ACCENT AS AN ATTITUDINAL OBJECT:
TURKISH PROSPECTIVE ENGLISH LANGUAGE TEACHERS' PERCEPTIONS AND EVALUATIONS OF DIFFERENT VARIETIES OF ENGLISH

A THESIS SUBMITTED TO
THE BOARD OF GRADUATE PROGRAMS OF
MIDDLE EAST TECHNICAL UNIVERSITY, NORTHERN CYPRUS CAMPUS

BY

CEREN YAĞMUR ÖZTÜRK

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF ARTS
IN THE
ENGLISH LANGUAGE TEACHING PROGRAM

JANUARY 2019

Approval of the Board of Graduate Programs

Prof. Dr. Gürkan KARAKAŞ
Chairperson

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Arts.

Asst. Prof. Dr. Ali Fuad SELVİ
Program Coordinator

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts.

Assoc. Prof. Dr. Çiler HATİPOĞLU
Supervisor

Prof. Dr. Ali Cevat TAŞIRAN
Co-Supervisor

Examining Committee Members

Prof. Dr. İsmail Hakkı MİRİCİ
English Language Teaching Dept.
Near East University

Assoc. Prof. Dr. Çiler HATİPOĞLU
Foreign Language Education Dept.
METU

Asst. Prof. Dr. Danyal Öztaş TÜM
Teaching English as a Foreign Language Prog.
METU NCC

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all materials and results that are not original to this work.

Name, Last Name: Ceren Yağmur Öztürk

Signature:

ABSTRACT

ACCENT AS AN ATTITUDINAL OBJECT:
TURKISH PROSPECTIVE ENGLISH LANGUAGE TEACHERS' PERCEPTIONS AND EVALUATIONS OF DIFFERENT VARIETIES OF ENGLISH

Öztürk, Ceren Yağmur
M.A., English Language Teaching Program
Supervisor: Assoc. Prof. Dr. Çiler Hatipoğlu
Co-Supervisor: Prof. Dr. Ali Cevat Taşıran
January 2019, 208 pages

The present study investigates how Turkish prospective teachers of English perceive phonological variation and evaluate the speakers of different accents of English based on the following characteristics: politeness, education level, language proficiency, wealth, intelligibility, native speaker status, and attractiveness. By examining the topic through a lens intersecting sociolinguistics and social psychology of language, this thesis introduces a new context to the existing language attitude literature, by being the first language attitude study within Turkey to utilize the Verbal Guise Technique (VGT), which is a derivation of Matched Guise Technique (MGT). Additionally, the present study contributes a new statistical perspective for the analysis of the data to the existing language attitude literature.

A total of 109 prospective English language teachers took part in two different studies. The data were collected at Middle East Technical University, Northern Cyprus and Ankara Campuses. In the first study, the data were analyzed quantitatively, whereas in the second study qualitatively. The results show that the participants evaluated the speakers with foreign accents of English rather negatively while holding a strong preference towards speaking with the Model American English (MAE) accent. Findings also demonstrate that while MAE is being evaluated high for the dimension of status, MBE is being evaluated high for solidarity. Previous exposure to various linguistics courses often resulted in the international accents being perceived negatively, rather than positively. Participants were prejudiced against the Turkish accented variety of English, giving it very negative descriptions. Relatedly, subjects reported that they

would pay attention to their students' accent in the classroom environment while perceiving native-like pronunciation as a characteristic of advanced and competent speakers of English. The present study provides evidence of negative bias that is held amongst Turkish prospective teachers of English towards the speakers of international accents of English. Results and implications are further discussed.

Keywords: accent perception, verbal guise technique, varieties of English, Turkish prospective teachers of English, language attitudes

ÖZ

TUTUMSAL OBJE OLARAK AKSAN:
ANA DİLİ TÜRKÇE OLAN İNGİLİZCE ÖĞRETMEN ADAYLARININ FARKLI İNGİLİZCE AKSANLARINA KARŞI OLAN ALGI VE DEĞERLENDİRMELERİ

Öztürk, Ceren Yağmur
M.A., English Language Teaching Program
Tez Yöneticisi: Assoc. Prof. Dr. Çiler Hatipoğlu
Ortak Tez Yöneticisi: Prof. Dr. Ali Cevat Taşıran
Ocak 2019, 208 pages

Bu çalışma İngilizce öğretmen adaylarının fonolojik çeşitliliği nasıl algıladıklarını ve İngilizcenin yerel ve uluslararası aksanlarını kibarlık, eğitim düzeyi, dil yeterliliği, zenginlik (maddi), anlaşılabilirlik, konuşmacının yerli-yabancı statüsü ve çekicilik özelliklerine göre nasıl değerlendirdiklerini incelemiştir. Konuyu, sosyodilbilim ve dilin sosyal psikolojisiyle kesişen bir mercekten inceleyerek, Örtük Eşleştirme Tekniğinden (ÖET) türeyen Sözel Eşleştirme Tekniğini (SET) Türkiye'de ana dili Türkçe olan İngilizce öğretmenleriyle kullanmış bilinen ilk araştırma olmasının yanı sıra, mevcut dil tutum literatürüne yeni bir bağlam kazandırmaktadır. Ek olarak, bu çalışma dünya literatürüne, özellikle dil tutum araştırmalarına, verilerin analizi için yeni bir istatistiksel bakış açısı da katmaktadır.

İki farklı çalışmaya anadili Türkçe olan toplam 109 İngilizce öğretmen adayı katılmıştır. Veriler Orta Doğu Teknik Üniversitesi (ODTÜ), Kuzey Kıbrıs ve Ankara Kampüslerinden toplanmıştır. İlk çalışmada, veriler nicel olarak analiz edilirken, ikinci çalışmada nitel analize başvurulmuştur. Sonuçlar, katılımcıların Model Amerikan İngilizcesi (MAI) aksanıyla konuşmaya yönelik güçlü bir tercihte

bulunurken, İngilizcenin yerel olmayan aksanlarını olumsuz olarak değerlendirdiklerini göstermiştir. Bulgular Model Amerikan İngilizcesi aksanının statü değişkeni altında, Model İngiliz İngilizcesi (MII) aksanının ise dayanışma değişkeni altında gruplandırıldığını ortaya koymuştur. Çeşitli dilbilim derslerine maruz kalmanın İngilizcenin uluslararası aksanlarının çoğu zaman olumsuz değerlendirilmesine neden olduğu görülmüştür. Katılımcıların Türk aksanlı İngilizceye karşı önyargılı ve olumsuz tanımlamalarda bulunduğu saptanmıştır. Buna ek olarak, İngilizce öğretmen adayları, sınıf ortamında kendi öğrencilerinin İngilizce telaffuzuna önem vermenin yanı sıra, ana dili İngilizce olan bireyler gibi fonolojik üretimde bulunabilmeyi İngilizcedeki ileri seviye ve yetkin konuşmacıların bir özelliği olarak gördüklerini bildirmişlerdir. Bu çalışma, anadili Türkçe olan ve ODTÜ İngilizce öğretmenliği programında okuyan Türk öğretmen adaylarının İngilizcenin uluslararası aksanlarına karşı olumsuz bir önyargı beslediğinin bilinen ilk kanıtı olarak sunulmaktadır. Çalışmanın sonuç ve önerileri tartışılmıştır.

Keywords: aksan algısı, sözel eşleştirme tekniği, İngilizce çeşitleri, ana dili Türkçe olan İngilizce öğretmen adayları, dil tutumları

To my mother

ACKNOWLEDGMENTS

First of all, I would like to express my deepest gratitude to my supervisors, Assoc. Prof. Dr. Çiler Hatipoğlu and Prof. Dr. Ali Cevat Taşıran for their support, mentorship, constructive criticism, advice, and encouragement throughout this process. I owe my statistical development fully to Prof. Taşıran who invested a lot of his time and took full responsibility to personally train and help me to develop a critical perspective when it came to statistical analyses, which resulted in a newly found passion towards R statistical software and syntax. Similarly, without Assoc. Prof. Dr. Hatipoğlu's continuous support and motivation the completion of this thesis would not have been possible.

I am also hugely indebted to Assist. Prof. Dr. Erin Carrie for her attentiveness, investment, patience, and the time she spent discussing my questions. Her work served as the main source of inspiration for this thesis and I am very lucky to have come across a sociolinguist like her.

I am very grateful to my jury members, Prof. Dr. İsmail Hakkı Mirici and Assist. Prof. Dr. Danyal Öztaş Tüm for their valuable comments and feedback that contributed greatly to this work.

I'd like to thank every single one of the prospective teacher participants for their time and participation, without their input, this work wouldn't have existed.

I would like to thank a number of other people who played a significant role in the development of this thesis: Prof. Dr. Meral Aksu for encouraging me to take an academic route during my BA studies; Prof. Dr. Oya Yerin Güneri for her sincere guidance when times were tough; Assist. Prof. Dr. Scott H. Boyd for shifting my focus back to academics; the faculty of ELT at METU NCC for accepting me into the MA program; Assoc. Prof. Dr. Mary Ann Walter for introducing me to the field of linguistics and teaching me memorable lessons inside and outside the classroom, along with her help at the initial stages of this project; Instr. Hakkı Nüvit Tarhan for providing me with his expertise and various opportunities to develop myself as a teacher; Instr. Steve Neufeld for offering his help and support throughout my BA and MA studies; Assoc. Prof. Dr. Selda Koydemir for offering

me a graduate assistantship; Assoc. Prof. Dr. Aslı Bugay Sökmez for her understanding, support, and positive attitude throughout my graduate assistantship; Ms. Pevrin Harmanlı for always offering her help and being awesome; Instr. Dr. Elvan Eda Işık Taş for the moral support; Ms. Aslı Ökten for the administrative support; METU NCC for providing me with a full scholarship throughout my BA and MA studies, along with the financial support necessary to present my work at various conferences.

Special thanks to Assoc. Prof. Dr. Jennifer Cramer for all the fun chats and discussions we had about sociolinguistics that always provided a new perspective and an opportunity to further brainstorm.

I would also like to thank all of my friends for being there, especially Çağla Güldemir, Pelin Güven, Ali Hamza, Alina Calaretu, Hana Kasht, Hürriye Özdemir, and my girl gang from Russia, who always gave me a reason to smile. Thank you to Mike, who has been there through the ups and downs and always supported me no matter what I chose to do.

Finally, I would like to thank my beloved parents, Dilek and Musti, for their unconditional love and support throughout all these years.

TABLE OF CONTENTS

ETHICAL DECLARATION……..……...……iii
ABSTRACT vi
ÖZ viii
ACKNOWLEDGMENTS xi
TABLE OF CONTENTS xiii
LIST OF TABLES xvi
LIST OF FIGURES xviii
LIST OF ABBREVIATIONS xx
CHAPTER 1 1
INTRODUCTION 1
1.1 Background of the Study 1
1.2 Significance of the Study 3
CHAPTER 2 7
2 LITERATURE REVIEW 7
2.1 The Global Spread of English 7
2.2 Definition, Construct and Function of Attitudes 9
2.3 Scope of Language Attitudes 12
2.4 Historical Development and Previous Research 13
CHAPTER 3 19
3 METHODOLOGY 19
3.1 Choice of the Sample Population and Background Variables 19
3.2 The Verbal Guise Technique 22
3.3 Speech Recordings Chosen 25
3.4 Text of the Recordings: The Stella Passage 26
3.4.1 Inner Circle Accents of English Chosen 28
3.4.2 The Outer Circle Accents of English Chosen 30
3.4.3 Expanding Circle Accents of English Chosen 31
3.5 Data Collection Procedure 32
3.5.1 Study 1. Northern Cyprus Campus 33
3.5.2 Study 2: Ankara Campus 37
3.6 Data Analysis: Ordered Logistic Regression (OLR) 39

CHAPTER 4 41
4 RESULTS and DISCUSSION 41
4.1 Descriptive Statistics 41
4.1.1 Study 1: METU Northern Cyprus Campus 41
4.1.2 Mean Evaluations of the Speakers Separated for Gender 44
4.1.3 Mean Evaluations of the Speakers Combined for Gender 47
4.1.4 Normality Tests 55
4.1.5 Homogeneity Tests 55
4.1.6 Origin Identification Task 56
4.2 Inferential Statistics: Ordered Logistic Regression (OLR) 59
4.2.1 OLR Results Separated for Gender 59
4.2.2 OLR Results Combined for Gender 66
4.2.3 Origin Identification and Perceived Attractiveness 74
4.2.4 Origin Identification and Perceived Education Level 75
4.2.5 Origin Identification and Perceived Language Proficiency 76
4.2.6 Origin Identification and Perceived Politeness 77
4.2.7 Origin Identification and Perceived Native Speaker Status 79
4.2.8 Origin Identification and Perceived Intelligibility 80
4.2.9 Origin Identification and Perceived Wealth 81
4.2.10 Exposure to Media and Accent Evaluations 82
4.2.11 Exposure to L2 Courses and Accent Evaluations 83
4.2.12 Exposure to Linguistics Courses and Accent Evaluations 84
4.2.13 Countries Previously Traveled and Accent Evaluations 85
4.2.14 Female Students and Accent Perception 86
4.2.15 OLR Analysis of All Variables 87
4.3 Qualitative Data Analysis: Study 2, METU Ankara Campus 90
4.3.1 Demographic Information of the Participants 91
4.3.2 TPTEs' Attitudes Toward MAE and MBE 95
4.3.3 TPTEs' Cognitive Evaluations of MAE, MBE, and TavE 105
CHAPTER 5 115
5 CONCLUSION 115
5.1 Summary of the Results 115
5.2 Contribution of the Study 119
5.3 Implications, Limitations, and Future Work 120

6 REFERENCES 125
APPENDICES 134
APPENDIX A. OLR ANALYSIS - EXPOSURE TO MEDIA 134
APPENDIX B. OLR ANALYSIS – EXPOSURE TO LINGUISTICS COURSES 141
APPENDIX C. OLR ANALYSIS - EXPOSURE TO L2 COURSES 148
APPENDIX D. OLR ANALYSIS - COUNTRIES TRAVELED 155
APPENDIX E. OLR ANALYSIS – FEMALE PARTICIPANT PERCEPTIONS 162
APPENDIX F. OLR ANALYSIS OF ALL VARIABLES 176
APPENDIX G. RECORDING ORDERINGS 192
APPENDIX I. LINKS TO THE RECORDINGS 193
APPENDIX J. STUDY 2. ONLINE QUESTIONNAIRE 194
APPENDIX K. STUDY 1. QUESTIONNAIRE 202
APPENDIX L. APPLIED ETHICS RESEARCH CENTER APPROVAL 205
APPENDIX M. CODEBOOK 206

LIST OF TABLES

Table 3.1 The population sample (METU NCC and Ankara Campuses) 20
Table 3.2 Subjects' exposure to foreign language courses..... 21
Table 3.3 Subjects' exposure to linguistics courses 21
Table 3.4 Subjects' exposure to English media 21
Table 3.5 Accents chosen based on Kachru's Three Circles of English Model..... 25
Table 3.6 Background information of the inner circle speakers chosen 30
Table 3.7 Background information of the outer circle speakers chosen 31
Table 3.8 Background information of the expanding circle speakers 32
Table 4.1 Mean scores and standard deviation of the male speakers 45
Table 4.2 Mean scores and standard deviation of the female speakers..... 46
Table 4.3 Normality Test (Study 1, METU NCC) 55
Table 4.4 Homogeneity Test (Study 1, METU NCC)..... 55
Table 4.5 Correct origin identification rates (separated for gender) 56
Table 4.6 Correct origin identification rates (combined for gender)..... 57
Table 4.7 Results for Perceived Attractiveness (separated for gender)..... 59
Table 4.8 Results for Perceived Education Level (separated for gender) 60
Table 4.9 Results for Perceived Language Proficiency (separated for gender) 61
Table 4.10 Results for Perceived Nativeness (separated for gender)..... 62
Table 4.11 Results for Perceived Intelligibility (separated for gender) 63
Table 4.12 Results for Perceived Wealth (separated for gender)..... 64
Table 4.13 Results for Perceived Politeness (separated for gender) 65
Table 4.14 Perceived Attractiveness (combined for gender) 66
Table 4.15 Attractive and Unattractive Varieties..... 66
Table 4.16 Perceived Education Level (combined for gender)..... 67
Table 4.17 Educated and Uneducated Varieties..... 67
Table 4.18 Perceived Politeness (combined for gender)..... 68
Table 4.19 Polite and Rude Varieties..... 69
Table 4.20 Perceived Language Proficiency..... 69
Table 4.21 Proficient and Improficient Varieties..... 70
Table 4.22 Perceived Wealth (combined for gender)..... 71
Table 4.23 Wealthy and Poor Varieties..... 71

Table 4.24 Perceived Nativeness (combined for gender) 72
Table 4.25 Native and Foreign Varieties 72
Table 4.26 Perceived Intelligibility (combined for gender)..... 73
Table 4.27 Intelligible and Unintelligible Varieties..... 73
Table 4.28 Origin Identification and Perceived Attractiveness 74
Table 4.29 Origin Identification and Perceived Education Level..... 76
Table 4.30 Origin Identification and Perceived Language Proficiency 77
Table 4.31 Origin Identification and Perceived Politeness..... 78
Table 4.32 Origin Identification and Perceived Native Speaker Status..... 79
Table 4.33 Origin Identification and Perceived Intelligibility 80
Table 4.34 Origin Identification and Perceived Wealth..... 82
Table 4.35 Exposure to L2 Courses and Accent Evaluations 83
Table 4.36 Exposure to Linguistics courses and Accent Evaluations..... 84
Table 4.37 Countries Traveled and Accent Evaluations..... 85
Table 4.38 Participant Gender and Accent Perception 86
Table 4.39 OLR Analysis of All Variables..... 89
Table 4.40 TPTEs' Description of Turkish Accented English (N=44) 107

LIST OF FIGURES

Figure 1. EF EPI 2019 5
Figure 2.1 The Three Circles of English Model (adapted from Kachru, 1996) 7
Figure 3.1 Instructions provided to the readers of the Speech Accent Archive 26
Figure 3.2 Rating scale used in Study 1 34
Figure 3.3 Origin identification item used in Study 1 35
Figure 3.4 Sample verbal guise item from Study 2 38
Figure 4.1 Exposure to second language courses (METU NCC) 41
Figure 4.2. Exposure to linguistic courses (METU NCC) 42
Figure 4.3. Exposure to English media (METU NCC) 43
Figure 4.4. Countries visited by the subjects (METU NCC) 43
Figure 4.5. Boxplot for Perceived Attractiveness (combined for gender) 48
Figure 4.6. Boxplot for Perceived Education Level (combined for gender) 49
Figure 4.7. Boxplot for Perceived Intelligibility (combined for gender) 50
Figure 4.8. Boxplot for Perceived Language Proficiency (combined for gender) 51
Figure 4.9. Boxplot for Perceived Native Speaker Status (combined for gender) 52
Figure 4.10. Boxplot for Perceived Politeness (combined for gender) 53
Figure 4.11. Boxplot for Perceived Wealth (combined for gender) 54
Figure 4.12. Gender of the Participants (N=44) 91
Figure 4.13. Class of the Participants (N=44) 91
Figure 4.14. Exposure to English Series\Movies (N=44) 92
Figure 4.15. Exposure to English Music (N=44) 92
Figure 4.16. Exposure to L2 Courses (N=44) 93
Figure 4.17. Exposure to Linguistics Courses (N=44) 93
Figure 4.18 Exposure to Different Varieties of English (N=44) 94
Figure 4.19. Perceived Attractiveness of MAE 95
Figure 4.20. Perceived Attractiveness of MBE 95
Figure 4.21. Perceived Intelligibility for MBE 98
Figure 4.22. Perceived Intelligibility for MAE 98
Figure 4.23. Perceived Wealth for MAE 100
Figure 4.24. Perceived Wealth for MBE 100
Figure 4.25. Perceived Education Level (MAE) 102
Figure 4.26. Perceived Education Level (MBE) 102

Figure 4.27. TPTEs’ Accent Preference (N=44)..... 105
Figure 4.28 TPTEs' Beliefs about Advanced and Competent L2 English Speakers..... 108
Figure 4.29 TPTEs’ Thoughts on their Accent and Pronunciation in Class 110
Figure 4.30 TPTEs’ Thoughts on Students' Accent and Pronunciation in Class 111
Figure 4.31 TPTEs' Thoughts on Exposing Students to the Varieties of English..... 113

LIST OF ABBREVIATIONS

ELT	English Language Teaching
TEFL	Teaching English as a Foreign Language
TPTEs	Turkish Prospective Teachers of English
MAE	Model American English
MBE	Model British English
SAE	Southern American English
SSE	Scottish Standard English
IvE	Indian variety of English
JvE	Jamaican variety of English
WAvE	West African variety of English
UavE	Ukrainian accented variety of English
GavE	German accented variety of English
CavE	Chinese accented variety of English
FavE	French accented variety of English
TavE	Turkish accented variety of English
EIL	English as an Internation Language
ELF	English as a Limgua Franca
GE	Global English
WE	World Englishes
MGT	Matched Guise Technique
VGT	Verbal Guise Technique
METU	Middle East Technical University
NCC	Northern Cyprus Campus
AC	Ankara Campus
ANOVA	Analysis of Variance
MANOVA	Multivariate Analysis of Variance
OLR	Oredered Logistic Regression

OLM	Ordered Logit Model
GA	General American
RP	Received Pronunciation
ENL	English as a Native Language
ESL	English as a Second Language
EFL	English as a Foreign Language
L1	First Language
L2	Foreign language
EF	Education First
EF EPI	Education First English Proficiency Index

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

The globalization of English has led to the field of English Language Teaching (ELT) to gain importance due to the international demand for becoming proficient in English. However, this proficiency has often been confused with the ability to sound like a native speaker by many second language learners, gatekeepers, and even English language teachers. Relatedly, many non-native teachers of English themselves started adopting common native-speaker models of pronunciation (i.e. Standard American, Standard British or RP) while also advocating for the extermination of imposed native speaker norms. Such linguistic choices added to the positive and negative attitudes towards having a foreign or native-like accent, due to pronunciation being perceived as a marker of in-group\out-group membership and competence in the targeted language. On a macro level, an individual's accent in English has become an international identity marker, to which different stereotypes and prejudices are being attached to (i.e. linguistic profiling). Therefore, focusing on attaining sociolinguistic and communicative competencies as a benchmark of proficiency in second language learning became an uneasy task for many second language learners, teachers, and speakers. One of the leading causes of this problem lies in the perception of the variation in pronunciation, which is constantly being manipulated by the media and various language ideologies. It is for this reason accent perception and language attitude studies hold crucial importance due to providing a cognitive map of associated stereotypes, biases, and judgements, while also creating a constructive base toward clarifying those misperceptions (that may often lead speakers of different varieties to face negative consequences). Therefore, gaining a deeper understanding of how different accents of English are being perceived and evaluated by Turkish prospective English language teachers will shed further light on the linguistic preference(s), biases, and teacher cognition which is capable of shaping the attitude formation of future generations regarding the speakers of different accents.

