. the fortis fricative /s/ (Rugesæter 2014). The substitution of /z/ for the Norwegian /s/ is argued to constitute a typical feature found in the speech by Norwegian L1 immigrant population in the USA (Moen 1988), as well as by young Norwegian L1 EFL learners on the beginner's level of proficiency in English (Lersveen 2018; Nilsen 1989; Rugesæter 2014).

Building upon the previous literature (Flege, Hillenbrand 1986; McAllister *et al*. 2002; Nilsen 1989; Rugesæter 2014), this article presents a study that seeks to shed light upon whether or not the English fricative /z/ would represent a challenge to a group of Norwegian L1 EFL students (hereafter "participants") on the B2 level of proficiency in English according to the Common European Framework of Reference for Languages, or CEFR (The Council of Europe 2011). Whilst the prior studies pay attention to /z/-related mistakes in the perception and production of English speech either by Norwegian L1 EFL learners on the beginner's level of proficiency or Norwegian immigrants in the English-speaking countries (Moen 1988; Nilsen 1989; Rugesæter 2014; van Dommelen, Hazan 2010), the novelty of the present study involves the research focus on the group of participants who are university EFL students on the upper-intermediate level of proficiency in English. It should be emphasised that the B2 level of English proficiency according to CEFR (The Council of Europe 2011) is routinely overlooked in the literature on EFL pronunciation (Rugesæter 2014). In addition, there seems to be a paucity of published research that analyses Norwegian L1 EFL learners' /z/-related errors through the lenses of phonemic transcription in the International Phonetic Alphabet (IPA). Seeking to bridge the existing gap, the aim of the present study is to identify and analyse possible /z/-related errors in the participants' phonemic transcriptions in the IPA by means of addressing the following research questions (RQs):

1. Would the participants make any mistakes associated with /z/ in the phonemic transcriptions in the IPA?

2. Would the participants' possible /z/-related mistakes in the phonemic transcriptions in the IPA decrease, increase and/or remain stable in the course of two semesters of study?

Prior to discussing the RQs, this article proceeds as follows. First, the theoretical framework of the study is provided in Section 2. Thereafter, in Section 3, a review of the previous literature is outlined. Section 4 discusses how phonemic transcription in the IPA is employed in a variety of EFL contexts. In Section 5, the status of the English language in Norway is explained. Additionally, Section 5 summarises the teaching and learning of English in Norwegian contexts. That is followed by the description of the present study, inclusive of the participants, methodology, tasks, results and their discussion in Section 6. Finally, the article concludes with the summary of the major findings and their linguo-didactic implications in Section 7.

2. Theoretical Background

The theoretical background of the present study is based upon the Speech Learning Model (SLM). In accordance with the SLM, the learner's L1 plays a prominent role in the acquisition of the phonetic system of one's foreign language (FL), second language (L2), or EFL, for that matter (Flege 2005). The SLM postulates that

> … the phonetic systems used in the production and perception of vowels and consonants remain adaptive over the life span, and those phonetic systems reorganize in response to sounds encountered in an L2 through the addition of new phonetic categories, or through the modification of the old ones. (Flege 1995: 233)

It should be emphasised that, according to the SLM, the mechanisms of learning one's L1 sound system last over the life span and can be successfully applied to the learning of an L2 and/or an FL (Flege 1995). In the process of L2 learning, the sounds that are phonetically similar to the learners' L1 are assimilated into the L2 and/

or FL categories (Chan 2012; Evans, Alshangiti 2018; Flege 2009). Specifically, the recently revised SLM (SLM-r) model suggests that L2 learners map the sounds they encounter in L2 words onto their L1 phonetic categories by means of the so-called cross-language mappings that take place subconsciously and automatically (Flege *et al*. 2021: 85). It follows from the SLM, as well as from the SLM-r, that the process of cross-language mappings is not straightforward, given that it is exacerbated by the learners' maturing categories in their L1 that can block the formation of new categories of the FL sounds (Best, Tyler 2007; Rojczyk 2010; Munro, Bohn 2007). Specifically, it is argued that the maturation of the L1 categories can lead to potential problems associated with the perception of phonetic contrasts in the L2 and/or FL (Flege, Hillenbrand 1986: 508).

In addition to the compromised perception of the L2/FL contrasts (for instance, the /s/ – /z/ contrast in English), the SLM points to the substitution of FL-specific phonemes that are absent in the learners' L1 by the closest L1 phoneme as a typical strategy used by an FL learner (Evans, Alshangiti 2018). From the vantage point of the SLM, the substitution implies that the FL learner either construes a mental association of the unfamiliar FL phoneme with the L1 phoneme or fails to establish the connection between them (Chan 2012; Flege 1995). It is inferred from the SLM that the novel FL sound could be linked by the FL learner to the closest L1 sound or sounds (Flege 1995).

In light of the above-mentioned factors, the SLM suggests that the learners' L1 exerts phonetic and phonological influences on the FL sound system (Amengual 2021; Flege 2009). In the SLM, the cross-linguistic influence that is associated with the learners' L1 is deemed to be a cause of the FL speech production with the so-called "foreign" accent that involves a range of pronunciation errors on the part of an EFL learner (Bjekić, Čubrović 2021; Marković 2020; Waniek-Klimczak 2008; Waniek-Klimczak *et al*. 2015). Additionally, the SLM assumes that the cross-linguistic phonetic and phonological influences are one of the reasons of "hearing with the

accent" (Amengual 2021), i.e. the compromised phonemic ability of the FL learners to perceive and process the FL-specific segmentals. It is inferred from the SLM that a compromised perception ability (in other words, hearing with the accent) is likely to be concomitant with a similarly compromised speaking ability, i.e. speaking with the accent. This contention is explained in the framework of the SLM-r by positing that segmental production and perception in the learner's FL co-evolve owing to a bi-directional connection that is thought to exist between them (Flege *et al*. 2021; Flege, Bohn 2021).

In line with the SLM, it is assumed that EFL speakers whose L1s lack /z/ might experience challenges with its production and perception due to a variety of reasons (Flege, Hillenbrand 1986). Following the SLM-r, several variables could be involved in the compromised /z/ perception and production, for instance, EFL learners' individual characteristics, the amount of EFL exposure, and inter-subject variability, to name just a few (Flege *et al*. 2021; Flege, Bohn 2021). The following section of the article provides a review of the prior literature that seeks to establish variables that could be the cause of EFL learners' errors associated with /z/.

