

Young Norwegian Learners' Perception and Recognition of English Variants

Relationships with language exposure and media intake

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Abstract

English as a tool of communication is emphasized in the Norwegian subject curriculum reform of 2020, and no competence aims are directly connected towards the choice of English variant. The present study investigates young Norwegian learners' perception of differences between American English and British English and their ability to identify a specific variant, seen in relation to passive English exposure. The data collection comprised two parts: a questionnaire of exposure to English outside of school and a perception test of selected phonetic features contrasting the English variants under investigation. 40 students in year 5 participated in the study, allowing for a thorough investigation of weekly English exposure and self-assessment of basic L2 proficiency through selected statements. The present study aims to determine which external factors of English exposure might affect comprehension of differences between English variants. The perception test presented words and sentences pronounced in both American English and British English, and the participants were asked whether they perceived a difference or not. The participants were also presented with words and sentences in either British or American and were asked to identify which English variant they heard.

The results suggest that the participants in the present study manage to discriminate and recognize English variants to a certain extent. The participants with the highest score in the perception test were characterized by a high English exposure through listening to English songs, watching English films / TV shows, and watching videos on TikTok and similar platforms. Moreover, they self-assessed their L2 proficiency as good. The findings are supported by the results of the participants with the lowest scores on the perception test, who reported less exposure through these factors and a lower self-assessment of L2 proficiency. The findings in the present study contribute to the existing field of research by providing data concerning English exposure outside of school. Furthermore, the results support previous studies within accent perception and recognition. More research is needed to determine how passive English exposure affects the ability to discriminate and recognize English variants.

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It's been a hard day's night, and I've been working...

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1. Introduction

“It is not pronounced /ka:nt/, it’s /kænt/.”

Year 5 student

1.1 Background and purpose of the study

“English is a universal language”. This opening line from the Norwegian subject curriculum for English (The Norwegian Directorate for Education and Training, 2006) describes the purpose of teaching English in Norway. Though the curriculum has been updated since 2006, this quotation is useful in that it demonstrates the status of English worldwide. The most widely recognized variants are British English and American English (Han, 2019). These two variants both have a large presence in Norway due to cultural reasons such as football, media, music, and Norwegians’ frequent travels abroad. The American cultural hegemony in Norway has influenced the variant of English spoken among Norwegians. The quote at the head of this thesis comes from an English as a second language (ESL) classroom of Norwegian learners in year 5, whose teacher spoke with an American accent. When a substitute teacher with a British accent instructed the group, one student pointed out that the pronunciation of “can’t” was wrong due to the lack of /æ/. This raised the question of whether young Norwegian learners are aware of the phonetic differences between American English and British English. Based on the quote presented above, some learners detect phonetic differences without being aware of the different variants of English. According to researchers within this field (Nilsen, 2010), it is natural to consider General American (GA) as the standard variant of American English and Received Pronunciation (RP) as the standard variant of British English.

The Norwegian subject curriculum does not state which variant of English is preferred in the classroom. The subject curriculum reform of 2020 (The Norwegian Directorate of Education and Training, 2020) focuses on English as a tool of communication and identity development. The aims are to create a proficiency basis for local and global communication and prepare the students for a life which requires English competence in reading, writing and oral skills. No competence aims are

directly related to the choice of English variant, and no requirements regarding the choice of accent are present. Since there are no requirements for this, one may ask to what extent children in the Norwegian school system are aware of the different variants of English. Previous studies in this field of research have focused on how the choice of English variant shapes identity among Norwegian learners (Rindal, 2010; Rindal & Piercy, 2013). Carrie and McKenzie (2018) focus on the ability of Spanish monolinguals to distinguish between American English and British English, and to identify a specific variant. However, no studies have focused on young ESL learners' ability to contrast and identify American English and British English. The present study investigates young Norwegian learners' ability to identify words and sentences as either British or American, and aims to contribute to the existing field of research by considering the following research questions:

RQ1: Are Norwegian learners of English able to identify differences in words and sentences between American English and British English?

RQ2: Are Norwegian learners of English able to identify words and sentences as either American or British?

RQ3: Is there a difference in response between presenting learners with a single word and presenting them with a sentence?

RQ4: How does passive exposure to English impact young Norwegian learners' perception of different English variants?

1.2 Outline

The present study provides a detailed literature review of previous studies and relevant literature in the field, incorporating several studies focusing on ESL learners' aim of English variant and the ability to identify the country of origin of a native speaker of English. Considering that the subjects in the present study are young Norwegian learners of English, the present study also aims to investigate how the Norwegian school system addresses the issue of differences between American English and British English. Several teaching materials are considered, and a brief outline of how these textbooks incorporate a focus on this matter is presented. The literature review section also provides a thorough summary of incidental foreign

language learning, before describing the phonetic features that constitute the bedrock of the present study. The methodology section contains a thorough description of the design and procedure applied to investigate the research questions above. After this, the paper gives a comprehensive review of the data material collected before using the findings to discuss young Norwegian learners' perception and recognition of differences between British English and American English. The final section of the present study presents concluding remarks and offers suggestions for further research.

2. Literature review

2.1 Second language acquisition

According to Ellis (1985, p. 5), second language acquisition is “the study of how learners learn an additional language after they have acquired their mother tongue”. Contrasting with studies of first language acquisition, studies in this field involve how a person develops skills in a second language after already having acquired their primary language. An essential aspect in second language acquisition is bilingualism, which accounts for naturalistic acquisition along with classroom acquisition.

Naturalistic acquisition refers to learning a language in an untutored way, through exposure to it in one’s environment. On the other hand, classroom acquisition refers to the process of learning a language intentionally through instruction, preferably through classroom instruction or other courses that aim to teach an unfamiliar language (Ellis, 1985). When discussing bilingualism, it is usual to distinguish between early and late bilingualism. Rowland (2014) refers to simultaneous multilingualism, which involves children learning two languages from birth. Research in this field shows that neonates can discriminate between two languages already from birth due to prenatal bilingual exposure (Byers-Heinlein, Burns & Werker, 2010). Rowland (2014) also explains the concept of sequential multilingualism, the opposite of simultaneous multilingualism. This involves children learning a second language later, having already acquired a primary language. Children who start learning a second language in school are both sequential and early bilingual. However, late bilingualism is not compatible with simultaneous multilingualism, as a dominant language has already been acquired.

It is essential to discuss the interdependent systems theory (Rowland, 2014) in the debate regarding how children treat their two languages. This is the view that the two languages depend on each other during development, which leads to a type of bilingual bootstrapping. In acquisition of grammar, bootstrapping means that children learn the structure and rules of one language and convert this to the acquisition of a second language. This view is relevant when discussing how late bilinguals treat their two languages. In such cases, one language may be more dominant than the other,

which allows learners to depend on the structures already acquired in one language while learning a second (Rowland, 2014).

2.2 English as a lingua franca

Seidlhofer (2005, p. 339) states that “English as a lingua franca has emerged as a way of referring to communication in English between speakers with different first languages”. As Seidlhofer explains, the term “English as a lingua franca” (ELF) describes the global status of the English language. The aim is to be able to communicate with each other, with a sufficient level of proficiency. Globalization is connecting the world more extensively than ever before, and English has become a standard of communication across borders. Considering all English speakers in the world, only 1 in 4 is a native speaker of English. This means that most people communicating in English speak it as a second language (Seidlhofer, 2005; Crystal, 2003). It is important to ensure that speakers of English as a second language acquire a level of proficiency that allows for communication with citizens not sharing their mother tongue. This view of English allows for a recognition of how English is taught in Norway. As stated in the Norwegian subject curriculum, communication skills are the key in formal English education. The students are trained to be prepared for a life that requires sufficient communicative skills in English. As Rugesæter (2012) points out, the focus of English teaching has shifted from a native speaker model to an international communication model. The aims of teaching English as an L2 are to develop proficiency sufficient to communicate with others. But what is the status of English as an L2 in Norway? Previously, studies have used the term “English as a foreign language” (EFL) when describing its status in Norway. Another term growing in popularity is “English as a second language” (ESL).

2.2.1 A foreign language or a second language?

Graddol (2006) makes a distinction between EFL and ESL. He argues that EFL teaching tends to concentrate on the importance of native speakers’ culture and society. At the same time, the production of English focuses on imitating native speakers’ attitudes towards the language. In EFL settings, the learners are foreigners because the language is the property of the native speaker. Learners are invited in

as linguistic tourists, though native speakers position themselves as superior to the learners. On the other hand, ESL environments recognize the position of English in the society where it is taught. Children might be exposed to the language before they enter school, and ESL environments often contain a local variant of the language. One of the first examples of ESL identified was during the era of the British Empire. For local people to communicate, the British colonizers imposed the English language on the colonized societies (Graddol, 2006). There is a significant difference between EFL and ESL, though Rindal and Piercy (2013) claim that English in Norway is caught between these paradigms. Traditionally, English has been taught as a foreign language, with the focus on imitating a native-like standard. Nowadays, the English language has become more globalized, including in Norway, which leads to greater English exposure both in schools and outside of the classroom. Considering this, English has become a part of Norwegian learners' linguistic repertoire, being applied in daily speech more than ever. However, English is not treated as a second language either, considering Graddol's understanding of ESL (2006). English in Norway is not a product of postcolonialism, and no unique Norwegian variant of English has developed. Nevertheless, the colloquial term "Norwegian-English" has arisen, referring to the way Norwegians pronounce English. Though Norwegian learners of English may be exposed to a high amount of English before school age and during schooling in general, it is still not sufficient to term it ESL.

2.3 Accent among Norwegian learners of English

In Rindal and Piercy's study from 2013, an agreement to consider the English language in Norway as a lingua franca is proposed. The idea that English is used to achieve a communicative goal is supported by the Norwegian Directorate of Education and Training (2020). The English language has traditionally been taught as a foreign language in Norway, though it can be argued that the paradigm is shifting towards teaching it as a second language. The chances of communicating in English with other non-native speakers of English are fairly high. Hence, the goal should be to achieve sufficient skills for communication. The study by Rindal and Piercy (2013) investigates which variant of English Norwegian students aim at and whether their pronunciation matches their choice of English variant. The research included 70 Norwegian speakers of English from schools in Oslo. All participants

were 17 years of age at the time of conducting the study. The shared L1 variant was concluded by the authors to be Urban East Norwegian (UEN), which matches with their place of origin. In the test phase, the participants' speech production was recorded while reading a list of 40 words. In addition to this, casual conversations between sets of two participants were also recorded. This resulted in a total of three and a half hours of speech from the participants. The words included in the test consisted of sounds that could differentiate pronunciation between American English and British English. Three vocalic features and four consonantal features were under investigation. The vowel features were the quality of the vowels in the lexical sets BATH, LOT, and GOAT. The consonantal features investigated were the presence or absence of postvocalic /r/, the realization of intervocalic /t/, and the presence or absence of post-coronal /j/. The fourth consonantal feature to be investigated was the realization of voiceless /th/. The results from the study provide evidence of rhoticity among Norwegian learners of English. Of the participants, 82% pronounced the non-prevocalic /r/, while 68% used /æ/ in the vowel quality in BATH. These results suggest a strong influence from an American variant of English, while the British variant is a minority among Norwegian learners of English. There is a strong usage of American English in the realization of intervocalic /t/, dominated by a voiced realization of /t/ or the alveolar tap. Rindal and Piercy (2013) also found that the vowel quality in GOAT tends towards an American pronunciation, with 82% realizing the vowel as /ou/.

However, an essential aspect of the study referred to above was whether the participants de facto applied the linguistic features of the English variant reported. The findings suggest that, to a certain extent, the reported accent aims influenced the participant's pronunciation. Those who reported aiming for British English applied fewer American features than those who aimed for American English.

Notwithstanding, most participants applied more than one English variant for each phonetic variable. As a result, a hybrid and variable L2 accent characterized their pronunciations, meaning that the English variants reported did not exclusively match their actual accents. Still, the results imply that most of the participants applied the intended accent variant to a certain extent and indicate a high level of L2 awareness and competence.

A similar study was conducted by Rindal in 2010. The theoretical background involves the language situation in Norway and what variants of English are common in formal educational settings. Rindal refers to the variant of English used at the English teacher training program at the University of Oslo, where most courses focus on RP. Only one of seven groups focuses on GA as a standard form of English. Rindal also stresses that exposure to English outside formal settings mainly exposes learners to an American variant of English due to American global cultural hegemony (Rindal, 2010; Crystal, 2003; Pennycook, 1994). This suggests that GA (or other variants of American English) is the most common variant for media in Norway. In the study by Rindal (2010), 28 participants aged 17–18 years took part in a production test, being recorded while reading a word list including several critical conditions that differentiate American English from British English. The phonological variables investigated were postvocalic /r/, intervocalic /t/, and the vowel qualities in GOAT and LOT. They were also asked to state which English variant they aimed at in L2 speech production and provide the reasoning for their choice of variant. The aim was to investigate whether the participants would consistently use the variant of English they aimed at.

Interestingly, the self-reported accent aim corresponded significantly with accent use, meaning that learners aiming for British English applied the linguistic features of this variant to a large extent. Nearly two out of three tokens with a critical condition involved American-like pronunciation. Notwithstanding, the findings suggest some degree of mixing of English variants for all phonetic variables. Considering that a native-like pronunciation is no longer the goal of formal English instruction, it is challenging to achieve a full native-like pronunciation for all variables. However, these findings suggest that the participants, to a large extent, applied the linguistic features of the English variant they reported aiming for. On the one hand, this accounts for deep comprehension of the differences between American English and British English among the participants, in addition to an awareness of their own speech production. On the other hand, the studies by Rindal (2010) and Rindal and Piercy (2013) reported considerable discrepancies between the English variant reported as the aim and actual speech production. This must be emphasized, as the participants were characterized by a hybrid and variable L2 accent.

One of the participants in Rindal's study made the following statement: "The Norwegian school tries to teach everyone British English from the beginning, but it's so much easier for the students to learn American, because there's much more American TV and stuff like that" (2010, p. 253). This feedback shows how Norwegian learners may feel caught between two variants of English. Rindal (2010) refers to the focus on RP at the teacher training program at the University of Oslo, which supports the participant's claim concerning the presence of British English in school. However, American cultural hegemony characterizes Norwegian ESL learners' contact with English in informal settings. Although British English is the focus in the context of formal English instruction, passive media exposure may account for the high usage of American-like pronunciation. On the one hand, this may lead to confusion in terms of what variant to choose. On the other hand, it may lead to increased awareness of accent differences; this is likely, based on the participant's comment above.

2.4 Recognition of accents

When discussing the acquisition of second language phonology, it is essential to mention the differences in speech sounds between L1 and L2. One typical characteristic of English as a second language is the accent. In conversation, native speakers of English may find it easy to infer an EFL speaker's country of origin. French-accented English speakers differ from German-accented English speakers, as their native language influences their speech production (Archibald, 2009). Several researchers have conducted studies to investigate English learners' perception of accents, and the ability to locate the country of origin of an English speaker. Among these are Scales, Wennerstrom, Richard, and Wu (2006), who studied the ability to identify English accents among a group of English learners. The participants involved had various nationalities, originating from Asia, Africa, and Spanish-speaking countries, and were aged between 18 and 30 years old. Speech samples of native English speakers were presented to the participants, who were asked to identify the country of origin. The speech samples included native speakers of English with American and British accents – one speech recording for each variant. In addition, two English speakers with foreign accents were included, namely Mexican/Spanish and Chinese. The results show that less than 30% managed to identify the American native speaker, while the recognition rate for the British native

speaker was around 50%. The percentage of participants who managed to identify the Chinese speaker was barely above 30%, while the recognition rate for the Mexican/Spanish speaker was nearly 40%. No exact percentage from the test was offered in the results section, though a table of the recognition rates presented a rough statistical overview of the scores. One interesting finding from the study was the ability to identify the English speaker with a Chinese accent among the participants with a Chinese-speaking background. They had a recognition rate of over 80% for this, which is a considerably higher rate than the Spanish speakers' ability to identify the English speaker with a Spanish accent, which was slightly below 60%. In summary, the results of the study by Scales, Wennerstrom, Richard, and Wu (2006) suggest that it is less challenging to identify a speaker with a British accent than a speaker with an American accent. Moreover, speakers with a language background similar to the speaker seem to apply a set of metalinguistic tools to correctly label a speaker's country of origin.

Stephan (1997) asked German university students of English to label certain English variants. Among these were the Southern British accent and the General American accent. Other British variants included Northern English accent, Cockney, Welsh, and Standard Scottish. The participants were presented with each speech recording once and were required to label the variant immediately. 46.3% managed to label the speaker of American English, while 28.9% managed to identify the Southern English accent correctly. These results suggest that it is less challenging to label GA than RP, considering the proximity of RP and Southern English accents. The recognition rate for Cockney, Northern English and Standard Scottish ranged from 23.9% to 27.9%, while the percentage of correct answers for the native speaker of Welsh was only 5.5%. It is essential to stress that this test asked the participants to label the British variants according to their geographical location within the UK. For instance, the participants had correct answers if they labelled the Cockney accent as either "Cockney" or "London" but would fail if they responded with "British". However, the fact that less than half of the participants managed to correctly identify the single variant of American English presented raises questions about the ability of English learners to contrast native speakers of American and British variants.

2.5 Identifying British English and American English

A study conducted by McKenzie (2008) investigates how reliably Japanese learners of English could locate the place of origin of native speakers of English. Speech samples of different variants of English were presented to the participants, who had to identify the country of origin according to the speech sample presented. Though the speech samples recorded comprised multiple variants, including regional dialects within a country, the results were considered successful if the correct country of origin was answered. The American variants of English presented to the participants comprised of Midwestern US English (standard variant) and Southern US English (non-standard variant). The British varieties of English presented to them included Glasgow Standard English (standard variant) and Glasgow Vernacular (non-standard variant). The results from the study suggest that it is less challenging to recognize the country of origin of American native speakers of American variants than of native speakers of British variants. The participants tended to score relatively highly on recognizing the two American variants, with a successful recognition rate of 54.66% for the standard variant and 59.14% for the non-standard variant. The recognition rate for the British variants was lower, with 32.08% for the standard variant and 31% for the non-standard variant. There was no major difference between the recognition rates of the standard variant and non-standard variant, applicable to both the American and British variants presented to the participants. McKenzie (2008) explains that these results might be affected by the prevalence of American culture in Japanese society. The prevalence of the American variant of English may preserve its status and popularity among Japanese citizens due to the influence of the US news stream and media hegemony. In summary, McKenzie's study (2008) suggests that Japanese learners of English manage to locate the country of origin for native speakers of American variants more easily than for native speakers of British variants. It can be discussed to what extent Japanese ESL learners are exposed to Scottish English. A lack of exposure to this English variant may account for the higher recognition of the American variants. The present study applied the linguistic features of RP and GA to compare general phonetic differences between British English and American English.

Another study that investigated spoken language varieties was conducted by Carrie and McKenzie (2018). They recruited Spanish monolingual speakers of English, aged 19–33 years, in a study where they investigated the ability to distinguish between RP and GA. For the purpose of the study, a text was designed which included the four phonological variables under investigation. These were intervocalic /t/, postvocalic /r/, the vowel quality in LOT, and postconsonantal /u/. The text was recorded by four native speakers of English, two speaking RP and two speaking GA. Each English variant had one male and one female speaker. The participants in the study listened to the recordings and had to determine which English variant they perceived. The phonological variables under investigation were included 35 times in the test: 7 tokens of intervocalic /t/, 11 tokens of postvocalic /r/, 7 tokens of the vowel quality in LOT, and 10 tokens of the postconsonantal /u/ (Carrie & McKenzie, 2018).