Majority of previously conducted language attitude studies show that native and non-native speakers usually prefer a native accent, whereas a foreign accent is usually associated with

biased or stereotyped opinions (Brennan & Brennan, 1981; Edwards, 1982; McKenzie, 2008, Carrie, 2017). Previous research has shown that accent may have an impact on the educational and workplace environments, as well as our linguistic behavior. For instance, Obios (2002) suggests that linguistic behavior such as 'the choice of a particular language in multilingual communities, language loyalty and language prestige of members of a given social group in terms of their use of linguistic varieties in bilingual and dialectal situations' are affected by the patterns of language attitudes (p.1). Watson's (1989) study highlights how the institutional pressure on children living in Gaeltacht or Gaidhealtachd (areas in which Gaelic is spoken, former being modern Irish and the latter being Scottish Gaelic usage) is leading children to the employment of English even when it comes to the language of play (p.49). Relatedly, the pressure coming from certain youth cults such as pop music, fashion and omnipresent media of radio and television dramatically affects the youth's linguistic behavior as well (ibid, p. 49).

In educational settings, discrimination based on one's accent has been reported in various studies. Cheshire's (1982) study has shown that teachers' perceptions of their pupils are highly impacted by the accent. Similarly, the accent was found to impact equal educational settings (e.g. Lippi-Green, 2012) and classroom performance (e.g. Snell, 2013). Cheshire's (1982) study showed that having a regional accent while reading may be interpreted as 'hopelessly lazy and careless' by the teachers (p.62). Relatedly, Snell's (2013) study demonstrated how students that had a 'Teesside accent' triggered negative attitudes from peers and teachers and how such attitudes result in the loss of confidence in group discussions and oral communication. However, some research shows that student perceptions of non-native accented teachers can also be negative (e.g. Butler, 2007). Ahn and Moore (2011) found out that the student held unfavorable attitudes towards Asian accented teachers and performed poorly at the listening tasks, a finding that demonstrates how the attitudes towards a teachers' accent may impact learning outcomes. In a study by Derwing (2003), the majority of the ESL students admitted that if they spoke English without a foreign accent, then they would be respected more. One-third of those students also reported being discriminated based on their accents as well.

Accent may also impact one's employment as the previous studies suggest. It was well established in the previous literature that the individuals who had a 'standard' accent were favored for high-status jobs in comparison to those who had non-standard accents that were considered for low-status jobs (e.g. Cargile, 2000; Hosoda and Stone-Romero, 2010; Rakic

et al., 2010). Similarly, Tsalikis et al.'s (2001) study showed that Americans perceived salesmen that spoke with a standard accent as more credible and effective in comparison to the Greek-accented salesmen. These findings suggest that accent has an impact on not only employment decisions but also may impact decisions throughout one's employment as well. In other words, due to the spread of English, the emergence of different accents of English is an inevitable process of globalization. However, this does not mean that linguistic discrimination, profiling, and stereotyping based on one's accent should remain invariant, especially if prospective English language teachers themselves hold negative attitudes towards different accents of English, and therefore, their speakers.

1.2 Significance of the Study

The primary objective of the present study is to add a new context (i.e. Turkey) to the existing non-native language attitude literature which – to my knowledge - has not been yet explored utilizing the verbal guise technique (VGT). McKenzie (2010) points out that out of the existing non-native language attitude studies, majority had a tendency to elicit attitudes towards 'the English language' as a single entity, by ignoring other native and non-native varieties of English (p.58). Same can be said to be the case in Turkey, where the majority of previous valuable research has either treated English as a single entity rather than an umbrella term which consists of different varieties (e.g: Uzum, 2007; Karahan, 2007; Goktepe, 2014), or investigated the perceptions of the Turkish nationals towards the native varieties of Turkish (e.g: Demirci, 1998; Demirci, 2002). Therefore, this thesis addresses this gap by being the first VGT study – to my knowledge – which explores the attitudes of Turkish prospective English language teachers toward native and international accents of English.

With the emergence of different accents of English, movements such as World Englishes (WE), English as a Lingua Franca (ELF), Global English (GE) and English as an International Language (EIL) have sought to raise awareness to the role of English when it comes to international communication by criticizing the idea of certain native varieties of English being treated as a benchmark or 'standard'. However, a plethora of studies carried out at an international level showed that the majority of second language learners have demonstrated a preference towards the native varieties of English and strive to achieve native or native-like pronunciation goals (some recent examples would be Buckingam,

2014; McCrocklin & Link, 2016). Similarly, there is evidence suggesting that non-native English language teachers themselves demonstrate a contradiction between their awareness of WE, ELF, GE, EIL movements and aspirations towards certain pronunciation models (e.g. Ranta 2010; Dewey, 2011; Friedrich 2012; Galloway, 2013; Jaramillo, 2014). Such contradictions may suggest that exposure to ELF aware pedagogy or sociolinguistics does not necessarily affect one's perception, and therefore attitudes towards the variation in pronunciation. Another objective of this thesis is to address this gap by placing Turkish prospective English language teachers' as subjects in order to interrogate their attitudes toward different accents of English, since, given their major, they have a higher exposure to such movements in comparison to others. Accordingly, examining in what ways and why prospective teachers of English perceive and evaluate different varieties of English may shed further light on the future development of the movements and their implementation for policy makers, language learners, teacher educators, curriculum developers, and future teachers to be.

Another objective of this study is to add a new inferential statistical perspective for the analysis of similar language attitude studies that use the Verbal Guise Technique (VGT). The majority of previously conducted language attitude research in the fields of social psychology and sociolinguistics often used ANOVA and MANOVA, analyses that are often based on the statistical assumptions that contradict the researcher's data (i.e. assuming normal distribution of the data, assuming an interval scale, etc.). However, this study uses Ordered Logistic Regression (OLR) for the first time – to my knowledge – by providing a detailed analysis of the results obtained by meeting the statistical assumptions that fit the researcher's data, and therefore, provide more statistically robust results (will be discussed further in Section 3.5). In addition to previously mentioned reasons, according to Carrie (2014) one of the limitations of the previously held non-native language attitude studies is the fact that the majority of them were conducted in countries 'where there is a culture of highly proficient English language use' (p. 72). She is referring to the countries with 'very high' and 'high' levels of proficiency based on the results obtained from the EF English Proficiency Index (EPI) in 2013. Relatedly, eliciting language attitudes from countries that are usually considered to have a 'low' and 'very low' proficiency in English may demonstrate whether such users also hold stereotypes towards the different varieties of English (ibid). Based on the EF EPI results of 2019, Turkey is ranked as 73rd out of the 80 countries, with a 'very low proficiency' level in English. Therefore, the results of the

present study may also provide further insight on whether the attitudes of Turkish subjects, coming from a very low English language proficiency context, are also biased towards different accents of English.

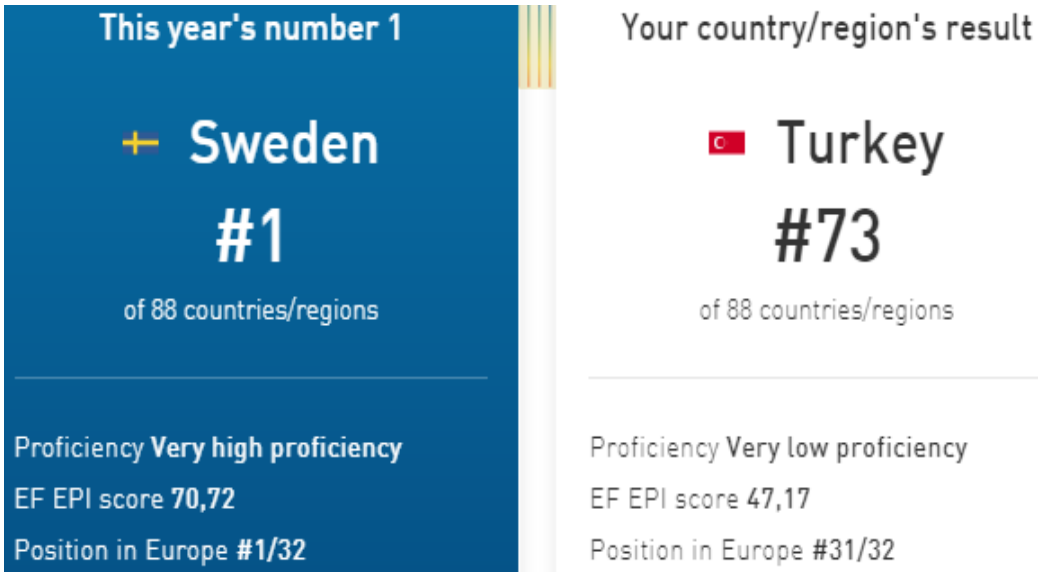


Figure 1. EF EPI 2019[1]

To summarize, this thesis makes significant contributions to the existing literature for several reasons. Firstly, although there has been a growing body of literature on language attitude research conducted in different parts of the world, attitudes of Turkish nationals toward different varieties of English have not been interrogated yet utilizing VGT. Secondly, in addition to adding a new context to the existing language attitude literature, the present study is also the first VGT study within its local context which places Turkish prospective English language teachers as the evaluators of different accents of English. Thirdly, this thesis also provides a new inferential statistical perspective, OLR, for the analysis along with a brief statistical argument, which – to my knowledge- has not been utilized before either. Furthermore, interrogating the perceptions of individuals that are listed under 'very low' proficiency level countries in English (EF EPI, 2019) might provide further insight by interrogating the linkage between perceived proficiency in English and the attitudes toward different accents of English. Lastly, by being a pioneering study regarding its national context and statistical design, the present study may provide important implications for future development of the ELF, EIL, WE and GE movements and their implementation in the local context, as well as internationally. In other words,

[1] results retreived from https://www.ef.com.tr/epi/ on 15.01.2019

demonstrating how Turkish prospective English language teachers perceive and evaluate different accents of English will provide valuable information for curriculum developers, teacher educators, policy makers, and serve as a reflection of the English Language Teaching programs in Turkey, while also having real social impact concerning issues around prospective English language teachers' awareness, identity, cognition, and attitudes that may be transferred to future generations through their students. The present study aims to achieve this by asking the following research questions:

1. **How do Turkish prospective teachers of English perceive and evaluate inner, outer and expanding circle accents of English?**
2. **What are Turkish prospective English language teachers' attitudes toward Model American, Model British, and Turkish accented varieties of English?**
3. **To what extent Turkish prospective teachers of English can identify the origin of the speakers?**
4. **How does the ability to identify the origin of the speakers affect perceptions and evaluations of Turkish prospective English language teachers?**

CHAPTER 2

LITERATURE REVIEW

2.1 The Global Spread of English

The global spread of English has led to the emergence of different varieties (i.e. accents). According to Bauer (2003) variety is an academic term which can be used to refer to any kind of language production (e.g. accent, dialect, language, etc.) regardless of it being determined by gender, region, age, social class or our own individual inimitable characteristics (p. 4). The commonly accepted model that is often used as a reference point to group different varieties of English is Kachru's Three Circles of English Model (1985:1990) which represents the countries based on the types of spread of English, functional domains and patterns of acquisition. The model groups the spread of English and its varieties into three different circles: the inner, outer, and expanding circles (see Figure 2.1 below).

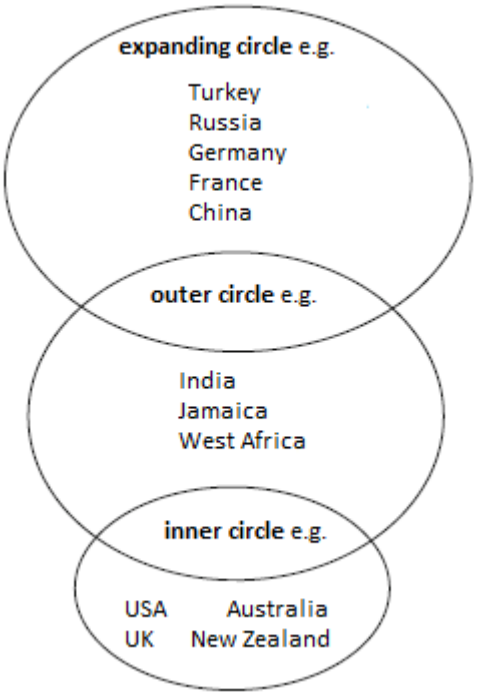


Figure 2.1 The Three Circles of English Model (adapted from Kachru, 1996)

The inner circle refers to the countries where English is spoken as the first language (L1) or native language (ENL) which also serve a norm-providing function (e.g. USA, UK, Australia, Canada). The outer circle represents the countries of postcolonial Anglophonic contexts, in which English is spoken and taught as a second language (ESL) and that serve are norm-developing function (e.g. India, Jamaica, West Africa). The expanding circle represents the countries in which English is being learned as a foreign language (EFL) that serve a norm-dependent or norm-accepting functions (e.g. Russia, Turkey, Germany, France, etc.).

Although Kachru's tripartite model is being used as a starting point by many scholars in order to explain the spread and functions of English, it has been facing a lot of criticism as well. Critiques towards the model were made due to it favoring standard or 'national varieties', simplifying the complexity of linguistic diversity, and ignoring 'grey areas' (Jenkins, 2003, pp.17-18). Others such as Modiano (1999) have proposed the English as an International Language (EIL) model which is based on the proficient usage of the language rather than geographical origin of the speakers and consists of 'centripetal' circles (p.10). However, such critiques tend to ignore the fact that Kachru's model initially was developed as a historical model, which represents the chronological origins of the varieties of English (Bolton, 2006, p. 293). Bolton (2006) further cites Kachru (1985, pp.13-14) in relation to the outer and expanding circles not being distinctively separated in his model (i.e. having no grey areas):

> The Outer Circle and the Expanding Circle cannot be viewed as clearly demarcated from each other; they have several shared characteristics, and the status of English in the language policies of such countries changes from time to time. What is an ESL region at one time may become an EFL region at another time or vice versa. (Kachru, 1985, pp.13-14; as cited in Bolton, 2006, p.293)

This thesis uses Kachru's tripartite model as a reference point with an aim to provide a sample of the varieties belonging to all three circles by highlighting their chronological emergence. Kachru's model also provides a solid understanding of the political power dynamics amongst different varieties of English, and therefore their usage, which can be

argued to still exist in modern times based on the preference and favoritism of the inner circle varieties by the majority of L2 learners. Kachru's model, as any other model may be subject to further criticism, however it is still able to provide a background picture when it comes to the attitudes that may be associated with different varieties of English. Therefore, the following section of the thesis will provide a deeper understanding of the concept of attitude, its construct and functions.

2.2 Definition, Construct and Function of Attitudes

According to Edwards (1999), the study of attitudes (i.e., perception) has remained an essential area of interest in the field of social psychology (p.101). Perception, the establishment and maintenance of which is culturally specific allows us to filter sensory input and provides further insight into what we perceive it to mean (ibid). It is worth noting that although the terms attitude and perception can be used interchangeably, a slight difference between them exists. In order to define perception a definition of sensation should be provided. According to Schacter et al. (2014), sensation is defined as a 'simulation of a sense organ' and perception is 'the identification, organization, and interpretation of a sensation in order to form mental representations' (p.130). Within the context of social groups, common perceptions held can be thought of as stereotypes in some cases, and as culture in others (Edwards, 1999, p. 101). In this thesis, since attitudes are elicited based on the evaluations of subjects' perceptions which will be stimulated by different accents of English, the term attitude encompasses individual perceptions as well, though is not used to mean the same thing. In other words, the idea is that most attitudes are not directly observable; therefore, elicitation of attitudes should rely upon individuals' self-reports of their own perceptions (McKenzie, 2010, pp. 21-22).

Various definitions of attitude have been proposed throughout the years. Due to its latent nature, the term was questioned in respect of scientific nature and indefinite definition. One of the reasons the definition of attitude is still being debated is due to having terms like feeling, opinion, belief, and attitude being used interchangeably due to their overlapping nature. Therefore, providing a clear distinction between these terms may prevent ambiguity. Beliefs can be defined as subjective, cognitive constructs that can be triggered or trigger emotional reactions and are a subcomponent of an attitude. Opinions, on the other hand, can be defined as overt beliefs that can be explicitly expressed or verbalized.

Therefore, beliefs and opinions are both components of attitude, however attitudes may be covert or overt, and may be expressed through verbal or non-verbal means (McKenzei, 2010, pp. 19-20). It is mostly agreed that attitude can be defined as a summary evaluation of a psychological object based on dimensions such as good-bad, pleasant-unpleasant, likeable-dislikeable, and harmful-beneficial (see Ajzen, 2001, p. 28). According to Allport (1935) 'an attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related' (p. 810). It is also often referred to as a 'hypothetical construct', due to its inability to be directly observed, because it can only be derived from what an individual says or does (Perloff, 2003, p.38). However, it would be a misconception to presume for this reason that attitudes are ''not real'' or are ''mere mental constructs'', a fallacy of behaviorism which suggests that all human activity can be reduced to behavioral units (ibid). Modern scholars argue that just because an entity is mental or emotional does not make it less real than a physical behavior (ibid). As Allport (1935) once stated:

> Attitudes are never directly observed, but, unless they are admitted, through inference, as real and substantial ingredients in human nature, it becomes impossible to account satisfactorily either for the consistency of any individual's behavior, or for the stability of any society' (p.839).

Attitudes may have various functions and benefits for people. Relatedly, same attitudes may serve different functions for different individuals. Developing an understanding of the functionality of attitudes for individuals may provide a broader perspective of social and individual motives behind certain dispositions. Perloff (2003) has listed some of the main functions of attitudes that researchers commonly agree upon as follows: knowledge, social adjustive, social identity, value expressive, ego-defensive and utilitarian. The knowledge function of attitudes may help individuals to make sense of the world and serve as an explanation for confusing events. The social adjustive function may allow individuals to adjust to certain groups. Sometimes people adopt certain attitudes not because they truly believe in them but because they believe that they will be more accepted by others if they were to choose a side. The function of social identity may serve as a representation of communicated identity and one's aspirations. The value expressive function may serve as

a reason to express one's core values and beliefs. The ego-defensive function may serve as a defense mechanism against unpleasant emotions which individuals would not want to acknowledge consciously. The utilitarian function of attitudes may help people to avoid punishments and attain rewards (ibid, pp. 74-76).