3. Literature Review

There is a cornucopia of previous publications that focus on EFL learners' and speakers' problems with /z/ (Broersma 2010; Bryła-Cruz 2021; Demirezen 2016; Flege, Hillenbrand 1986; Lersveen 2018; McAllister 2007; Rugæseter 2014; Roa *et al*. 2021; Zhang *et al*. 2021). The prior research literature focuses on i) the perception of the /s/ – /z/ contrast by EFL speakers and their English L1 controls (Broersma 2010; Flege, Hillenbrand 1986), ii) the perception of the /s/ – /z/ contrast by EFL speakers without the reference to the English L1 controls (McAllister 2007; Rugæseter 2014; Roa *et al*. 2021), iii) EFL speakers' perception and production of English fricatives inclusive of /z/ (Demirezen 2016; Lersveen 2018; Zhang *et al*. 2021),

and iv) gender differences in the production and perception of /z/ (Bryła-Cruz 2021).

The perception of the /s/ – /z/ contrast by Swedish L1 and Finnish L1 EFL speakers on the one hand and the English L1 controls on the other hand is investigated by Flege and Hillenbrand (1986). They have found that whilst English L1 speakers rely on phonological cues, such as the duration of fricatives, in order to identify /z/, Swedish and Finnish participants, whose L1s do not possess a /s/-/z/ contrast, show no significant effect of fricative duration (Flege, Hillenbrand 1986: 513). Additionally, the Swedish L1 and Finnish L1 participants' phonological awareness and phonetic sensitivity to fricative duration as a cue to the English /s/ – /z/ contrast do not correlate with their exposure to the English language in the English-speaking countries (Flege, Hillebrand 1986: 514). Similar to Flege and Hillenbrand (1986), Broersma's (2010) attention is centred on the durational cues for final fricative discrimination in English by Dutch L1 EFL speakers, who are contrasted with a group of English L1 controls. Broersma (2010) observes that, unlike the English L1 controls, the Dutch EFL speakers do not rely on the durational cues in the perception of the English final fricative contrasts. She concludes that a durational cue for the L1 fricative contrast is insufficient for successful perception of the /s/ – /z/ contrast (Broersma 2010).

Whilst research design in Broersma (2010), as well as in Flege and Hillenbrand (1986), involves the English L1 controls, there are several studies (McAllister 2007; Rugæseter 2014; Roa *et al*. 2021) that focus on the production of /s/ – /z/ contrast by proficient EFL speakers without comparing them to the English L1 speakers. For instance, McAllister (2007) indicates that English voiced fricatives are poorly acquired by Swedish L1 advanced EFL speakers, who fail to produce /z/. Likewise, Rugæseter (2014) has established that less than five per cent of the Norwegian L1 participants in his study produce the /s/ – /z/ contrast systematically in a reading-aloud task in English. He notes that the majority of the Norwegian L1 participants

substitute /z/ for /s/ consistently in their speech production in English. Analogously to Norwegian and Swedish, there is no /z/ in Spanish. Subsequently, Spanish L1 EFL speakers do not exhibit phonological awareness of the /s/ – /z/ contrast and fail to produce /z/ in a variety of positions in the word, particularly in the word-final position (Roa *et al*. 2021).

Whereas the study by Roa *et al*. (2021) focuses exclusively on the /s/ – /z/ contrast, Demirezen (2016), Lersveen (2018), Zhang *et al*. (2021) analyse EFL speakers' perception and production of /z/ and other English fricatives. Specifically, Demirezen (2016) investigates Turkish L1 EFL students' problems with the production and perception of /z/, /θ/, and /ð/. He has found that /z/ does not pose a substantial problem to the Turkish L1 EFL students due to the presence of a similar phoneme in Turkish. In like manner, Zhang *et al*. (2021) explore the perception and production of /z/ and other English fricatives, such as /f/, /v/, /θ/, /ð/, /s/, /ʃ/, and /ʒ/, by Chinese L1 EFL cohorts on the beginner's and intermediate levels of proficiency. They posit that /z/ is problematic for Chinese L1 EFL learners, who typically substitute it for /s/ and/or /ts/ due to the absence of /z/ in the Chinese phonetic inventory. By means of examining the perception and production of the unvoiced-voiced pairs of alveolar stops /d/-/t/, alveolar fricatives /s/-/z/, postalveolar fricatives /ʒ/-/ʃ/ and affricates /dʒ/-/tʃ/, Lersveen (2018) concludes that both the perception and production of the /s/-/z/ contrast by Norwegian L1 EFL speakers is compromised due to the L1 input.

Gender differences in the production and perception of English consonants, inclusive of /z/, are explored by Bryła-Cruz (2021). She suggests that the /s/ – /z/ contrast is difficult to Polish L1 EFL speakers in the word-final position. Specifically, it is difficult for 20% of female and 37.5% male participants in her study. Bryła-Cruz (2021) argues that whilst there is a Polish counterpart of /z/, Polish L1 EFL speakers' problems with the perception of /z/ are associated with insufficient attention to vowel duration as a temporal parameter in the /s/ – /z/ contrast (Bryła-Cruz 2021: 130).

It follows from the current literature that research studies focus, primarily, on EFL learners' perception and production of /z/, which are analysed, mainly, through the lenses of the /s/ – /z/ contrast. The literature, however, does not seem to utilise the IPA transcriptions as a diagnostic means of investigating EFL learners' errors associated with /z/. Further, in Section 4, there is an outline of prior studies that employ phonemic transcription in the IPA in a variety of EFL contexts.

4. Phonemic Transcription in the IPA in EFL Contexts

The literature in applied linguistics and EFL studies suggests that phonetic alphabets, for instance, the IPA, are invaluable tools in EFL settings (Messerklinger 2009: 27) that play an important role in the teaching and learning of English pronunciation (Allegra 2018: 1). The IPA in EFL contexts is problematised in the literature as a form of metalanguage that enables EFL instructors, as well as students, to visualise, represent, and communicate about the peculiarities of the English phonological system by means of phonetic symbols (Lintunen 2005; Mompean 2017; Mompean, Fouz-González 2021; Sordelli *et al*. 2022; Trinh *et al*. 2022). In the current research studies, the IPA transcription is regarded "an umbrella term that is used to refer to several types of transcription" (Lintunen 2004: 27), such as i) phonetic transcription (also known as narrow transcription), which is employed to represent nuanced phonological differences and ii) phonemic transcription, or broad transcription, which is used to separate one phoneme from another without delving into phonological details (Lintunen 2013; Marshall 2020; Mompean 2015; Mompean, Fouz-González 2021; Sordelli *et al*. 2022; Trinh *et al*. 2022).