To check whether the participants were able to distinguish between RP and GA, they were asked two questions during the data collection (Carrie & McKenzie, 2018, p. 316):

1. *Where do you think Speaker (X) is from?*
2. *What are your reasons for coming to that conclusion?*

The results from the study provide a relatively high success rate on correct identifications of speaker origin. The results suggest that it is more challenging to identify GA speakers than RP speakers. The female speaker of RP had a recognition rate of 76.1%, which corresponds to 54 out of 71 participants. This was the highest number of correct identifications of speaker origin. The participants attributed their answers to personal experience with English, mainly through recognizing familiar phonetic features in the recordings. The male RP speaker had a recognition rate of 49 correct answers out of 71 participants, which corresponds to 69%. One of the responses attributed the choice of speaker origin to the pronunciation of /t/, and other comments were related to various linguistic qualities of the speech. Lower recognition rates were reported for the GA speakers. The percentage for the male GA speaker was 66.2%, or 47 out of 71 participants. Several comments stated that the pronunciation of /t/ motivated their answers. Another factor, nasal quality in speech, was reported by 2.1% of participants. The percentage of correct

identifications of the female GA speaker was 64.8%, or 46 out of 71 participants. Of these participants, 37% reported the alveolar tap to be the cause of their origin identification. One participant reported that the vowel quality in HAND was the reason for their choice, though this phonetic quality was not under investigation. In conclusion, the percentage of correct identification was relatively high, though slightly higher for RP.

Different studies in the literature have come to different conclusions. Carrie and McKenzie (2018) found evidence for a higher recognition rate for British speakers, while the results from McKenzie (2008) suggest a higher recognition rate for American speakers. The variants under investigation in these studies differ to a substantial extent. The first included Scottish accents as the British variants, the latter included RP as the British variant. This may account for the difference in results. Although some linguistic features of the various English variants were mentioned as the reason for the participants' choices, RP and Scottish English have distinct pronunciations which are challenging to compare.

2.6 Incidental foreign language learning

Due to the globalization of society, English has become more common in daily situations. Children and adults are exposed to English more extensively than before. Though formal English instruction in Norway starts as early as the first year of school, students are exposed to a considerable amount of English input before this age. The term "incidental foreign language learning" is defined as "how children pick up English on their own outside the classroom" (Lefever, 2012). Along with formal instruction in English at school, the amount of English children are exposed to outside the classroom increases with age. As a result, children might have some degree of English proficiency prior to formal instruction. Koolstra and Beentjes (1999) researched how movies with English audio and Dutch subtitles affected the proficiency of young Dutch learners of English. Results from one of the groups in the study, year 6 students with two years of formal English instruction, suggest that students who frequently watch movies with Dutch subtitles had an improved vocabulary compared to those who reported less viewing of subtitled media. The

other group in the study, year 4 students with no formal English instruction, provided results suggesting that students had acquired some knowledge of English prior to formal instruction. The researchers suggest that this was due to exposure to English through media, mainly subtitled television programmes. Kuppens (2010) agrees that frequent consumption of English-language media affects and influences language learning, noting that Flemish year 6 students had acquired some knowledge about English by watching subtitled English TV programs prior to formal English instruction.

Lefever (2012) investigated how incidental foreign-language learning affected Icelandic children's comprehension of English and measured their acquired basic skills in English with no formal instruction. His findings show that the participants' perception of spoken English was relatively good and that by the age of eight, the participants had already acquired some basic skills of spoken English. Although a lack of vocabulary restricted communicative competence, boys tended to score better for this basic skill than girls. This can be explained by a higher number of boys playing English computer games. Listening skills were also satisfactory prior to formal English instructions. Regarding reading skills, the results from his study show that the children did not perform at the same level as listening. However, they had already attained basic literacy skills in English with no formal instruction at school, suggesting that incidental foreign language learning may enhance second language acquisition. In conclusion, Lefever (2012) claims that easy access to English at home through various media sources affects L2 acquisition, despite the lack of formal instruction.

2.6.1 Passive vs active exposure

When discussing how incidental foreign language learning can impact language acquisition in young Norwegian learners, it is essential to differentiate between active and passive exposure. In L1 acquisition, learners are exposed to their primary language in several ways, allowing for both input and output of a language. Their surroundings form the basis of their perception of the language, and the expected proficiency in L1 can be reached by perceiving speakers of the same language in addition to producing speech. When considering L2 acquisition, the surroundings

may, in certain settings, limit a learner's opportunities to produce and comprehend the target language, as it lacks a presence in daily settings. Some learners go into an active learning mode in formal instruction of a language – for example, in a classroom. On the other hand, active exposure to a target language may be limited outside of the classroom. Passive exposure is more likely than active exposure, especially in settings outside of the Norwegian classroom. Incidental foreign language learning involves passive input from a language through media, where one necessarily does not practise a language (Rugesæter, 2014). As mentioned, this does not involve formal instruction in the classroom, as this is labelled active exposure. The lack of output in passive exposure may limit the enhancement of speech production (language practice), while the presence of input may stimulate the enhancement of listening comprehension (language perception). However, an active learning mode may develop speech production, as learners rarely apply the structures and systems of a second language in settings of passive exposure (Rugesæter, 2014).

2.7 Media consumption among Norwegian youth

A critical concern of the present study is the effect that English exposure outside the classroom has on second language acquisition. English has become more available in Norway through various media, and statistics show that most Norwegian youths use the internet daily. Statistics Norway (2020) estimates that 92% of Norwegian children between the ages of 9 and 15 used the internet daily in 2019. Moreover, 59% used various video media every day, with an average usage time of 49 minutes. Another interesting fact from Statistics Norway (2020) is the increase in the percentage and usage time of children between the ages of 9 and 15 concerning digital games. In 2019, the estimate was that 81% used digital games every day, compared to only 14% in 2015. The time usage in 2019 was 73 minutes each day, compared to 28 minutes each day in 2015. The statistics displayed above provide evidence for a sharp increase among Norwegian youth in both time usage and daily use of digital games, which may be due to their growing availability and popularity. The statistics show that the daily usage of internet sources has barely increased (from 87% to 92%). One of the factors explaining this may be the incorporation of digital tools in Norwegian primary school and lower secondary school. Chromebooks,

iPads and other tablets are compulsory inventory in all Norwegian classrooms today, accessible for all eligible students in these year groups. There is no data available from 2015 explaining the time usage concerning video media. Therefore, it is difficult to conclude whether an increase or decrease has occurred in this area. From the lack of a noticeable increase in internet use, one can estimate that the data from this area reflects the amount of time spent on the usage of video media. The introduction of several online streaming services might account for a higher percentage of daily use. The sharp increase in usage of digital games might reflect a similar increase in video media usage due to availability and accessibility, but this question remains unsolved.

The media consumption of youth in Norway has increased sharply during recent years. The Norwegian Media Authority (2020) provides a detailed outline of preferred language among children in various media. This section provides data regarding English exposure on the internet among Norwegian children aged 11–12 years. In computer games, 62.5% primarily use English. Out of all participants who reported playing computer games, 70.5% believed that gaming enhanced their English proficiency. When watching films and TV shows, 61% of the boys primarily used English, compared to 42% of the girls. There is evidence for extensive English exposure among boys when watching YouTube, with 71% using English regularly. Less than half of the girls used English when watching YouTube. Although boys predominated in primarily using English in various media, the distribution become more even throughout the years. Nonetheless, the percentage of children who primarily use English in various media increases for both genders as they get older. Though the majority of social media has an age minimum of 13 years, 37% and 32% of respectively boys and girls use primarily English when using social media. The data from the Norwegian Media Authority (2020) provides evidence of extensive English exposure through various media from an early age.

2.8 American English and British English in textbooks from the ESL classroom

2.8.1 *Quest 5* Textbook

The next section of the present study investigates a selection of the teaching material available in the Norwegian primary school. One popular book series for formal English instruction in Norway is the *Quest* series. For year 5 students, *Quest 5* (Bade, Pettersen & Tømmerbakke, 2020) is a textbook following the new guidelines for the subject curriculum reform of 2020. Chapter 4 in this book is called “Let’s Go to the UK!” and has a cultural approach, showing students what they could experience in the UK. There are corresponding sound files available for all texts. Although nearly all sound files are recorded exclusively in British English, they contain various English variants present in the UK. Accents from Scotland, Wales, and Northern Ireland are all included in this chapter, along with British English. The only exceptions to the use of British English are small sections including profile speakers of either American or Australian heritage. These make up a small proportion of the entire textbook. Though chapter 4 contains several different variants of British English, there are no activities related to pronunciation or differences between the variants. Hence, passive exposure to different variants of English is present in the textbook.

2.8.2 *Quest 6* Textbook

The book designed for students in year 6 is *Quest 6* (Bade, Pettersen & Tømmerbakke, 2021). Like its predecessor, this textbook almost exclusively contains recordings of British native speakers. However, there are some similar exceptions in this edition as well. A poem by the American poet and social activist Langston Hughes is recorded in American English, as is a text about the headquarters of the United Nations. A chapter named “OK, USA!” contains solely American English speakers. Interestingly, this chapter covers differences between American English and British English in terms of vocabulary. It also explores some differences in terms of spelling. Native speakers of both American English and British English are included in the audio files, which allows for the exploration of pronunciation differences. Nonetheless, no activities are connected directly to pronunciation or accent differences. One can identify phonetic differences such as postvocalic /r/, intervocalic /t/, and the vowel feature in HALF. Still, the textbook and the corresponding audio files are characterized by passive exposure to the differences in

pronunciation rather than an active approach, since no activities are directly related to pronunciation or phonetic differences.

2.8.3 *Quest 7* Textbook

Quest 7 (Bade, Pettersen & Tømmerbakke, 2016), which is written for students in year 7, further explores the different English-speaking countries. A wider variant of accents is presented in this edition. Students are introduced to audio recordings of native speakers of English from Australia, New Zealand, Ireland, and Canada. In addition to this, they encounter native speakers from Jamaica, South Africa, Pakistan, and India. It is fair to state that during years 5–7, students are exposed to the prevalence of English worldwide in terms of culture and language work. Slang words, stories, and cultural input are included in several chapters. However, in *Quest 7*, the variant of British English is still preserved to a similar extent to the previous editions. There is extensive exposure to native speakers of British English, which is the main focus across the different sections in the book. Crucially, the seventh textbook in this series finally includes an activity related to the pronunciation of different English variants. Chapter 6 (Bade, Pettersen & Tømmerbakke, 2016, pp. 214–215), includes a text with an audio recording of an American English speaker. A post-reading activity involves speculating on the setting of the story. Without any clues except the pronunciation of words, the students are asked to reflect upon how they can tell if the story takes place in Great Britain or the USA. In addition to this activity, the textbook ends with language work related to different phonemes (see appendix D). Though the work with these phonemes is mainly concentrated around British pronunciations, these activities allow for further exploration of the differences between American English and British English. First, there is a tongue twister related to the schwa (/ə/) in the context of postvocalic /r/. Secondly, this section explores the pronunciation of the diphthongs /ɪə/, /eə/, and /ʊə/, all in settings of postvocalic /r/. As mentioned above, this allows for exploration of the different variants of English through an investigation of how Americans pronounce words differently. The *Quest* book series is dominated by audio recordings of native speakers of British English, although there is input in American English and other variants. It is not until the seventh volume that learners are finally introduced to some of the differences between English variants. Though the series is characterized by passive exposure to

the different variants, it allows for a self-guided exploration of phonetic differences. The series uses the scaffolding principle, introducing aspects of the different English variants book by book, increasing the number of variants by the level of instruction. Finally, the book series for the primary school level ends with activities directly related to phonetics and differences in pronunciation.

2.8.4 Stairs 7 Textbook

Another English teaching material frequently used in Norway is the textbook series *Stairs*. In *Stairs 7* (Solberg & Unnerud, 2014), there is a similar focus on British pronunciation to that identified in the *Quest* series. Evidence of this can be found in the designated phonetics chapter (see appendix E). This section deals with different phonemes, primarily concentrated around British pronunciation, including audio recordings in British English. The diphthongs /ɪə/, /eə/, and /ʊə/ are applied in settings with postvocalic /r/, essentially allowing for the teaching of British pronunciation. However, when dealing with the phoneme /r/, specific instructions are given for both British English and American English; for example, “British English pronounces this sound only before a vowel. American English also pronounces it after vowels” (Solberg & Unnerud, p. 237). The audio recordings are still exclusively British. This book also includes a designated chapter on the different variants of English in the world. Chapter 6 introduces learners to different English speakers from across the world, but the focus is primarily on vocabulary and culture. One activity related to the texts involves two families having a casual conversation. The students are then asked to identify which family is British and which is American. In addition to the different pronunciations of words, there are also clues related to the use of vocabulary. It is difficult to claim that this textbook offers material directly related to pronunciation differences between American English and British English. However, like *the Quest series*, it allows for passive exposure and self-guided exploration of differences between variants.

2.9 Phonetic differences between RP and GA

The choice of critical conditions to be investigated in the present study was influenced by the studies conducted by Carrie and McKenzie (2018), Rindal (2010),

and Rindal and Piercy (2013). There is a consensus concerning the importance of postvocalic /r/ and intervocalic /t/ when discussing consonantal features that differentiate RP from GA. The vowel quality in the lexical sets HALF and GOAT also form the foundation of two critical conditions that differentiate RP from GA. The following section presents some key differences in the phonetics of RP and GA.

As Nilsen (2010) points out, the consonantal differences between RP and American English are limited to allophones and phonotactics; “variants of a phoneme that are mutually exclusive are called allophones” (Nilsen, 2010, p. 34). In other words, allophones are variations of the same phonemes. They do not change the meaning of a word, but they involve small modifications to a single phoneme in terms of pronunciation. Phonotactic rules are “rules that govern the combinations of consonants in initial and final clusters” (Nilsen, 2010, p. 48). In terms of phonology, these rules comprise phonemes that can be combined and used together. Certain sounds in the English phonetic alphabet cannot accommodate each other, resulting in a certain phonetic structure in terms of which consonants can complement one another in connected speech.

2.9.1 Consonantal features

In terms of phonetic differences between American English and British English, the lack of rhoticity in RP creates one of the most prominent and critical phonotactic differences. The postvocalic /r/ is not pronounced in RP unless it immediately precedes a vowel sound. For example, “bird” (/bɜːd/) has a silent <r> in RP due to its being a non-rhotic language. Linking /r/ and intrusive /r/ are phenomena that may appear even when an orthographic <r> is preceded by a vowel. The former refers to the realization of an orthographic <r> if the following word starts with a vowel sound – for example, “the bar is open.” The latter refers to a realization of /r/ when there is no orthographic representation present. If a word ends in a vowel and the next starts with a vowel, the intrusive /r/ might appear as a connector of words; for example, “Hannah and I” may be transcribed in RP as /hænənɪ ənd aɪ/. This phenomenon may be applied to several varieties of British English. In American English, the linking /r/ is

not of interest, as all orthographic representations of <r> are realized phonetically. American English also lacks an intrusive /r/ (Nilsen, 2010).

While there are several phonotactic differences between American English and British English, there are also allophonic differences concerning realizations of intervocalic /t/. The intervocalic /t/ is the orthographic presence of <t> between two syllables when either the first syllable is stressed (e.g., “butter”) or both syllables are unstressed (e.g., “intensity”). RP realises intervocalic /t/ as an alveolar plosive (/ˈbʌt.ə/, /ɪnˈten.sə.ti/), while GA realizes it as an alveolar tap (/t̬/ or /r/) similar to /d/ (/ˈbʌt̬.ə/, /ɪnˈten.sə.t̬i/). Therefore, RP contrasts orthographic representations of <t> and <d> in all contexts, while GA might have indistinguishable pronunciations of the same letters (Nilsen, 2010).

2.9.2 Vocalic features

The vowel quality in HALF is included in the present study because it exposes some interesting differences between RP and GA. For a certain group of words, there are contrastive pronunciations. /ɑː/ is a long-open back monophthong, hereafter referred to as the RP monophthong. /æ/ is a near-open front monophthong, hereafter referred to as the GA monophthong. Examples of words that differ in pronunciation are “half, grass, and bath” (Nilsen, 2010). The majority of the participants from Rindal and Piercy’s (2013) study produced this quality as the GA monophthong. The vowel quality in GOAT is the last critical condition under investigation in the present study. /əʊ/ has a central starting point, hereafter referred to as the RP diphthong. /oʊ/ has a back starting point, hereafter referred to as the GA diphthong. The lips are rounded throughout the GA diphthong, while the RP diphthong has neutral lips at the beginning of the glide. Both diphthongs culminate in the same vowel quality. Only 12% of participants from the study by Rindal and Piercy (2013) produced the RP diphthong. Figure 1 demonstrates the different starting points of the RP diphthong and the GA diphthong.

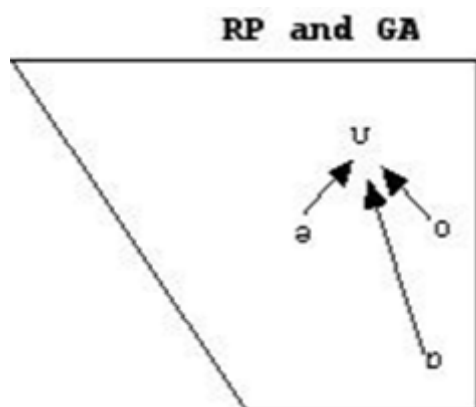


Figure 1: Starting and ending point for the RP diphthong and GA diphthong. Source: Knutson, P. (no date) *Vowels in RP and GA*. Retrieved from: <https://notendur.hi.is/peturk/KENNSLA/02/TOP/Amvowels.html> (Accessed 16/3-2021).

2.10 Summary and hypothesis for the present study

Based on the investigation of different classroom textbooks, it appears that Norwegian learners in year 5 have not commenced explicit instruction in the differences between American English and British English. However, studies in incidental foreign language learning (Lefever, 2012; Kuppens, 2010; Koolstra & Beentjes, 1999) suggest that passive exposure to English prior to formal instruction affects L2 acquisition. The sharp increase in media use among Norwegian children and youth gives evidence for considerable continuous English exposure outside of school (Statistics Norway, 2020; The Norwegian Media Authority, 2020). Previous studies in the field of accent recognition have focused on whether participants are able to identify a specific accent or English variant (Stephan, 1997; Scales et.al., 2006; Mckenzie, 2008; Carrie & McKenzie, 2018). The studies have come to different conclusions, as some show higher recognition of American accents, some of British accents. Furthermore, some studies have focused on Norwegian ESL speakers' accent aim and whether they applied the linguistic features of the reported accent aim (Rindal, 2010; Rindal & Piercy, 2013). Though the participants from these studies used several linguistic features of the reported accent aim, they were still characterized by a hybrid and variable L2 accent. Linguistic features from other English variants interfered with their reported accent aim.

The results from previous studies lead to the following hypotheses for the present study:

- A. Norwegian ESL learners perceive differences in English variants more effectively than they identify specific variants.
- B. Norwegian ESL learners with substantial English exposure outside of school have less difficulty distinguishing between, and identifying, English variants than those without such exposure.

Hypothesis A is based on the finding that Norwegians tend to apply linguistic features of both RP and GA (Rindal, 2010; Rindal & Piercy, 2013), suggesting that their awareness of different accents surpasses their ability to identify a specific accent. Hypothesis B is based on the findings regarding how incidental foreign language learning impacts L2 acquisition (Lefever, 2012; Kuppens, 2010; Koolstra & Beentjes, 1999). There is evidence for a continuous extensive English exposure through various media among Norwegian children (The Norwegian Media Authority, 2020). Current research has not addressed the question of whether stimuli with varying degrees of context influence learners' ability to distinguish between or identify English variants, which the present study aims to explore further. The next section describes the methodology applied to investigate the research questions stated in the introduction.