Most of the attitude research was conducted from a mentalist (cognitive) point of view. This approach views attitudes as a 'state of readiness' which would affect individual evaluations if awaken by any stimulation. Mentalists mostly accept a tripartite construct of attitude consisting of cognitive, affective and conative components. Cognitive component reflects an individual's thoughts and beliefs (e.g., thinking that native-like pronunciation in English will get someone a better job). Affective component consists of one's feelings and emotions (e.g., love of phonology classes). Conative component represents one's perceived tendency to behave towards the stimulus, although this is a subjective tendency which may not reflect actual behavior. For instance, one's love of phonology classes (affective component) and the belief that the achievement of native-like pronunciation would lead to better job outcomes (cognitive component) may result in attending phonology classes (tendency to behave, conative component). Although the relationship between the components and their degree of impact on attitude formation has remained a complex phenomenon and may be subject to variation, their overall involvement in attitude construct has been well established throughout the years. Therefore, the components of the tripartite model should be seen as being in a dynamic relationship with a potential to influence each other to various degrees, as the elicited components of attitudes may be subjected to gradual change, therefore should be approached synchronically (Carrie, 2014, p. 53).

The present study adopts the mentalist perspective of attitude by defining it as 'an evaluative reaction to some referent or attitude object, inferred on the basis of an individual's beliefs or opinions about the referent' (Gardner, 1985, p.9). Even though this operational definition does not specifically include the conative component of the attitude construct, based on the previously used four major attitude assessment techniques, such as the Likert (1932), the Thurstone (1928), the Guttman (1944), or the semantic differential (Osgood et al., 1957), it covers the essential nature of these measurement techniques that are based on 'evaluatively-worded belief statements' (ibid, p.9). Therefore, even though attitudes have a tripartite construct, how much each component affects the attitude construct and which components of the attitude construct are actually being elicited through

the utilized assessment techniques should be considered and approached with caution whenever an operational definition of attitude is being provided.

2.3 Scope of Language Attitudes

'Language attitudes' is an umbrella term which is used to describe a large scope of possible research studies that focus on attitudes towards specific objects. Attitude objects (i.e., attitudinal objects) may represent anything from material things to abstract concepts such as language varieties, thoughts, issues, preferences, gender, race, etc. Language attitude studies are important because they help us to develop a better understanding of the group stereotypes by which individuals judge others, how people position themselves within different social groups, and how they relate to their in-group and outgroup members (Garrett et al., 2003, p.12). According to Baker (1992, pp. 29-30) some of the major areas of concern in language attitude research are:

(i) attitudes towards language variation, dialect and speech style
(ii) attitudes towards learning a new language
(iii) attitudes towards a specific minority language
(iv) attitudes towards language groups, communities and minorities
(v) attitudes towards language lessons
(vi) attitudes of parents towards language lessons
(vii) attitudes towards the uses of a specific language
(viii) attitudes towards language preference

This thesis has an aims to add to the growing literature on language attitudes by specifically focusing on the Turkish prospective English language teachers' attitudes that are based on the perceptions of different accents of English (i.e. phonological variation, which unlike dialect, excludes the grammatical and lexical differences), in addition to interrogating subjects' language preference as well.

2.4 Historical Development and Previous Research

Language attitude research goes back to 1960s when Lambert, Hodgson, Gardner, and Fillenbaum provided speech stimuli in French and English to French Canadian and English Canadian listeners. The participants were asked to evaluate the speakers based on physical, emotional and mental traits. However, the participants were not aware of the fact that they were evaluating the same speaker in French and English guises. Matched-guise technique (MGT), which was specifically developed for Lambert et al.'s (1960) study, is an indirect method which is used to elicit the attitudes of the participants towards different speech varieties, and therefore their speakers. Another technique which was later derived from MGT is verbal guise technique (VGT). The main difference between MGT and VGT (e.g., Ladegaard, 1998; Hartikainen, 2000; McKenzie, 2004) is in the number of speakers that produce the speech stimuli. While one speaker produces different guises in MGT, VGT consists of the speech samples of different speakers and therefore is seen as a more sophisticated method due to addressing the mimicking problem often faced in MGT by providing original speech samples of the varieties produced by the members of particular speech communities. The procedure in both methods usually consists of a listening task followed by an evaluative process of the speech stimuli, which is seen as an indirect representation of the speakers. Lambert et al. (1960) found that English Canadian speakers were rated as being more intelligent, dependable, likeable, and as having more character. Later studies held by Lambert (Anisfield, Bogo and Lambert 1962; Lambert, Gardner, Olton and Tunstall, 1968; Tucker and Lambert 1969) showed that the non-linguist subjects do hold stereotyped attitudes toward different language varieties.

Various language attitude studies have been conducted from a sociolinguistic perspective. William Labov's (1966: 2006) "The Social Stratification of (r) in New York City Department Stores" is one of the earliest and most important studies that focused on native speaker attitudes towards variation in the pronunciation of postvocalic /r/ in American speech. Labov by taking the role of a customer observed the subjects in three different department stores which represented the upper, middle and lower classes. He found out that those from the higher socio-economic status pronounced /r/ more frequently than those with lower socio-economic status. One of the significances of the study was its investigation of language prestige. Prestige can be categorized into 'overt' and 'covert' categories, former being the focus of investigation involving class and gender in Labov's study. Both overt and covert forms are achieved by changing speech in order to gain prestige - projecting a higher status, standing, etc. - but do so in different ways. While overt

prestige targets the accents that are widely used by the culturally dominant group(s), covert prestige expresses a membership to an exclusive group, region, community which excludes itself from the language. In Labov's study, it was found that women were more inclined towards overt prestige than men, due to overusing \r\ which may also be referred to as hypercorrection (Labov, 1966; 2006, p.196).

Nowadays there are two dominant varieties of English (often referred to as 'standard varieties') that many prefer or strive to sound like due to their overt prestige. In England, Received Pronunciation (RP) is the variety which is often used in the media and is associated with high status and power. In America, the equivalent of RP is General American (GenAm), also referred to as 'Standard American' (SA). Preference and favoritism of these varieties have also been supported by research conducted with non-native speakers in the US (e.g., Eisenstein, 1982, Al-Kahtany, 1995) and UK (e.g., Clark and Schleef, 2010) contexts. Results of all studies show that non-native speakers have adopted the attitudes of native speakers at various degrees towards the 'standard' and regional varieties of English, evaluating the former more favorably.

Previous language attitudes studies have developed the main dimensions of social evaluations. In Lambert et al.'s (1960) study, there were a total of 14 initial traits (height, good looks, leadership, sense of humor, intelligence, religiousness, self-confidence, dependability, entertainingness, kindness, ambition, sociability, character and likeability) based on which the subjects had to evaluate the speech stimuli (p. 44). Later, in his follow up study, Lambert (1967) grouped the personality traits into three logical categories of personality: competence (intelligence, ambition, self-confidence, leadership and courage), personal integrity (dependability, sincerity, character, conscientiousness and kindness) and social attractiveness (sociability, likeability, entertainingness, sense of humor and affectionateness) for the purposes of interpretation (p. 95). Following research (e.g. Dalton-Puffer et al., 1997, p.126; Garrett et al., 2003, p. 106; McKenzie, 2010, p. 87; Carrie, 2017, p. 437) have shown that these categories could be further grouped into two dimensions: competence (i.e., status) and social attractiveness (i.e., solidarity).

There has been a number of language attitude studies focusing on non-native speaker evaluations towards the varieties of English, some being held in Austria (Dalton-Puffer et al. 1997); in Denmark (Jarvella et al. 2001; Ladegaard and Sachdev 2006); in Finland (Hartikainen, 2000); in France (Flaitz, 1993); in Japan (McKenzie, 2010); in Norway (Rindal, 2010); in Poland (Janicka et al., 2008), in South Korea (Yook & Lindemann, 2013), and in Spain (Carrie, 2014). These studies suggest that non-native speakers mostly

have a common preference towards the native varieties of English and find American and British varieties of speech relatively easy to identify. Furthermore, most of these studies show that the majority of the non-native speakers of English have a preference for RP, however, in some studies this depends on the correct identification or disclosure of the origin of the speakers that produce the speech stimuli. For instance, Jarvella et al.'s (2001) study demonstrated that GenAm was rated more negatively when the participants were able to identify the origin correctly, which suggested that some bias towards American speakers exists (p.51). Relatedly, Yook and Lindemann (2013) had two groups of participants one of which was informed about the origin of the speaker under evaluation. Results revealed that although Korean speakers had a strong preference for GenAm, their evaluations of RP were higher when the origin of the speakers was not provided (p. 292). Carrie's (2014) study revealed that although RP was evaluated higher for status, when the origin of the speakers was identified incorrectly, GenAm speakers were rated more positively in comparison to RP (p. 201). A more recent study conducted by Carrie and McKenzie (2017) provides further evidence for RP and GenAm guises having a high identification rate by the non-native speakers and the former being associated with higher prestige.

Previous language attitude studies that focused on native speaker evaluations of different regional varieties of English in the US showed that Southern American English (SAE) and New York English are prejudiced against (Niedzielski and Preston, 2000, p.95). According to the US Census Bureau (2019), there are four main regions in the US: The South, Midwest, Northeast, and West. The Southern region of the United States includes Texas, Alabama, Georgia, Mississippi, Louisiana, Tennessee, Georgia, Arkansas, Virginia, Delaware, Maryland, Kentucky, Oklahoma, Florida and both Carolinas; while the Midwest consists of Ohio, Michigan, Indiana, Wisconsin, Illinois, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas; the West includes Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, California, Oregon, Washington, Alaska, and Hawaii; and the Northeast covers the states of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania. Preston (2004) found that respondents from Michigan see the South as the most distinctive region of the US and rate the SAE as being the least 'correct' variety of English (p. 485) while also perceiving it to be the 'friendliest' and 'down to earth' one (p.486). Furthermore, while Michiganders evaluate their local speech as the most 'normal', 'standard' and 'correct' variety of English, Alabamians found their local variety to be the most 'pleasant' (ibid pp. 486 - 489). Such folk beliefs and perceptions that reflect the

attitudes of non-linguists are part of perceptual dialectology which was developed by Preston (1989) in order to expand the scope of language attitude research by offering a variety of direct techniques that could be used to measure the attitudes associated with different language varieties. Preston (1999, pp. xxxiv-xxxv) provides a summary of data gathering techniques in perceptual dialectology as follows:

I. *Draw-a-map.* Participants draw boundaries on a minimally detailed map where they think regional speech zones exist.

II. *Degree of difference.* Participants rate regions on a scale of one to four based on intelligibility for the perceived degree of dialect difference from their local area.

III. *''Correct'' and ''pleasant''.* Participants evaluate the regions for correctness and pleasantness.

IV. *Dialect identification.* Participants listen to the speech stimuli presented in scrambled order and are requested to identify the area (origin) of where they think it belongs.

V. *Qualitative data.* Participants are questioned about language varieties, their speakers and related topics through open ended conversations and asked about the tasks they have completed as well.

Some of the initial studies utilizing techniques from perceptual dialectology have focused on native speaker evaluations of L1 varieties in Turkey (Demirci, 1998), the Netherlands (Dann, 1999), the USA (Hartley, 1999), the UK (Inoue, 1999) and Japan (Long, 1999). More recent studies were conducted in Hungary (Kontra, 2002), Korea (Long and Yim, 2002) and Mali (Canut, 2002). Preston (1999) suggests that work in perceptual dialectology may continue by 'refining the methodologies and applying them to new situations' (xxxvii).

Moving to the context of the UK with regards to language attitude studies, it was found that urban vernacular varieties (the language or vocabulary particular to a group, class, profession or region which is especially spoken rather than written) in particular are evaluated very negatively by the native speakers. Previous studies have shown that the most stigmatized vernaculars in the UK are spoken by the working-class speakers in Liverpool (i.e., Scouse), Birmingham (i.e., Brummie), London (i.e., Cockney) and Glasgow (i.e., Glaswegian). McKenzie (1996, p. 21) points out that the evaluations of Glaswegian vernacular by the Glaswegians and non-Glaswegians are negative in particular (e.g., Menzies, 1991; Macafee, 1994; Torrance, 2002). McKenzie (2010) suggests that the reason

for such negative evaluations may be due to Glasgow vernacular being spoken in a city which is mostly associated with high poverty levels and violence (p. 56). It is worth mentioning that Glaswegian vernacular (also known as Scottish vernacular) coexist with a 'standardized' variety known as the Scottish Standard English (SSE) which is very similar to 'Standard English' grammatically and is spoken with a Scottish accent (ibid). Generally speaking, RP is the most prestigiously evaluated variety in the UK context and 'standard' varieties of Scottish, Irish and Welsh are evaluated positively (ibid), SSE being rated more favorably in particular (Milroy, 1999, p. 189).

Besides indirect (i.e., MGT, VGT) and direct (i.e., dialect identification) methods utilized in language attitude research, some studies use the societal treatment approach. This approach usually involves doing a content analysis of the 'treatment' given to the language variety and therefore its speakers (Garrett et al., 2003, p. 15). Participant observations, ethnographic studies or the analysis of sources in the public domain usually fall under this heading (ibid). One of the distinctive characteristics of the societal treatment approach is the fact that unlike the direct and indirect methods, it is the researcher who 'infers attitudes from the observed behaviors' (ibid, p.16). It is worth mentioning that even though these methodologies can be utilized separately, the majority of language attitude studies prefer to utilize a combination of these, often referred to as mixed method. The present study is a mixed method study which uses VGT along with the origin identification task (also referred to as dialect identification or variety recognition task).

CHAPTER 3

METHODOLOGY

3.1 Choice of the Sample Population and Background Variables

The sample population chosen for this study consisted of Turkish nationals who reported their mother tongue to be Turkish and who were enrolled in a four-year university program to become prospective teachers of English at the Middle East Technical University (METU) at one of two campuses – Northern Cyprus Campus (NCC) and Ankara Campus (AC).

Turkish prospective teachers of English (TPTEs henceforth) were chosen as subjects for several reasons. Firstly, university students that were studying to become teachers of English were likely to have a greater command of the targeted language and higher levels of awareness of different varieties of English. Secondly, according to the Higher Education Council of Turkey (YÖK), English Language Teaching programs in Turkey must include linguistics courses in their curriculum, which provides the current population sample with greater linguistic exposure and experience. Thirdly, most of the TPTEs are likely to have a motivation of teaching English in the future; therefore, their attitudes and evaluations towards different varieties of English become of crucial importance when it comes to the attitude formation of future generations. According to Wright (1999) 'Teachers are viewed by pupils as being influential agents in the forming of learners' attitudes' (p.207).

A total of 113 students participated in two separately conducted studies. However, several subjects (N=4) had to be eliminated due to not meeting the eligibility criteria for nationality and mother tongue. Of the remaining subjects (N=109), 66% were females and 34% were males. The age range of the participants was between 18 and 37. All of the participants were undergraduate students that represented four different years of study: 31% were in their first year, 25% were in their second year, 18% were in their third year, and 26% were in their last year. A summary of the sample population is provided in Table 3.1.

Table 3.1 The population sample (METU NCC and Ankara Campuses)

Class Standing	**METU NCC, Study 1 (N=65)**	**METU Ankara, Study 2 (N=44)**	**TOTAL (N=109)**	**Percent**
Year 1 Freshmen	18	16	34	31%
Year 2 Sophomores	12	15	27	25%
Year 3 Juniors	13	7	20	18%
Year 4 Seniors	22	6	28	26%
Gender				
F	41	31	72	66%
M	24	13	37	34%

Although one of the campuses is located in Northern Cyprus and the other one in Ankara, the curriculum offered is relatively similar, since the participants are enrolled in the same institution which offers the same quality of education across all campuses. However, there might be a slight difference in the exposure to second language and other elective linguistic courses that the participants in both studies have chosen. Tables 3.2 and 3.3 provide a breakdown of the second language and linguistic courses that the subjects in each study have been exposed to. This information was requested to test whether exposure to linguistic courses and familiarity with other languages would influence the evaluations of the subjects. Relatedly, exposure to English and its varieties through media was also requested from the participants. This was done because according to Dörnyei et al. (2006), learners desire to mesh with the foreign language community not only directly, but also indirectly, through the consumption of cultural products which are considered to influence the attitudes towards the target language and its speakers (p.15). A breakdown of subjects' exposure to English media can be seen in Table 3.4.

Table 3.2 Subjects' exposure to foreign language courses

Exposure to L2 courses	METU NCC Study 1 (N=65)	METU Ankara Campus, Study 2 (N=44)	TOTAL (N=109)	PERCENT
French	45	8	53	**49%**
German	41	38	79	**72%**
Spanish	4	3	7	**6%**
Arabic	1	1	2	**2%**
Japanese	5	0	5	**5%**
Russian	3	0	3	**3%**
Greek	4	2	6	**6%**
Chinese	1	2	3	**3%**
Korean	1	0	1	**1%**
Italian	0	7	7	**6%**

Table 3.3 Subjects' exposure to linguistics courses

Exposure to Linguistic Courses	METU NCC, Study 1 (N=65)	METU Ankara, Study 2 (N=44)	TOTAL (N=109)	PERCENT
Linguistics 1	43	44	87	**80%**
Linguistics 2	43	25	68	**62%**
Sociolinguistics	11	0	11	**10%**
Global English	22	0	22	**20%**
Contrastive Turkish-English	20	23	43	**39%**
Language Acquisition	16	17	33	**30%**
Listening & Pronunciation	61	29	90	**83%**
Oral Communication Skills	61	0	61	**56%**
The English Lexicon	11	9	20	**18%**
History of English	0	1	1	**1%**
Phonetics	0	5	5	**5%**

Table 3.4 Subjects' exposure to English media

Exposure to English Media	METU NCC, Study 1 (N=65)	METU Ankara, Study 2 (N=44)	TOTAL (N=109)	PERCENT
Every Day	42	37	79	**72%**
2-3 times a week	14	5	19	**17%**
Once a week	5	2	7	**6%**
Once a month	2	0	2	**2%**
2-3 times a month	1	0	1	**1%**
Rarely	1	0	1	**1%**

A complete list of the background variables requested in both studies are as follows:

i. age
ii. gender
iii. year of study
iv. mother tongue
v. exposure to L2 courses
vi. exposure to linguistics courses
vii. exposure to English through media
viii. exposure to the varieties of English through travel (countries travelled)

Age and gender are typically requested as background variables in sociolinguistic and social-psychological research. Dalton-Puffer et al. (1997) have demonstrated that personal experience which learners gain by spending time abroad may influence their attitudes and choice of a pronunciation model. Therefore, countries travelled were requested as a background variable in order to see which varieties of English the subjects have encountered through direct contact. Respondents' mother tongue and nationality were requested to make sure that only participants who considered themselves to be Turkish nationals and whose mother tongue is Turkish took part in the study. Year of the study was requested in order to see whether systematic exposure to linguistic courses which is controlled by the curriculum would influence the evaluations of the subjects.

3.2 The Verbal Guise Technique

The verbal guise technique (VGT) is a modern derivation of the matched-guise technique (MGT) which was developed by Lambert and his colleagues in 1960s (see Section 2.4). Both MGT and VGT require the subjects to listen and evaluate the speakers' traits based on the speech heard through a series of recordings. MGT and VGT are considered to be direct elicitation techniques because they require respondents to make explicit statements regarding a speaker, as well as indirect elicitation techniques, due to subjects not realizing that by evaluating a speaker they are also evaluating a variety (Fasold, 1984, p.150).

The main difference between MGT and VGT is in the number of speakers that produce the speech stimuli. In MGT usually a bilingual or someone with native-like ability in more than two languages provides the speech stimuli in different guises. The subjects are unaware of

the fact that they are evaluating the same speaker in different recordings representing different varieties. However, in VGT different speakers produce different samples of the language varieties, which results in more authentic speech stimuli, especially in cases when more than two speech varieties are under investigation. Although different speakers in VGT optimizes the authenticity of the produced speech, it may not always control the paralinguistic features (speech rate, tone, intonation, voice quality) due to having different speakers representing different varieties. Therefore, the researcher should minimize the difference in paralinguistic features through carefully controlling them to the extent possible. In order to achieve this, subjects' evaluations of the speakers are often thought to be prompted by their initial reactions to the linguistic variation present in the speech stimuli, uniformity of which can be considered to represent attitudes towards the speakers of a particular language variety (Carrie, 2014, p.91).