In a number of prior studies, the phonemic (broad) transcription in the IPA is employed as a diagnostic tool in i) assessing EFL learners' awareness of the English sounds, ii) perceptual training associated with the sound categories, iii) facilitating a general insight into the phonetic system of English and its main varieties (Atkielski 2005;

Cox, Fletcher 2017; Fouz-González, Mompean 2021; Lintunen 2013; Marshall 2020; Mompean 2015; Mompean, Fouz-González 2021; Sordelli *et al*. 2022; Trinh *et al*. 2022). The literature seems to share a contention that the application of the IPA transcription, mainly in its phonemic variant, has a beneficial effect on the teaching and learning process in an EFL classroom (Atkielski 2005; Mompean 2005; Mompean, Fouz-González 2021; Sordelli *et al*. 2022; Trinh *et al*. 2022). For instance, Mompean (2005) argues that

> The use of phonetic symbols in foreign language teaching and learning is potentially very advantageous. Provided that the values of phonetic symbols are known and that the foreign language learner can produce and discriminate the sounds symbols stand for, these advantages include, among other things, increased awareness of L2 sound features, "visualisation" of such intangible entities as sounds, increased learner autonomy when checking pronunciation in dictionaries, etc. (p. 1).

As far as the "visualisation" (Mompean 2005: 1) of the English sounds in the IPA is concerned, it is argued to play a diagnostic role in identifying and understanding EFL learners' pronunciation errors. The logic behind this argument is that when the learners record and transcribe their own speech, or, alternatively, EFL instructors do so, the static and visual IPA symbols enable the visualisation of the pronunciation errors and facilitate their correction (Atkielski 2005: 1). In relation to the pronunciation errors, Komar (2017: 162) posits that phonemic transcriptions are reflective of EFL students' pronunciation errors that eventuate in their actual speech. Consequently, phonemic transcription could be seen as a diagnostic tool that is indicative of EFL learners' actual performance (Atkielski 2005; Lintunen 2005; Messerklinger 2009; Mompean, Fouz-González 2021; Sordelli *et al*. 2022; Trinh *et al*. 2022).

It should be observed, however, that whilst the use of phonemic transcription is considered "very advantageous" (Mompean 2005: 1) in a variety of EFL contexts (Komar 2017; Lintunen 2013), it is not

commonly employed in the EFL teaching and learning at primary and secondary schools in Norway (Rugesæter 2012). Further, the article proceeds to the description of the Norwegian EFL contexts and the status of English in Norway.

5. The Status of English in Norway and an Outline of the EFL Teaching and Learning in Norwegian Contexts

The status of English in Norway is characterised by the notions of both prestige and necessity, given that English is widely used for educational, professional, and recreational purposes (Brevik, Hellekjær 2018; Kapranov 2019). Generally, Norwegians are considered to be highly proficient users of English, especially in terms of oral and conversational skills (Vold 2022). The high level of English proficiency by Norwegians is based upon several variables, such as the daily presence of the English language on Norwegian TV, extensive travel to the English-speaking countries, and the necessity to use English in order to communicate with foreign workers, refugees, and foreign tourists in Norway (Sunde, Kristoffersen 2018). In particular, English is "omnipresent in Norway's written and audio-visual media and popular culture, and Norwegian youth often immerse themselves in leisure activities involving rich English input" (Sunde, Kristoffersen 2018: 280). The omnipresence of the English language in Norway has facilitated a view of the current status of English as hybrid (Hellekjær 2007; Rindal, Piercy 2013; Simensen 2005; Vold 2022). Specifically, it is argued that English in Norway is regarded as an L2 rather than an FL (Rindal, Piercy 2013: 212). However, it should be noted that English does not have the official status of an L2 there (Hellekjær 2007; Rindal, Piercy 2013). Its hybrid status is reflective of the current socio-linguistics context, where English is associated with an important part of everyday life (Eide 2021).

It could be argued that the status of English in Norway is commensurate with the context of the Norwegian EFL teaching and learning process. Due to the aforementioned hybrid status of English,

some EFL professionals suggest that English is taught in Norway less as an FL and more as an L1 (Simensen 2005). For instance, Norwegian L1, as well as English, are taught at primary school starting from the age of six (Brevik, Hellekjær 2018).

English is a compulsory subject at primary and lower secondary school in Norway. According to the curriculum requirements that are set by the Norwegian Ministry of Education, there are 138 teaching hours in Years 1–4 and 228 hours in Years 5–7 at primary school, whereas in Years 8–10 at lower secondary school there are 222 hours (Udir 2022a). From Year 1 onwards, the school subject of English involves the focus on such obligatory components as i) oral skills, ii) writing skills, iii) reading skills, and iv) digital skills (Udir 2022b). Given that English pronunciation as a part of oral skills is pivotal to the present study, let us note that the Norwegian Ministry of Education posits that "oral skills in English are to create meaning through listening, speaking and conversation" (Udir 2022b).

It follows from the description of the basic oral skills provided by the Norwegian Ministry of Education (Udir 2022b) that not much specific attention is paid to English pronunciation. However, by the end of secondary school a Norwegian EFL learner is expected "to use key patterns for pronunciation in communication" (Udir 2022c). Whilst there is a reference to English pronunciation in the competence aims, the Norwegian Ministry of Education does not describe what the key patterns of pronunciation are. In this regard, the prior literature indicates that "English pronunciation does not seem to play a central role in the development of communicative competences of a Norwegian L1 EFL learner" (Kapranov 2020: 73).

Taking into account the current context of EFL teaching and learning in Norway, it could be reasonable to assume that Norwegian EFL learners on the upper-intermediate level of proficiency might experience challenges with the pronunciation of the English sounds that have no analogues in their L1, Norwegian. Given that /z/ is absent in the phonological inventory of the Norwegian language, it remains to be elucidated whether or not the English fricative

consonant /z/ poses challenges to the group of participants, who are Norwegian L1 EFL learners on the B2 level of proficiency in English. That is further explored in the study, which is presented in Section 6 of the article.

6. The Present Study and Its Assumptions

From the vantage point of applied linguistics, the present study aimed at contributing to the existing body of knowledge about the acquisition of the English fricative /z/ by a cohort of EFL learners whose L1s did not have the equivalent fricative sound in their phonological repertoires (Flege, Hillenbrand 1986; McAllister 2007; Rugæseter 2014; Roa *et al*. 2021; Zhang *et al*. 2021). Specifically, the study focused on the group of participants on the upper-intermediate B2 level of EFL proficiency whose L1 was Norwegian. From a theoretical perspective, the study was informed by the tenets of the SLM and SLM-r. First of all, the study took into consideration the role of segmental production and perception of the FL sounds that were theorised to co-evolve and influence each other in the process of the FL category formation, which, according to the SLM-r, could take place regardless of the age of first exposure to an FL (Flege, Bohn 2021: 42). In addition, the study took into account the SLM-r tenet, which pointed to the non-linearity and inter-subject variability of an FL learner's phonetic performance (Flege, Bohn 2021). Importantly, however, the study factored in the SLM principle of the FL phonetic category formation that involved the FL learner's awareness of cross-language phonetic differences and ensuing establishment of perceptual links between L1 and FL sounds (Flege, Bohn 2021).