3. Methods and data

3.1 Aim and scope

Based on existing studies in the current field of research, the present study opted to further investigate young Norwegian learners' perception and recognition of British English and American English and what external factors may affect this. Four research questions were formed to determine (1) whether young Norwegian learners of English are able to identify differences in words and sentences between American English and British English; (2) whether young Norwegian learners of English are able to identify words and sentences as either American or British; (3) whether there is a difference between being presented with a single word and being presented with a sentence; and (4) how passive exposure to English impacts young Norwegian learners' perception of different English variants.

3.1.1 Procedure and choice of methodology

There is evidence of extensive English exposure for Norwegian children aged 11–12 years, while classroom settings for the same age group lack explicit instruction for phonetic differences between American English and British English. An interesting discussion remains regarding the preservation of British English in the classroom while a high degree of external English exposure outside of school is in American English. Hence, young Norwegian learners may find themselves caught between two paradigms. To address the research questions presented above, the methodology in the present study comprised a questionnaire about exposure to English outside of the classroom and a perception test about differences between American English and British English. The questionnaire was designed to investigate how incidental foreign language learning might affect second language acquisition, by establishing the linguistic profiles of the participants. The perception test comprised elements related to the ability to contrast American English with British English and identification of specific English variants. The choice of method was influenced by several studies within perception and production of English variants (Stephan, 1997; Scales et.al., 2006; Rindal, 2010; Rindal & Piercy, 2013; Carrie & McKenzie, 2018). The data collection in the present study was conducted in a year 5 group of Norwegian learners of English, by investigating how incidental foreign language

learning affects acquisition of differences between American English and British English. A quantitative method was applied with the purpose of standardizing the information collected. The predefined research questions required a wide group of participants in order to establish material wide enough to analyse differences and similarities within the group of subjects (Postholm & Jacobsen, 2018). A quantitative method is not very flexible, as the data collected must comply with the predefined research questions. However, the advantages of a quantitative method are that it allows for comparable results to previous studies and across the participants in the present study. The quantitative data can be measured and presented numerically (Christoffersen & Johannessen, 2012), which is important when investigating the participants' various levels of English exposure.

3.2 Participants

A total of 40 students participated in the project. The participants were a group of learners in year 5 from a Norwegian primary school, between 10 and 11 years of age. At the time of data collection, the participants had completed four and a half years of formal instruction in English. The questionnaires and parental consent were distributed to a total of 56 students. A total of 44 respondents approved of participation, among whom 41 participants completed both the questionnaire and the perception test. One test was discarded due to fuzziness and lack of ability to complete the perception test independently, resulting in a data sample of 40 participants: 22 females and 18 males. No restrictions were imposed for learners with special educational needs or disabilities, but the participants were required to complete the perception test independently. One competence aim states that after year 4, students should be eligible to “explore and use the English alphabet and pronunciation patterns in a variety of playing, singing and language-learning activities” (The Norwegian Directorate of Education and Training, 2020). This is reflected in the English variants identified in the various teaching material investigated previously, although it is characterized by passive rather than active exposure. In summary, the participants should be able to complete the perception test independently.

3.2.1 Selection process and ethical considerations

The participants in the present study were recruited by convenience from a primary school in the South of Norway. Previous studies have not focused on young ESL learners' ability to distinguish between and identify English variants. The present study offers a contribution to the theoretical landscape by focusing on younger ESL learners' perception of differences between English variants and their ability to assign a speech sample to its respective variant. Another interesting aspect in the selection of participants is the lack of explicit instruction in the classroom through textbooks and competence aims. In other words, the participants have not yet acquired knowledge of different English variants through school, which allows the present study to highlight the impact that incidental foreign language learning has on perception of English variants. As mentioned previously, the incorporation of different English variants increases in classroom textbooks throughout the years, although British English dominates overall. The participants in year 5 were suitable for this purpose due to their lack of prior explicit instruction in differences between American English and British English.

Because the participants were minors, parental consent had to be secured in advance (see appendix G). The present study also required approval from the Norwegian Centre for Research Data (NSD), since it involved personal data from the participants, who may be directly or indirectly identifiable from the data. No names were registered on the questionnaire or the perception test. Instead, each participant was assigned a unique code to ensure anonymity in the data collection. In this way, the questionnaires regarding exposure to English could be matched to the results from the perception test. Although the study handled personal data, the research process was conducted in compliance with current regulations stated by NSD (see appendix F).

3.3 Questionnaire construction

By influence from Postholm and Jacobsen (2018); Dörnyei and Taguchi (2010); Marian, Blumenfeld and Kaushanskaya (2007); and TRAWL/ESIT (no date), the questionnaire in the present study was designed with the aim of establishing a

linguistic profile of the participants' exposure to English outside of the classroom. By summarizing the amount of time that children spend being passively exposed to English, one can easily find the corresponding factors between language learning and incidental foreign language learning. The LEAP-Q questionnaire (Marian, Blumenfeld & Kaushanskaya, 2007) was used as a starting point when designing a suitable questionnaire for this project: "The target population for the LEAP-Q consists of adult and adolescent bilinguals and multilinguals with a variety of language experiences and proficiency levels" (Marian, Blumenfeld & Kaushanskaya, 2007, p. 944). The LEAP-Q determines the various levels of bilingual experience and proficiency among a sample of participants and is one of the most tried, tested, and recognized questionnaires within this field of research (Marian, Blumenfeld & Kaushanskaya, 2019). Although the LEAP-Q was not applied in its entirety, it was a convenient starting point to design and administer a questionnaire related to children with less L2 experience than adults. Along with the guidelines of Dörnyei and Taguchi (2010), the questionnaire for the present study was designed following the four steps below.

3.3.1 Step 1: Draft and design

Since the aim of the questionnaire was to attain a more comprehensive picture of young Norwegian learners' exposure to English outside of the classroom, the first step in the process of creating the questionnaire was to construct a draft of relevant questions (see appendix A for a full outline of the questionnaire). In questions 1–3, the participants were asked to list languages used at home, other acquired languages, and travels to English-speaking countries. The most critical part of the questionnaire was question 4, where the participants ticked boxes on a multi-item scale concerning usage time of English outside of school. Following the multi-item scale of English exposure in question 4, questions 5–8 included specific open-ended questions to elaborate further on usage time of English outside of school. Questions 9 and 10 incorporated self-assessment of English proficiency and selected statements using Likert scales. Scientists (Boud, 1989; McDonald & Boud, 2003; Ross, 2006) claim that self-assessment provides fairly accurate data; it benefits the present study by displaying children's own beliefs regarding their English proficiency and various statements. Individual judgements based on self-knowledge may benefit

the present study by helping to obtain valid data in areas which may be challenging to measure. However, Ross (2006, p. 3) explains that “young children may overestimate because they lack the cognitive skills to integrate information about their abilities and are more vulnerable to wishful thinking”. To ensure validity and reliability in the self-assessment, questions 9 and 10 included respectively four and five options on the Likert scales. As Dörnyei and Taguchi (2010, p. 27) point out, the Likert scale is “simple, versatile, and reliable”. Dörnyei and Taguchi (2010) also claim that the Likert scale has proved an effective method for rating scales among children, when the number of options is reduced. Following the various statements of language proficiency, the participants were also asked which English variant they aimed at.

3.3.2 Step 2: Feedback

A draft for the questionnaire was discussed with the supervisors of the present study. The feedback obtained proved to be valuable in terms of design and phrasing of questions. Inspiration from the questionnaire designed by TRAWL/ESIT (no date), a research project led by Ingrid Kristine Hasund at the University of Agder, was useful in determining the options in the multi-item scale. The LEAP-Q questionnaire (Marian, Blumenfeld & Kaushanskaya, 2007) also inspired in terms of the number of scale options and phrasing of questions. Feedback from supervisors for the present study assisted in phrasing to avoid any possibility of ambiguous questions. Both questionnaires and the feedback obtained from supervisors were excellent inspirations when finalizing the questionnaire for the present study, which was to be distributed to the participants.

3.3.3 Step 3: Piloting

The questionnaire was piloted by two fellow students to quality-check the phrasing and design. The students who took part in the pilot study were both teacher students of English. Their experience with students in a similar age group allowed them to give valid and reliable input and comments, which was why the piloting was not conducted by the relevant age group. Although a pilot study among the relevant age group would allow for further impressions and reactions beyond an administrator’s point of

view, the feedback obtained in the pilot study proved to be valuable as an indication of whether the questionnaire would achieve the expectations and aims of the study (Dörnyei & Taguchi, 2010). The feedback obtained at this stage was highly relevant and functioned as a checklist concerning the clarity of the instructions, overall appearance of the questionnaire, and possible ambiguous questions.

3.3.4 Step 4: Finalization

After the three steps above were completed, the questionnaire was finalized and distributed to the participants in the present study. Instead of an electronic questionnaire, it was distributed in a traditional paper-based format. An email to the parents of the participants was sent along with the questionnaire attached, as a reminder to assist their children with the completion of the questionnaire. One concern was raised regarding whether the participants would provide honest answers regarding usage time of computer games and media exposure when completing the questionnaire along with an adult. Another concern was raised about whether a self-assessment completed along with a parent would lead to an overestimate of the learner's own skills. However, it was finally decided that an adult had to monitor the completion of the questionnaire to avoid any fuzziness or confusion about the questions. After one week, enough respondents had approved of participation and submitted the questionnaire.

3.4 The perception test

The perception test investigated the participants' ability to distinguish between and identify American English and British English in four distinctive phonological variables. These were postvocalic /r/, intervocalic /t/, and realization of the vowel quality in HALF and GOAT. Pre-recorded speech samples of various native speakers of English included words and sentences containing these critical conditions. The aim of the test was (1) to ask whether the participants perceived a difference between the speech samples and (2) to ask whether they could identify a speech sample as either American or British. Each participant had a desk facing a large screen and a loudspeaker. The speech recordings were played from the loudspeaker, and the words and sentences were also displayed on the screen in front of them. In addition

to the words and sentences, the screen also showed a relevant picture connected to the speech recording. For example, when the participants heard the word “bath”, they could see the word on the screen in front of them along with a picture of a bathtub. All answers by the participants were given by hand in a pre-given task set. The test included four distinctive sections, which are described in turn below. In order to avoid confusion regarding the procedure of the test, both oral and written instructions were given in Norwegian. The participants were exposed to American and/or British speech recordings of sentences and words. They were asked whether they perceived a difference between the two variants, or if they could identify which variant they heard. Both male and female native speakers of English were included in the speech samples.

3.4.1 Selection of words

During the process of selecting words containing the critical conditions under investigation, it was decided to include words that differed in only one critical condition between RP and GA. A list of words included in the perception test can be found in appendix C. However, five words presented two different critical conditions; these were termed “two-token words”. In addition, 10 filler words were included. These are words with no phonetic difference between American and British pronunciation. By incorporating filler words, the test aimed to investigate whether the lack of a distinctive phoneme would affect the participants’ efforts to identify a specific accent. However, it is worth noting that participants might still detect a difference between the fillers, although no critical conditions were present. Due to the participants’ level of English proficiency, the selected words also had to be familiar to children aged 10–11 years. In the selection process, Quest Flash Cards 1–4 (Hansen, Lien & Pritchard, 2014) were applied and investigated to sort representative words. The use of Quest Flash Cards 1–4, general concerns about the participants’ English vocabulary, and interference from other identifiable features restricted the selection of words. As a result, some critical conditions had more tokens represented in the test than others. An overview of the distribution is presented in table 1.

Table 1: Distribution of the critical conditions included in the perception test.

Critical condition / Section	Section 1	Section 2	Section 3	Section 4	Total
Postvocalic /r/	6	5	6	7	24
Intervocalic /t/	3	2	4	2	11
HALF	4	2	5	5	16
GOAT	3	4	6	5	18
Two-token words	0	0	0	5	5
Fillers	0	3	4	3	10
Total	16	16	25	27	84

3.4.2 Description and procedure

Familiarization phase

The familiarization phase included four tasks designed to familiarize participants with the design and format of the test. The aim of this phase was to avoid confusion and ambiguity in the test, and to make the instructions given clearer for the students. This was an oral task, including a similar task from each of the four sections to establish familiarity with a new test format. The audio files for this section were recorded by the administrator of the test, as no answers were registered here.

Section 1

Each participant listened to 16 sentence pairs twice (see appendices B & C), each containing one or two tokens of the same critical condition. Of the 16 pairs, 11 presented a contrast between British and American pronunciation of the same sentence, whereas the final five presented the same sentence spoken by two speakers of the same variant, either British or American. After each sentence pair, participants had 10 seconds to respond by indicating whether the pair represented the same variant (similar pronunciation) or two different variants (different pronunciation).

Section 2

Each participant listened to 16 new sentences (see appendices B & C) which were played twice. The set of sentences in this part was mainly new, although some sentences were reused from section 1. Eight sentences were spoken by British speakers, and eight by American speakers. Each sentence contained one or two tokens of the same critical condition, and three sentences were filler sentences without critical conditions for the present study. Some sentences included two tokens of the same critical condition. Across the 16 trials, each critical condition had a different number of tokens. After hearing each sentence twice, the participants had 10 seconds to respond by indicating which variant the sentence represented (American or British).

Section 3

This section had the same design as section 1, where the participants were presented with speech by native speakers of both American English and British English. However, the speech recordings only included single words. The words chosen for this part were mainly new words, although some words from sections 1 and 2 were repeated. Each participant listened to a word list of 25 word pairs, each word containing either one or two tokens of the same critical condition (see appendices B & C). Of the 25 word pairs, 14 presented a contrast between British and American pronunciation. Seven word pairs presented the same word spoken by speakers of the same variant – British or American. In addition, four word pairs were fillers. 11 words were pronounced the same, due to being pronounced either by two British or by two American native speakers, or due to not having identifiable contrasts in pronunciation between the two variants. After each word pair, participants had 10 seconds to respond by indicating whether the pair represented the same variant (similar pronunciation) or two different variants (different pronunciation).

Section 4

The fourth and final section of the test had a similar design to section 2: the participants were asked to determine whether they heard British or American English. Each participant listened to a word list of 27 words twice, a mix of new and repeated words (see appendices B & C). 13 words were presented by British speakers, while 11 were presented by American speakers. Most words contained one or two tokens of the same critical condition. Five words included two different tokens of different critical conditions, to see if this would reinforce participants' ability to identify a word as either British or American. In addition, three filler words were included. These were pronounced by American speakers. After having heard each word twice, the participants had 10 seconds to respond by indicating which variant the word represented (American or British).

Final note

As a final part of the test, the participants were asked to explain how they perceived the differences between American English and British English. This was done to explore which tools young Norwegian learners apply to identify differences between British English and American English. The question presented to the participants was as follows: "How can we perceive differences between American English and British English?"

3.4.3 Speech recordings

The speech recordings used in the test were recorded by five native speakers of English: three male and two female speakers. The British native speakers consisted of two male speakers and one female speaker, while the American native speakers consisted of one male and one female speaker. Several speakers were recorded to ensure that the participants had little to no chance of recognizing the speakers in order to locate their variant of English. The mix of male and female speakers also ensured reliability by preventing participants from recognizing the native speakers and their origins.

Male – Age 40–50 y – Southern British accent

Female – Age 20–30 y – Northern British accent

Male – Age 20–30 y – Northern British accent

Female – Age 30–40 y – General American accent

Male – 20–30 y – General American accent

McKenzie (2008, p. 142) states that “research suggests that male and female speakers of the same language variant may evoke different responses amongst listener-judges”, although he exclusively applies female recordings in his studies. Ladegaard (1998) exclusively includes male recordings in his study but does not clarify the reason for the choice. Though the research by Ladegaard (1998) and McKenzie (2008) included exclusively male and female voice recordings respectively, there are also studies which include both male and female voice recordings to clarify conditional gender-based allocations (Carrie & McKenzie, 2018). The order of the speech recordings in the present study was mixed, to ensure that recordings of the same native speaker did not appear multiple times consecutively.

The native speakers recruited for the present study were familiar to the administrator of the study. The test would benefit from including native speakers with a southern British accent, due to the proximity to RP (Deterding, 1997). Several researchers have used speakers with a southern British accent in their studies of British phonetics (Toft, 2002; Roach, 2004; Deterding, 1997). Though only one native speaker with a southern British accent was recruited for the present study, the assembly of all native speakers resulted in a corpus of representative sounds considering the phonetic variables under investigation. One disruption that needed to be taken into consideration was the two British speakers with a northern accent, who did not have representative pronunciations of the RP diphthong. Hence, these recordings could not be used for this phonetic variable. However, they had a representative pronunciation for postvocalic /r/, intervocalic /t/, and in some tokens of the RP monophthong. This was a concern when designing the perception test, but after thorough preparation and groundwork the test had representative speech recordings

for all the sentences and words included in the test. A weakness concerning the RP diphthong was subsequently identified, as words with the RP diphthong located mid-word lacked a proper RP pronunciation. When preceded by another phoneme, the RP diphthong was in some recordings similar to the realization of the GA diphthong. As a result, a total of four speech recordings containing the RP diphthong were considered either insufficient or faulty. Both American native speakers had a representative pronunciation for the phonetic variables under investigation, raising no concerns about the viability of these speech recordings.

Another concern of the perception test was the interference of other critical conditions not under investigation in the present study. Section 2 included three filler words without a critical condition under investigation. After carrying out the perception test, possible interference from other identifiable features was discovered, which may have affected participants' answers. However, this section measured the ability to identify a specific accent in the context of sentences, so this did not cause extensive disruption to the analysis. Section 3 included interference from other identifiable features in two of four filler words. As this section asked if the participants perceived a difference, the potential disruption from other identifiable features must be taken into consideration in the analysis; section 3 asked whether the participants perceived a difference between American English and British English in the words "black" and "blue". Although these words did not contain any critical conditions investigated in the present study, a difference may have been perceived due to the difference between clear and dark /l/.

3.4.4 Preparation and piloting

After the audio files were collected, the files had to be edited, refined, and organized into separate files. It was time-consuming to process all samples of recordings, due to the lack of representative sounds for some native speakers. To make sure that the process of testing would proceed unproblematically, a pilot test was undertaken with two students aged 20 and 23 years old without familiarity with the project or its procedure. The participants in this pilot study were not the same participants from the piloting of the questionnaire. The pilot test was of high value in revealing any

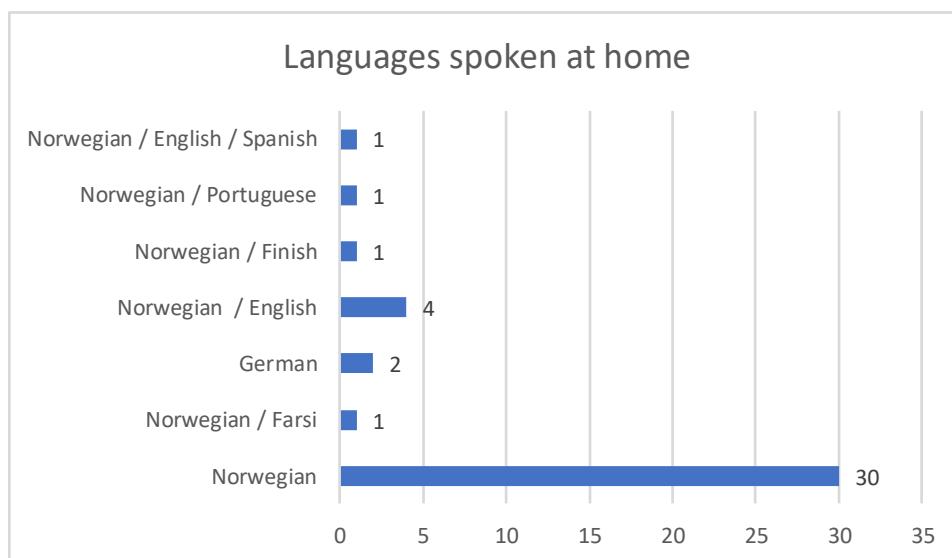
potential failures or mistakes in terms of correct audio files for their corresponding tasks. It also provided valuable feedback and experience regarding how to carry out the perception test in the classroom among young Norwegian learners. It was not necessary to conduct the piloting in a year group similar to the participants in the present study, as the aim was merely to ensure that all audio files corresponded to their respective tasks and visual representations.