Another limitation of the MGT and VGT is the assumptions that a single language variety can characterize and represent a speech community. However, it is common knowledge in the field of sociolinguistics that an individual's speech varies daily and that each person has a peculiar way of speaking. Therefore, when MGT and VGT are being employed, the speakers that produce speech stimuli may provide samples of their own individual spoken variety, rather than a general representation of the target community's speech variety. According to Garrett et al., (2003, pp. 58 - 60), possible complications with employing MGT, and relatedly the VGT, are summarized below:

I. *The issue of salience*: providing listeners with a repeated content of a reading passage may exaggerate the language variation and make it more salient than it would be outside of experimental context.
II. *The issue of perception*: it is not certain to what extent the subjects have perceived the variables under investigation and whether they perceived them to represent the area that the researchers believes it to represent.
III. *The issue of accent-authenticity:* when trying to control certain idiosyncratic features, other characteristics that co-vary within an accent may get eliminated as well. Therefore, the authenticity of the sample may be questioned.
IV. *The issue of mimicking-authenticity:* usually in the MGT, where one bilingual or bi-dialectal speaker produces different speech recordings, the authenticity of the stimuli may be questioned, especially when the speaker should produce more than two language varieties. According to Preston (1996) mimicking varieties may

cause inaccuracies, and even when the voices are seen to be valid, they may still be perceived as odd (p. 65).

V. *The issue of community authenticity:* labels used for the speech varieties should be more specific in order to prevent any perceptual and descriptive variation.

VI. *The issue of style-authenticity:* when the recordings presented are read aloud, the speech stimuli may differ from the spontaneously produced speech. Some of the studies, like Labov's (1972), used reading aloud procedure to elicit a more formal style of language in comparison to a more casual style. Therefore, whether the speech stimuli that was read aloud represents a more formal or casual language style may be questioned.

VII. *The issue of neutrality:* the notion of a 'factually neutral' text is controversial, since the ways the readers and listeners interpret and interact with texts are based on pre-existing social schemata.

MGT and VGT have caused a considerable amount of debate. However, there are also some commonly accepted advantages of employing MGT and VGT. Firstly, these techniques have a well-constructed design when it comes to eliciting individuals' private attitudes. It is commonly accepted that direct questioning of an individual's attitudes is not likely to elicit private attitudes, but rather elicit a socially accepted expression of attitudes. However, since in MGT and VGT the subjects think that they are evaluating a speaker rather than indirectly evaluating a particular speech variety, their responses have a tendency to be more open and private. Secondly, all of the studies employing MGT and VGT have demonstrated the importance of spoken language when it comes to impression formation and social prejudice. Thirdly, using these techniques have generated a considerable amount of studies internationally, allowing room for comparison and cumulative development of the theory. Lastly, MGT and VGT have created a foundation for cross-disciplinary work between social psychology and sociolinguistics (Garrett et al., 2003, p. 57), where the present study also places itself, at the interface of social psychology and sociolinguistics.

3.3 Speech Recordings Chosen

It is within the scope of this thesis to investigate language attitudes towards a large number of accents of English, including the regional accents, because 'eliciting evaluations of such would make a significant contribution to language attitude research' (Carrie, 2014, p.94). Therefore, this study involves 12 different accents of English which can be further divided into three Kachruvian circles: the inner, outer, and expanding circle accents (see Section 2.1). A summary of the accents chosen from all three circles can be seen in Table 3.5.

Table 3.5 Accents chosen based on Kachru's Three Circles of English Model

Inner circle varieties chosen	Model American, Southern American, Model British, and Scottish Standard English accents
Outer circle varieties chosen	Indian variety of English, Jamaican variety of English, West African variety of English
Expanding circle varieties chosen	Ukrainian accented variety of English, German accented variety of English, French accented variety of English, Chinese accented variety of English, and Turkish accented variety of English

Speech recordings were selected from The Speech Accent Archive (Weinberger, 2015) and were controlled for content. Using prerecorded speech stimuli from an online corpus was preferred mainly for two reasons. Firstly, given the local context of the study, it was not feasible to collect original recordings of such a diverse sample. Secondly, as previously mentioned, VGT was utilized in order to avoid the issue of mimicking authenticity which is often faced in MGT. Therefore, choosing authentic speech samples produced by the speakers of the targeted accents that are offered by The Speech Accent Archive was found to be more appropriate in the case of this study. All of the selected speech recordings were validated by an expert linguist.

3.4 Text of the Recordings: The Stella Passage

The content of the recordings was controlled by the Stella Passage (69 words\30 seconds). Although according to Garrett et al., (2003) it is hard to name a text as factually neutral due to the pre-existing social schemata of the individuals (p. 60), it was found appropriate by the researcher to use recordings that were controlled for content for several reasons. Firstly, to address the style-authenticity issue, the speakers had prior exposure to the text and were familiarized with it in order to achieve a more natural flow. They could also ask questions in order to gain a full understanding of the content prior to recording their speech (see Figure 3.1). Therefore, the possibility of eliciting a formal style was minimized. Secondly, addressing the issue of salience, it is in fact a major aim of the present study to elicit the attitudes of the subjects to salient features of phonological variation, which makes it possible for the listener judges to contrast the variation in pronunciation and evaluate the speakers accordingly. Therefore, using recordings that were controlled for content to elicit the attitudes toward different accents was found appropriate by the researcher for this study. Thirdly, Dalton-Puffer et al. (1997) suggest that the text should be emotionally neutral and relate to the context in which the study is being held (p.118). Therefore, using spontaneous speech samples that are free in their content would jeopardize the factual\emotional neutrality of the audio stimuli due to the risk of individuals revealing personal information and emotionally triggering content. In other words, using a passage controlled for content addresses the issue of neutrality by minimizing the possible triggering effects of spontaneous speech.

to the reader:

Please silently look at the following paragraph for a minute. If there are words that you do not understand, please ask the investigator.

Figure 3.1 Instructions provided to the readers of the Speech Accent Archive

Lastly, the researcher chose to use the Stella Passage instead of using samples of spontaneous speech was in order to address the issue of accent-authenticity. Since the passage is also controlled for time and length (69 words\30 seconds), it minimizes the possibility other features that co-vary with an accent to occur and interfere with the evaluation process (e.g., length of speech, speech rate, etc.). The text of the Stella Passage is provided below:

Please call Stella. Ask her to bring these things with her from the store: Six spoons of fresh snow peas, five thick slabs of blue cheese, and maybe a snack for her brother Bob. We also need a small plastic snake and a big toy frog for the kids. She can scoop these things into three red bags, and we will go meet her Wednesday at the train station.

Dalton-Puffer et al. (1997) suggest that the text of the recordings chosen in MGT and VGT studies should relate to the participants' context and that the situational context of the speech samples should be predefined in order to have control over listeners' interpretations (p.118). Although it may be suggested that the content of The Stella Passage is not specific to TPTEs' context, as it is also the case with the majority of teaching materials that are being used in the outer and expanding circle countries, the passage still reflects an everyday conversation which may be encountered in second language communication and classroom environment while learning or teaching. It is worth noting that the TPTEs in the present study undergo a five-year education before starting to teach. During these five years, the first year is usually spent at the preparatory school, where the student teachers improve their proficiency in English before starting a four-year TEFL program. After meeting the proficiency standard in English required to proceed to the four-year TEFL program, student teachers undergo an intensive training consisting of developing different teaching modules such as using phonology in the classroom and developing students' writing, listening, reading, and speaking skills. In other words, since the subjects' learner and prospective teacher identities are intertwined in the process of these five years, content of the Stella Passage may be argued not to be so unrelated to the TPTEs' context in the present study, since the exposure and usage of similar passages and content is common throughout TPTEs' education and teaching practices\internships. Unlike Dalton-Puffer et al. (1997) suggests, it wasn't found necessary to predefine the situational context of speech stimuli for two main reasons. First, the focus of the present study was on the evaluation of phonological variation (i.e., differences in pronunciation) rather than the context or content, therefore providing a situational context might have shifted the listeners' focus elsewhere. Secondly, according to Carrie (2014), such an approach 'would do nothing other than bias both the speech present in the recordings and the evaluations made by listener-judges' (p.106).

3.4.1 Inner Circle Accents of English Chosen

Instead of using labels such as 'General American' (GA), 'Standard American', 'Standard British' and 'Received Pronunciation' (RP), labels of Model American English (MAE) and Model British English (MBE) that were adapted from Carrie (2014) are being used, because both accents are treated as a point of reference rather than imposed norms of use in the present study. When speech varieties are treated as norms, they are often associated with the idea of correctness, whereas when they are treated as models, the learners can choose the degree to which they wish to relate to them (Dalton and Seidlhofer 1994, p.27). Therefore, English language teachers should manage the degree to which they engage with these points of reference in order to please the learners who would like to achieve native-like pronunciation and the learners that do not (Jenkins 1998, 124-125). Another reason why labels MAE and MBE are being used in the present study is in order to address the issue of community-authenticity (see Section 3.2) which urges the speech varieties in use to be labeled more appropriately, by using more specific and localized labels (p. 60), that would be relative to not only the speech community that is being evaluated, but also to the speech community which is evaluating the varieties (Garrett, 2010). In the local context of this study, American and British varieties of English are being treated as models by both teachers and learners of English, therefore will be labelled as MBE and MAE henceforth.

GA label was not used in the present study because of its ambiguity. The word 'general' implies that the variety is being spoken by the majority of Americans, if not by all. Therefore, this label was rejected due to not having an unrealistic representation of the speech community. Relatedly, RP label was dismissed due to its restrictiveness. According to McArthur (1992), RP is 'unlikely to have been spoken by more than 3-4% of the British Population' (p. 851). By using MAE and MBE, the risk of misattribution of the labels between the evaluator and the researcher is reduced, since, as previously mentioned, both varieties are still considered to be pronunciation models for foreign students all over the world, as it is the case with the participants in the present study. However, it should be noted that although often treated as models, such varieties are not perceived to be superior to any other speech variety. Despite the use of different labels, MAE and MBE are not likely to differ greatly phonologically from the American and British varieties that are treated as standard or reference accents elsewhere in language attitude research; therefore, the results should be comparable.

In order to represent Standard Scottish English (SSE) accent, a male speaker from Glasgow and a female speaker from Edinburgh were chosen. It is worth mentioning that SSE is often associated with the educated middle class and often referred to as Scottish Standard English (SSE), which unlike the Scottish vernacular, has similar grammar to English and only differs in terms of pronunciation. SSE variety was chosen for several reasons. Firstly, one of the aims was to provide another inner-circle variety of English which would phonologically differ from the MBE and could represent a regional variety within the UK context. Secondly, when it comes to varieties of Scottish English, perceptions of native evaluators were mostly given attention in language attitude research (McKenzie, 2004, p.2). Therefore, interrogating non-native speaker attitudes towards the targeted variety would make valuable contributions to the existing language attitude literature. SSE originated in Edinburgh during the eighteenth century by the Scots looking to anglicize their speech (Aitken, 1979; as cited in Tichenor, 2012, p.4). Therefore, it was found appropriate to include a female speaker from Edinburgh to represent this variety. Relatedly, a speaker from Glasgow was selected, because SSE is often identified with Glasgow, and coexists with another regional variety which is often associated with the working class and low status, referred to as Glasgow vernacular (for a detailed review see McKenzie, 2004).

Another inner circle variety that was selected for the present study was Southern American English (SAE). According to Hickey (2014) 'the south already begins at Virginia in the central Atlantic coast and stretches through the Carolinas down to Georgia and then across Alabama, Mississippi and Louisiana to eastern Texas' (p.28). Therefore, selecting speakers from Virginia and Mississippi was found appropriate by the researcher in order to represent this variety. SAE was chosen because previous research suggests that the native speakers from the US tend to judge southern accent very unfavorably in comparison to other US varieties of English (e.g., Hartley, 1999; Preston, 2004). However, some evidence also suggests that SAE is rated high in terms of 'friendliness' especially amongst southerners themselves (Preston, 2004, p.480). Therefore, this variety was included in order to interrogate the non-native speaker evaluations of SAE which also serves as a regional variety within the US. Table 3.6 provides basic background information of the inner circle speakers chosen.

Table 3.6 Background information of the inner circle speakers chosen

Speaker's Gender	Speaker's Age	Variety
Male	27	**MBE**
Female	30	**MBE**
Male	27	**MAE**
Female	18	**MAE**
Male	52	**SAE**
Female	39	**SAE**
Male	35	**SSE**
Female	22	**SSE**

3.4.2 The Outer Circle Accents of English Chosen

Three different varieties that were selected to represent the outer circle were Jamaican, Indian and West African. Indian variety of English (IvE) was represented by a male and female speaker whose mother tongue was Punjab. In order to represent West African variety of English (WAvE), a male speaker from Cameroon and a female speaker from Liberia were selected (see Omoniyi, 2008, pp. 172-177 for a detailed review and discussion). Lastly, a male and female speaker from Jamaica were selected to represent the Jamaican varieties of English (JvE). Outer circle varieties were included in the present study because most research on language attitudes focuses on the inner and expanding circle varieties. Therefore, studies that include the evaluations of the outer circle varieties, especially studies that investigate non-native speaker attitudes towards the outer-circle varieties, would make valuable contributions to the existing literature.

Indian variety of English (IvE), West African variety of English (WAvE) and Jamaican variety of English (JvE) labels were chosen instead of Indian English (IE), West African English (WAE), and Jamaican English (JE) for several reasons. Firstly, when another nationality or region is placed before English, it presupposes that everyone who belongs to that group speaks the same variety of English identically. However, when the word variety is included in the labels, then the representation of the targeted variety, and therefore its speakers, provides a sample in which a group of individuals speak similarly. Secondly, outer circle varieties are complex in their geopolitical and linguistic features. For example,

what was used to be called India before may not represent the same geography nowadays, meaning when addressing a variety as Indian English, does it include Pakistan as well, or should there be a different label concerning Pakistan such as Pakistani English? Relatedly, geographies such as West Africa are rich in their linguistic nature and have a variety of national languages spoken. When vaguely labeling a variety as West African English (WAE), which national languages and dialects are included? Furthermore, would it be realistic to assume that individuals speaking different dialects in their L1 would provide an identical language sample phonologically? By the inclusion of the word variety in such labels, the researcher is able to represent a sample of a sample, which eliminates vague assumptions and false representations of a speech community, while also providing a more realistic and up to date characterization of the English being spoken in the targeted speech community and geography. Lastly, the outer circle varieties were relabeled in order to address the issue of community authenticity. Table 3.7 provides a summary of the outer circle variety speakers chosen for the present study.

Table 3.7 Background information of the outer circle speakers chosen

Speaker's Gender	Speaker's Age	Variety
M	49	**IvE**
F	33	**IvE**
M	69	**JvE**
F	19	**JvE**
M	18	**WAvE**
F	28	**WAvE**

3.4.3 Expanding Circle Accents of English Chosen

Turkish, French, German, Ukrainian and Chinese accented varieties of English were selected as the expanding circle varieties. Turkish accented variety of English (TavE) was chosen because all of the subjects share Turkish as their L1, and it would be interesting to interrogate the respondents' evaluations of a sample representing their own L1 accented variety of English. Relatedly, it is hypothesized that prospective Turkish teachers of English will be evaluating their own L1 accented sample less favorably than the other varieties.

French (FavE) and German accented varieties of English (GavE) were chosen due to subjects having the highest exposure to these languages in the educational environment. German and French were the two of the most preferred elective foreign language courses amongst the subjects on both campuses. Ukrainian accented variety of English (UavE) was chosen due to the natural exposure of the subjects. A lot of individuals from the Post-Soviet states live in Turkey and Northern Cyprus, the majority of which consist of Russian and Ukrainian nationals. Therefore, the subjects in the present study get a fair exposure to East Slavic languages. Accordingly, Ukrainian accented variety of English was chosen to represent the Slavic accent in the present study. Chinese accented variety of English (CavE) was chosen because according to the previous research, this variety is often disfavored by the participants in the previous literature (Luk, 1998, p.100; Jenkins, 2004, p.204; Chen, 2011, p. 76). Both Chinese speakers share Cantonese as their L1. Table 3.8 provides a breakdown of the expanding circle speakers selected for the present study.

Table 3.8 Background information of the expanding circle speakers

Speaker's Gender	Speaker's Age	Variety
Male	33	CavE
Female	18	CavE
Male	28	FavE
Female	20	FavE
Male	27	GavE
Female	53	GavE
Male	24	TavE
Female	37	TavE
Male	26	UavE
Female	53	UavE

3.5 Data Collection Procedure

Two studies were conducted in order to interrogate the attitudes of undergraduate student teachers that were studying in two different campuses of the same institution. Study 1 was conducted at METU NCC and had an aim to elicit TPTEs' perceptions and evaluations of the chosen inner, outer, and expanding circle accents (see Sections 3.4.1, 3.4.2, and 3.4.3). Study 2 had a specific focus on the participants' attitudes toward the model varieties of English, their accent preference, descriptions of TavE, and tendency to behave in a

classroom environment. Study 1 consisted of a VGT experiment along with an origin identification task, whereas Study 2 had a specific aim to uncover what lies behind TPTEs' attitudes toward MBE, MAE, and TavE. Therefore, Study 2 had a more qualitative construct requiring the participants to provide elaborated written answers to explain their evaluations and choices.

In Study 1, the data were collected in the form of one-on-one 25-minute sessions with the researcher utilizing a paper-based questionnaire. In Study 2, the data were collected online, and sessions lasted for approximately 40 minutes for each participant. In Study 1, the data collection lasted for 5 weeks, whereas in Study 2 the data were collected in two weeks. In both studies, the participants were requested to complete an informed consent form before taking part in the study. Similarly, in both studies, after the data were collected, the participants were provided with a debriefing form as well. The following section will provide further information regarding the administration of the research instrument in both studies.

3.5.1 Study 1. Northern Cyprus Campus

The data were collected at METU Northern Cyprus Campus from 65 undergraduate students that were enrolled in a four-year Teaching English as a Foreign Language program. The data collection tool was a paper-based questionnaire which consisted of three sections: VGT experiment, optional origin identification task, and demographic information.

After signing the informed consent form, each participant had a one on one session with the researcher which lasted between 20-25 minutes. In those sessions, respondents had to listen to a total of twenty-four recordings that were previously downloaded from the Speech Accent Archive and evaluate each speaker on a five-point Likert scale based on seven characteristics: wealth, education level, rudeness[2], language proficiency, attractiveness, intelligibility and native speaker status that were selected from the previous literature (Figure 3.2).

[2] Characteristic of rudeness was reverse coded as politeness during the analyses.

Circle the correct numeric response to each question						
Statements		1=Strongly Disagree, 2=Disagree, 3=Neither Agree or Disagree, 4=Agree, 5= Strongly Agree				
1	The speaker sounds rude	**1**	**2**	**3**	**4**	**5**
2	The speaker sounds educated	**1**	**2**	**3**	**4**	**5**
3	The speaker sounds attractive	**1**	**2**	**3**	**4**	**5**
4	The speaker's language proficiency is high	**1**	**2**	**3**	**4**	**5**
5	The speaker sounds rich/wealthy	**1**	**2**	**3**	**4**	**5**
6	The speaker is a native speaker of English	**1**	**2**	**3**	**4**	**5**
7	The speaker sounds intelligible\understandable	**1**	**2**	**3**	**4**	**5**

Figure 3.2 Rating scale used in Study 1

All of the selected characteristics were included based on the previous literature. Out of the selected characteristics, rudeness and attractiveness can be grouped under the dimension of solidarity, while wealth, education level, and language proficiency can be grouped under the dimension of status (see Section 2.4). Even though intelligibility, defined as 'the extent to which a speaker's utterance is actually understood' (Munro et al., 2006, p.112), does not fall under the dimensions of either status or solidarity, it was included based on the previous research (Derwing and Munro, 1997; Munro and Derwing, 1995; 1999) where it is emphasized that L2 speech should be considered based on various dimensions, including intelligibility. Relatedly, the inclusion of intelligibility becomes of crucial importance when the foreign listener judges evaluate different varieties of English, since this characteristic provides valuable information regarding the participants' ability to decode phonological utterances once faced with inner, outer, and expanding circle accents of English. Native speaker status was included because previous research shows that foreign accent ratings correlate with the frequency of phonological divergences from native speaker patterns (Anderson-Hsieh, Johnson, & Koehler, 1992; Magen, 1998; Munro & Derwing, 2001). Therefore, the evaluations of native speaker status will help to uncover how close or distant TPTEs perceive the accents under evaluation to be from the inner circle accents. Education level and politeness were amongst the most frequently mentioned

labels in Preston's (1999) study (p. 363). Relatedly, characteristics of wealth and education level were included based on Demirci & Kleiner's (1999) study conducted in Bursa, in which native Turkish participants viewed the western cities in Turkey as more "European", "modern", "educated", "wealthy", and "liberal" (p.271). Although the present study is a VGT study and does not utilize a map to elicit participant attitudes (unlike Preston's and Demirci & Kleiner's studies mentioned above), it was found appropriate by the researcher to include some of the labels (i.e. wealth, education level) that were assigned by the native Turkish participants from the existing literature, since the participants in the present study are also Turkish. Cummins (1980) argues that cognitive\academic language proficiency can be distinguished from interpersonal communication skills such as accent, sociolinguistic competence, and oral fluency in both L1 and L2 (p.175). Although defining language proficiency has been subject to some debate and it is not within the scope of this thesis to define it, whether accent plays a significant role in TPTEs' perceptions and evaluations of language proficiency (if any) is. Therefore, language proficiency was also included as a characteristic in the present study. In Lambert et al.'s (1960) initial study, 'good looks' was one of the main characteristics chosen for investigation. Therefore, this thesis includes attractiveness to further interrogate the linkage between evaluations of physical characteristics of the speakers based on accent alone.