Yet, another theoretical and methodological consideration that was central in the study involved the prior research (Atkielski 2005; Lintunen 2005; Marshall 2020; Mompean 2005; Mompean, Fouz-González 2021; Sordelli *et al*. 2022; Trinh *et al*. 2022) which established that EFL students' transcriptions in the IPA were reflective of their pronunciation skills. In particular, the study factored in that

EFL students, "who were the best transcribers were also the ones whose pronunciation developed the most" (Lintunen 2005: 5). In line with the prior literature, phonemic transcriptions in the IPA were treated in the study as a diagnostic tool that allowed the identification of /z/-related mistakes made by the participants.

In light of the aforementioned theoretical and methodological backgrounds, it was assumed in the study that an EFL learner on the B2 level of proficiency according to CEFR (The Council of Europe 2011) would be aware of the English fricative consonant /z/ and, as posited by the SLM-r (Flege, Bohn 2021: 43), would be able to establish a perceived phonetic dissimilarity between /z/ and its closest Norwegian equivalent, the fortis fricative /s/. In other words, Assumption 1 was based upon the contention that the participants would not make any /z/-related mistakes in a set of phonemic transcriptions, in particular, they would not substitute /z/ for its Norwegian equivalent /s/.

Concurrently with Assumption 1, however, Assumption 2 was considered in the study. Assumption 2 rested on the participants' possible lack of awareness of the English fricative consonant /z/ that could stem from i) the absence of /z/ and the /s/-/z/ contrast in the phonological system of Norwegian, the participants' L1 (Flege, Hillenbrand 1986; Haugen 1967; Nilsen, Rugesæter 2015; Rugesæter 2014) and ii) insufficient attention to English pronunciation in the Norwegian EFL contexts (Bøhn, Hansen 2017; Kapranov 2020). All that, subsequently, would map onto the participants' errors associated with /z/ in phonemic transcriptions in the IPA, where, according to the SLM (Flege 1995; Flege *et al*. 2021), the participants, potentially, would substitute /z/ for its Norwegian equivalent /s/. In line with the aforementioned Assumption 1 and Assumption 2, two RQs were formulated (see the introductory part of the article). Based upon the RQs, the specific aim of the study was to identify, quantify and classify /z/-related errors in the participants' phonemic transcriptions in the IPA.

6.1. THE STUDY CONTEXT

The study was contextualised in the university course in English phonetics offered to pre-service EFL teachers at a university in Norway. The course consisted of two semesters of study (the autumn semester and the spring semester), which was organised around the topics in the course book *English Phonetics for Teachers* (Nilsen, Rugesæter 2015). The lectures and seminars in the course of English phonetics involved the topics from the course book by Nilsen and Rugesæter (2015) that are summarised in Table 1 below.

Table 1. *The Topics in the Course in English Phonetics*

N	**Lecture/Seminar Topics**	**Semester**
1	Chapter 1. Introduction Chapter 2. Sound Foundation (manner and force of articulation, phoneme and allophone, the syllable)	Autumn semester
2	Chapter 3. Consonants (stops, fricative, nasals, approximants)	Autumn semester
3	Chapter 4. Vowels (monophthongs, the weak vowels, diphthongs)	Autumn semester
4	Chapter 5. Stress, Rhythm, and Sounds in Company (word stress, sentence stress, weak forms, assimilation and elision)	Autumn semester
5	Chapter 6. Intonation (pitch, tones, the five tones in English)	Spring semester
6	Chapter 7. Teaching pronunciation (the teaching and learning of pronunciation, language practice)	Spring semester
7	Varieties of Spoken English (accent and dialect, variation in Britain, variation in the US, Australian English, pidgin and creoles, English as an international language)	Spring semester

As far as the teaching and learning content associated with /z/ was concerned, it was emphasised in the course book that

> The importance of teaching the difference between /s/ and /z/ cannot be stressed too strongly, because a great many pairs of words are distinguished solely by the use of these two fricatives. Teachers will do their pupils a disservice if they do not insist on the correct pronunciation of the "inflectional -s". (Nilsen, Rugesæter 2015: 46)

In addition to the theoretical and methodological considerations, the course book offered pronunciation practice (see Excerpt 1) that involved segmentals and important contrasts, such as the /s/ – /z/ contrast, which the participants were requested to listen to, practise and analyse. An example of pronunciation practice in the course book is provided in Excerpt (1) below.

(1) **Pronunciation practice 3.3**
(a) soup, psalm, course, psychology, dismiss, cement;
(b) zoo, amaze, raisin, please, misery, examine, possess:
(c) lice – lies; face – phase; niece – knees […] (Nilsen, Rugesæter 2015: 46)

In addition to pronunciation practice, the course in English phonetics had a strong focus on transcription exercises that involved individual words and sentences to be transcribed in phonemic transcription in the IPA, as illustrated by Excerpt 2.

(2) **Exercise 3.4. Transcribe the following words:**
Sparks, sits, smiles, busy, bus, matches, saves, chips, pears, conceal, goose, horse, mixes, amazes, glass […]
Transcribe the following sentences:
(a) Sarah's husband was disturbed by his Swiss cousin's singing.
(b) Suzy received an offer as assistant manager.
(c) We discovered all the cows grazing near the fancy swimming pool. […] (Nilsen, Rugesæter 2015: 46)

It should be noted that the participants were introduced to the IPA at the beginning of the autumn semester, when it was used in order to familiarise them with the consonant sounds and a number of contrasts, such as /w/-/v/, /s/-/z/, that were deemed to be of critical

importance to Norwegian L1 EFL learners. Additionally, it should be observed that the participants worked with the phonemic transcription in the IPA on a routinely basis during the two semesters of study either by transcribing individual words, such as *sparks*, *sits*, *smiles*, etc. in Exercise 3.4. (see Excerpt 2) or transcribing the whole sentences, as in examples (a) – (c) in Excerpt 2.

The course in English phonetics was aimed, primarily, at pre-service EFL teachers, who were expected to be at the B2 level of proficiency in English. Given that the participants in the study were on the B2 level according to CEFR (The Council of Europe 2011), it would be pertinent to specify its competences associated with pronunciation. Below, Table 2 summarises the competencies in terms of the overall phonological control, sound articulation, and prosodic features that are expected to be mastered by an EFL learner on the B2 level of proficiency.