4. Results

4.1 Findings from the questionnaire

The questionnaire was distributed to the participants in advance of the perception test and was completed with assistance from their parents. The aim of the questionnaire was to display the amount of time for which learners were being exposed to English outside of school, and to investigate factors that might enhance their perception of differences between American English and British English. The questionnaire investigated the primary languages spoken at home, and several languages were mentioned. The data collected from this section is presented in figure 2. The vast majority spoke only Norwegian at home as their primary language, while some spoke multiple languages at home. There were two participants who spoke another language at home as their primary language, namely German. These were the only cases of a different primary language at home, which means that the remaining participants all spoke Norwegian exclusively or alongside a second language. Among the participants who reported multiple languages spoken at home, the languages mentioned were English (4), Finnish (1), Portuguese (1), and Farsi (1). In addition, one case of three languages at home was reported, namely Norwegian, English, and Spanish.

Figure 2: Languages spoken at home (N = 40).



The second section of the questionnaire involved visits to English-speaking countries. The options were not restricted to vacations, but also included longer stays. Of the data collected in this area, eight participants reported having stayed in the USA; six participants said they had stayed there for between two and four weeks, while only one had stayed there for less than that time. One participant reported spending between one and three months in the USA. Other English-speaking countries reported in the questionnaire were South Africa (1–3 months), Canada (>2 weeks), Wales (>2 weeks) and England (>2 weeks).

4.1.1 Weekly exposure to English outside of school

Figure 3: Hours of exposure to English per week outside of school (N = 40).

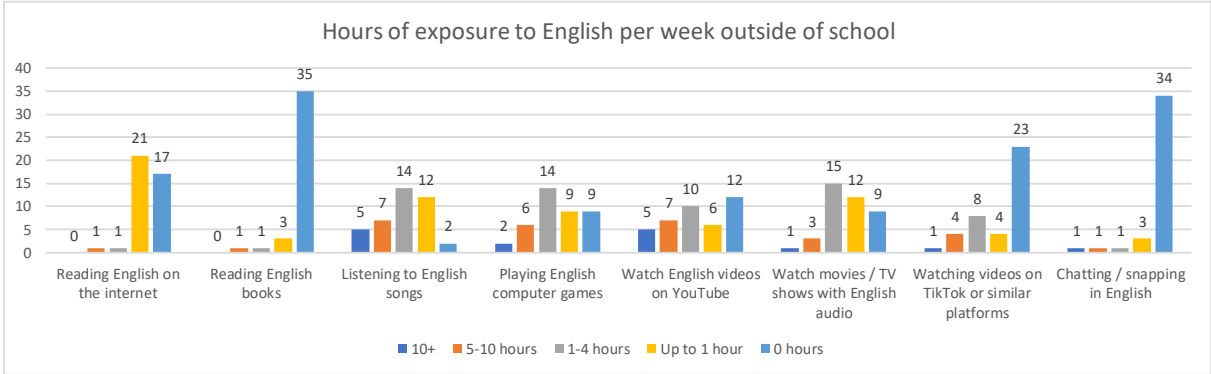


Figure 3 demonstrates the amount of time spent on English outside of school through different variables. The variables of *chatting/snapping in English* and *reading English books* involve the least hours of passive English exposure. On the other hand, there is evidence of at least some passive English exposure in the categories *listening to English songs* (N = 38), *playing English computer games* (N = 31), *watching English videos on YouTube* (N = 28) and *Watching movies / TV shows with English audio* (N = 31). These variables were found to be the sources of highest exposure to English across the sources investigated. Of these, there were only two cases of participants reporting zero hours of exposure through listening to English songs. The findings above demonstrate that the categories where Norwegian learners in year 5 spend the least time involve social media platforms and reading English books. Social media platforms such as TikTok and Snapchat have age minimums of 13 years, which may explain the low reported usage of these platforms. The results above indicate that there are several sources of passive exposure to English across the

participants in the present study. English computer games, videos on YouTube, and movies and TV shows with English audio are common sources of exposure to English outside of school.

The questionnaire asked which English YouTube channels the participants frequently watched (see table 2). These were investigated further, to see what English variant the founders of the channels used. Several of the channels reported were of US origin, while some were of British origin. In addition to this, some other English variants were reported by the participants. Several of the YouTube channels reported posted computer game commentary videos, meaning that there was a large amount of English spoken in the videos. What all channels have in common is that they present a large amount of spoken English in different variants, meaning that the passive exposure is relatively high. Participants were also asked to report frequently played computer games with English audio; a selection of the most frequent computer games reported is shown in table 3. More than 1 out of 4 participants played *Minecraft* regularly. All the computer games reported have the common denominator of presenting instructions written in English. Another aspect of these games is that they allow for online gaming and communication with other players. As English is a global language, many computer games require communication in English. However, the questionnaire did not ask how frequent this was. As a result, the present study cannot determine the frequency and amount of English input and output production in this specific context.

Table 2: List of frequently watched YouTube channels.

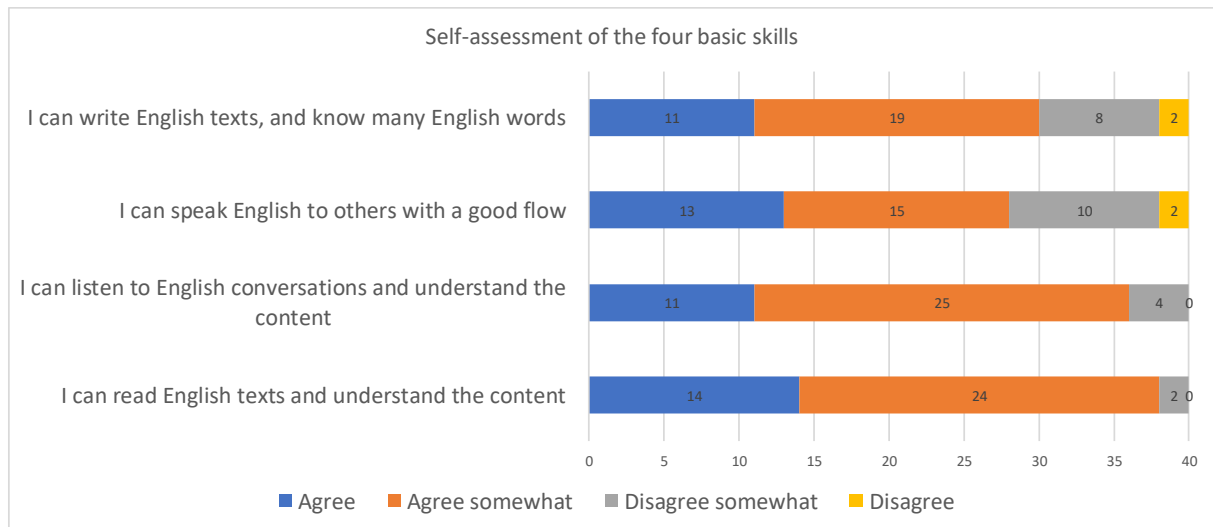
YouTube channel	English variant
Roostertime	GB
Kiingtong	GB
Moriah Elizabeth	US
FailArmy (3)	US
SSSniperWolf (2)	US
Amustycow (2)	US
The LaBrant Fam	US
5 minute crafts	US
Breaker's Lab	US
Inside Edition	US
Mark Rober	US
Zack King	US
Melville MSP	CA
Nick Pro	CA
x2Twins	Australia

Table 3: List of frequently played videogames.

Videogame	No. of participants
<i>Minecraft</i>	11
<i>Roblox</i>	7
<i>Among Us</i>	6
<i>Fortnite</i>	6
<i>Rocket League</i>	5

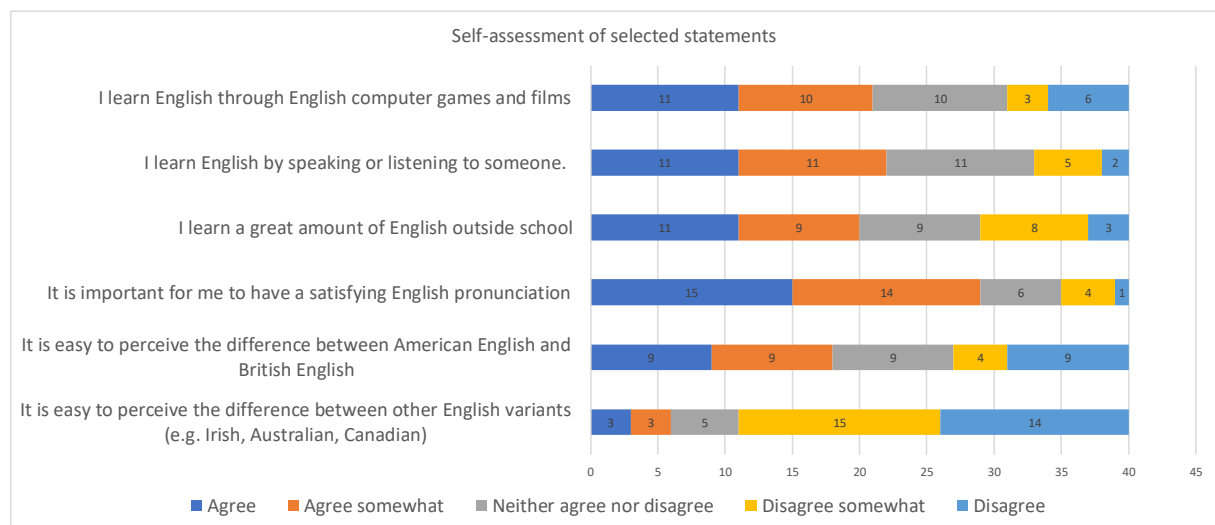
4.1.2 Self-assessment

Figure 4: Self-assessment of the four basic skills.



The participants were asked to self-assess in terms of the four basic skills of reading, listening, speaking, and writing (see figure 4). Most of the participants agreed somewhat with the positive statements regarding their reading, listening, speaking, and writing skills. Between 11 and 14 fully agreed with each statement. In general, few participants stated full agreement, but the majority did agree somewhat. Overall, the vast majority rate their own basic skills as satisfactory, by agreeing or agreeing somewhat with the statements presented in the questionnaire. The two categories of greatest interest are those concerning listening and reading, since both these skills were required to perform well in the perception test. Although listening is of higher importance, reading was relevant in the perception test due to the orthographic representation of the words. Writing and speaking were not relevant to the perception test. However, the findings from this section suggest that most participants assess their four basic skills in English to be solid and satisfactory.

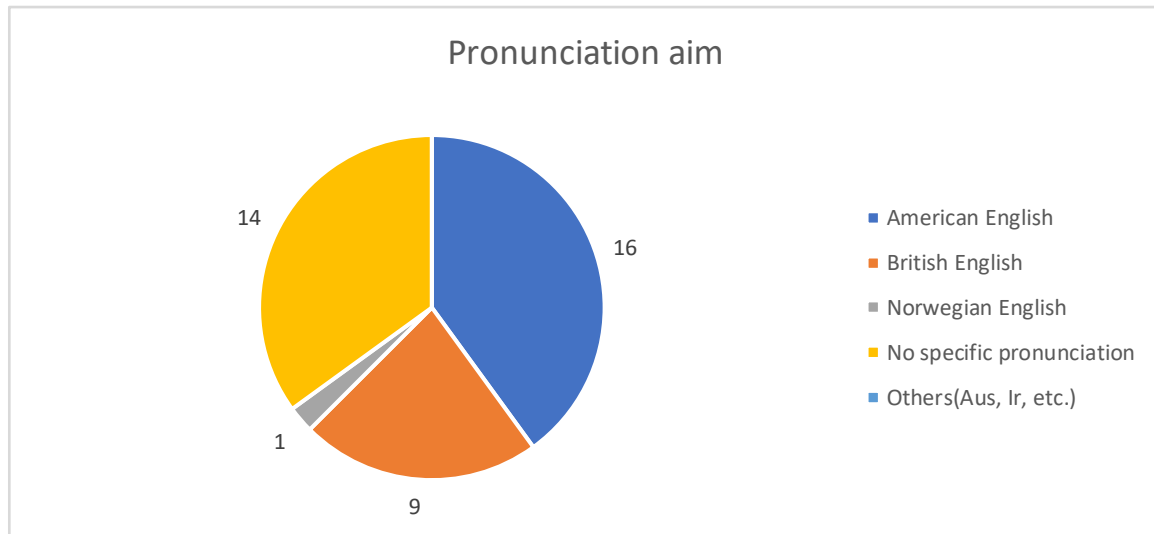
Figure 5: Self-assessment of selected statements (N = 40).



The penultimate section of the questionnaire involves the results from another self-assessment question. The participants were asked to rate their degree of agreement with a selection of statements concerning English language learning (see figure 5). The first three questions provide an interesting finding, as approximately half of the participants recognized the value of passive exposure to English outside of school. The remaining half ticked off *disagree*, *disagree somewhat*, or *neither agree nor disagree* to the same statements. However, approximately three-quarters of students reported agreement regarding the importance of a satisfying English pronunciation, which suggests that the attitude towards pronunciation is one of positive attention and concern. The last statement, which investigated self-assessed skills of accent perception between different English variants, provided evidence of enhanced comprehension regarding the differences between American English and British English compared to other English variants. Examples of other English variants were given in the questionnaire (e.g., Australian, Irish, and Canadian English). Though a diminished comprehension of these variants may be caused by a lack of relevant exposure, English teaching materials include a bare minimum of content regarding these variants, with no specific attention to pronunciation differences. The number of participants who fully *agreed* to the statement regarding differences between American English and British English is equal to the number of participants who fully *disagreed* – a significantly divided response. On the other hand, the number of participants who reported little or no proficiency in distinguishing between the other variants constituted a large majority, indicating less variation in this regard.

4.1.3 Pronunciation aim

Figure 6: Reported pronunciation aim (N = 40).



The last section at the questionnaire asked the participants to state what variant of English they aimed for in their pronunciation (see figure 6). A majority of participants aimed for American English ($N = 16$), while those aiming for British English ($N = 9$) constituted hardly 25% of the participants. Considering that more than half of the participants reported a specific accent aim, awareness of pronunciation is partly endemic in the sample of participants for the present study. However, the number of participants reporting no specific pronunciation aim ($N = 14$) suggests an indifferent attitude towards accent among several participants. Although other variants of English (e.g., Australian, Irish) were given as options, no participants reported aiming for these. Results from Rindal and Piercy (2013) show that 17-year-old learners aim toward a specific accent to a larger extent, where only 13 out of 67 participants reported a “neutral” accent aim or responded with “I don’t care”. The findings of the present study, combined with those of Rindal and Piercy (2013), suggest that pronunciation aim is of higher importance for older learners than for younger ones.

4.2 Findings from the perception test

Figure 7: Average correct answers and average percentage across all four sections.

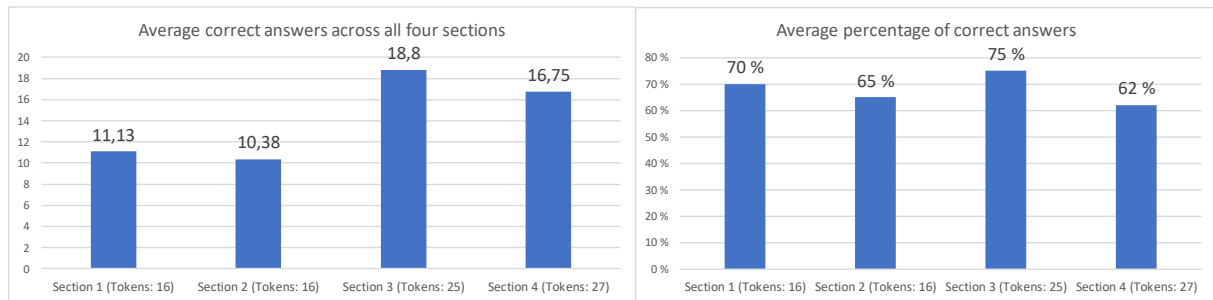


Figure 7 demonstrates how the participants performed across all four sections of the perception test. Sections 1 and 2 included sentences, while sections 3 and 4 included single words. The participants were asked to identify differences in sections 1 and 3, while sections 2 and 4 asked them to identify a specific English variant. The findings show that the average number of correct answers varied between 62.04% and 75.20%. In section 1, the average number of correct answers was 11.13 out of 16, which corresponds to 69.53%. In section 2, the average score was 10.38 out of 16, which corresponds to 64.84%. There was a difference of 5 percentage points between section 1 and section 2. The result from section 3 (18.8) corresponds to 75.2%, the highest percentage of correct answers of any section. Section 4 (16.75) provided the lowest average score, corresponding to 62.04%. In the context of single words, the results again suggest that it is less challenging to perceive a difference than to identify a specific English variant. The deviation of 13.16 percentage points between sections 3 and 4 indicates a much greater discrepancy than that between sections 1 and 2.

4.2.1 Breakdown of the phonetic features

Figure 8: Mean average of incorrect answers in the different critical conditions across all trials (overall group).

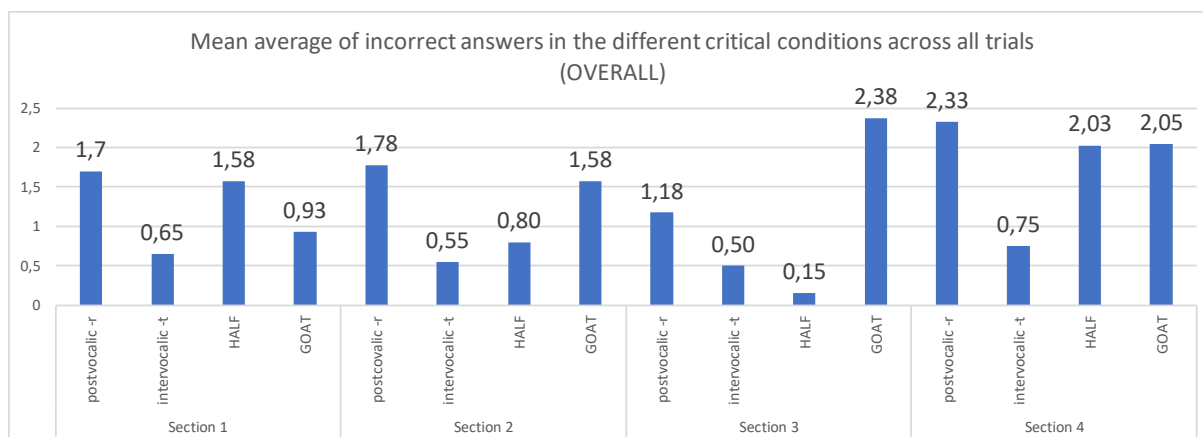


Figure 9: Percentage of incorrect answers in the different critical conditions across all trials (overall group).