After the subjects were done evaluating each accent, they had an optional origin identification task (Figure 3.3). The respondents could request listening to the recording for the second time. This was done in order to allow the participants the option of focusing on each task separately if desired. The subjects were also allowed to take a five-minute break after the 12th recording. This was done in order to prevent listener's fatigue.

***I think the origin of the speaker is:**

Figure 3.3 Origin identification item used in Study 1

The origin identification task, also referred to as the dialect identification/variety recognition item (Section 2.4), was in order to address the issue of perception (Section 3.2). Garrett (2003) defines recognition as cognitive mapping of speech features that could be heard and that also reflects one's 'records of the usage norms in particular communities' (p.208). Therefore, being able to identify a dialect, or the origin of the speaker in the case

of this study, means the ability to recognize the 'values of variable features and then succeeding or failing to make the appropriate mapping' (ibid). The origin identification/variety recognition task was left optional in the present study for several reasons. Firstly, evidence from previous literature suggests that the non-native listeners perform poorly on dialect identification tasks (e.g., Scales, Wennerstrom, Richard & Wu, 2006, p. 723; McKenzie, 2008, p. 146). Therefore, it was found appropriate by the researcher to allow the subjects the option of leaving the variety recognition item blank, which would mean that the respondent was not able to identify it. Secondly, during the pilot study that was conducted prior to Study 1, it was found that the participants could take a lot of time trying to guess the origin of the speaker when the task was forced. Lastly, in the pilot study, some of the participants asked if they could proceed without completing the variety recognition task due to not being able to make a guess about the origin of the speaker. Therefore, it was decided that the origin identification task should be optional in order to eliminate any possible discomfort faced by the participants as well as to prevent overthinking.

According to Dornyei (2006) administration procedure of a research instrument may determine the quality of the subjects' responses (pp. 113-114). Therefore, the following steps were taken in order to standardize each of the 65 sessions:

<u>Section 1: The Verbal Guise Instrument</u>

i. Allow respondents to read the instructions. Go over the instructions and the questionnaire with the participants once again in Turkish and explain/answer questions if needed.
ii. Remind the participants to start rating speech samples (30 seconds each) as soon as possible in order to elicit their first reaction. Stress the importance of evaluating all of the speakers based on all 7 categories in order to minimize the possibility of blank responses.
iii. Remind the participants that variety identification task is optional, yet if left blank it would mean that the respondent was not able to identify the origin of the speaker.
iv. Make sure to wait for a signal from the participant in order to proceed to the next recording.

Section 2: Optional Origin Identification Task

v. Allow the respondents to hear the recordings for the second time for the optional origin identification task if requested.

Section 3: Demographic Information

vi. Make sure to provide the participants with a debriefing form after they are done with this section.

Since the data were collected in the form of one-on-one sessions with the researcher, eight groups that included all of the 24 recordings separated for gender in randomized order were created: 1A, 2B, 3C, 4D, 5E, 6F, 7H, 8G (see Appendix G). This was done with the purpose of eliminating any possible ordering effects. The recordings were randomized using an online randomization tool (random.org).

3.5.2 Study 2: Ankara Campus

The data for the second study were collected from the undergraduate students enrolled in a four-year Foreign Language Education program (FLE) in METU Ankara Campus (N=44). Data were collected using an online questionnaire, administered in English. However, the Turkish translations of the selected characteristics were provided. It was found appropriate to collect the data online rather than doing one on one sessions with the participants for several reasons. Firstly, the second study required the participants to think and provide elaborated written answers after listening to each recording. Secondly, based on the results obtained from the pilot study that was conducted in Ankara Campus with a group of students at a computer lab during a class session, it was observed that some of the participants got distracted and lost focus due to technical and internet related difficulties. It was also observed that it was not very easy to control the noise in a lab setting. Furthermore, the pilot study showed that some students took much longer time answering the questions in comparison to the others. Therefore, the option of collecting the data at a lab environment during a class session en masse was eliminated, and the participants could complete the online questionnaire individually, from their home environment by taking as much time as they need and without external factors interfering with the process.

3.5.2.1 Design of the Online Questionnaire

In Study 2, the online questionnaire had an aim to elicit what lies behind TPTES' perceptions and evaluations of the model varieties of English, along with their descriptions of TavE, while also interrogating how those attitudes might affect TPTEs' teaching practices, accent preference, and tendency to behave.

First, an online questionnaire using SurveyMonkey © was created. The questionnaire consisted of three sections: the verbal guise task (8 items), attitude elicitation task (6 items), and demographic questions. Verbal guise items in the questionnaire consisted of yes and no questions. The respondents had to listen to the recording first and then to agree or disagree with a statement (e.g. 'The speaker sounds attractive'). TPTEs had an option to check both, yes and no options at the same time in order to express their neutrality. Since the main objective of Study 2 was to elicit participants' explanations and rationale behind their evaluations, it wasn't found necessary to utilize a Likert scale in the VGT experiment. Participants had to explain their answers in a comment box which was controlled for length (minimum 15 characters and maximum 800). An example of a question from the online questionnaire can be seen in Figure 3.4.

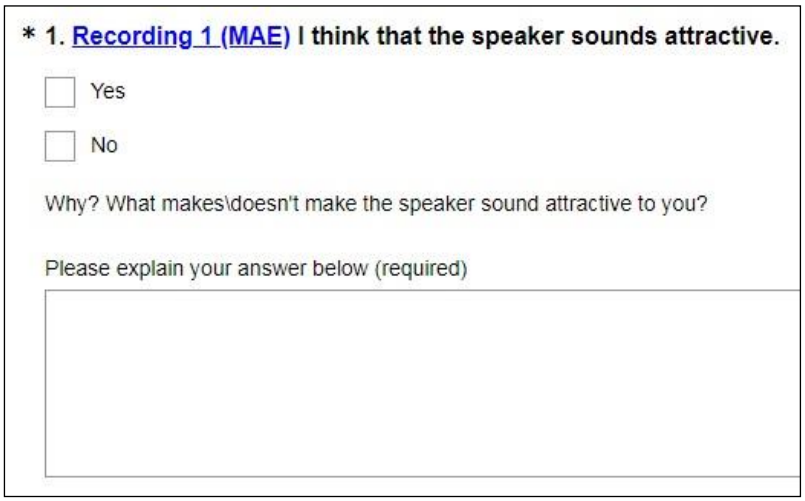


Figure 3.4 Sample verbal guise item from Study 2

In contrast to Study 1, in Study 2 the respondents were able to see the origin of the speakers. This was done in order to test the issue of perception (Section 3.2). In other words, the

researcher wanted to test whether knowing the origin of the speaker would affect the perceptions of the subjects, and therefore their evaluations of MAE and MBE in comparison to Study 1. The second section of the online questionnaire had an aim to uncover TPTEs' thoughts and preferences regarding MBE, MAE, and TavE (will be further discussed in Section 4.3.3).

3.6 Data Analysis: Ordered Logistic Regression (OLR)

Most of the previous language attitude research, MGT and VGT studies in particular, have been conducted using a t-test, ANOVA or MANOVA, followed by a post hoc test. However, this study will be utilizing Ordered Logistic Regression (OLR) for several reasons. Firstly, ANOVA and MANOVA tests assume interval or ratio level of measurement when a Likert scale is being used. However, this assumption hardly reflects the true nature of the reported answers, because although the thresholds on a Likert scale are assigned a numerical value, they are representing ordered categories, and the distance between those categories are usually unknown. Therefore, every participants' perception of the degree to which they are agreeing or disagreeing with an item will differ and may not necessarily correspond to the researcher's perception (i.e. *the issue of perception*). Secondly, ANOVA and MANOVA techniques assume a Gaussian (normal) distribution, which is a form of a continuous distribution. However, this can hardly be the case due to values on a Likert scale being discrete ordered categories, responses of which can't exceed the end points (it is not possible to give a response that precedes 1 and proceeds 5 on a five-point Likert scale). Lastly, OLR can be used when working with categorical data as well (i.e. correct\incorrect). Which means that in MGT and VGT studies, OLR can be used for the analysis of the recognition data (i.e. origin identification\variety recognition in case of this thesis).

Ordered Logistic Regression (OLR) is part of Ordered Logit Model (OLM) which aims to predict the odds of a particular response occurring by looking at the other responses given by the participants. Assuming the categorical choices of "1=strongly disagree", "2=disagree", "3= neither agree or disagree", "4=agree", and "5=strongly agree", respectively being P_1, P_2, P_3, P_4, and P_5, then, the logarithms of the odds of the categorical answers are as follows:

strongly disagree,

$$\log\left(\frac{P_1}{P_2 + P_3 + P_4 + P_5}\right)$$

strongly disagree or disagree,

$$\log\left(\frac{P_1 + P_2}{P_3 + P_4 + P_5}\right)$$

strongly disagree, disagree, or neither disagree or agree,

$$\log\left(\frac{P_1 + P_2 + P_3}{P_4 + P_5}\right)$$

strongly disagree, disagree, neither disagree or agree, or agree,

$$\log\left(\frac{P_1 + P_2 + P_3 + P_4}{P_5}\right)$$

Since there are four thresholds on a five-point Likert scale, and since we do not exactly know what the chosen categorical response by each participant stands for (distance wise), OLR allows us to estimate participant responses on a maximum level through observing all of the other responses given. It is worth noting that for the purposes of this thesis, the analysis will only be limited to OLR, which is able to provide a new perspective by addressing the issues mentioned above. However, utilizing Ordered Logit Model (OLM) with broader population samples that would utilize multilevel analysis would contribute greatly to the existing language attitude literature, to MGT and VGT studies in particular.

CHAPTER 4

RESULTS and DISCUSSION

4.1 Descriptive Statistics

4.1.1 Study 1: METU Northern Cyprus Campus

As previously mentioned, the population sample in Study 1 consisted of sixty-five (N=65) Turkish prospective English language teachers that were enrolled in a four-year Teaching English as a Foreign Language undergraduate program. Forty-one females (63%) and twenty-four males (37%) took part in Study 1. Minimum age of the participants was 18 and the maximum was 37 (with a mean of 21.58 and median 21). Majority of the participants were seniors (34%), followed by freshmen (28%), juniors (20%), and sophomores (20%). Subjects' exposure to second language courses other than English may provide further insight into the participant evaluations and origin identification task. Figure 4.1 shows participants' exposure to second language courses, French (67%) and German (60%) being the most popular choices, followed by Japanese (9%).

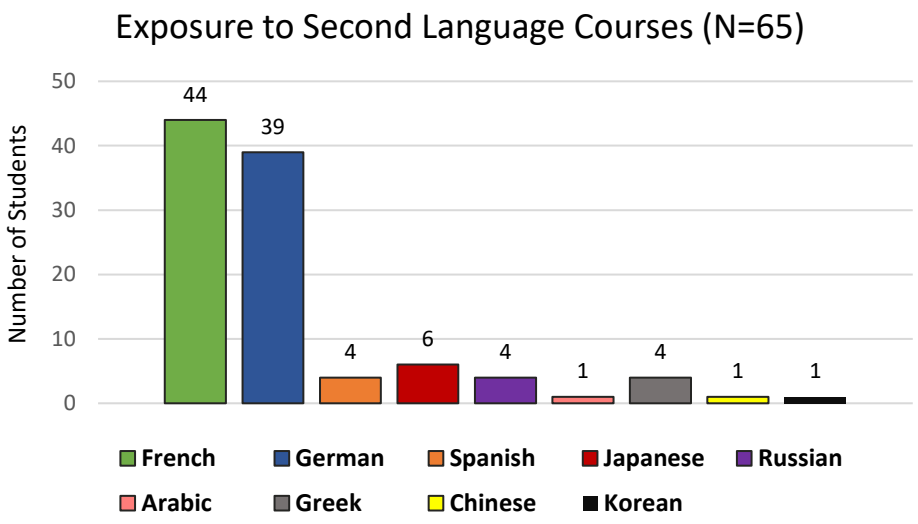


Figure 4.1 Exposure to second language courses (METU NCC)

Figure 4.2 provides information regarding the sample population's exposure to Linguistic courses. All of the participants have taken pronunciation and oral communication courses. Out of the remaining, the majority have taken Linguistics 1 (73%) and Linguistics 2 (70%) courses. The students also had some prior exposure to Sociolinguistics (21%) and Global English (35%) courses as well.

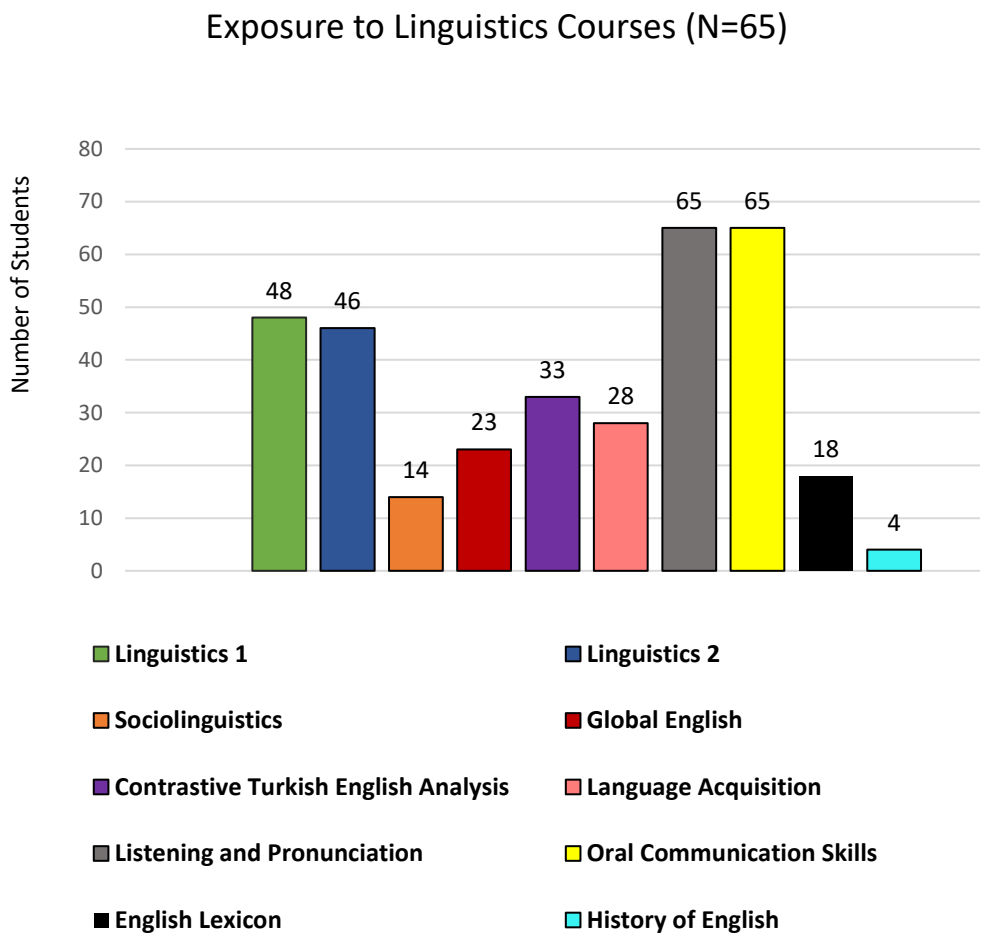


Figure 4.2. Exposure to linguistic courses (METU NCC)

Majority of the participants (60%) have reported watching movies/listening to music in English on a daily basis. Out of the remaining, 34% of the students have reported watching movies/listening to music for 2-3 times a week. Figure 4.3 provides a breakdown of TPTEs exposure to English media.

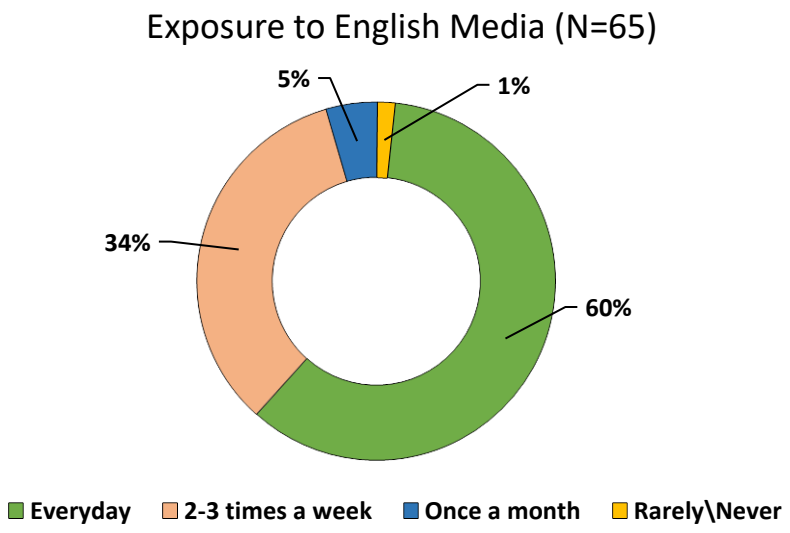


Figure 4.3. Exposure to English media (METU NCC)

Figure 4.4 shows countries visited by the students. Out of the inner circle countries, the majority of the students have been to England (48%), following USA (%6), and Scotland (3%). None of the participants have reported being to the outer circle countries. However, Germany (20%) and France (11%) had the most visitation rates amongst the expanding circle countries, followed by Ukraine (6%), Russia (3%), and China (3%).

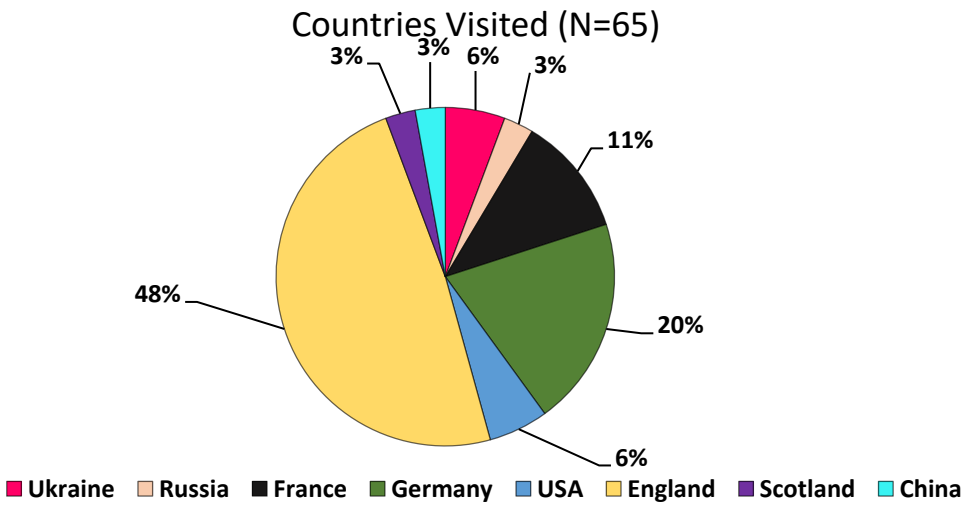


Figure 4.4. Countries visited by the subjects (METU NCC)

4.1.2 Mean Evaluations of the Speakers Separated for Gender

The participants were asked to evaluate twenty-four speech recording samples (12 male and 12 female guises for each variety) based on seven characteristics: politeness, education level, wealth, language proficiency, intelligibility, nativeness, and attractiveness. First the mean scores of male and female speakers for each characteristic were calculated. Table 4.1 shows mean scores (M) and standard deviations (SD) of the male speakers for all seven characteristics. MAE male speaker was evaluated positively on almost every trait, being perceived as the most attractive, most educated, most intelligible, most proficient in English, and native-like, followed by the MBE male speaker. However, for perceived politeness, MBE male speaker was evaluated as being the politest, followed by the MAE, German, French, and SSE male speakers. Turkish male speaker was perceived to be the rudest out of all speakers, followed by the Indian, Ukrainian, and Southern American male speakers. Due to MAE and MBE being treated as the model varieties nowadays, having these accents in the top two of most favorably evaluated varieties across all seven categories was not unexpected. However, although most of the participants rated the inner circle varieties in the top four for native speaker status, interestingly, SAE male speaker was perceived to be in the top four for perceived rudeness, following the Turkish, Indian, and Ukrainian male speakers. Turkish male speaker was perceived to be the rudest out of all speakers, followed by the Indian, Ukrainian, and Southern American male speakers. From the expanding circle varieties, German male speaker received the highest evaluations for perceived education level, intelligibility, attractiveness, socioeconomic status, language proficiency, native speaker status, and politeness. SSE male speaker was rated the highest, following MAE and MBE male speakers, on perceived attractiveness and socioeconomic status. The Turkish male speaker guise has received the lowest evaluations on all traits except for perceived intelligibility, in case of which he was perceived as one of the least intelligible male speakers, followed by the Chinese male speaker guise. Indian male speaker received the second lowest evaluations (following the male Turkish accented guise) for all perceived characteristics besides intelligibility, where he was evaluated as one of the least intelligible male speakers, followed by the Turkish and Chinese male speakers.