Table 2. *Descriptors of Pronunciation-Related Linguistic Competencies on the B2 Level according to CEFR (The Council of Europe 2011)*

N	CEFR Descriptor Scheme	Descriptor
1	Overall Phonological Control	Can generally use appropriate intonation, place stress correctly and articulate individual sounds clearly; accent tends to be influenced by the other language(s) they speak, but has little or no effect on intelligibility.
2	Sound Articulation	Can articulate a high proportion of the sounds in the target language clearly in extended stretches of production; is intelligible throughout, despite a few systematic mispronunciations.
3	Prosodic Features	Can employ prosodic features (e.g. stress, intonation, rhythm) to support the message they intend to convey, though with some influence from the other languages they speak.

6.2. PARTICIPANTS

The study involved 16 participants (11 females and 5 males, mean age = 22.3 y.o., standard deviation = 3.7), who were on the B2 level of EFL proficiency according to CEFR (The Council of Europe 2011). The participants' proficiency level was documented by their secondary school leaving certificates that stated that they had passed their English exams on the B2 level. All participants were enrolled in an EFL programme for pre-service EFL teachers at a university in Norway.

The participants' L1 was Norwegian and English was an FL to all of them. There were neither early balanced nor early sequential English/Norwegian bilinguals among the participants. None of the participants reported any knowledge of a third language. The participants' formal exposure to English started at the age of six at primary school. In addition, all participants informed the author of the article of their short stays in the English-speaking countries, predominantly, in the United Kingdom (the UK) and the United States of America, either as tourists or students at the Norwegian Centre in York (the UK). The mean duration of their stays in the English-speaking countries was two weeks per participant.

The participants were requested to sign a consent form that allows the author of the present article to process, analyse and publish their written data for scientific purposes. To ensure confidentiality, the participants' real names were coded. The following coding scheme was used in the study, e.g. P as in "participant" and the number (P1, P2, … P16).

6.3. METHODOLOGY AND PROCEDURE

The study involved the following methodological considerations. In line with the prior literature (Atkielski 2005; Lintunen 2005; Marshall 2020; Mompean 2005; Mompean, Fouz-González 2021; Sordelli *et al.* 2022; Trinh *et al.* 2022), phonemic transcription in the

IPA was regarded as a diagnostic means of error identification as far as the participants' /z/-related mistakes were concerned. In light of the methodological approach adopted by Lintunen (2005), Mompean (2017), and Mompean and Fouz-González (2021), /z/-related mistakes made by the participants in the phonemic transcriptions were assumed to be indicative of the lack of awareness of /z/ and, consequently, its correct use in their speech production in English.

Two tasks, Task 1 and Task 2, that involved phonemic transcriptions in the IPA were used in the study. Task 1 was executed by the participants by the end of the autumn semester after they had been explicitly taught how to transcribe phonemically in the IPA. Task 2 was offered to the participants at the end of the spring semester. It should be noted that the participants had explicit instruction and practice in phonemic transcription in the IPA both in the autumn and in the spring semesters. In Task 1, as well as in Task 2, the participants were instructed to transcribe phonemically one short written text per task. Short texts for Task 1 and Task 2, respectively, were film plot synopses that were adapted from the web-site www.imdb.com (the Internet Movie Database, or IMDb). The reason for choosing the IMDb's plot synopses was accounted for in the prior literature (Kapranov 2019) that pointed to the successful application of feature films synopses to the execution of phonemic transcription tasks due to the generic and easily understandable summaries about popular feature films that, as a rule, were devoid of specialised vocabulary and aimed at the public at large. Whilst the short texts that were used in Tasks 1–2 originated from the IMDb's website, they were adapted by the author of the article in such a manner that each text contained words with the fricative consonant /z/. Specifically, there were six words that contained /z/ (two words with word-initial /z/, two words with word-medial /z/, and two words with word-final /z/) per each text in Task 1 and Task 2, respectively. It was ensured that no words that contained /z/ in Task 1 were repeated in Task 2. In addition, it should be observed that all six words with /z/ per task pertained to the frequently used lexical items that would be

typically encountered in stylistically neutral texts (for instance, *is*, *position*, *zoo*). The descriptive statistics of the tasks are summarised in Table 3.

Table 3. *The Descriptive Statistics of Task 1 and Task 2*

N	Descriptive Statistics	Task 1	Task 2
1	Total number of short texts to be transcribed per task	1	1
2	Total number of words per text	40	65
3	Total number of sentences per text	4	4
4	Total number of words that contained /z/ per text	6	6

The participants executed Tasks 1 and 2, respectively, at home and sent their phonemic transcriptions to the author of the article, who analysed them manually to identify /z/-related mistakes. Once the participants' /z/-related errors were identified, they were entered into the Statistical Package for Social Sciences, or SPSS (IBM 2011) in order to compute means and standard deviations of the errors per group. It should be specified that in the discussion of the results the terms "/z/-related mistake/mistakes" and /z/-related error/errors" are used interchangeably.

6.4. RESULTS AND DISCUSSION

The results of the data analysis revealed that the majority of participants made /z/-related mistakes, specifically 75% of all participants in Task 1 and 87.5% of them in Task 2. Whilst none of the participants transcribed /z/ as an omission (i.e. no symbol instead of /z/), they, nevertheless, substituted /z/ for /s/ both in Task 1 and Task 2. No other types of substitution, for instance, /ʃ/ instead of /z/, was found in Tasks 1–2.

These findings are further discussed in the article through the prism of the RQs in the study. To reiterate, RQ 1 aims at establishing

whether or not the participants make any /z/-related mistakes in the phonemic transcriptions in the IPA, whereas RQ 2 seeks to discover whether or not /z/-related mistakes decrease, increase, or remain stable in Task 1 and Task 2.

6.4.1. THE DISCUSSION OF RQ 1

As previously mentioned, the majority of the participants made /z/-related mistakes in phonemic transcriptions in Tasks 1 – 2. The only type of mistakes involves the substitution of /z/ for /s/. This finding supports Assumption 2 in the study, which factors in the absence of /z/ and the /s/-/z/ contrast in the participants' L1 (Flege, Hillenbrand 1986; Haugen 1967; Nilsen, Rugesæter 2015; Rugesæter 2014) on the one hand and insufficient attention to pronunciation in the Norwegian EFL contexts (Bøhn, Hansen 2017; Kapranov 2020) on the other hand. Arguably, the participants' lack of awareness of /z/ maps onto the /z/-related errors in Task 1 (the total number (N) of /z/-related mistakes = 39) and in Task 2 (N of /z/-related mistakes = 27).