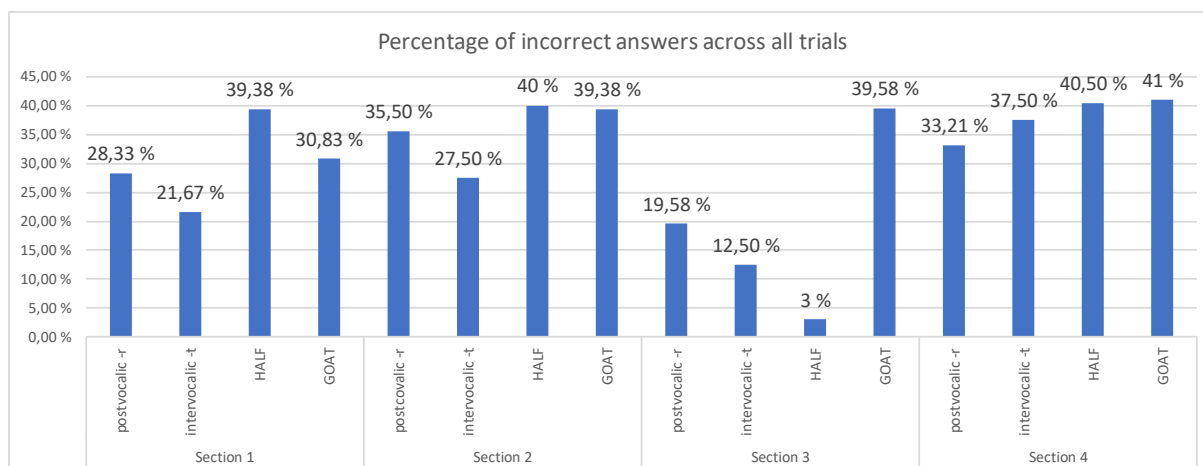


Table 4: Total average number of errors and average percentage of errors.

Critical condition	Average number of errors	Average percentage %
Postvocalic /r/	6.98	29.16%
Intervocalic /t/	2.45	24.79%
HALF	4.55	30.72%
GOAT	6.93	37.70%
Two-token words	1.88	37.50%

Figures 8 and 9 display a breakdown of all four sections in terms of which critical conditions caused most implications for the participants, while table 4 demonstrates the overall average percentage of errors and number of errors. Though one needs to account for the difference in number of tokens, words including the critical condition of intervocalic /t/ accounted for a relatively small number of the mistakes made. On average, 2.45 mistakes were made across all four sections, which corresponds to 24.79%. This was the lowest percentage of errors identified in the perception test, which can be seen across all four sections. The error percentages were quite similar in the phonetic features of postvocalic /r/ and HALF, although they had different numbers of tokens included. The critical condition in GOAT provided the highest percentage of errors made, 37.7%. This corresponds to an average of 6.93 mistakes made across all trials, and the high occurrence of errors is reflected across all sections. Nevertheless, it is essential to emphasize the lack of some representative RP diphthongs in the speech recordings, which may account for the high percentage of errors. Words where the RP diphthong appeared mid-word might lack a representative RP pronunciation. However, the RP diphthong in word-final contexts provided more representative speech samples.

4.2.2 Two-token words

Table 5: Percentage of incorrect answers regarding two-token words.

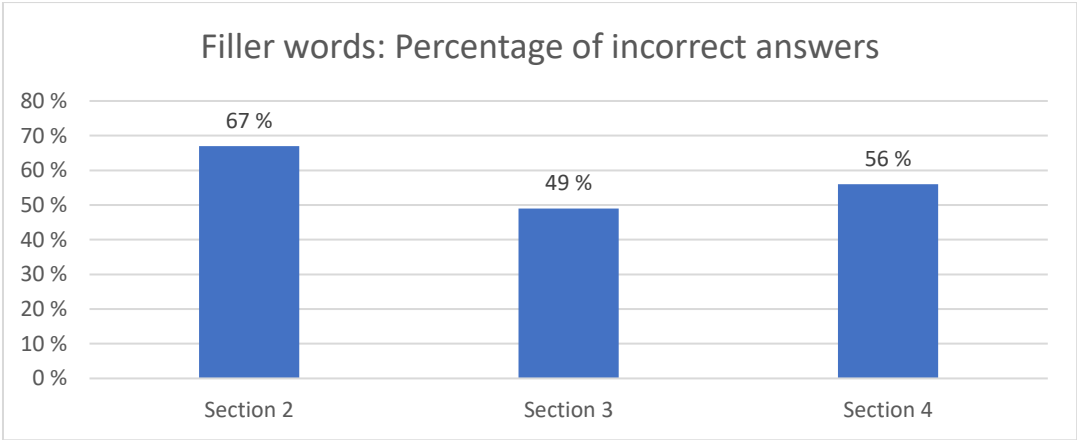
Two-token word	“Potato”	“Mosquito”	“Shoulder”	“Rather”	“Butter”
Percentage of incorrect answers	35%	38%	50%	33%	33%
Total: 37.50%					

Findings from the two-token words included in the test offer a relatively high percentage of errors compared to words with one critical condition (see table 5). Overall, the percentage of incorrect answers was 37.5%. In the two-token word “shoulder”, only half of the participants managed to identify the specific accent. Yet again, a central concern raised in this context was the lack of a distinct RP diphthong. If the RP diphthong is word-final, the pronunciation is closer to RP

pronunciation. However, when the RP diphthong is preceded by other phonemes, there tends to be a lack of clear and precise RP pronunciation. This is supported by the lower percentage of incorrect answers about “potato” and “mosquito.” Although all representations of words with two different critical conditions resulted in a high percentage of errors, the sample of two-token words was very small.

4.2.3 Filler words

Figure 10: Percentage of incorrect answers on filler words across all sections.



Filler words were included to investigate how the participants responded to words lacking a critical condition. However, as mentioned in the methods section, a total of five filler words included other identifiable features which must be taken into consideration. In section 2, all three filler words included other identifiable features. However, the participants were only presented with one variant of English in this section. Two filler words in this section were pronounced by American speakers, while one filler word was pronounced by a British speaker. Although the presence of other identifiable features may give an extra hint as to which variant of English was presented, 67% of the answers were incorrect (see figure 10). This may be due to the lack of a critical condition under investigation in the present study. In section 3, which aimed at investigating whether the participants perceived a difference between American English and British English, two of four filler words included other critical conditions. The results from the perception test show that 49% of the answers were incorrect. This means that 49% perceived a difference in some filler words, which may have been caused due to interference from other identifiable features. Participants reporting a difference were marked as incorrect, although a difference

may have been present. This must be considered when looking at this data. Filler words from section 4, on the other hand, did not include any interference from other identifiable features. Nevertheless, 56% of answers were incorrect, suggesting that the lack of a distinctive phoneme may affect participants' ability to identify a single word as either British or American.

4.3 Difference between perceiving a difference and identifying a specific accent

One essential aspect of the present study is its investigation of the differences between participants' ability to perceive a phonetic difference and their ability to identify a specific accent. As explained previously, in the present study, the perception test comprised four sections. Sections 1 and 3 had a similar design, which aimed at measuring the participants' ability to perceive a contrast between words or sentences pronounced in both variants. Sections 2 and 4 aimed to investigate whether the participants could identify a word or sentence as either British or American. The first two sections involved recordings of sentences, while the third and fourth sections involved recordings of single words. An essential finding from the perception test is the percentages of correct answers on the sections about identifying a phonetic difference, which must be compared with those of the sections about identifying a specific accent. There are 8.93 percentage points differentiating sections 1 and 3 from sections 2 and 4, as seen in table 6.

Table 6: Percentage of correct answers when identifying a difference and identifying a specific accent.

Perceiving phonetic differences		Identifying a specific accent	
Section 1	Section 3	Section 2	Section 4
69.53%	75.20%	64.84%	62.04%
Mean: 72.37%		Mean: 63.44%	

Following Rowntree's (1981) description of statistics and significance testing, a z-test was applied to determine whether there was a significant difference between participants' abilities to perceive a difference and to identify a specific accent. In contexts where the participants were presented with sentences, the findings presented above suggest a more enhanced ability to detect phonetic differences than to identify a specific accent. The percentage of correct answers differed by 5 percentage points between sections 1 and 2; there were 445 correct answers in total in section 1, compared to 415 correct answers in total in section 2. On an individual level, however, this means that each participant on average scored 0.75 more correct answers each on section 1. A two-tailed z-test was carried out to investigate a possible significant difference between sections 1 and 2. The null hypothesis for this test was that the proportions are the same, while the alternate hypothesis involves a significant difference between the proportions. The test does not allow for rejection of the null hypothesis, as the z-critical was 1.95 ($z = 1.24$). Additionally, the p -value (0.21) was higher than alpha (0.05), which means that the null hypothesis cannot be rejected. Data from the z-test suggests that there is no significant difference between the groups. Hence, in contexts where the participants were presented with sentences, there was no significant difference between their ability to detect phonetic differences and their ability to identify an accent.

Participants answered 75.20% of questions correctly in section 3, while section 4 only had a success rate of 62.04%, lowest among all sections. This is a difference of 13.16 percentage points, suggesting that it is less challenging to perceive a difference than to identify a specific accent. Sections 3 and 4 had 25 and 27 trials respectively. A z-test was applied to determine whether there was a significant difference between perceiving a phonetic difference and identifying an English variant. These sections comprised various individual English words presented to the participants. The null hypothesis suggests that there is no change between the two proportions presented, while the alternative hypothesis suggests that there is a significant change (0.05) between the two proportions in the test. The test observation from the two-tailed z-test shows that the z-value (2.33) was higher than the z-critical (1.96). $p = 0.02$ was lower than the significant level (0.05). Thus, the alternate hypothesis can be accepted in favour of the null hypothesis. The z-test

suggests that, in contexts where the participants are presented with single words, they have an enhanced ability to perceive a difference between the two variants compared to their ability to identify a specific English variant.

The results of the z-test applied above suggest that the difference between sections 3 and 4 is statistically significant. On the one hand, the perception test provided results suggesting that it is easier to perceive a difference between American English and British English in the context of single words. On the other hand, the difference in results between sections 1 and 2 is not statistically significant. The acceptance of the null hypothesis in sections 1 and 2 and its rejection in sections 3 and 4 provides valuable data concerning the question of whether the amount of speech presented affects participants' perception of English variants.

4.4 Highest vs lowest average scorers

The perception test included 84 tasks, and the results show an average score of 57.05 correct answers. This score was rounded down to 57, and by extracting the difference between the mean average score and all results, the mean deviation was found to be 8.45. This means that the participants scored, on average, 8.45 either below or above the average score. According to Gorard (2006), the mean deviation explains how representative the average score of a set of figures is and provides an effective review of the set's variability. In the present study, the mean variation was applied to distinguish the participants scoring exceptionally well on the perception test from the remaining participants. By analysing all participants with a score higher than the mean average (66 and above), a sample of 10 participants was selected. These tests were investigated further to examine what contributing factors might lead to a deeper comprehension of differences between American English and British English. The same method was applied when analysing the group of participants with the lowest scores on the perception test. This sample also included 10 participants.

4.4.1 Highest average scorers

Figure 11: Linguistic profile of the highest average scorers in the perception test.

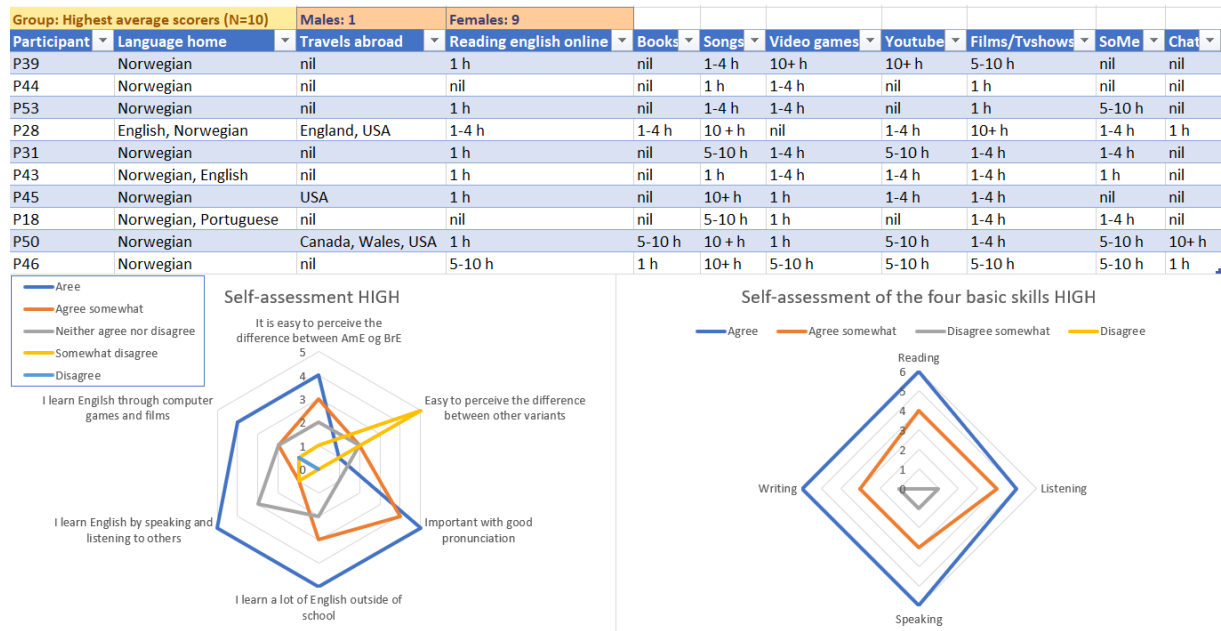


Figure 12: Average number of incorrect answers in the different critical conditions across all trials – HIGH (N = 10) vs OVERALL (N = 40).

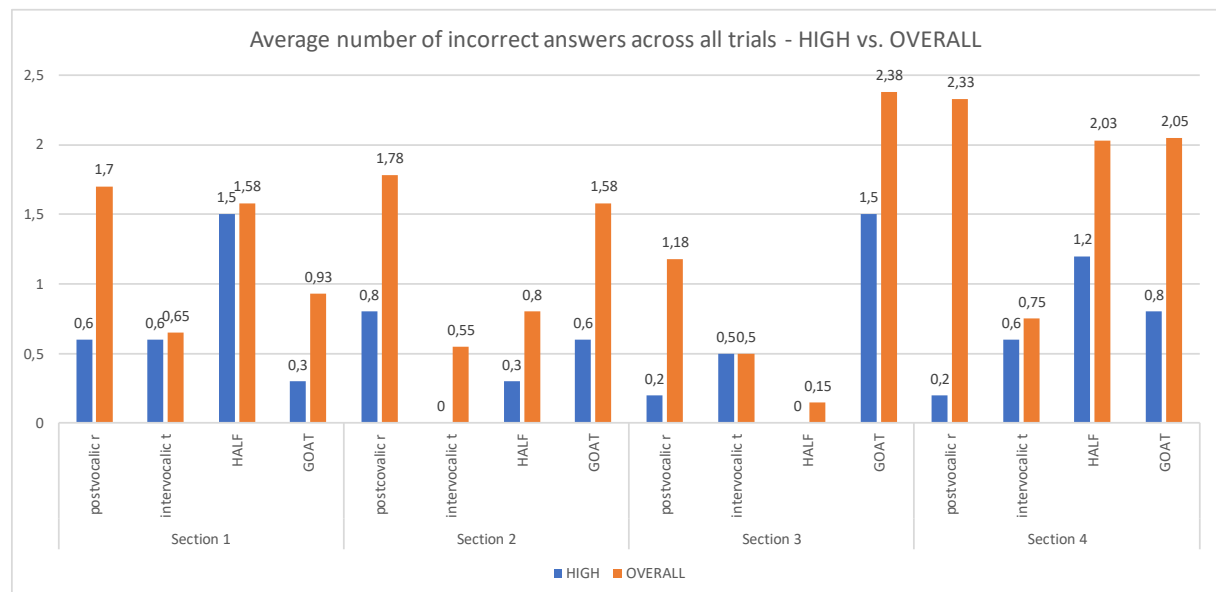


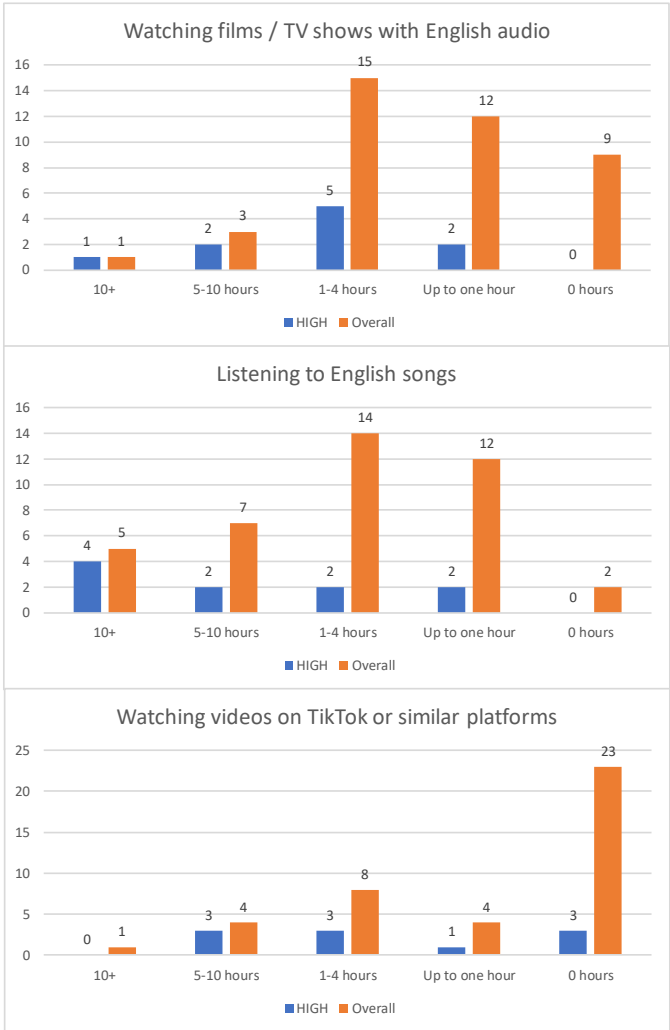
Table 7: Average number of incorrect answers for each phonetic category (OVERALL vs HIGH)

Critical condition	Average number of errors (OVERALL)	Average number of errors (HIGH)
Postvocalic /r/	6.98	1.8
Intervocalic /t/	2.45	1.7
HALF	4.55	3.0
GOAT	6.93	3.2

After all data had been analysed, the ten participants with the highest average number of correct answers were extracted from the sample and analysed as a group to investigate their exposure to English outside of the classroom; among these were one boy and nine girls. It was challenging to identify any reoccurring factors among these, yet the findings were of interest. There were some reports of several languages being spoken at home, in addition to three participants reporting travels to English-speaking countries. The linguistic profiles demonstrate a high degree of passive exposure to English outside of school in terms of selected factors. The factor that provided least exposure to English was *chatting/snapping in English*, but this corresponds to the overall group, as very few participants in general reported being exposed to English in this way. The reason for this may be the age minimum of 13 years on social media such as Snapchat. The majority of the highest average scorers reported Netflix as a source of English exposure. Three participants reported the computer games *Minecraft* and *Roblox* as sources of English exposure. The self-assessment of selected statements displays a generally high level of agreement towards all statements, except the statement about distinguishing between other variants of English. This statement was dominated by the *somewhat disagree* response. Most participants *agreed* or *agreed somewhat* to the basic skills, suggesting that the highest average scorers do perceive their own English skills as good or satisfactory. This supports the idea that students were accurate in their self-assessment. In summary, the highest average scorers rated their ability to distinguish American English and British English as good. They also acknowledged the importance of a proper pronunciation. However, three participants reported no

pronunciation aim, although only one neither agreed nor disagreed to the statement regarding the importance of accent.

Figure 13: Comparative chart of exposure to English for selected factors from the questionnaire (HIGH vs OVERALL).