Table 4.1 Mean scores and standard deviation of the male speakers

Male Speakers	Polite	Educated	Attractive	Proficient in English	Wealthy	Native Speaker	Intelligible
SAE	2.92	3.11	2.65	3.54	2.98	3.42	3.69
MAE	4.40	4.49	4.42	4.66	4.20	4.72	4.80
MBE	4.55	4.38	4.34	4.62	4.06	4.68	4.77
SSE	3.38	3.37	2.97	3.60	3.17	2.71	3.58
UavE	2.91	2.49	1.83	2.63	2.03	1.92	3.20
TavE	2.71	1.80	1.34	1.46	1.63	1.08	2.35
FavE	3.46	2.83	2.15	2.55	2.26	1.66	3.12
GavE	3.71	3.49	2.80	3.68	2.94	2.66	3.86
JvE	3.03	2.40	1.83	2.29	2.12	1.54	2.97
CavE	2.97	2.46	1.71	2.31	2.03	1.45	2.22
WAvE	3.05	2.63	1.89	2.49	2.22	1.72	2.95
IvE	2.80	1.94	1.48	1.55	1.78	1.12	2.58
Standard Deviations							
SAE	1.327	0.812	1.316	1.119	1.082	1.261	1.158
MAE	0.880	0.640	0.808	0.644	0.905	0.600	0.474
MBE	0.848	0.700	0.889	0.630	0.933	0.687	0.523
SSE	1.221	0.911	1.145	0.981	1.098	1.476	1.184
UavE	1.195	0.812	0.858	0.993	0.809	1.163	0.905
TavE	1.433	0.870	0.594	0.614	0.762	0.269	1.152
FavE	1.032	0.821	0.939	0.919	0.853	0.989	1.023
GavE	0.964	0.904	1.019	0.850	0.982	1.326	0.982
JvE	1.089	0.787	0.782	0.897	0.910	0.772	1.045
CavE	1.250	0.812	0.843	0.934	0.847	0.811	1.082
WavE	1.124	0.894	0.970	0.886	0.838	1.153	1.022
IvE	1.135	0.747	0.640	0.662	0.760	0.545	1.102

Participant evaluations changed for some of the varieties when female speaker guises were matched. Generally speaking, female speakers have received higher mean evaluations in comparison to male speaker guises. Mean scores (and standard deviations) for female speakers for each characteristic are provided in Table 4.2.

Table 4.2 Mean scores and standard deviation of the female speakers

Female Speakers	Polite	Educated	Attractive	Proficient in English	Wealthy	Native Speaker	Intelligible
SAE	4.14	3.74	3.35	3.72	3.25	3.46	3.91
MAE	4.26	4.22	3.95	4.58	3.88	4.57	4.62
MBE	4.42	4.25	4.06	4.51	3.94	4.57	4.69
SSE	4.32	3.55	3.57	3.75	3.29	3.15	4.03
UavE	3.14	2.22	1.78	1.65	1.95	1.14	2.34
TavE	3.89	3.18	2.86	3.18	2.95	1.83	3.80
FavE	3.40	2.29	1.88	2.03	1.86	1.38	2.54
GavE	2.49	2.35	1.89	2.35	2.18	1.45	3.03
JvE	3.37	2.91	2.38	2.97	2.60	2.15	3.17
CavE	4.03	3.31	3.06	3.49	3.08	2.74	3.72
WAvE	3.09	2.72	2.35	2.68	2.29	2.37	3.31
IvE	3.62	2.62	2.15	2.38	2.32	1.49	3.08
Standard Deviations							
SAE	0.966	0.940	0.991	1.008	1.046	1.263	1.114
MAE	1.149	0.838	0.975	0.682	1.068	0.809	0.823
MBE	0.846	0.708	0.882	0.640	0.950	0.706	0.498
SSE	0.903	0.830	1.045	0.771	0.964	1.228	0.790
UavE	1.102	0.820	0.910	0.717	0.856	0.348	0.923
TavE	1.077	0.950	1.029	0.934	1.052	1.084	1.003
FavE	1.087	0.785	0.927	0.809	0.846	0.630	0.969
GavE	1.187	0.856	0.850	1.007	0.934	0.771	1.045
JvE	1.140	1.011	0.995	0.935	1.043	1.202	1.039
CavE	0.918	0.828	1.130	0.868	0.872	1.326	0.927
WavE	1.195	0.820	0.991	0.954	0.824	1.341	1.060
IvE	1.100	0.995	1.034	1.056	0.812	0.753	1.136

Unlike with the male speakers, MBE female speaker got the highest mean scores for perceived attractiveness, intelligibility, education level, socioeconomic status, and politeness, followed by the female MAE speaker. Mean scores for perceived native speaker status were the same for MAE and MBE female speakers, however MAE has received the highest ratings for perceived language proficiency. Unlike the male speaker evaluations, Turkish female speaker was evaluated more favorably on all seven characteristics, usually placing in the top six out of twelve varieties. Similarly, to male speaker evaluations, all four of the inner circle varieties were evaluated very favorably for perceived native speaker status, only followed by the Chinese female speaker guise. SSE female speaker was rated favorably placing in the top four across all categories, only this time it was perceived to be the politest guise following the female MBE speaker. Ukrainian, French, and German female speaker guises were rated as the lowest for perceived attractiveness, intelligibility, education level, wealth, language proficiency, and native speaker status. Unlike with the male speaker mean evaluations, German, West African, Ukrainian, and Jamaican female speaker guises have been perceived as the rudest varieties, in that order.

4.1.3 Mean Evaluations of the Speakers Combined for Gender

After calculating the mean scores for male and female speakers separately, mean scores of each accent, combined for gender were calculated. Results show that MBE and MAE speakers were rated very positively, the latter being evaluated very favorably for perceived education level, language proficiency, wealth, and native speaker status. However, MBE speakers were perceived to be most attractive, educated, and polite (i.e., the least rude) in comparison to the MAE speakers. SSE was evaluated mostly positively on all characteristics, remaining in the top three for all categories following MAE and MBE, except for native speaker status, in which it placed as 4th, following SAE. SSE variety has received higher evaluations than the SAE guise. In short, all of the inner circle varieties have remained in the top four for perceived attractiveness, politeness, language proficiency, intelligibility, wealth, native speaker status, and education level. Figure 4.5 shows TPTEs' evaluations of the varieties for perceived attractiveness.

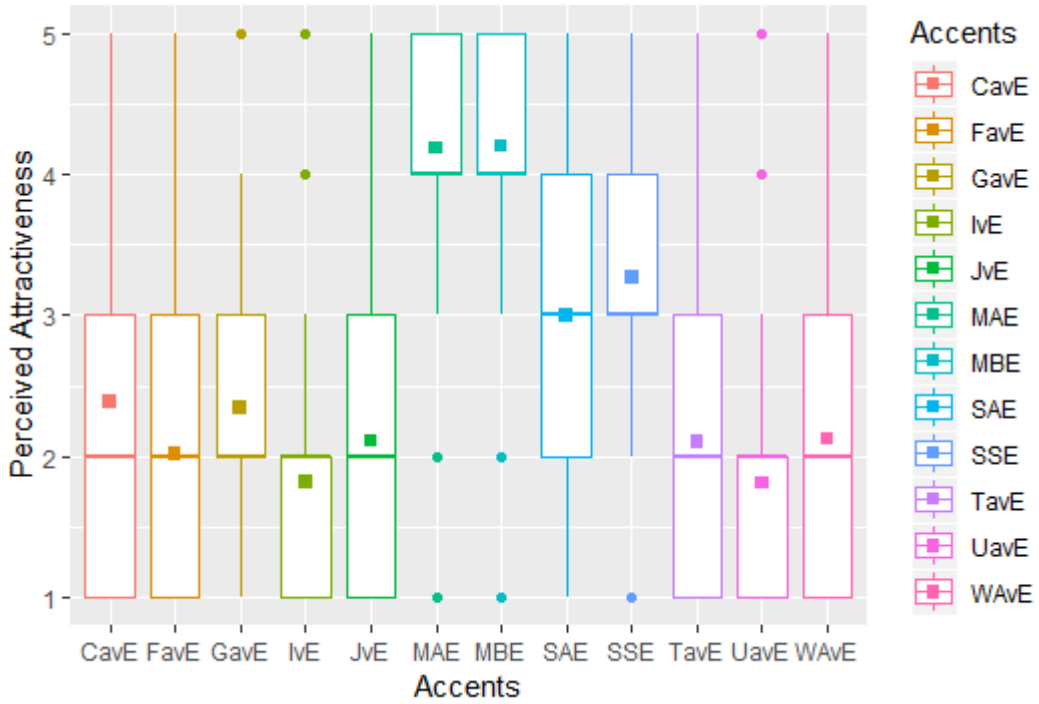


Figure 4.5. Boxplot for Perceived Attractiveness (combined for gender)

Figure 4.5 shows that MBE (M=4.20, SD=0.922) and MAE (M=4.18, SD=0.893) varieties were evaluated most favorably, former receiving slightly higher ratings for perceived attractiveness. SSE (mean=3.27, SD=1.133) was the third guise that was perceived to be the most attractive amongst the participants, followed by SAE (M=3.00, SD=1.214). Ukrainian (M=1.81, SD=0.881), Indian (M=1.82, SD= 0.922), French (M=2.02, SD= 0.940), and Turkish (M=2.10, SD= 1.133) guises received the lowest evaluations for perceived attractiveness.

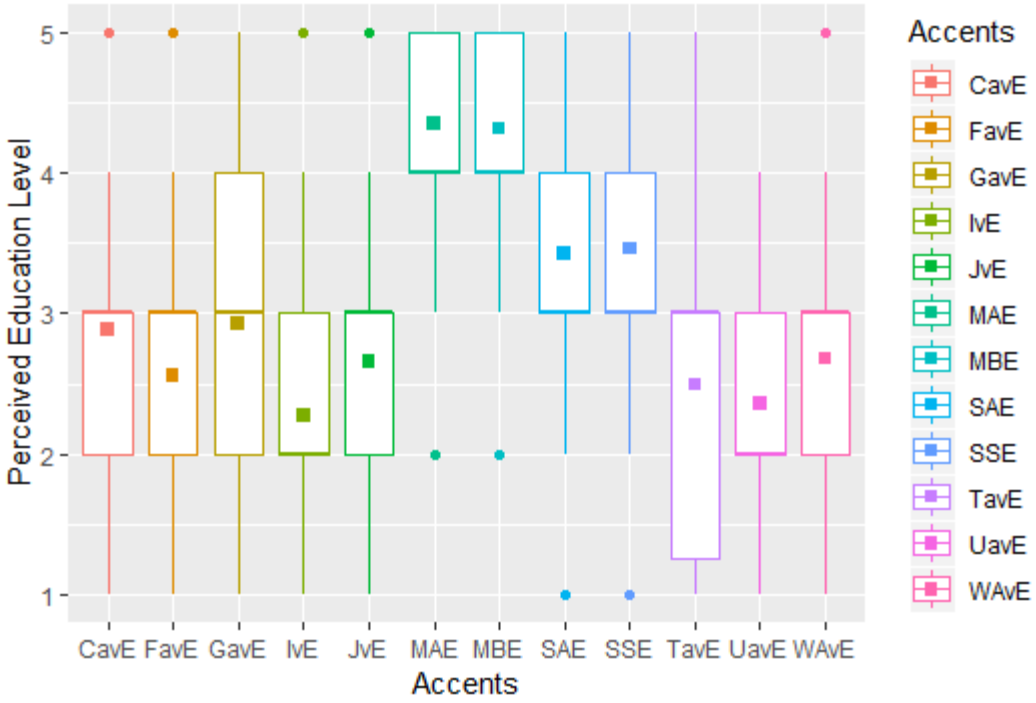


Figure 4.6. Boxplot for Perceived Education Level (combined for gender)

Figure 4.6 shows that MAE (M=4.35, SD=0.756) received the highest evaluations for perceived education level, followed by MBE (M=4.32, SD=0.705), SSE (M=3.46, SD=0.873), and SAE (M=3.42, SD=0.873). Indian (M=2.28, SD=0.940), Ukrainian (M=2.35, SD=0.825), Turkish (M= 2.49, SD=1.143), and French (M=2.56, SD=0.845) guises have received the lowest evaluations for perceived education level by the population sample. German (M=2.92, SD=1.046) and Chinese (M=2.88, SD=0.920) guises have received the highest mean scores out of the expanding circle samples for perceived education level.

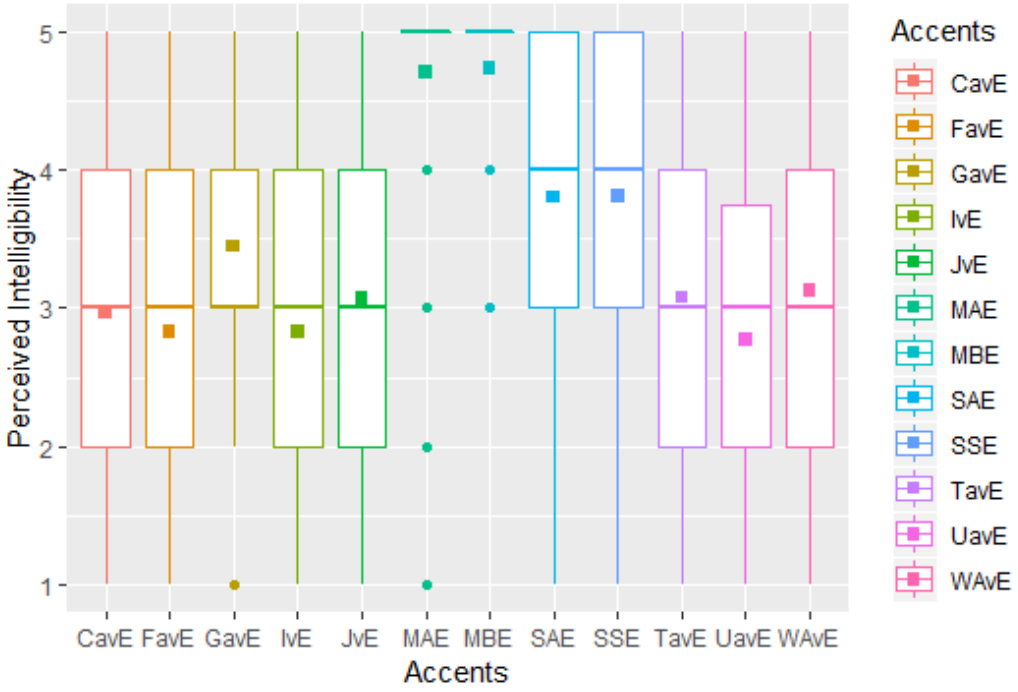


Figure 4.7. Boxplot for Perceived Intelligibility (combined for gender)

Figure 4.7 shows that MBE (M= 4.37, SD=0.510) has received the highest evaluations for perceived intelligibility, followed by MAE (M=4.71, SD=0.676), SSE (M=3.81, SD=1.027), and SAE (M=3.80, SD=1.137) guises. The guises that were perceived to be as the least intelligible by the population sample were Ukrainian (M=2.77, SD=1.008), Indian (M=2.83, SD=1.142), French (M=2.83, SD=1.035) and Chinese (M=2.97, SD=1.257). German (M=3.45, SD=1.093) guise received the highest evaluations from the expanding circle varieties, and West African (M=3.13, SD=1.052) guise has received the highest evaluations from the outer circle varieties for perceived intelligibility.

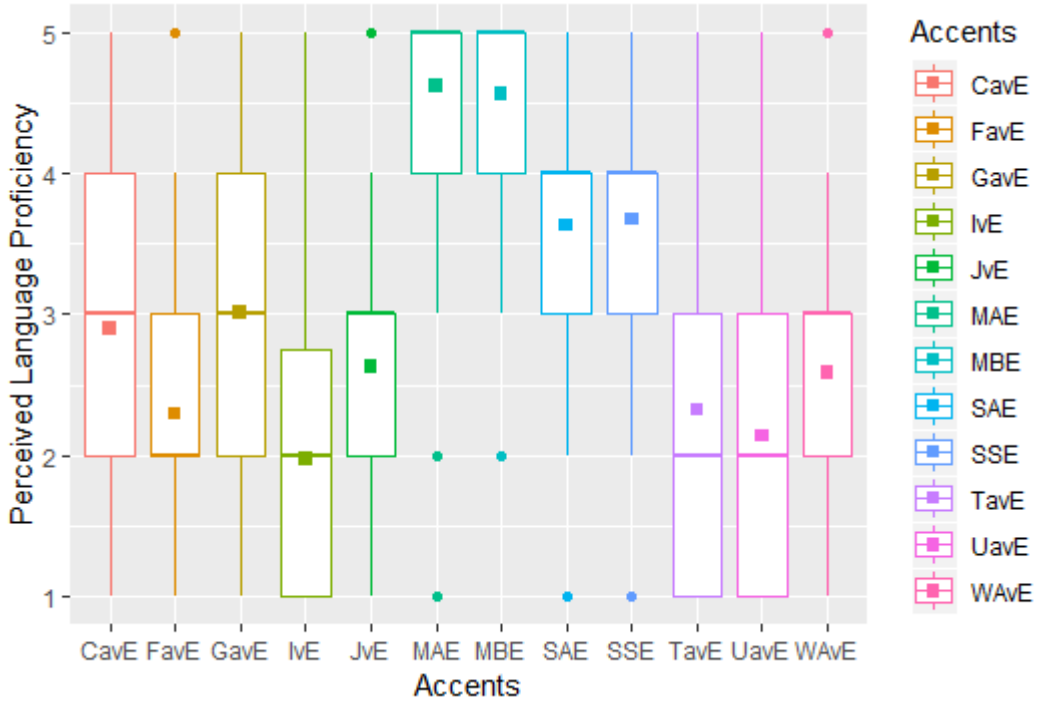


Figure 4.8. Boxplot for Perceived Language Proficiency (combined for gender)

Figure 4.8 shows that the inner circle varieties were evaluated to be the most proficient speakers of English, MAE (mean=4.62, SD=0.662) being the most favorably evaluated, followed by MBE (mean=4.56, SD=0.635), SSE (mean=3.68, SD=0.882), SAE (mean=3.63, SD=1.065). Indian (mean= 1.97, SD=0.972), Ukrainian (mean=2.14, SD=0.994), Turkish (mean=2.32, SD=1.169), and French (mean=2.29, SD=0.902) guises have received the lowest evaluations for language proficiency in English. German and Chinese (mean=2.90, SD=1.077) guises have received the highest evaluations out of the expanding circle varieties.