Given that there are 16 participants in the study and six occurrences of /z/ per Task, the total number of /z/-related mistakes, potentially, could be 96 in each task per group (16 participants multiplied by six errors = 96). It should be borne in mind that each task involves the maximum of six occurrences of /z/ that are represented by two occurrences in the word-initial position, two in the word-medial and two in the word-final positions. The comparison between the highest possible number of /z/-related mistakes (N = 96) and the actual number of errors associated with /z/ per group in Tasks 1–2 is emblematised by Figure 1 below.

Against the hypothetical number of /z/-related mistakes, i.e. 96 in each task per group, the total number of the actual /z/-related errors in Task 1 (i.e. 39) does not seem to be substantial. However, if we analyse the number of /z/-related errors per participant in each of the tasks, the error analysis reveals that only four participants out of 16 (i.e. 25%) have no mistakes associated with /z/ in Task 1. At

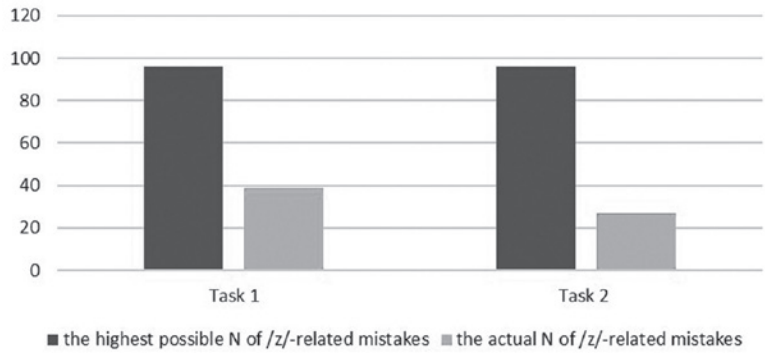

Figure 1. *The Total Number of Actual /z/-Related Mistakes per Group Compared to the Total Number of Potential /z/-Related Mistakes per Group in Tasks 1–2*

the same time, however, five participants (31.25%) stand out of the group by making the highest number of mistakes that involve the correct transcription of /z/. In particular, three participants (18.75%) have made the maximal number of /z/-related mistakes (N = 6) in Task 1, and two participants (12.5%) have 4 /z/-related errors each, whilst mean (M) mistake in total per group is 3.25, standard deviation (SD) = 1.83, in the same task. To reiterate, all /z/-related mistakes both in Task 1 and Task 2 involve the substitution of /z/ for /s/, whereas other types of mistakes associated with /z/, such as the omission of /z/ from the transcription or its substitution by other fricatives (e.g. /ʃ/) have not been identified in the error analysis. The distribution of /z/-related errors per participant in Task 1 is illustrated by Figure 2.

It is evident from Figure 2 that between the two opposite extremes of the participants with no /z/-related mistakes (25%) and the participants with the highest number of errors (31.25%) associated with /z/ there is a subgroup of participants with a lower number of mistakes; specifically four participants (25%) have made two mistakes each in Task 1. As shown in Figure 2, their mistakes are associated, predominantly, with substituting /z/ for /s/ in the word-final

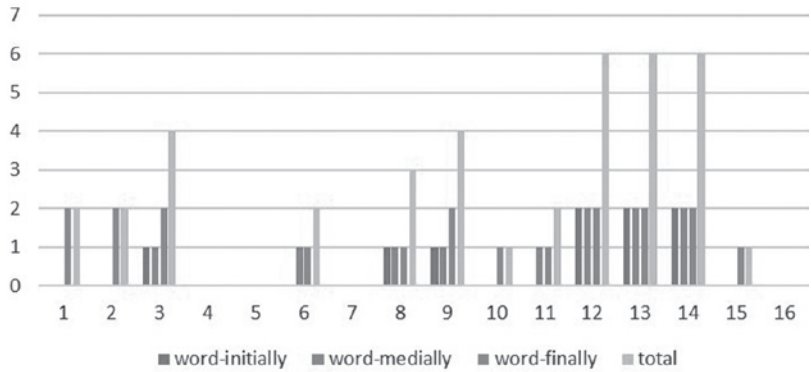

Figure 2. *The Distribution of /z/-Related Errors per Participant in Task 1*

position, represented in Task 1 by the words *lives* and *sisters*. Compared to Task 1, the distribution of the /z/-related errors seems to be similar as far as the mistakes in the transcription of /z/ in the word-final positions are concerned. This finding is graphically represented by Figure 3.

It is seen in Figure 3 that none of the participants has made the maximum number of /z/-related mistakes in Task 2, i.e. N = 6. The highest number of mistakes associated with /z/ and made by one participant (6.25%) is N = 4. That is followed by three participants (18.75%) with three /z/-related mistakes each, which are associated, mainly, with /z/ in the word-final position (see Figure 3). Otherwise, there is a substantial number of participants (37.5%) who have made only one mistake associated with /z/ in Task 2.

In terms of the relationship of the errors associated with /z/ and gender differences, the results of the error analysis in Task 1 indicate that three female participants and one male participant make no such mistakes, whereas the rest of them substitute /z/ for /s/ irrespective of gender. In Task 2, there are only two participants who have no /z/-related mistakes. These participants are female. Arguably, this finding provides indirect support to the previous literature

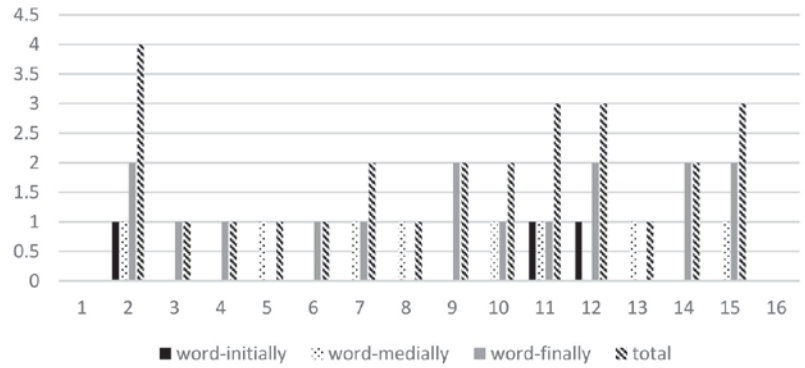

Figure 3. *The Distribution of /z/-Related Errors per Participant in Task 2*

(Bryła-Cruz 2021) which reports that female EFL learners make less /z/-related mistakes than their male counterparts. It should be mentioned, however, that the present study is not gender balanced with five males and 11 females. Hence, the gender-related findings in the study should be treated with caution.