The blue bars in figure 13 present the highest average scorers from the perception test, while the orange bars represent the overall group of participants. Considering the first two factors in the figure, eight out of ten in the highest average scorers place themselves in the upper-three categories of exposure. With attention to the factor of *listening to English songs*, four of five participants who reported spending ten or more hours were among the highest average scorers. Overall, 21 participants reported spending one hour or less per week watching films or TV shows with English audio. Only two of these were among the highest average scorers. 14 participants reported

spending the same amount of time listening to English songs; only two of these were among the highest average scorers. The highest average scorers comprise most of the participants reporting English exposure through TikTok or similar platforms. Though this factor does not provide the greatest exposure to English, 7 of the highest average scorers reported social media as a source of English exposure.

Figure 12 demonstrates the different areas across the perception test where the highest average scorers made mistakes and compares this group to the overall group. The findings indicate that words with intervocalic /t/ were the most straightforward critical condition to detect, both in terms of perception of differences and identifying a specific accent. In total, 1.7 mistakes on average were made for this critical condition, compared to 2.45 for the remaining participants. On the other hand, the largest gap between the highest average scorers and the overall group was located in the critical condition of postvocalic /r/. The highest average scorers had an average of 1.8 incorrect answers for this critical condition, while the overall group had 6.98, resulting in a deviation of 5.18. The critical condition of the vowel quality in HALF varied in results across the four sections in the test, with 1.5 in section 1 and 0.0 in section 3. Overall, the average number of incorrect answers was 3.0 across 16 trials, compared to 4.55 for the overall group. Comparable results were found in the critical condition of the vowel quality in GOAT, with a total of 3.2 incorrect answers across 18 trials, compared to 6.93 for the overall group. The lowest variable was 0.3 in section 1, compared to 1.5 in section 3.

One critical condition in terms of which the highest average scorers had comparable results to the rest of the group was the token of intervocalic /t/. This phoneme had the lowest rate of incorrect answers among both groups, by 1.7 to 2.45, resulting in a deviation of 0.75. This suggests that the differences between American English and British English in terms of intervocalic /t/ are straightforward. However, the results for the remaining critical conditions have a larger deviation from the overall group. As presented in the paragraph above, a deviation of 5.18 in postvocalic /r/ tokens was identified between the highest average scorers and the overall group. This was the largest deviation across all four critical conditions. The deviation for HALF was 3.05,

while the deviation for GOAT was 3.73. The results presented suggest that the highest average scorers had excellent results for the critical conditions of postvocalic /r/, HALF and GOAT. The results for intervocalic /t/ displayed a smaller deviation. As shown earlier, three selected factors presented a pattern of increased English exposure outside of school for the highest average scorers. In addition, their self-evaluation in the four basic skills was generally confident and might account for an acquired awareness regarding accent differences. Three of the participants had also travelled to countries in North America, which might account for authentic familiarity with the accent. The findings presented suggest that exposure to content with English audio might account for an awareness of differences between American English and British English.

4.4.2 Lowest average scorers

Figure 14: Linguistic profile of the lowest average scorers (LAS) in the perception test.

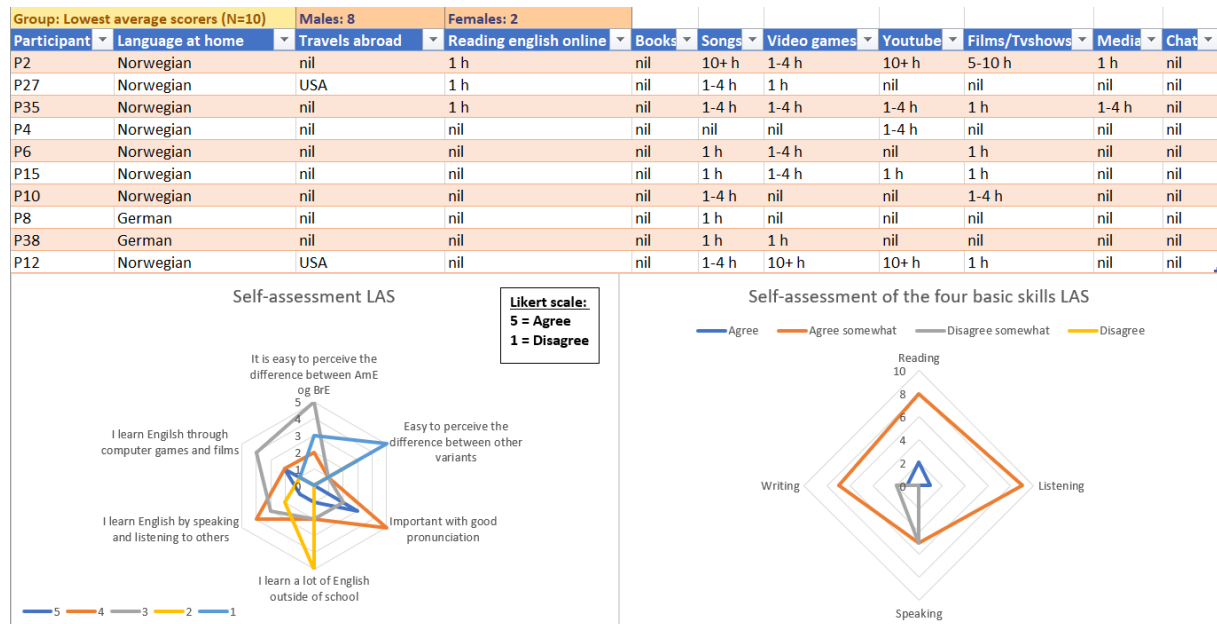


Figure 15: Average number of incorrect answers in the different critical conditions across all trials – LAS (N = 10) vs OVERALL (N = 40).

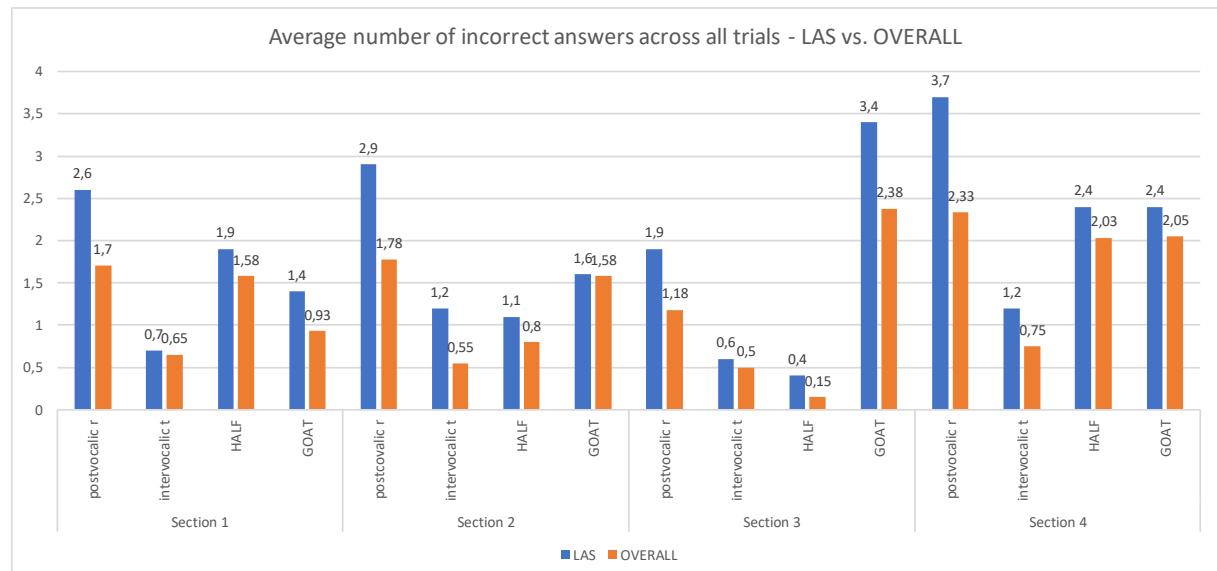


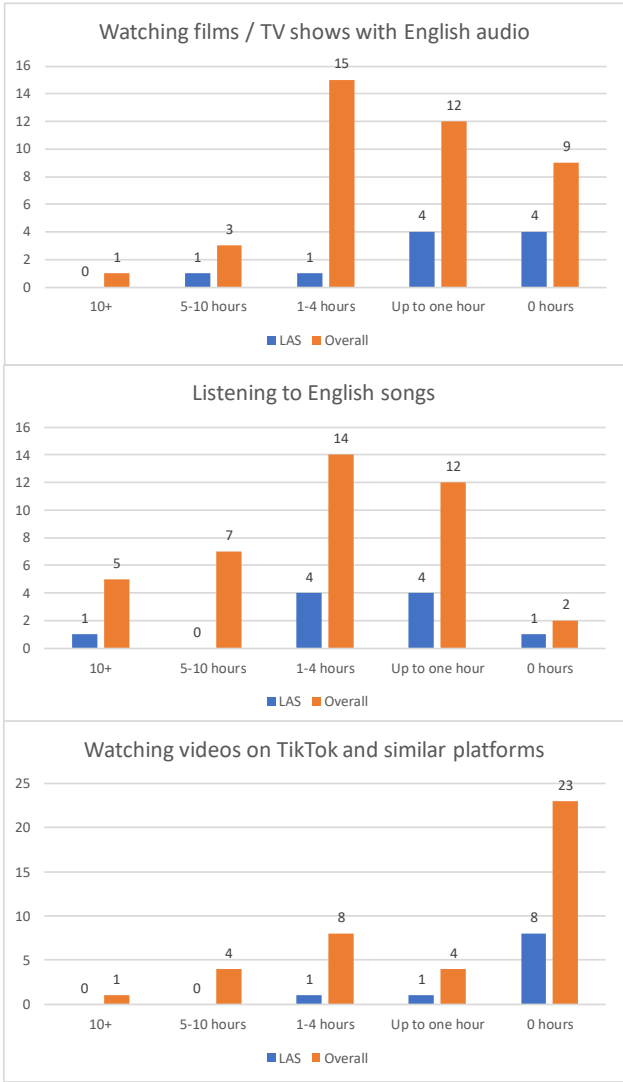
Table 8: Total number of incorrect answers for each phonetic category (OVERALL vs LAS)

Critical condition	Average number of errors (OVERALL)	Average number of errors (LAS)
Postvocalic /r/	6.98	11.1
Intervocalic /t/	2.45	3.7
HALF	4.55	5.8
GOAT	6.93	8.8

The mean deviation of 8.45 was applied in determining the lowest average scorers. The mean deviation was subtracted from the average score of 57 correct answers, resulting in 48.55. A sample of 10 students scored 48 or fewer correct answers – eight boys and two girls. All participants reported only speaking one language at home; eight spoke Norwegian, and two spoke German. Findings from section 4 of the questionnaire suggest a lower level of exposure to English outside of school for this group compared to the highest average scorers. Half of the lowest average scorers reported Netflix as a source of English exposure, although fewer hours of exposure to this factor were reported. The majority of the participants reported *agreeing somewhat* with the self-assessment of the basic skills of reading and listening comprehension. Compared to the highest average scorers, there were fewer reports of *agree* to all basic skills among the lowest average scorers. Regarding the self-assessment of selected statements, very few reported full agreement. Five and three participants respectively reported *neither agreeing nor disagreeing* and *disagreeing somewhat* when rating their own ability to distinguish between American English and British English. A majority fully *disagreed* when rating their ability to distinguish between other variants of English. Most participants did not acknowledge the impact of incidental foreign language learning and did not believe that they could develop their English proficiency outside of the classroom. Five participants among the lowest average scorers reported no pronunciation aim. However, eight participants *agreed* or *agreed somewhat* about the importance of good pronunciation. This suggests that though no pronunciation aim was reported, they still found it

important to speak with proper English pronunciation. In summary, the lowest average scorers also provide evidence for accurate self-assessment.

Figure 16: Comparative chart of exposure to English for selected factors from the questionnaire (LAS vs OVERALL).



The group comprised of the lowest average scorers reported less English exposure outside of school than the group of the highest average scorers. The blue bars represent the lowest average scorers, the orange bars the overall group. The findings indicate a difference in passive exposure through watching films and TV shows with English audio compared to the highest average scorers. While the majority of the highest average scorers reported a weekly exposure of one to four hours or more, most of the lowest average scorers reported one hour or less on this factor. The

amount of English exposure through listening to English songs was also low compared to the highest average scorers. Finally, the overall exposure to English through TikTok and similar platforms was significantly lower than the other factors presented; eight participants among the lowest average scorers reported zero hours of exposure.

Figure 15 displays the areas and critical conditions across the perception test where the lowest average scorers made most errors and compares this group to the overall group. Out of 24 trials, words with the critical condition of postvocalic /r/ provided an average of 11.1 incorrect answers. Compared to the other groups under investigation, this is 4.12 higher than the overall group and 9.3 higher than the highest average scorers. The critical condition with the fewest errors was tokens of intervocalic /t/. The participants had an average of 3.7 mistakes out of 11 tokens. The number of errors in this variable was comparable to the highest average scorers and the overall group. The critical condition of HALF displayed an average of 5.8 incorrect answers out of 16 tokens, while the critical condition of GOAT presented an average of 8.8 incorrect answers out of 18 tokens, although some unrepresentative speech recordings were presented to the participants here. A pattern therefore emerges regarding which critical condition causes the fewest complications for all learners. The lowest average of incorrect answers was for tokens of intervocalic /t/ among the highest average scorers, the lowest average scorers, and the overall group. However, the most challenging critical condition differed between the two groups. While the highest average scorers produced most errors in the vowel quality of GOAT, the lowest average scorers had most incorrect answers in tokens of postvocalic /r/. The results suggest that the lowest average scorers did not perceive the difference in rhoticity between American English and British English. However, they managed to perceive the allophonic varieties of intervocalic /t/.

5. Discussion

The previous section displayed the main findings from the questionnaire and the perception test. The current investigation focused on young Norwegian learners' ($N = 40$) ability to perceive differences between American English and British English, and whether they could identify words as either American or British. The results from the perception test were investigated in relation to incidental foreign language learning, which suggests that passive exposure to English through various sources may affect participants' perception of different English variants. In addition, participants' self-assessment of English proficiency tended to correlate with the score obtained on the perception test. Specifically, the highest average scorers provided evidence of high exposure to English through films and TV with English audio, English songs, and videos on social media platforms. They were also characterized by a tendency to rate their basic English skills as good, and agreement with the statements presented regarding English proficiency. The lowest average scorers, on the other hand, reported less English exposure through these sources. The self-assessments of the lowest average scorers were characterized by lower ratings of their basic skills, and less agreement with the selected statements. The discussion of the results focuses on the following research questions, as stated in the introduction:

RQ1: Are Norwegian learners of English able to identify differences in words and sentences between American English and British English?

RQ2: Are Norwegian learners of English able to identify words and sentences as either American or British?

RQ3: Is there a difference in response between presenting learners with a single word and presenting them with a sentence?

RQ4: How does passive exposure to English impact young Norwegian learners' perception of different English variants?

5.1 English exposure through media

There is evidence for continuous passive English exposure outside school, which supports the findings from the Norwegian Media Authority (2020) and Statistics

Norway (2020). English exposure outside of school has increased in recent years. The use of computer games has seen a sharp increase since 2015, and the Norwegian Media Authority (2020) claims that 62.5% of 11- to 12-year-olds who reported playing computer games use English regularly. 70.5% of the participants playing computer games agreed with the assertion that gaming improves English proficiency. Results from the same study also provided evidence of regular English use when watching YouTube, films, and TV. Statistics Norway (2020) estimated that 81% of children aged 9–15 years used digital games daily in 2019, and 49% used various video media every day. Based on these facts, it was anticipated that the present study would find a high degree of English exposure through these factors. It was also expected that participants' perception of L2 acquisition through gaming would reflect the results from the Norwegian Media Authority (2020). Interestingly, around 75% of participants in the present study reported weekly exposure to English through computer games and viewing of YouTube, films, and TV in various amounts. The percentage of participants using English computer games reflects the statistics from previous studies. The results from the present study identify greater English exposure through various video media than do previous studies. However, approximately 50% of the participants in the present study believed that computer games and video media affected L2 acquisition, lower than the percentage reported by the Norwegian Media Authority (2020). Only 50% of the participants believed that they learned a large amount of English outside of school, which is an interesting finding considering the amount of English exposure reported. The greatest source of English exposure among the participants in the present study was through listening to English songs; only two participants reported no time spent on this activity. A common denominator of the most frequent English exposure is a high amount of input and lack of output. Nevertheless, these findings correspond to theories suggesting that incidental foreign language learning is characterized by passive exposure, meaning that the structures and systems of a second language are rarely applied (Rugesæter, 2014).

Another interesting aspect to discuss is the lack of explicit classroom instruction in pronunciation differences between American English and British English. A thorough review of various classroom textbooks revealed that British English is the dominant

variant in the audio files across all primary school year groups. However, the number of audio files involving other variants (American, Australian, Irish, etc.) increases with the level of instruction, meaning that learners in year 7 are more passively exposed to other variants than those in year 5. This leads to the question of where the participants in the present study (year 5) have acquired their knowledge of accent differences, since they lack explicit instruction through classroom textbooks. On the one hand, passive exposure to different English variants through classroom textbooks may account for some of this knowledge. On the other hand, it is more likely that this knowledge was acquired outside of school, considering the amount of passive English input reported in the questionnaire. However, a combination of these two sources may account for some acquired knowledge; the questionnaire revealed that several American YouTube channels were frequently watched, whereas British English was the dominant variant at school. This suggests that both internal and external factors may have influenced participants' perception of English variants. With regard to *RQ4*, the findings from the questionnaire, seen in relation with classroom exposure to English, suggest that passive English exposure inside and outside the classroom affects participants' perception of English variants.

Of the participants, 12 reported spending 5 hours or more every week watching English videos on YouTube. Four of these were among the highest average scorers, while two participants were among the lowest average scorers. On the same note, eight participants reported spending 5 hours or more playing English-language computer games. One participant was in the group of highest average scorers, while another was among the lowest average scorers. There was a preponderance of male participants spending a considerable amount of time on English computer games – 6 boys and 2 girls. However, no clear patterns were discovered regarding time usage on YouTube and computer games, due to broad and wide-ranging results in the perception test. Therefore, it is challenging to draw conclusions regarding whether the amount of English exposure through YouTube and computer games affects perception of different English variants. Still, the findings contribute to the field by presenting data regarding English exposure through various media which corresponds to previous reports.

5.2 Awareness of phonetic differences between American English and British English

The average number of correct answers on the perception test was 57.05 out of 84 trials, which corresponds to 68%. These results do suggest that the participants are able both to perceive differences between American English and British English and to identify words and sentences as either American or British. Although a part of the audio files lacked representative RP diphthongs in the vowel quality in GOAT, the results may be considered satisfactory. However, there was a considerable discrepancy between participants' ability to identify phonetic differences and their ability to identify a specific accent. In the perception test, sections 1 and 3 involved identifying phonetic differences, which provided a score of approximately 72%. Sections 2 and 4 involved identifying a specific accent, and the results from this section demonstrate a rate of correct identification of approximately 63%. The results suggest greater ability among the participants to detect differences between the English variants under investigation than to identify specific variants.