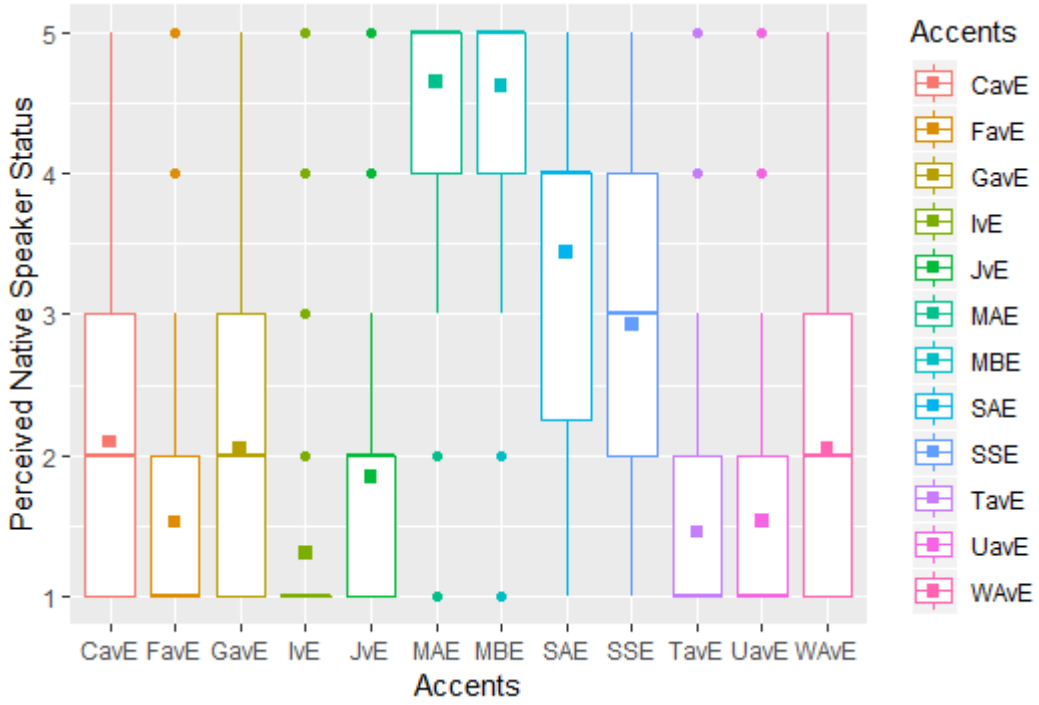


Figure 4.9. Boxplot for Perceived Native Speaker Status (combined for gender)

Figure 4.9 shows that MAE (mean=4.65, SD=0.714) was evaluated most favorably for the native speaker status, followed by MBE (mean=4.62, SD=0.696), SAE (mean=3.44, SD=1.258), and SSE (mean=2.93, SD=1.371). Indian (mean=1.31, SD=0.680), Turkish (mean=1.45, SD=0.875), French (mean=1.52, SD=0.837), and Ukrainian (mean=1.53, SD=0.942) varieties were the lowest rated varieties for this characteristic. Perceived native speaker status is the only characteristic in which SAE (mean=3.44, SD=1.258) was evaluated more favorably than the SSE guise.

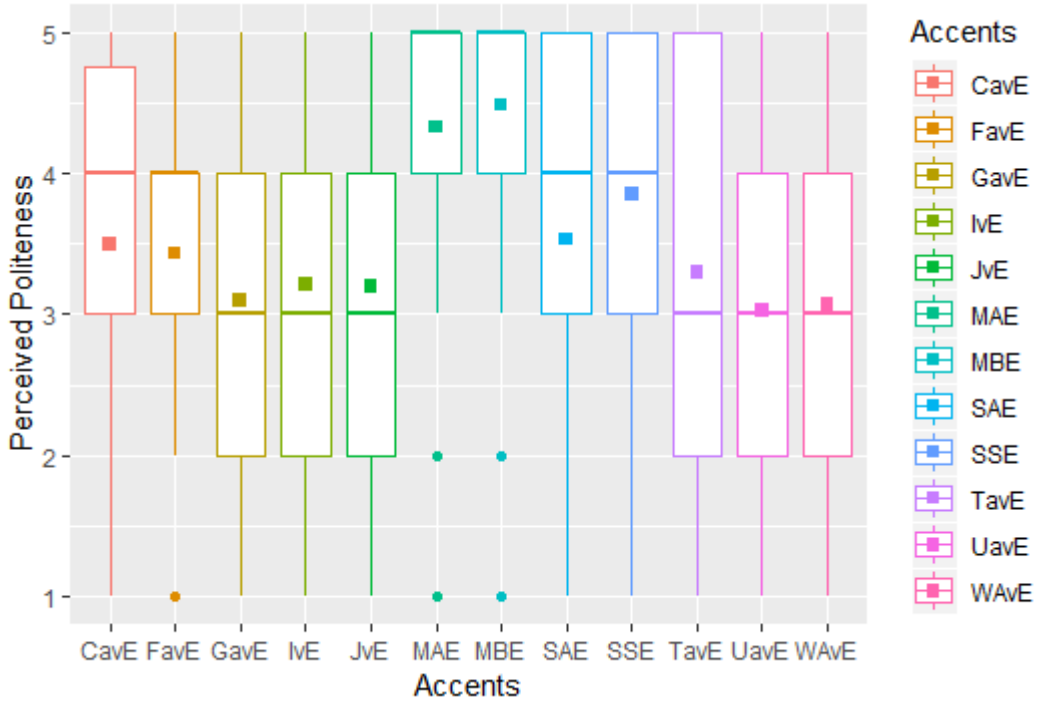


Figure 4.10. Boxplot for Perceived Politeness (combined for gender)

Figure 4.10 shows that the inner circle varieties have received the highest mean scores for perceived politeness, MBE (M=4.48, SD=0.847) being the most favorably evaluated accent for this characteristic, followed by MAE (M=4.33, SD=1.022), SSE (M=3.85, SD=1.169), and SAE (M=3.53, SD=1.307) varieties. Ukrainian (M=3.02, SD=1.151), West African (M=3.07, SD=1.156), German (M=3.10, SD=1.238), and Jamaican (M=3.20, SD=1.123) guises have received the lowest mean scores for perceived politeness. Chinese (M=3.50, SD=1.215) accented variety of English has received the highest score amongst the expanding circle varieties for perceived politeness.

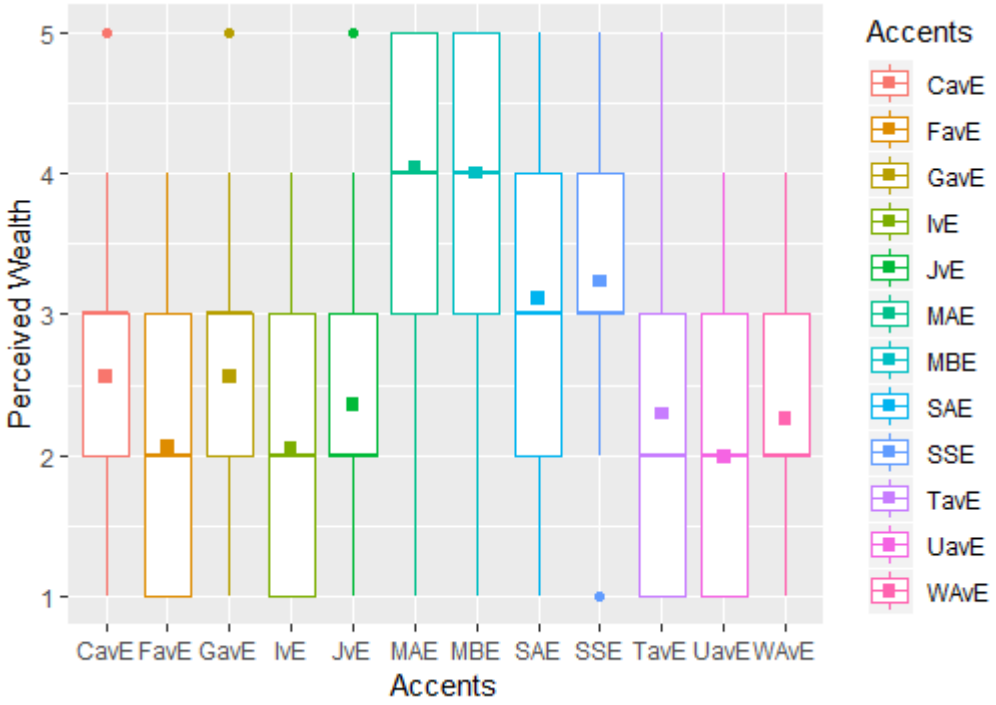


Figure 4.11. Boxplot for Perceived Wealth (combined for gender)

Figure 4.11 shows the mean scores of perceived wealth. Inner circle varieties have received the highest ratings for this characteristic, MAE (mean=4.04, SD=0.999) being evaluated positively in particular, followed by MBE (mean=4.00, SD=0.940), SSE (mean=3.23, SD=1.031), and SAE (mean=3.12, SD=1.068) guises. Ukrainian (mean=1.99, SD=0.831) variety of English has received the lowest mean scores for perceived wealth, followed by Indian (mean=2.05, SD=0.829), French (mean=2.06, SD=0.869), and West African (mean=2.25, SD=0.829) varieties.

4.1.4 Normality Tests

After the mean scores were calculated, normality tests were conducted in order to see if the data were distributed normally. Table 4.3 shows the results of Shapiro-Wilk, Kolmogorov-Smirnov, and Anderson-Darling tests for the dependent variable of perceived attractiveness. Results show that all three tests have resulted in $p < 0.001$, therefore it was confirmed and cross validated that the data are not normally distributed.

Table 4.3 Normality Test (Study 1, METU NCC)

Shapiro-Wilk Test W = 0.88872, p-value < 2.2e-16
Kolmogorov-Smirnov Test D = 0.19149, p-value < 2.2e-16
Anderson-Darling Test A = 58.045, p-value < 2.2e-16

4.1.5 Homogeneity Tests

After it was confirmed that the data are not normally distributed, several tests for homogeneity were conducted to test homoscedasticity of variances. Table 4.4 shows the results of Barlett and Levene Tests of Homogeneity of Variances for the dependent variable of perceived attractiveness. Both tests reveal that the homogeneity of variance was not established $p < 0.001$.

Table 4.4 Homogeneity Test (Study 1, METU NCC)

Bartlett Test of Homogeneity of Variances
Bartlett's K-squared = 40.488, df = 11, p-value = 0.00002951

Levene's Test for Homogeneity of Variance

Df	F value	Pr(>F)
11	3.5745	0.00005421 ***

4.1.6 Origin Identification Task

This study examined if the TPTEs were able to identify the origin of the speakers based on the accent alone. Table 4.5 shows correct origin identification rate separated for gender.

Table 4.5 Correct origin identification rates (separated for gender)

N=65	Mean	SD	Correct %	Incorrect %
TavE (m)	0.77	0.425	76.9	23.1
MAE (m)	0.55	0.501	55.4	44.6
UavE (f)	0.51	0.504	50.8	49.2
TavE (f)	0.51	0.504	50.8	49.2
MBE (m)	0.49	0.504	49.2	50.8
SAE (m)	0.45	0.501	44.6	55.4
MAE (f)	0.45	0.501	44.6	55.4
MBE (f)	0.40	0.494	40.0	60.0
SAE (f)	0.29	0.458	29.2	70.8
IvE (m)	0.23	0.425	23.1	76.9
WAvE (f)	0.17	0.378	16.9	83.1
FavE (m)	0.15	0.364	15.4	84.6
UavE (m)	0.14	0.348	13.8	86.2
WAvE (m)	0.11	0.312	10.8	89.2
FavE (f)	0.09	0.292	9.2	90.8
IvE (f)	0.08	0.269	7.7	92.3
SSE (m)	0.06	0.242	6.2	93.8
GavE (f)	0.06	0.242	6.2	93.8
GavE (m)	0.03	0.174	3.1	96.9
JvE (f)	0.03	0.174	3.1	96.9
CavE (m)	0.03	0.174	3.1	96.9
CavE (f)	0.02	0.124	1.5	98.5
SSE (f)	0.00	0.000	0	100.0
JvE (m)	0.00	0.000	0	100.0

In order to see the broader picture, correct origin identification rates combined for gender were analyzed (Table 4.6). Results clearly show that TPTEs have the highest correct identification rate of their L1 accent, Turkish accented variety of English, followed by MAE, MBE, and SAE. JvE, CavE, and SSE have received the lowest origin identification rates. These results are in contrast with previous research findings (Carrie, 2014; Carrie & McKenzie, 2018), where the prospective Spanish teachers of English had higher origin identification rates for MBE in comparison to MAE.

Table 4.6 Correct origin identification rates (combined for gender)

Variety	**Correct Identification**	**Percent %**
TavE	83	64
MAE	65	50
MBE	58	45
SAE	48	37
UavE	42	32
IvE	20	15
WavE	18	14
FavE	16	12
GavE	6	5
SSE	4	3
CavE	3	2
JvE	2	2

The origin identification task was optional and open-ended; therefore, the unanswered items were considered as a failure to identify the targeted variety. Whether the responses given can be considered as being *correct* or *incorrect* is subject to some debate, however it is important to have an open mind when it comes to non-native speaker identifications (McKenzie, 2010, p. 125). Therefore, the following criteria were followed while interpreting the identifications of the participants:

- *American, US, American English, somewhere in the US*, and *the States* were accepted when the participants were identifying the origin of the MAE speakers,
- *United Kingdom, English, England, British*, and *Standard British* were accepted when the participants were identifying the origin of the MBE speakers,
- *American, Southern US, Texas, Southern American*, and *somewhere in the US* were accepted for the successful identification of the SAE speakers, because these answers showed that the participants were able to differentiate SAE from MBE and SSE varieties,
- *Scottish, Scotland, Scotch*, and *Iskoç* (meaning Scottish in Turkish) answers were considered as the correct identification of the SSE speakers (no answers included 'from the UK' or 'UK' in the origin identification task for the SSE speakers)
- *Turkish, East of Turkey, Istanbul dialect, Diyarbak*ır and *Türk* answers were considered successful for the identification of TavE speakers,
- *Ukrainian, Russian*, and *Eastern European* answers were accepted as the correct identification for the UavE speakers,
- *African* and *Africa* were considered as successful identifications for the WAvE speakers,
- *Jamaica* and *Jamaican* were considered as correct identifications for the JvE speakers,
- *France and French* were the answers that were accepted as the correct identification for the FavE speakers,
- *German* and *Germany* answers were considered as correct for the identification of the GavE speakers were accepted,
- *Chinese, China, Asia* and *Asian* were accepted as the correct identification for the CavE speakers,
- *Indian, Indian English, Pakistan, Pakistani*, and *Hintli* (meaning Indian in Turkish) were considered to be successful identifications for the IvE speakers.

4.2 Inferential Statistics: Ordered Logistic Regression (OLR)

4.2.1 OLR Results Separated for Gender

OLR results of the varieties separated for gender for all seven dependent variables are provided below for several reasons. Firstly, the following analysis is able to show that when some of the varieties are analyzed separately for gender, their impact on the perception of dependent variables may statistically differ. Although a more holistic and statistically robust perspective can be gained through the inclusion of all genders, and even though results separated for gender should not be interpreted as final, knowing to what extent each gender plays a role in the perception of specific characteristics by the subjects will provide a broader understanding. Male speaker of Indian variety of English was set as the base group due to being redundant in the following cases. Table 4.7 shows the evaluations of perceived attractiveness for each variety separated for gender.

Table 4.7 Results for Perceived Attractiveness (separated for gender)

	Estimate	Std.Error	z value	Pr(>|z|)	
SAE_F	3.5072	0.3379	10.380	< 2e-16	***
SAE_M	2.2109	0.3507	6.305	2.89e-10	***
MAE_F	4.5871	0.3509	13.071	< 2e-16	***
MAE_M	5.6098	0.3646	15.385	< 2e-16	***
MBE_F	4.7746	0.3494	13.663	< 2e-16	***
MBE_M	5.4783	0.3645	15.029	< 2e-16	***
SSE_F	3.8901	0.3428	11.347	< 2e-16	***
SSE_M	2.8203	0.3411	8.268	< 2e-16	***
UavE_F	0.6211	0.3382	1.836	0.06630	.
UavE_M	0.7750	0.3353	2.312	0.02080	*
TavE_F	2.6298	0.3343	7.867	3.62e-15	***
TavE_M	-0.5014	0.3663	-1.369	0.17106	
FavE_F	0.8302	0.3350	2.478	0.01320	*
FavE_M	1.3888	0.3295	4.215	2.49e-05	***
GavE_F	0.9155	0.3283	2.789	0.00529	**
GavE_M	2.5840	0.3343	7.729	1.08e-14	***
JvE_F	1.8159	0.3326	5.460	4.75e-08	***
JvE_M	0.8308	0.3307	2.512	0.01199	*
CavE_F	2.9797	0.3407	8.745	< 2e-16	***
CavE_M	0.4924	0.3353	1.469	0.14188	
WAvE_F	1.7512	0.3320	5.275	1.33e-07	***
WAvE_M	0.8233	0.3394	2.426	0.01528	*
IvE_F	1.3470	0.3353	4.018	5.88e-05	***
Sig.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

It is significantly estimated that once the female Ukrainian accent is heard, it affects the perception of attractiveness positively, at 10 percent significance level. All of the inner circle varieties, along with Turkish, Jamaican, West African, Chinese, and Indian female speakers, affect the perception of attractiveness very positively once they are heard, at 0.1 percent significance level ($p<0.001$). French and German male speaker guises were also significantly estimated to affect the perception of attractiveness very positively, at 0.1 percent significance level. In other words, except for Turkish male and Indian male guises, all of the remaining varieties were significantly estimated to affect the perception of attractiveness positively.

Table 4.8 shows the results of perceived education level. The following statistically significant estimations were made.

Table 4.8 Results for Perceived Education Level (separated for gender)

	Estimate	Std.Error	z value	Pr(>|z|)	
SAE_F	3.9539	0.3422	11.554	< 2e-16	***
SAE_M	2.5191	0.3262	7.722	1.14e-14	***
MAE_F	5.1530	0.3493	14.750	< 2e-16	***
MAE_M	5.7991	0.3538	16.390	< 2e-16	***
MBE_F	5.1227	0.3432	14.927	< 2e-16	***
MBE_M	5.5153	0.3499	15.762	< 2e-16	***
SSE_F	3.5167	0.3302	10.650	< 2e-16	***
SSE_M	3.1354	0.3301	9.497	< 2e-16	***
UavE_F	0.6216	0.3172	1.960	0.050021	.
UavE_M	1.1835	0.3174	3.729	0.000193	***
TavE_F	2.7263	0.3305	8.249	< 2e-16	***
TavE_M	-0.4063	0.3247	-1.251	0.210798	
FavE_F	0.8433	0.3168	2.662	0.007776	**
FavE_M	1.8915	0.3226	5.863	4.55e-09	***
GavE_F	0.9470	0.3187	2.971	0.002966	**
GavE_M	3.4156	0.3354	10.184	< 2e-16	***
JvE_F	2.1138	0.3331	6.347	2.20e-10	***
JvE_M	1.0214	0.3159	3.233	0.001223	**
CavE_F	2.9630	0.3279	9.036	< 2e-16	***
CavE_M	1.1615	0.3177	3.655	0.000257	***
WAvE_F	1.7134	0.3200	5.355	8.58e-08	***
WAvE_M	1.5026	0.3226	4.658	3.19e-06	***
IvE_F	1.4709	0.3274	4.493	7.04e-06	***
Sig.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

Table 4.8 shows that all of the inner circle varieties affect the perception of education level very positively, at 0.1 percent significance level (p<0.001), although the SAE male guise was perceived to affect the education level slightly less positively in comparison to the inner circle guises, as well as Turkish female (p<0.001), German male (p<0.001), and Chinese female speaker (p<0.001) guises. Excluding the Turkish male guise, all of the remaining varieties were estimated to affect the perception of education level positively. When the Ukrainian female speaker guise was heard, it affected the perception of the education level positively at 10 percent significance level.

Table 4.9 shows the results of perceived language proficiency in English. All of the varieties, except for female Ukrainian, male Indian, and male Turkish accented guises, were significantly estimated to have a positive effect on perceived language proficiency in English, at less than 1 percent significance level (p<0.001).