Summarising RQ 1, it could be posited that whilst there is a decrease in the number of /z/-related mistakes from Task 1 to Task 2, the majority of participants, nevertheless, made them abundantly in the tasks. From a broad theoretical perspective, these findings corroborate the prior research (Haugen 1967; Lersveen 2018; Moen 1988; Nilsen 1989; Rugesæter 2014) that points to the substitution of /z/ for /s/ by Norwegian L1 EFL speakers. Presumably, the substitution of /z/ for /s/ by the participants can be accounted by the SLM and SLM-r (Flege 1995; Flege *et al.* 2021; Flege, Bohn 2021), which posit that EFL learners, and FL speakers generally, use the closest L1 phoneme instead of the FL-specific phoneme that is absent in their L1. Given that all /z/-related mistakes in the study involve only one type of errors, i.e. the substitution of /z/ for /s/, it could be argued that this mistake is not only recurrent in the tasks, but also typical to the group of participants. In terms of the typicality and consistency

of the type of /z/-related mistakes in the tasks, the present findings are in line with the SLM, which suggests that substitutions of a novel FL phoneme by the closest phoneme in the FL learner's L1 constitutes a typical strategy (Evans, Alshangiti 2018).

6.4.2. THE DISCUSSION OF RQ 2

As previously indicated in the article, RQ 2 is concerned with a possible decrease or increase in /z/-related mistakes in Task 1 and Task 2. The error analysis shows that there is a decrease in the total number of /z/-related mistakes from Task 1 (N = 39) to Task 2 (N = 27). In addition, the error analysis indicates that the decrease involves the occurrence of /z/-related errors in all three positions of /z/ in the words that are used in the tasks, namely /z/ in the word-initial, word-medial, and word-final positions. These findings are presented in Table 4, below, in the form of means (M) and standard deviations (SD) per group in each task.

Table 4. *//z//-Related Mistakes Made by the Participants in the IPA Transcription Tasks per Group*

N	Types of the /z/-Related Mistakes	M and SD of /z/-Related Mistakes in the IPA Task 1	M and SD of /z/-Related Mistakes in the IPA Task 2
1	/s/ instead of /z/ word-initially	M 1.5 SD 0.5	M 1.0 SD 0.0
2	/s/ instead of /z/ word-medially	M 1.37 SD 0.48	M 1.0 SD 0.0
3	/s/ instead of /z/ word-finally	M 1.58 SD 0.49	M 1.45 SD 0.47

It follows from Table 4 that whilst the decrease in the errors from Task 1 to Task 2 is observed in the data, it does not seem to be substantial.

The observation is further supported by the statistical analysis. In particular, the application of the paired samples t-tests in SPSS (IBM 2011) to the data that are summarised in Table 4 has yielded no statistically significant results. Specifically, the difference between means in Task 1 and Task 2 is not significant at $p < .05$ as far as the word-initial errors are concerned, e.g. $t(15) = 1.65145$, $p = .054539$. Similarly, the word-medial errors (e.g. $t(15) = 0.79241$, $p = .217173$), as well as the word-final errors (e.g. $t(15) = 0.64253$, $p = .262705$) are not significant at $p < .05$. In other words, despite the observed decrease in the total number of /z/-related errors, the absence of the statistically significant differences in the distribution of /z/-related errors in Task 1 and Task 2 is indicative of the persistent nature of the /z/-related mistakes that the participants make even after they have had two semesters of training in the IPA transcription.

Whereas the total number of /z/-related mistakes per group decreases from Task 1 to Task 2, data analysis reveals that the number of participants who make them actually increases in Task 1 compared with Task 2. This finding is illustrated by Figure 4 below, where the total number of errors associated with /z/ per individual participant is plotted against the tasks.

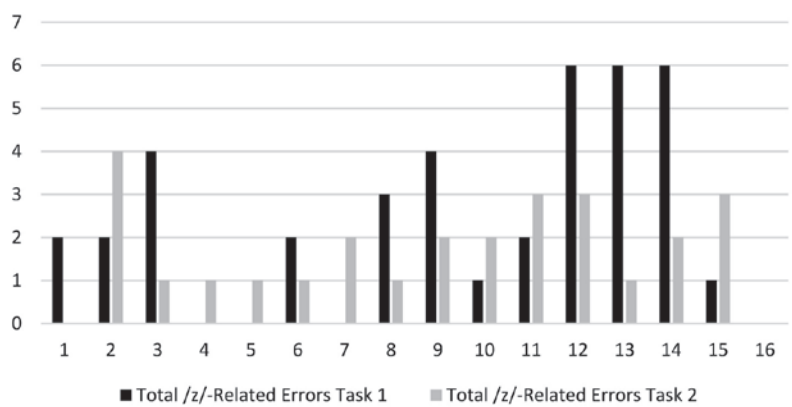

Figure 4. *The Comparison of Total /z/-Related Errors per Individual Participant in Tasks 1–2*

It follows from Figure 4 that the increase in the individual participants who make /z/-related mistakes in Task 2 (14 participants) in contrast with Task 1 (12 participants) involves Participants 4 and 5, whose phonemic transcriptions in Task 1 are error-free as far as the transcription of /z/ is concerned. It may seem paradoxical that, concurrently with the decrease in the mean /z/-related errors, Task 2 is characterised by the increase in the participants who continue to make /z/-related mistakes. Put differently, we observe the participants' non-linear performance in the Tasks 1–2. It could be assumed that the participants' non-linear or, perhaps, unstable performance in the tasks is indicative of their lack of awareness of /z/, its production and perception. In this regard, these findings support the literature (Bryła-Cruz 2021; Flege, Hillenbrand 1986; McAllister 2007; Roa *et al*. 2021; Zhang *et al*. 2021) which indicates that advanced EFL learners whose L1s do not possess /z/ in their phonological inventories fail to exhibit awareness of /z/. To reiterate, the present study employs phonemic transcriptions in the IPA as a diagnostic tool to establish whether or not the participants know how to transcribe /z/ correctly. Consequently, errors in the transcription signal about the participants' insufficient awareness of /z/. Given that the participants invariably transcribe /z/ by substituting it for /s/, it could be suggested that the participants' category formation for /z/ is compromised. In line with the SLM-r (Flege *et al*. 2021; Flege, Bohn 2021), the substitution of /z/ for /s/ in the present study illustrates the contention that if an FL phonetic category is not properly formed, a composite L1-L2 phonetic category may be developed on the basis of the closest L1 phoneme (Flege, Bohn 2021: 42).

Arguably, the persistence of the substitution of /z/ for /s/ in Task 2 cannot be explained by the participants' individual differences, since this mistake is made by the majority of them. Another variable that should be factored out involves the participants' sojourns abroad in English-speaking countries. In this regard, the author of the article concurs with Flege and Hillenbrand (1986), Lersveen (2018) and McAllister (2007), who point to the absence of positive

gains associated with the FL exposure in English-speaking countries as far as the acquisition of the /s/-/z/ contrast is concerned. Furthermore, in light of substantial everyday exposure to English in Norway (Brevik, Hellekjær 2018; Kapranov 2019; Sunde, Kristoffersen 2018), a stay abroad as a means of getting exposure to English appears less relevant in the Norwegian EFL contexts (Lersveen 2018; Vold 2022).