It is essential to discuss whether the results from the perception test provide evidence of a consciousness of the linguistic features differentiating British English and American English. The findings of Rindal and Piercy (2013) suggest that the participants of that study applied linguistic features of their reported pronunciation aim, although their speech production was characterized by hybrid and varied pronunciation. Participants who reported a pronunciation aim of British English applied phonetic features of American English, and vice versa. However, the participants in Rindal and Piercy's study (2013) who aimed at British English applied fewer American features than those who aimed for American English, which suggests an awareness of and competence in accent differences. In the same manner, the participants in the present study demonstrate a level of consciousness of selected linguistic features differentiating British English from American English – for example, by producing fewer errors in tokens of intervocalic /t/. On average, the vowel feature in GOAT was the most challenging critical condition for participants in the present study, although some RP diphthongs lacked a distinct RP pronunciation. Still, the results from the perception test suggest a certain awareness of the different phonetic features that distinguish American English from British English, which

correspond to results from previous studies. Considering *RQ1* and *RQ2*, the participants managed to both perceive differences between and positively identify British English and American English. Still, the participants provided a higher percentage of correct answers in perceiving differences. This suggests that hypothesis A can be accepted, since the participants perceived differences in English variants to a greater extent than they were able to identify a specific variant. Rindal and Piercy (2013) suggest that the participants' pronunciation aims were influenced by their daily exposure to English rather than by their teachers. This implies that the participants in the present study may have acquired their accent perception outside the classroom, especially considering the lack of explicit instruction on this in classroom textbooks. This is also supported by the comparison of the highest average scorers with the lowest average scorers, which indicates a large discrepancy in English exposure outside of school. The findings from the present study, which suggest that the participants with extensive English exposure in selected factors provided a higher percentage of correct answers in the perception test, agree with hypothesis B. The highest average scorers were characterized by substantial English exposure through input-based sources and faced fewer difficulties distinguishing between and identifying English variants.

5.3 Recognition of English variants

In sections 2 and 4, the participants were asked to identify words and sentences as either British or American; the percentage of correct identifications on these sections combined was 63.44%. The percentage of correct identifications was slightly lower than in the study conducted by Carrie and McKenzie (2018), which provided recognition rates of 69% for RP and 66.2% for GA. Still, the age of the participants must be accounted for, as Carrie and McKenzie (2018) recruited participants aged 19–33 years. Although the percentage from the present study comprises all 43 trials in the analysis, it does not provide specific results regarding how many British or American speech samples were identified correctly. Still, considering the age of the participants in the present study and the average percentage of correct answers, the results correspond to the study by Carrie and McKenzie (2018). Other studies in this field have come to different conclusions. McKenzie (2008) provided recognition rates of 54.66% for the standard variant of American English and 32.08% for the standard

variant of British English. The British variant in this study was Glasgow Standard English, which does not correspond to the British variant in the present study. Though it is debatable whether the speakers in the present study spoke RP, the phonetic features under investigation were influenced by RP and GA. Regardless, the present study provided higher recognition rates than those of both variants combined in McKenzie (2008).

5.4 The ELF and ESL paradigms

Although the lowest average scorers reported less English exposure outside of school and self-assessed their English proficiency more negatively, the findings in the present study in no way imply a diminished English proficiency among this group. Their self-assessment of their ability to perceive differences between British English and American English corresponds to the results in the perception test, suggesting an accurate perception of their own skills in this specific area of L2 knowledge. The ELF paradigm in Norway reflects the competence aims from the Norwegian Directorate for Education and Training (2020) and rejects the paradigm of EFL, in accordance with Graddol (2006) and Seidlhofer (2005). There are no aims and goals of developing native-like pronunciations among young Norwegian learners, and English as an L2 in Norway is shifting towards an ESL paradigm. The ELF and ESL paradigms are also manifested in the subject curriculum reform of 2020, which emphasizes the importance of English as a tool of communication (The Norwegian Directorate of Education and Training, 2020).

5.5 Comments from the participants

The final section of the perception test asked the participants how they perceived the differences between American English and British English. These comments proved valuable in identifying which features the participants were looking for in order to distinguish between the speech samples presented. A selection of the comments is presented below. The answers were given in Norwegian and were translated by the administrator for this purpose.

P4: "I think it has something to do with ø."

This comment refers to the realization of postvocalic /r/ (e.g., spider, winter, summer), where British speakers do not pronounce /r/. Norwegians may perceive this sound as /ø/, which is a familiar and distinctive sound in Norwegian. P4 did not specify which variant included /ø/, but their score in this phonetic category suggests a greater ability to detect a difference than identifying an accent. To support this, the participant had two errors in tokens including this critical condition on sections 1 and 3, compared to 10 mistakes in sections 2 and 4.

P50: "British does not have r, but American does."

This participant is aware of the difference between American English and British English in realizations of postvocalic /r/. The results support this view, as no mistakes were made on this critical condition in sections 3 and 4 (a total of 18 tokens of this critical condition). This participant did not manage to perceive the similarity among the filler words from section 3. The lack of a distinctive sound may explain this.

P37: "British spits on the t."

This comment refers to the different allophones of /t/, which RP realizes as an alveolar plosive, GA as an alveolar tap. Non-native speakers of English may perceive an alveolar plosive as similar to spitting, due to the amount of air released by this manner of articulation. Over 11 trials of the critical condition of intervocalic /t/, this participant made one mistake. This suggests that prior knowledge of phonetic differences plays a significant role in distinguishing between American English and British English.

P18: "Harry Potter speaks British."

P36: "I hear that Hermione from Harry Potter speaks British."

Two participants named the *Harry Potter* movies as a source of knowledge of British English. In general, P18 had a good knowledge of the differences between British English and American English and was among the highest average scorers. The results of P36 were of no significant interest, but it is interesting to investigate what factors the participants attribute their answers to. These comments support the idea that incidental foreign language learning appears through mainstream media such as films and TV.

P43: "British speakers say *åu* and *a*."

P44: "British speakers say a lot of *au*."

Both participants above were among the highest average scorers and expressed a specific difference related to the critical condition in GOAT. The proximity between the British diphthongs of /æʊ/ and /åu/ (/au/) suggests that P43 and P44 had acquired this contrast already. In the perception test, the participants made respectively two mistakes and one mistake in tokens including the RP/GA diphthong, which suggests that their own assertions regarding this contrast match their results. In addition to this, P43 stated that British speakers say *a*, which may refer to the critical condition of /ɑ:/ vs /æ/. This participant made one mistake across 16 trials of this feature. None of the two participants above managed to perceive a similarity in the filler words presented in section 3. On the one hand, some filler words may have included other identifiable features. On the other hand, errors made on the filler words may be related to possible recognition of the speakers. The results from section 4, where both participants managed to assign all filler words to their respective accent, support this view. By recognizing the native speakers, one might detect the accent though there is no distinctive phoneme present.

5.6 Perception vs recognition of American English and British English

Table 9: Error rates in sections 1 & 3 vs sections 2 & 4 (Average of incorrect answers divided by number of tokens).

Critical condition	Section 1 & 3	Section 2 & 4
Postvocalic /r/	0.24	0.35
Intervocalic /t/	0.18	0.33
HALF	0.21	0.41
GOAT	0.36	0.40

Based on the perception test carried out in the present study, the participants are able to identify a difference between the two variants of English. The average rates of correct answers on sections 1 and 3 were 70% and 75% respectively; these rates are relatively high and suggest that young Norwegian learners in year 5 have acquired a perception of phonetic differences between American English and British English.

The findings from the test suggest that some contrasts are more challenging to perceive than others, although it must be considered that the audio files lacked some representative recordings of the RP diphthong. Nevertheless, the error rates shown in table 9 suggest that it is more challenging to perceive a difference in words and sentences containing the critical condition of the RP/GA diphthong. The lowest error rate was in tokens of intervocalic /t/. However, the participants encountered greater challenges when trying to identify a word as either British or American. Sections 2 and 4 provided a correct answer rate of 65% and 62% respectively. The deviation between the most and least challenging critical conditions is lower than for sections 1 and 3. The RP/GA diphthong and the RP/GA monophthong provide the highest rate of incorrect answers when identifying a word as either British or American. This indicates that the participants in the present study found it more challenging to identify words and sentences as American or British when they contained these critical conditions. The critical condition of intervocalic /t/ has the lowest error rate across all sections, suggesting greater awareness of this difference than of other critical conditions.

The z-test carried out did not show a significant difference between sections 1 and 2 in the perception test. The difference between sections 3 and 4, however, was significant. In contexts where the participants were presented with single words, the results demonstrate greater skill in perceiving a difference between the two variants than in identifying a specific variant. In other words, participants were able to identify differences between American English and British English to a greater extent than they were able to identify a word as either British or American. This is reflected in previous studies (Rindal & Piercy, 2013; Carrie & McKenzie, 2018), which suggests a certain phonological consciousness among Norwegian learners and equivalent recognition rates between RP and GA.

5.6.1 Stimuli with varying degrees of context

With regard to *RQ3*, the perception test did not provide evidence of a significant difference related to the amount of speech presented to the participants. Hence, no conclusions can be drawn about whether stimuli with varying degrees of context

influence the answers given by the participants. Sections 1 and 2 combined provided a total percentage of correct answers of 67.5%, while sections 3 and 4 combined provided a percentage of correct answers of 68.5%. The data available in the present study neither supports nor clarifies the question of whether stimuli with varying degrees of context influence participants' ability to distinguish between and identify English variants. Hence, the results presented regarding whether the impact of tone and pitch affects perception and recognition of English variants do not contribute to the existing field of research.

5.6.2 Influence of incidental foreign language learning and self-assessment

The findings from the questionnaire suggest that a selection of factors involving incidental foreign language learning may enhance learners' ability to distinguish between and identify English variants. The present study drew attention to the factors *listening to English songs, watching films or TV with English audio, and watching videos on TikTok or similar platforms*. Although there is insufficient data to draw conclusions about whether these factors affect second language learning, the participants with the highest scores on the perception test were characterized by having greater exposure to these factors than the overall group. With regard to RQ4, the observations in the present study suggest that extensive passive exposure to English did impact the participants' perception of different English variants. This is also supported by the findings from the lowest average scorers, who were characterized by a low level of English exposure in terms of the selected factors. Still, the data provided does not allow for a general conclusion about how passive exposure to English impacts young Norwegian learners' perception of different English variants. Another important finding to address is participants' self-assessment of their own abilities to perceive differences between American English and British English. The highest average scorers self-assessed their skills in this area to be relatively good, which matched their results in the perception test. Conversely, the lowest average scorers were characterized by modest self-assessments of their ability to perceive differences between American English and British English. Although the present study did not aim to investigate how Norwegian learners self-assess their own English skills, the results and findings support the validity and reliability of self-assessment as a method. In summary, the highest average scorers

were characterized by high passive exposure to English in selected factors and positive self-assessment of their proficiency in English, whereas the lowest average scorers provided evidence for lower passive exposure and more negative self-assessment of English proficiency.

6. Conclusion

6.1 Summary of key findings

The aim of the present study was to investigate young Norwegian learners' ability to perceive differences between American English and British English and to identify words and sentences as either British or American. The participants' proficiency in this area was examined in relation to passive English exposure and self-assessment of basic English proficiency. The data collection comprised a questionnaire regarding exposure to English outside of the classroom and a perception test of differences between American English and British English. Four phonetic features that distinguish RP from GA were selected for investigation into learners' perception of differences between American English and British English, and speech samples of different native speakers of English were presented to the participants. The results from the perception test display an average of 68% correct answers, which suggests that the participants in the present study were competent at both distinguishing between and identifying English variants. However, some phonetic features resulted in fewer errors, and the findings suggest that the critical condition of intervocalic /t/ caused the fewest complications of the selected phonetic features. In addition, the participants provided a higher percentage of correct answers when asked whether they perceived a difference between the two variants than when asked to identify a specific variant. This supports hypothesis A, and the results indicate that participants have acquired some level of awareness of the differences between American English and British English. The findings indicate that those with substantial English exposure through selected factors from the questionnaire have an enhanced proficiency in this area, supporting hypothesis B. This assertion is supported by the comparison between the highest average scorers and the lowest average scorers. However, a mixture of different influences – the dominance of British English at school, combined with the mainstream media influenced by the American global cultural hegemony – may account for proficiency in this area. The present study does not offer enough data to draw conclusions about this. Nevertheless, there is evidence for continuous passive English exposure through media, which according to the Norwegian Media Authority (2020) will continue to increase as young learners mature. The role of incidental foreign language learning in L2 acquisition is evident in the ever-expanding position of the English language worldwide.

6.2 Limitations of the study

The quality of the speech samples for the present study could have been improved by ensuring representative speech sounds for all phonetic features under investigation. As mentioned, the lack of a distinctive RP diphthong in some speech samples must be considered when investigating the data from the perception test. Moreover, filler words without other identifiable features would have improved the perception test and its reliability. Finally, the analysis of the results from the perception test, seen in relation with participants' English exposure, does not provide enough data to prove the impact of incidental foreign language learning in the present study. Hence, no conclusions can be drawn as to whether passive exposure to English affects young Norwegian learners' perception of different English variants.

6.3 Suggestions for further research

More comprehensive research should be conducted into incidental foreign language learning's effect on perception of different English variants. Another suggestion for future studies is to investigate other phonetic features distinguishing American English from British English, and to what extent they may cause complications for Norwegian ESL learners. It is suggested that speech samples and representative tokens of the critical conditions under investigation be thoroughly prepared and administered to avoid interference from other identifiable features.

7. Literature

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8. Appendices

Appendix A: The questionnaire

Undersøkelse om engelsk utenfor skolen.

Denne undersøkelsen samler inn informasjon om hvordan barn bruker og hører engelsk utenfor klasserommet. Du skal ikke oppgi navn i undersøkelsen. Alle elever får en kode, som kan kobles sammen med en lyttetest i klasserommet. Alle svar vil bli behandlet anonymt. **Fyll ut spørreskjemaet sammen med ditt / deres barn.** 10 spørsmål skal besvares. Det er kun tillatt å krysse av på ett alternativ per spørsmål, dersom ikke noe annet er spesifisert.

Kjønn

Jente Gutt Annen kjønnsidentitet

1. Hvilke språk snakker dere hjemme?

2. Hvilke andre **språk** kan ditt/deres barn? Kryss av for om du kan **lese, skrive, forstå og/eller prate språket**. (Tillat med flere kryss).

Språk	Lese	Skrive	Forstå	Snakke

3. Har dere bodd eller oppholdt dere i et **engelsktalende land**? List opp hvilke land under, og **sett kryss** for hvor **lenge** der har oppholdt dere i landet.

List opp engelsktalende land her: ↓	Mindre enn to uker.	2-4 uker	1-3 mnd.	4-6 mnd.	7-12 mnd.	Mer enn ett år.

4. Kryss av for omtrent **hvor mange timer i uka** (utenom skole og lekser) ditt/deres barn bruker til å...

	Over 10 timer	5-10 timer	1-4 timer	Opp mot 1 time	Ingen
Lese engelsk på internett.					
Lese engelske bøker eller blader.					
Lytter til engelske sanger.					
Spille dataspill hvor du bruker engelsk.					
Se på engelske videoer på YouTube.					
Se på filmer/TV-serier med engelsk tale.					
Se på videoer på engelsktalende kanaler på TikTok eller lignende videotjenester.					
Chatte / snappe med noen på engelsk.					

5. Spesifiser hvilke **engelske kanaler eller brukere på YouTube** ditt/deres barn ser på/følger:

Ser ikke på YouTube

Ser på følgende kanaler _____

6. Hvis ditt/deres barn bruker **internettbaserte strømmetjenester** (f.eks. Netflix, TV2 Sumo, Disney+, Viaplay) til å se på engelske filmer/serier, hvilke brukes?

Bruker ikke på strømmetjenester

Bruker følgende: _____

7. Spesifiser hvilke **engelsktalende dataspill** ditt/deres barn spiller:

Spiller ikke engelske dataspill

Spiller følgende engelske dataspill: _____

8. Hvis ditt/deres barn ser på **filmer/serier med engelsk tale**, brukes det **undertekst**?

Ser ikke på filmer/serier med engelsk tale

Bruker undertekst på følgende språk: _____

9. Kryss av for om ditt/deres barn er enig, litt enig, litt uenig eller helt uenig i følgende påstander.

Påstand	Helt enig	Litt enig	Litt uenig	Helt uenig
Jeg kan lese engelske tekster og forstå innholdet.				
Jeg kan lytte til engelske samtaler og forstå det som blir sagt.				
Jeg kan snakke engelsk med andre med god flyt.				
Jeg kan skrive engelske tekster, og kan mange engelske ord.				

10. Sett kryss mellom 1 og 5 i boksen som passer påstanden.

1 = Uenig 5 = Enig

Påstand	1	2	3	4	5
Det er lett å høre forskjellen mellom amerikansk og britisk.					
Det er lett å høre forskjellen mellom andre engelske varianter (f.eks. australsk, irsk, canadisk).					
Det er viktig for meg å ha en god uttale på engelsk.					
Jeg lærer mye engelsk utenfor skolen.					
Jeg lærer engelsk ved å snakke med eller lytte til noen.					
Jeg lærer engelsk gjennom engelske dataspill og filmer .					
Spesifiser hvilken type engelsk ditt/deres barn ønsker/prøver å prate:					
<input type="checkbox"/> Britisk <input type="checkbox"/> Amerikansk <input type="checkbox"/> Annen engelsk (f.eks. australsk) <input type="checkbox"/> Norsk engelsk <input type="checkbox"/> Ingen spesiell uttale					

Tusen takk for deres deltagelse og hjelp til min masteroppgave! 😊

Oppgave 1: Du hører en setning to ganger. Hører du forskjell? Sett kryss.

Setning	Forskjellig uttale	Lik uttale
Setning 1		
Setning 2		
Setning 3		
Setning 4		
Setning 5		
Setning 6		
Setning 7		
Setning 8		
Setning 9		
Setning 10		
Setning 11		
Setning 12		
Setning 13		
Setning 14		
Setning 15		
Setning 16		

Oppgave 2: Du hører samme setning to ganger. Hører du britisk eller amerikansk? Sett kryss.

Setning	Britisk	Amerikansk
Setning 1		
Setning 2		
Setning 3		
Setning 4		
Setning 5		
Setning 6		
Setning 7		
Setning 8		
Setning 9		
Setning 10		
Setning 11		
Setning 12		
Setning 13		
Setning 14		
Setning 15		
Setning 16		

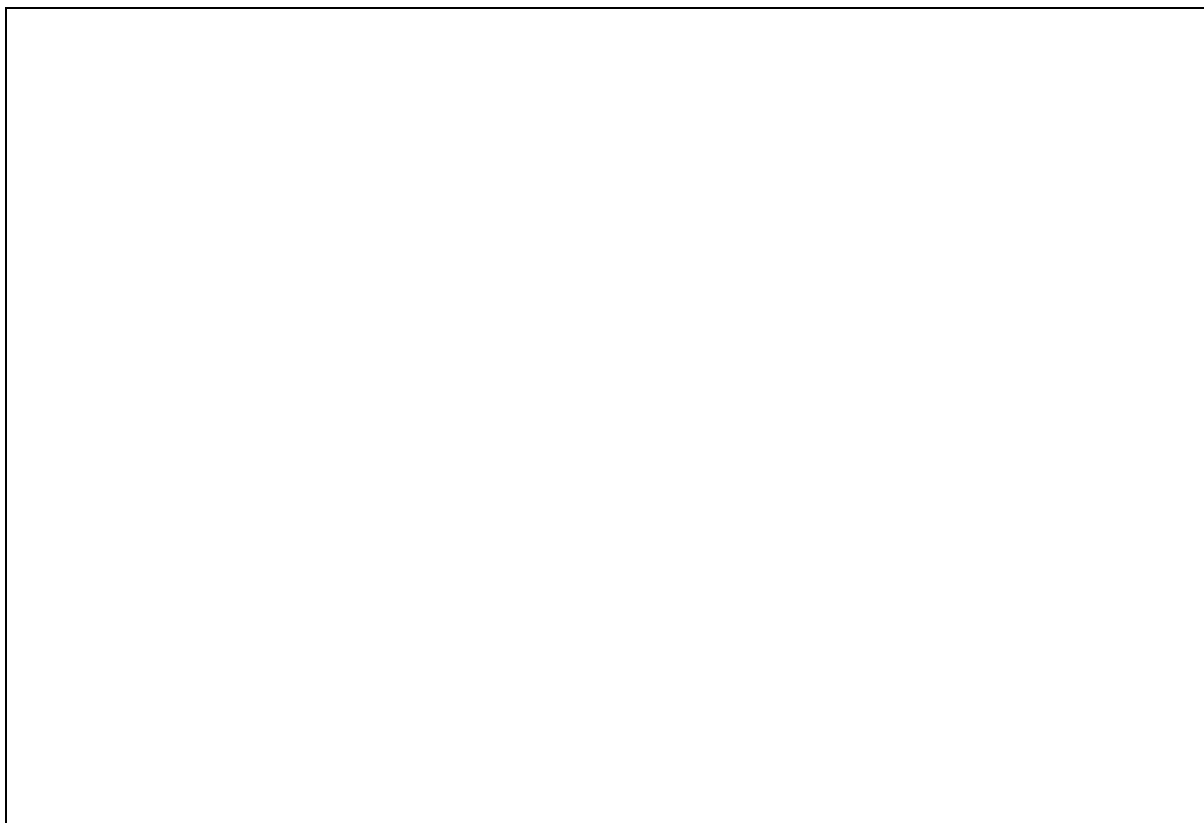
Oppgave 3: Du hører et ord to ganger. Er det lik eller forskjellig uttale? Sett kryss.

Ord	Forskjellig	Likt
Bath		
Grass		
Tiger		
Metal		
Beatles		
Red		
Toe		
Spider		
Ask		
White		
Window		
Broken		
Star		
Elbow		
Kitten		
Ear		
Blue		
City		
Snowman		
Fast		
Black		
Arm		
Half		
Road		
Firework		

Oppgave 4: Du hører et ord to ganger. Hører du britisk eller amerikansk? Sett kryss.

Ord	Britisk	Amerikansk
Craft		
Phone		
Flower		
Scarf		
Firework		
Hamburger		
Cold		
Hitting		
Potato		
Class		
Mosquito		
Soap		
Car		
Shoulder		
Man		
Last		
Beetle		
Elbow		
Garden		
Rat		
Goat		
Rather		
Calf		
Ham		
Spider		
Half		
Butter		

Hvordan kan vi høre forskjell på amerikansk og britisk engelsk?



Appendix C: Test guide / word list

Filler words in red.

Section 1: Sentences

1. I am sitting
2. The winter is dark
3. I like the summer
4. The king lives in a castle
5. Look at that bird
6. The classroom is big
7. I broke my nose
8. She was hitting the ball
9. I like the summer
10. My house is yellow
11. The bathroom was small
12. I live on a farm
13. She was hitting the ball
14. The bathroom was small
15. Look at that bird
16. He is playing in the snow

Section 2: Sentences

1. He plays the piano
2. They settled in the jungle
3. Lightning and thunder in the storm
4. **This is a tall man**
5. The glass is full
6. My middle finger hurts
7. I like the color purple
8. I eat from a bowl
9. Look at that bird
10. **Random dog walking**
11. Lightning and thunder in the storm
12. This is the calf
13. I eat from a bowl
14. I am sitting
15. **This is a small cat**
16. This is a mango

Section 3: Words

1. Bath
2. Grass
3. Tiger
4. Metal
5. Beatles
6. **Red**
7. Toe

8. Spider
9. Ask
10. White
11. Window
12. Broken
13. Star
14. Elbow
15. Kitten
16. Ear
17. Blue
18. City
19. Snowman
20. Fast
21. Black
22. Arm
23. Half
24. Road
25. Firework

Section 4:

1. Craft
2. Phone
3. Flower
4. Scarf
5. Firework
6. Hamburger
7. Cold
8. Hitting
9. Potato
10. Class
11. Mosquito
12. Soap
13. Car
14. Shoulder
15. Man
16. Last
17. Beetle
18. Elbow
19. Garden
20. Rat
21. Goat
22. Rather
23. Calf
24. Ham
25. Spider
26. Half
27. Butter

Appendix D: Quest 7 Textbook

Bade, A. H., Pettersen, M. D. & Tømmerbakke, K. (2016) *Quest 7 Textbook* (1st edition), pp. 240-242,

Oslo: H. Aschehoug & Co. (Available at www.brettboka.no, accessed 11/5-2021)

 **Language Work**

Sounds – Tongue Twisters


/ə/

Betty Botter bought some butter;
"But," said she, "this butter's bitter!
If I put it in my batter
It will make my batter bitter.
But a bit of better butter
Will but make my batter better."
Then she bought a bit of butter
Better than the bitter butter,
Made her bitter batter better.
So 'twas better Betty Botter
bought a bit of better butter.



/ɔ:/

Bear scored four goals with his paw,
Bear caught the ball and scored once more.
That's enough, thought Wolf quite sore,
and made a hole in the ball with his claw.




/ɪə/

Here is a pear, my dear.
You can give it to the deer over there.



/ð/ /θ/

The thin twin Tim and the thirsty twin Tom went together.



Appendix E: Stairs 7 Textbook

Solberg, C. & Unnerud, H. D. (2014) *Stairs 7 Textbook*. (1st edition). Pp. 234-237. Oslo: Cappelen

Damm. (Available at www.brettboka.no, accessed 11/5-21)

Phonetics

Chapter 1

/s/ og /z/

S på engelsk uttales omtrent som på norsk. Lyden kan skrives med s i ord som *sun* /sʌn/, *star* /stɑː/ og *sky* /skaɪ/ eller med c i ord som *cent* /sent/, *city* /sɪti/ og *circle* /ˈsɜːkl/.

/z/ er en lyd vi ikke har på norsk. Den uttales omtrent som en s, bare at stemmebåndene vibrerer når vi sier den. Lyden kan skrives med z i ord som *zero* /ˈzɪərəʊ/, *zebra* /ˈzebrə/ og *zip* /zɪp/, eller med s i ord som *dogs* /dɒgz/, *rose* /rəʊz/ og *cosy* /ˈkɒzi/.

Øv på å si disse ordene:
sip /sɪp/ – zip /zɪp/
fleece /fliːs/ – fleas /fliːz/
peace /piːs/ – peas /piːz/
price /praɪs/ – prize /praɪz/

Substantiv i flertall ender på -s. Vanligvis uttales denne som en stemt s /z/.

Eksempel: boys /bɔɪz/

Flertalls s-en uttales som ustemt s, /s/ hvis substantivet ender på en

ustemt konsonant, som -p og -t.

Eksempel:
tops /tɒps/

Øv på å si disse ordene:

girls /gɜːlz/
roses /rəʊzɪz/
witches /wɪtʃɪz/
thieves /θiːvz/

caps /kæps/
cats /kæts/
pits /pɪts/

Chapter 2

/t/ og /d/

/t/ er en kort i som er nokså lik den norske i-en. Når du sier den engelske lyden /t/, ligger tunga litt lengre bak i munnen. /t/ fins i ord som *kitten*, *hip* og *milk*. Den kan skrives med i, som i *sit* /sɪt/ eller y som i *system* /sɪstəm/.

/d/ er en lang i-lyd som ligner på den norske i-en i fin. Den fins i ord som *seal*, *feel* og *knee*. Den kan skrives med ea som i *meal* /miːl/, e som i *fever* /ˈfiːvə/, ee som i *meet* /miːt/ eller ei som i *seize* /siːz/.

Øv på å si disse ordene:

sit /sɪt/ – seat /siːt/
sick /sɪk/ – seek /siːk/
wit /wɪt/ – wheat /wiːt/

/ʊ/ og /uː/

/ʊ/ er en mellomting mellom den norske u-en i ord som *putte* og den norske korte o-en i ord som *bukk* og *jukse*. Lyden fins i ord som *cook* /kʊk/, *foot* /fʊt/ og *hood* /hʊd/.

/uː/ ligger mellom den norske u-en i hus og o-en i bok. Lyden fins i ord som *hula hoop*, /huːlə huːp/, *food* /fuːd/ og *pool* /puːl/.

Øv på å si disse ordene:

luke /luːk/, food /fuːd/,
moon /muːn/
good /gʊd/, book /bʊk/,
cooking /ˈkʊkɪŋ/

Chapter 3

/e/, /æ/, /ɑː/ /ɒ/ og /ɔː/

/e/ er en kort vokal. Den høres ut som den norske e-en i mett. Den fins i ord som *pet*, *men* og *head*. Den kan skrives med e som i *set* /set/, *wedding* /ˈwedɪŋ/ og *bed* /bed/, med ea som i *bread* /bred/, *dead* /ded/ og *leather* /ˈleðə/, eller med a som i *many* /ˈmeni/ og *any* /ˈeni/.

Øv på å si disse ordene:

ready /ˈredi/, heavy /ˈhevi/,
any /ˈeni/, many /ˈmeni/.

/æ/ er en kort vokal som ligner på den norske vokalen i ord som *tverr*. Den fins i ord som *cat* /kæt/, *rat* /ræt/ og *pan* /pæn/.

Øv på å si disse ordene:

madam /ˈmædəm/, hat /hæt/,
camera /ˈkæmərə/,
mackerel /ˈmækərəl/

/ɑː/ er en lang vokal som uttales med tunga langt bak i halsen. Den høres nokså lik ut som den norske a-en i hake. Lyden fins i ord som *father*, *heart* og *car*.

Øv på å si disse ordene:

far /fɑː/, hard /hɑːd/, father
/ˈfɑːðə/, calm /kɑːm/

/ɒ/ fins i ord som *hot* /hɒt/, *pottery*

/ˈpɒtəri/ og *pop* /pɒp/. Den ligner på den norske å-en i kopp, men du skal åpne munnen litt mer når du sier den.

/ɔː/ fins i ord som *four* /fɔː/, *more* /mɔː/ og *board* /bɔːd/. Den ligner på den norske å-en i får.

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Øv på å si disse ordene:
rotten /ˈrɒtn/, got /gɒt/,
copper /ˈkɒpə/
fought /fɔːt/, naught /nɔːt/,
forward /ˈfɔːwəd/

Chapter 4

Diftonger I

Diftonger er sammensatt av to vokaler som sies i én stavelse. I kapittel 4 skal du lære fire diftonger. Husk at vi har diftonger på norsk også: ei, ai, au og øy. Disse høres annerledes ut enn de engelske. På engelsk må du sette sammen de lydene du allerede har lært, og si dem i én stavelse.

/eɪ/ Denne diftongen fins i ord som *break* /breɪk/, *wait* /weɪt/, *fake* /feɪk/ og *veil* /veɪl/.

/aɪ/ Denne diftongen fins i ord som *hike* /haɪk/, *smile* /smaɪl/ og *guide* /gaɪd/.

/ɔɪ/ Diftongen /ɔɪ/ fins i ord som *joy* /dʒɔɪ/, *noise* /nɔɪz/ og *voice* /vɔɪs/.

/əʊ/ Diftongen /əʊ/ fins i ord som *show* /ʃəʊ/, *though* /ðəʊ/ og *sew* /seʊ/.

/aʊ/ Denne diftongen fins i ord som *how* /haʊ/, *plough* /pləʊ/ og *town* /taʊn/.

Øv på å si disse ordene:

faith /feɪθ/, brave /breɪv/,
waiter /ˈweɪtə/
join /dʒɔɪn/,
choice /tʃɔɪs/, toy /tɔɪ/
mow /məʊ/, bowling /ˈbɔʊlɪŋ/,
old /əʊld/
how /haʊ/, cow /kaʊ/, loud /laʊd/

Chapter 5

Diftonger II

/ɪə/ Denne diftongen fins i ord som *hear* /hɪə/, *here* /hɪə/ og *weird* /weɪrd/.

/eə/ Denne diftongen fins i ord som *bear* /beə/, *there* /ðeə/ og *hair* /heə/.

Diftongen /ʊə/ fins i ord som *pure* /pjʊə/, *tour* /tʊə/ og *curious* /ˈkjʊəriəs/.

Øv på å si disse ordene:

fear /fiə/, rear /riə/, weary /ˈweəri/
pear /peə/, chair /tʃeə/,
Mary /ˈmeəri/
sure /ʃʊə/, moor /mʊə/,
cure /kjʊə/.

Chapter 6

/r/

r på engelsk høres helt annerledes ut enn på norsk, uansett hvilken dialekt du har. På britisk-engelsk uttales denne lyden bare for en vokal. På amerikansk engelsk uttales den også etter vokaler.

r i begynnelsen av ord:

ride /raɪd/, real /riəl/, ready /ˈredi/,
rat /ræt/, rotten /ˈrɒtn/,
road /rəʊd/

r i slutten av ord:

far /fɑː/, car /kɑː/, tour /tʊə/,
fur /fɜː/, hair /heə/, star /stɑː/

r etter vokal:

hard /hɑːd/, farther /ˈfɑːðə/,
further /ˈfɜːðə/, heart /hɑːt/,
hurt /hɜːt/, storm /stɔːm/

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NSD NORSK SENTER FOR FORSKNINGSDATA

NSD sin vurdering

Prosjekttittel

Norske elevers forståelse for fonetiske kontraster i amerikansk og britisk engelsk sett i sammenheng med eksponering til engelsk utenfor klasserommet.

Referansenummer

988612

Registrert

15.12.2020 av Jens Christian Nedland Ytre-Arne - jcytrearne@student.uia.no

Behandlingsansvarlig institusjon

Universitetet i Agder / Avdeling for lærerutdanning

Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

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Type prosjekt

Studentprosjekt, masterstudium

Kontaktinformasjon, student

Jens Christian Ytre-Arne, jens.ya@live.no, tlf: 98007683

Prosjektperiode

01.02.2021 - 31.05.2021

Status

20.01.2021 - Vurdert

Vurdering (1)

20.01.2021 - Vurdert

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet den 20.01.2021 med vedlegg, samt i meldingsdialogen mellom innmelder og NSD. Behandlingen kan starte.

MELD VESENTLIGE ENDRINGER

Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke type endringer det er nødvendig å melde: <https://www.nsd.no/personverntjenester/fylle-ut-meldeskjema-for-personopplysninger/melde-endringer-i->

Du må vente på svar fra NSD før endringen gjennomføres.

TYPE OPPLYSNINGER OG VARIGHET

Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 31.05.2021.

LOVLIG GRUNNLAG

Prosjektet vil innhente samtykke fra foresatte til behandlingen av personopplysninger om elevene. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som foresatte kan trekke tilbake.

Lovlig grunnlag for behandlingen vil dermed være foresattes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

PERSONVERNPRINSIPPER

NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om:

- lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om ogsamtykker til behandlingen
- formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke viderebehandles til nye uforenlige formål
- dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet
- lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylleformålet

DE REGISTRERTES RETTIGHETER

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: åpenhet (art. 12), informasjon (art. 13), innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18), underretning (art. 19), dataportabilitet (art. 20).

NSD vurderer at informasjonen som de registrerte og deres foresatte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Vi minner om at hvis en registrert/foresatt tar kontakt om sine/barnets rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER

NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32).

For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og eventuelt rådføre dere med behandlingsansvarlig institusjon.

OPPFØLGING AV PROSJEKTET

NSD vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Lykke til med prosjektet!

Kontaktperson hos NSD: Jørgen Wincentzen

Vil du delta i forskningsprosjektet

«Norske elevers forståelse for lydforskjeller mellom amerikansk og britisk engelsk»

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å undersøke norske elevers forståelse for forskjeller mellom amerikansk og britisk engelsk. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Målet med dette forskningsprosjektet er å undersøke elevers forståelse for lydforskjeller mellom amerikansk og britisk engelsk, sett i sammenheng med eksponering til engelsk utenfor klasserommet. Jeg ønsker å se nærmere på hvilke faktorer som bidrar til engelsklæring utenfor klasserommet, og skal undersøke hvordan TV, dataspill, og internett kan være med på å bidra på dette feltet. Elevene vil, sammen med de voksne hjemme, gjennomføre en spørreundersøkelse om eksponering til engelsk utenfor klasserommet. På skolen vil de delta i en lyttetest, for å se nærmere på det å skille mellom amerikansk og engelsk uttale. Forskningsprosjektet er en del av masteroppgaven jeg skriver ved UiA. Resultatene fra spørreundersøkelsen og lyttetesten vil kun brukes til dette formålet.

Hvem er ansvarlig for forskningsprosjektet?

Universitetet i Agder v/ Jens Christian Ytre-Arne er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Jeg ønsker å forske på elever ved 5. trinn for å se hvilke kunnskaper de har rundt amerikansk vs. britisk engelsk. Jeg ønsker også å undersøke hvordan deres aktivitetsmønster rundt internett, dataspill og TV/film er.

Hva innebærer det for deg å delta?

- Hvis du velger å delta i prosjektet, innebærer det at eleven sammen med de voksne hjemme fyller ut et spørreskjema om kontakt med engelsk utenfor skolen. Her samles informasjon om tidsbruk på internett, dataspill og TV/filmer. Det vil ta ca. 10 minutter å fylle ut spørreskjemaet. Svarene vil bli registrert på papir og elektronisk i Microsoft Excel, og brukes i en kvantitativ analyse om eksponering til engelsk utenfor klasserommet.
- Lyttetesten innebærer å høre et lydopptak av noen som prater engelsk, og svare på om elevene hører amerikansk eller britisk engelsk. Det vil IKKE bli tatt lydopptak av elevene. Lyttetesten vil ta ca. 30 minutter, og gjennomføres på skolen. Svarene vil også her bli registrert på papir, og elektronisk i Microsoft Excel.
- Hvis barn deltar, kan foresatte få se spørreskjema/lyttetest på forhånd ved å ta kontakt.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Resultatene vil ikke bli brukt i kartlegging/vurdering av elever. Formålet er KUN å undersøke tidsbruk og kontakt med engelsk utenfor klasserommet. Dersom dere ikke ønsker å delta, vil det bli gitt et alternativt opplegg under lyttetesten på skolen. Grunnen til at jeg skal koble sammen spørreundersøkelsen og lyttetesten er for å se hvilke forhold som evt. kan bidra til økt forståelse rundt lydforskjeller i amerikansk og britisk engelsk.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrevet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

- De som vil ha tilgang til resultatene er meg selv og følgende veiledere ved UiA
 - Ingrid Kristine Hasund, Førsteamanuensis, kristine.hasund@uia.no
 - Bjørn H. Handeland, Stipendiat, bjorn.handeland@uia.no
- Elevens navn vil bli adskilt resultatene. Navn vil bli erstattet med en kode, som lagres på egen navneliste adskilt fra øvrige data. Datamaterialet vil registreres og lagres elektronisk, uten å registrere verken navn eller kode fra elevene.
- Jeg forsikrer at deltakerne vil ikke kunne gjenkjennes i publikasjon av masteroppgaven.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Opplysningene anonymiseres når prosjektet avsluttes/oppgaven er godkjent, noe som etter planen er i begynnelsen av Mai 2021. Resultatene fra spørreundersøkelsen, lyttetesten og koblingsnøkkel vil bli makulert ved prosjektslutt.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg, og
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Universitetet i Agder har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- Jens Christian Ytre-Arne, Universitetet i Agder, jens.ya@live.no, tlf: 98007683
- Personvernombud v/ Universitetet i Agder, personvernombud@uia.no

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

- NSD – Norsk senter for forskningsdata AS på epost (personverntjenester@nsd.no) eller på telefon: 55 58 21 17.

Med vennlig hilsen

Jens Christian Ytre-Arne

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet «*Norske elevers forståelse for lydforskjeller mellom amerikansk og britisk engelsk*», og har fått anledning til å stille spørsmål. Jeg samtykker til:

- Å la mitt/vårt barn delta i spørreundersøkelsen.
- Å la mitt/vårt barn delta i lyttetesten på skolen.

Jeg samtykker til at elevens opplysninger behandles frem til prosjektet er avsluttet

(Signert av foresatt, dato)

På vegne av:

(Elevens navn)