Presumably, the main variable that seems to be involved in the participants' /z/-related mistakes could be associated with phonetic factors. Following the SLM-r (Flege *et al.* 2021; Flege, Bohn 2021), phonetic factors are deemed to be the primary force behind the formation or non-formation of a new phonetic category for an FL sound (Flege, Bohn 2021: 42). In particular, the SLM-r posits that the phonetic factors related to the FL category formation involve the "degree of perceived phonetic dissimilarity from the closest L1 sound, and the precision with which the closest L1 category is specified when L2 learning begins" (Flege, Bohn 2021).

In conclusion to the discussion of RQ 2, it appears possible to consider the following. Notwithstanding that the number of /z/-related errors decreases in Task 2 in contrast to Task 1 (see the means summarised in Table 4), the number of participants who make /z/-related mistakes increases in Task 2. This finding suggests that the variables of continuous learning, sojourns abroad and other forms of L2 exposure as posited in the SLM-r (Flege, Bohn 2021) are not sufficient to override the phonetic factors at hand, namely the absence of /z/ and the /s/-/z/ contrast in the participants' L1, Norwegian.

7. Conclusions and Linguo-Didactic Implications

The study focuses on the English fricative consonant /z/ as a challenge to the group of EFL university students on the B2 level of proficiency. Given that scholarly attention to the upper-intermediate cohorts of EFL learners on the B2 level of proficiency is underrepresented in the literature (Raeisi-Vanani, Baleghizadeh 2022), the

study might offer a novel insight into /z/ as a challenge to the study participants whose L1 does not include this fricative consonant in its phonological inventory. Specifically, the study demonstrates that on the B2 level of EFL proficiency there is insufficient awareness of /z/, which is evident from multiple /z/-related mistakes in phonemic transcriptions in Task 1 and Task 2.

It should be emphasised that the study has demonstrated how phonemic transcription can be successfully employed as a diagnostic tool in identifying the participants' /z/-related errors. Specifically, the error analysis of the participants' phonemic transcriptions has revealed that they make the typical and persistent mistake of substituting /z/ for /s/ in Tasks 1 –2. The error analysis of the participants' transcriptions indicates that whilst the substitution of /z/ for /s/ in the word-initial and word-medial positions declines in Task 2, it still persists in the word-final positions in this task. It could be concluded that the present findings are indicative of the participants' compromised phonological awareness of /z/.

Whilst the present findings provide an addition to the prior literature (Flege, Hillenbrand 1986; Haugen 1967; Lersveen 2018; Rugesæter 2014) and offer novel avenues to explore, the study involves several shortcomings that should be remedied in the subsequent research. Specifically, the study would benefit from the recordings of the participants' spontaneous and semi-prepared speech in English. The recordings should be analysed in conjunction with the participants' phonemic transcriptions in order to arrive at a broader picture associated with their use of English fricatives, inclusive of /z/ in their actual speech. Additionally, the study would benefit from the participants' reflections concerning their awareness of /z/, the /s/ – /z/ contrast in English and the possible reasons that might compromise their perception and production of /z/.

Arguably, the present study is relevant not only to EFL students whose L1 is Norwegian, but also to other cohorts of EFL learners whose L1s lack /z/ and the /s/-/z/ contrast, for instance, Finnish, Swedish, and Thai. The findings in the study are indicative of

the following linguo-didactic suggestions that could be applied to a variety of EFL teaching and learning contexts. First, given that /z/-related errors are persistent on the B2 level of EFL proficiency, it appears reasonable to incorporate pronunciation instruction on this level of proficiency (Metruk 2017: 15). Second, EFL learners on the B2 level of proficiency whose L1 backgrounds lack /z/ should pay specific attention to /z/ and the /s/ – /z/ contrast in the English language. Third, EFL learners on the B2 level of proficiency should be encouraged to use the IPA transcription as a (self)-diagnostic tool in assessing one's potential problems associated with English pronunciation. Fourth, EFL students whose L1s do not have /z/ in their phonological inventories should be taught the English fricatives explicitly in a systematic manner.

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RESÜMEE

INGLISE FRIKATIIV /Z/ KUI VÄLJAKUTSE NORRA EMAKEELEGA INGLISE KEELE ÕPPIJATELE: FONEEMILISTE TRANSKRIPTSIOONIDE VEAANALÜÜS

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Inglise keele frikatiivid, näiteks /z/, põhjustavad arvatavalt raskusi inglise keele kui võõrkeele õppijatele, kelle esimesed keeled (K1) on frikatiivide poolest inglise keelest teistsuguse foneetilise repertuaariga (Kallio, Suni, Šimko 2021; Kanokpermpoon 2007). Kuna norra keele foneetilises süsteemis ei ole frikatiivi /z/, mõjutab selle puudumine uurimuste kohaselt negatiivselt norra emakeelega inglise keele õppijate kõneproduktsiooni (Rugesæter 2014). Selle uurimuse eesmärk on analüüsida inglise frikatiivi /z/ võimalikke raskuseid, mida kogevad norra emakeelega inglise keele õppijad (edaspidi *osalejad*) B2 tasemel CEFR-i järgi (The Council of Europe 2011). Selleks paluti osalejatel teha seeria foneemilisi transkriptsioone rahvusvahelises foneetilisel tähestikus (IPA), üks transkriptsioon sügissemestri lõpus (ülesanne 1), teine kevadsemestri lõpus (ülesanne 2). Foneemilisi transkriptsioone kasutati siin diagnostiliselt (Lintunen 2005; Fouz-González, Mompean 2021), et määrata nende /z/ tundmist ja kaudselt nende /z/ kasutust. Osalejate transkriptsioonide veaanalüüs näitas, et enamik neist tegi /z/ asendamisel /s/ häälikuga vigu. Arvestades, et /z/ asendamine /s/ häälikuga oli ülesandes 1 tüüpiline ning esines ka ülesandes 2, võib öelda, et kõrgema kesktaseme õppijate jaoks oli /z/ keeruline. Keelelis-didaktiliste implikatsioonide üle arutleti artiklis.

Võtmesõnad: inglise keel võõrkeelena, inglise frikatiivide /z/, /s/ – /z/ kontrast, kõrgema kesktaseme inglise kui võõrkeele õppijad, norra keel K1

Oleksandr Kapranov's research interests involve academic writing, cognitive linguistics and psycholinguistics.
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