Table 4.9 Results for Perceived Language Proficiency (separated for gender)

	Estimate	Std.Error	z value	Pr(>|z|)	
SAE_F	4.4401	0.3517	12.624	< 2e-16	***
SAE_M	4.1030	0.3544	11.577	< 2e-16	***
MAE_F	6.5950	0.3809	17.315	< 2e-16	***
MAE_M	6.8119	0.3854	17.674	< 2e-16	***
MBE_F	6.2288	0.3650	17.066	< 2e-16	***
MBE_M	6.6652	0.3835	17.378	< 2e-16	***
SSE_F	4.3608	0.3410	12.787	< 2e-16	***
SSE_M	4.2096	0.3456	12.181	< 2e-16	***
UavE_F	0.2187	0.3306	0.661	0.508296	
UavE_M	2.2919	0.3354	6.833	8.32e-12	***
TavE_F	3.3644	0.3370	9.982	< 2e-16	***
TavE_M	-0.2650	0.3397	-0.780	0.435375	
FavE_F	1.1107	0.3276	3.390	0.000699	***
FavE_M	2.1147	0.3305	6.398	1.57e-10	***
GavE_F	1.7294	0.3345	5.171	2.33e-07	***
GavE_M	4.2800	0.3425	12.496	< 2e-16	***
JvE_F	2.9579	0.3358	8.808	< 2e-16	***
JvE_M	1.6316	0.3305	4.937	7.92e-07	***
CavE_F	3.9059	0.3397	11.497	< 2e-16	***
CavE_M	1.6368	0.3308	4.948	7.50e-07	***
WAvE_F	2.3749	0.3335	7.122	1.07e-12	***
WAvE_M	1.9938	0.3273	6.091	1.12e-09	***
IvE_F	1.7556	0.3371	5.208	1.91e-07	***
Sig.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

Several statistically significant estimations can be made from Table 4.10, which shows the OLR results of perceived native speaker status. All of the varieties (p<0.001), besides male Turkish and female Ukrainian speaker samples had a positive effect on perceived native speaker status, at 0.1 percent significance level. Interestingly, SSE male speaker guise was perceived to be slightly less native, not only in comparison to the other inner circle varieties, but also in comparison to Chinese female speaker (p<0.001) guise as well.

Table 4.10 Results for Perceived Nativeness (separated for gender)

	Estimate	Std.Error	z value	Pr(>|z|)	
SAE_F	4.90678	0.52143	9.410	< 2e-16	***
SAE_M	4.83884	0.52088	9.290	< 2e-16	***
MAE_F	6.89514	0.54800	12.582	< 2e-16	***
MAE_M	7.35739	0.56652	12.987	< 2e-16	***
MBE_F	6.74741	0.54144	12.462	< 2e-16	***
MBE_M	7.30771	0.56693	12.890	< 2e-16	***
SSE_F	4.46870	0.51750	8.635	< 2e-16	***
SSE_M	3.80561	0.52486	7.251	4.14e-13	***
UavE_F	0.61475	0.58661	1.048	0.294645	
UavE_M	2.60445	0.52093	5.000	5.74e-07	***
TavE_F	2.49757	0.51925	4.810	1.51e-06	***
TavE_M	-0.02029	0.65762	-0.031	0.975388	
FavE_F	1.66053	0.53191	3.122	0.001797	**
FavE_M	2.14589	0.52507	4.087	4.37e-05	***
GavE_F	1.70715	0.53270	3.205	0.001352	**
GavE_M	3.78930	0.51976	7.290	3.09e-13	***
JvE_F	3.03010	0.51911	5.837	5.31e-09	***
JvE_M	2.01421	0.52487	3.838	0.000124	***
CavE_F	3.89314	0.51824	7.512	5.81e-14	***
CavE_M	1.61719	0.53763	3.008	0.002630	**
WAvE_F	3.30703	0.52255	6.329	2.47e-10	***
WAvE_M	2.15452	0.52573	4.098	4.16e-05	***
IvE_F	1.89054	0.52747	3.584	0.000338	***
Sig.codes:‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1					

Table 4.11 shows the results for perceived intelligibility. Following statistically significant estimations can be made. Only male Chinese speaker guise was estimated to have a statistically significant negative effect on the perception of intelligibility, at five percent significance level (p<0.005). MAE and MBE guises, including all genders, were perceived to have the most

positive effects on intelligibility, followed by the female SSE, female SAE, male SAE, and male SSE speaker guises, in that order.

Table 4.11 Results for Perceived Intelligibility (separated for gender)

	Estimate	Std.Error	z value	Pr(>|z|)	
SAE_F	2.4784	0.3311	7.486	7.09e-14	***
SAE_M	2.0359	0.3334	6.106	1.02e-09	***
MAE_F	4.2956	0.3766	11.405	< 2e-16	***
MAE_M	4.8133	0.4101	11.738	< 2e-16	***
MBE_F	4.1692	0.3614	11.537	< 2e-16	***
MBE_M	4.6942	0.4012	11.700	< 2e-16	***
SSE_F	2.4935	0.3236	7.706	1.30e-14	***
SSE_M	1.8423	0.3308	5.569	2.56e-08	***
UavE_F	-0.3355	0.3153	-1.064	0.287358	
UavE_M	1.0871	0.3119	3.486	0.000491	***
TavE_F	2.1364	0.3283	6.508	7.63e-11	***
TavE_M	-0.3760	0.3268	-1.150	0.250011	
FavE_F	0.0165	0.3158	0.052	0.958339	
FavE_M	0.9106	0.3166	2.877	0.004021	**
GavE_F	0.8236	0.3150	2.615	0.008932	**
GavE_M	2.2679	0.3253	6.972	3.13e-12	***
JvE_F	1.0009	0.3183	3.144	0.001666	**
JvE_M	0.7140	0.3180	2.245	0.024751	*
CavE_F	1.9691	0.3215	6.126	9.03e-10	***
CavE_M	-0.6767	0.3240	-2.088	0.036765	*
WAvE_F	1.2524	0.3197	3.918	8.94e-05	***
WAvE_M	0.6980	0.3172	2.201	0.027763	*
IvE_F	0.8733	0.3224	2.709	0.006753	**
Sig.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

Table 4.12 shows the following statistically significant estimations for perceived wealth. Firstly, all of the inner circle varieties have a positive effect on the perception of wealth, at 0.1 percent significance level. However, it is worth mentioning that female Chinese guise was perceived to be wealthier than the male Southern American guise, at 0.1 percent significance level. All of the varieties were significantly estimated to have a positive effect on the perception of wealth, besides male Turkish, female Ukrainian, female French, and male Chinese speaker guises. Ukrainian male speaker guise was significantly estimated to have a positive effect on the perceived wealth, at 10 percent significance level. Male Jamaican and

female German guises (p<0.005) were perceived to be wealthy, at 5 percent significance level. Male German and female Turkish speakers were also perceived as being wealthy, at 0.1 percent significance level. It was significantly estimated that once the female German and male Jamaican guises (p<0.005) were heard, they affected perceptions of wealth positively, at 5 percent significance level.

Table 4.12 Results for Perceived Wealth (separated for gender)

	Estimate	Std.Error	z value	Pr(>|z|)	
SAE_F	2.8414	0.3322	8.555	< 2e-16	***
SAE_M	2.3902	0.3345	7.147	8.89e-13	***
MAE_F	4.1262	0.3377	12.219	< 2e-16	***
MAE_M	4.7323	0.3423	13.825	< 2e-16	***
MBE_F	4.1663	0.3356	12.416	< 2e-16	***
MBE_M	4.4237	0.3388	13.057	< 2e-16	***
SSE_F	2.9506	0.3287	8.977	< 2e-16	***
SSE_M	2.7577	0.3347	8.238	< 2e-16	***
UavE_F	0.3463	0.3216	1.077	0.281670	
UavE_M	0.5435	0.3181	1.708	0.087551	.
TavE_F	2.2299	0.3288	6.782	1.18e-11	***
TavE_M	-0.4064	0.3284	-1.238	0.215877	
FavE_F	0.1321	0.3228	0.409	0.682277	
FavE_M	0.9915	0.3179	3.119	0.001817	**
GavE_F	0.7618	0.3186	2.391	0.016810	*
GavE_M	2.2405	0.3274	6.842	7.80e-12	***
JvE_F	1.6165	0.3293	4.909	9.14e-07	***
JvE_M	0.6618	0.3188	2.076	0.037874	*
CavE_F	2.4945	0.3243	7.693	1.44e-14	***
CavE_M	0.5083	0.3184	1.596	0.110396	
WAvE_F	1.0276	0.3153	3.259	0.001116	**
WAvE_M	0.8879	0.3165	2.805	0.005031	**
IvE_F	1.1325	0.3165	3.579	0.000346	***
Sig.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

Table 4.13 shows the OLR results for perceived politeness. Female German speaker was significantly estimated to effect the perception of politeness negatively and was perceived to be rude, at 10 percent significance level. However, when the female Ukrainian speaker was heard, her accent was perceived to be polite at 10 percent significance level. All of the inner circle varieties (p<0.001) were significantly estimated to have a positive effect on the

perceived politeness once they were heard, at 0.1 percent significance level, besides the male SAE speaker. It was significantly estimated that when the female Turkish speaker was heard, she was perceived to be polite, at 0.1 percent significance level.

Table 4.13 Results for Perceived Politeness (separated for gender)

	Estimate	Std.Error	z value	Pr(>|z|)	
SAE_F	2.1283	0.3178	6.697	2.13e-11	***
SAE_M	0.2336	0.3219	0.726	0.46796	
MAE_F	2.6107	0.3367	7.755	8.84e-15	***
MAE_M	2.7184	0.3359	8.093	5.83e-16	***
MBE_F	2.7150	0.3332	8.149	3.66e-16	***
MBE_M	3.2035	0.3570	8.974	< 2e-16	***
SSE_F	2.5460	0.3328	7.650	2.01e-14	***
SSE_M	0.9006	0.3174	2.837	0.00455	**
UavE_F	0.5310	0.3092	1.717	0.08593	.
UavE_M	0.1726	0.3133	0.551	0.58165	
TavE_F	1.7202	0.3185	5.400	6.66e-08	***
TavE_M	-0.2770	0.3288	-0.843	0.39949	
FavE_F	0.9375	0.3092	3.032	0.00243	**
FavE_M	1.0014	0.3082	3.249	0.00116	**
GavE_F	-0.5291	0.3157	-1.676	0.09378	.
GavE_M	1.3441	0.3092	4.347	1.38e-05	***
JvE_F	0.8760	0.3129	2.800	0.00511	**
JvE_M	0.3727	0.3082	1.209	0.22654	
CavE_F	1.8840	0.3131	6.016	1.78e-09	***
CavE_M	0.2766	0.3163	0.875	0.38180	
WAvE_F	0.4576	0.3133	1.461	0.14411	
WAvE_M	0.3950	0.3104	1.273	0.20305	
IvE_F	1.2605	0.3111	4.051	5.10e-05	***
Sig.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

Results provided in Section 4.2.1 show that the gender of the speakers has a significant effect on TPTEs' perceptions, and that the OLR analysis is able to provide an in-depth analysis regarding the effects of speaker gender on TPTEs' evaluations.

4.2.2 OLR Results Combined for Gender

4.2.2.1 Perceptions of Attractiveness

Table 4.14 shows the overall results for perceived attractiveness combined for gender. Table 4.15 shows whether the dependent variable was perceived negatively, positively, or as having no significant effect in this observation sample.

Table 4.14 Perceived Attractiveness (combined for gender)

	Estimate	Std.Error	z value	Pr(>|z|)	
FavE	-0.53788	0.22540	-2.386	0.0170	*
GavE	0.01522	0.22553	0.067	0.9462	
IvE	-0.94498	0.23042	-4.101	4.11e-05	***
JvE	-0.35900	0.22454	-1.599	0.1099	
MAE	3.14464	0.24690	12.736	< 2e-16	***
MBE	3.15949	0.24635	12.825	< 2e-16	***
SAE	1.10325	0.23216	4.752	2.01e-06	***
SSE	1.50746	0.23121	6.520	7.04e-11	***
TavE	-0.49486	0.23289	-2.125	0.0336	*
UavE	-0.92979	0.23007	-4.041	5.31e-05	***
WAvE	-0.36610	0.22711	-1.612	0.1070	
Sig.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

Table 4.15 Attractive and Unattractive Varieties

Rank	- (Unattractive)	0 (No effect)	+ (Attractive)
1	IvE	GavE	MBE
2	UavE	JvE	MAE
3	FavE	WAvE	SSE
4	TavE	CavE	SAE

Tables 4.14 and 4.15 show that all of the inner circle varieties were perceived as attractive, at 0.1 percent significance level. IvE and UavE were perceived as the most unattractive varieties once they were heard, at 0.1 percent significance level. TavE and FavE were significantly estimated to affect the perception of attractiveness negatively, by also being perceived as unattractive varieties, at 5 percent significance level.

4.2.2.2 Perceptions of Education Level

Table 4.16 shows that, just like with the perceived attractiveness, inner circle varieties were perceived as the most educated varieties. Remaining expanding and outer circle varieties, besides German and West African, were perceived negatively by the participants in terms of the perceived education level. MAE was significantly estimated to be perceived as the most educated variety once it was heard, followed by MBE, SSE, and SAE, at 0.1 percent significance level. OLR results also show that when Indian ($p<0.001$), Ukrainian ($p<0.001$), Turkish ($p<0.001$), and French ($p<0.01$) varieties are being heard, they are being perceived as 'uneducated', former being perceived as the most uneducated (Table 4.17). Even though CavE and WAvE varieties did not result in statistically significant estimations ($p>0.05$) in case of this study, it is worth mentioning that when they are heard, they affect the perceptions of education level positively, at 10 percent significance level.

Table 4.16 Perceived Education Level (combined for gender)

	Estimate	Std.Error	z value	Pr(>|z|)	
FavE	-0.61832	0.22467	-2.752	0.005922	**
GavE	0.06915	0.23177	0.298	0.765422	
IvE	-1.23388	0.22880	-5.393	6.93e-08	***
JvE	-0.46686	0.22738	-2.053	0.040050	*
MAE	3.20549	0.25061	12.791	< 2e-16	***
MBE	3.04360	0.24656	12.344	< 2e-16	***
SAE	1.04105	0.23120	4.503	6.71e-06	***
SSE	1.15457	0.22802	5.063	4.12e-07	***
TavE	-0.80422	0.23658	-3.399	0.000675	***
UavE	-1.02864	0.22534	-4.565	5.00e-06	***
WAvE	-0.39415	0.22451	-1.756	0.079156	.
Sig.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

Table 4.17 Educated and Uneducated Varieties

Rank	- (Unducated)	0 (No effect)	+ (Educated)
1	IvE	GavE	MAE
2	UavE	WAvE*	MBE
3	TavE	CavE*	SSE
4	FavE		SAE
5	JvE		

4.2.2.3 Perceptions of Politeness

Table 4.18 shows that Turkish prospective English teachers' perceptions of politeness are influenced positively when they hear the inner circle varieties, except for Southern American English. Outer and expanding circle varieties, besides French and Turkish, were all perceived negatively in terms of perceived politeness.

Table 4.18 Perceived Politeness (combined for gender)

	Estimate	Std.Error	z value	Pr(>|z|)	
FavE	-0.14519	0.21651	-0.671	0.50248	
GavE	-0.61171	0.22237	-2.751	0.00594	**
IvE	-0.45041	0.22002	-2.047	0.04064	*
JvE	-0.47143	0.21853	-2.157	0.03098	*
MAE	1.47780	0.23604	6.261	3.83e-10	***
MBE	1.74956	0.24114	7.255	4.00e-13	***
SAE	0.09855	0.22414	0.440	0.66018	
SSE	0.56091	0.22651	2.476	0.01327	*
TavE	-0.28150	0.22932	-1.228	0.21963	
UavE	-0.71558	0.21950	-3.260	0.00111	**
WAvE	-0.65123	0.21958	-2.966	0.00302	**
Sig.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

It was significantly estimated that when MBE and MAE speakers are heard, then their accents affect the perception of politeness positively, at 0.1 percent significance level. Similarly, when SSE is being heard, it is perceived to be polite, at 5 percent significance level. Out of the expanding circle varieties, UavE was perceived as the rudest variety ($p<0.01$), followed by GavE ($p<0.01$). Out of the outer circle varieties, WAvE was perceived as the rudest ($p<0.01$), followed by JvE ($p<0.05$). Interestingly, only Chinese accented variety of English out of the expanding circle varieties was perceived as being polite, at 1 percent significance level. Table 4.19 provides a breakdown of the varieties that are perceived as being polite and rude.

Table 4.19 Polite and Rude Varieties

Rank	- (Rude)	0 (No effect)	+ (Polite)
1	UavE	FavE	MBE
2	WAvE	SAE	MAE
3	GavE	TavE	SSE
4	JvE		CavE
5	IvE		

4.2.2.4 Perceptions of Language Proficiency

Table 4.20 shows the OLR results of the observation sample for perceived language proficiency. It is significantly estimated that when the inner circle accents are being heard, then the listeners perceive the speakers of those accents to be proficient in English. On the other hand, when outer and expanding circle varieties are being heard, besides GavE, listeners perceive the speakers of those accents as not being proficient in English. No statistically significant estimations were reached for GavE in terms of perceived language proficiency within the current population sample. Relatedly, it is worth noting that even though no statistically significant estimations were able to be made for JvE ($p>0.05$), once the JvE was heard by the participants, it affected the perceptions of language proficiency positively, at 10 percent significance level (at 90% confidence interval).

Table 4.20 Perceived Language Proficiency

	Estimate	Std.Error	z value	Pr(>|z|)
FavE	-1.0142	0.2227	-4.554	5.26e-06 ***
GavE	0.2179	0.2276	0.957	0.3384
IvE	-1.6816	0.2310	-7.280	3.33e-13 ***
JvE	-0.4318	0.2228	-1.938	0.0527 .
MAE	3.6722	0.2646	13.879	< 2e-16 ***
MBE	3.4045	0.2566	13.267	< 2e-16 ***
SAE	1.3388	0.2337	5.729	1.01e-08 ***
SSE	1.3436	0.2268	5.924	3.14e-09 ***
TavE	-1.0565	0.2342	-4.510	6.48e-06 ***
UavE	-1.3394	0.2288	-5.854	4.81e-09 ***
WAvE	-0.5281	0.2205	-2.395	0.0166 *
Sig.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1				

MAE was significantly estimated to be perceived as the most proficient accent of English, followed by MBE, both at 0.1 percent significance level. The model varieties ($p<0.001$) were followed by SSE and SAE accents, in that order, both at 0.1 percent significance level. It is worth noting that CavE was the only expanding circle variety that was perceived positively for language proficiency level in English, at 5 percent significance level. It was significantly estimated that when IvE is being heard, then the speaker is being perceived as improficient in English, at 0.1 percent significance level. Besides IvE, other varieties that were perceived negatively for language proficiency in English were UavE ($p<0.001$), TavE ($p<0.001$), FavE ($p<0.001$) and WAvE ($p<0.05$), in that order. Relatedly, it is worth noting that JvE is also being perceived negatively and leads to the perception of an improficient speaker of English, at 10 percent significance level. Table 4.21 shows the orderings of the varieties based on perceived language proficiency.

Table 4.21 Proficient and Improficient Varieties

Rank	**-** **(Improficient in English)**	**0** **(No effect)**	**+** **(Proficient in English)**
1	IvE	GavE	MAE
2	UavE	JvE*	MBE
3	TavE		SSE
4	FavE		SAE
5	WAvE		CavE

4.2.2.5 Perceptions of Wealth

Table 4.22 shows the perceptions of wealth. It is significantly estimated that when the inner circle varieties are being heard, their speakers are perceived to be wealthy by the observation sample, at 0.1 percent significance level. Besides German and Jamaican, all of the remainder varieties are significantly estimated to lead to a perception of a poor speaker, economically speaking.

Table 4.22 Perceived Wealth (combined for gender)

	Estimate	Std.Error	z value	Pr(>|z|)	
FavE	-0.87565	0.22643	-3.867	0.00011	***
GavE	-0.01291	0.22728	-0.057	0.95469	
IvE	-0.87961	0.22466	-3.915	9.03e-05	***
JvE	-0.36195	0.22751	-1.591	0.11163	
MAE	2.79925	0.24183	11.575	< 2e-16	***
MBE	2.66554	0.23938	11.135	< 2e-16	***
SAE	1.05013	0.23205	4.525	6.03e-06	***
SSE	1.27314	0.23128	5.505	3.70e-08	***
TavE	-0.55855	0.23170	-2.411	0.01593	*
UavE	-0.99573	0.22643	-4.398	1.09e-05	***
WAvE	-0.51093	0.22232	-2.298	0.02155	*
Sig.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

Results show that MAE was perceived to be the wealthiest variety, followed by MBE, SSE, and SAE, in that order, at 0.1 percent significance level. It is significantly estimated that once Ukrainian accent is heard, it is perceived as being poor at 0.01 percent significance level, followed by Indian (99.9%), French (99.9%), Turkish (95%), and West African (95%). Table 4.23 shows the orderings of the varieties in relation to perceived wealth.

Table 4.23 Wealthy and Poor Varieties

Rank	**-** **(Unwealthy\Poor)**	**0** **(No effect)**	**+** **(Wealthy)**
1	UavE	GavE	MAE
2	IvE	JvE	MBE
3	FavE		SSE
4	TavE		SAE
5	WAvE		CavE

4.2.2.6 Perceptions of Native Speaker Status

Table 4.24 shows that inner circle varieties were perceived positively for native speaker status. The speakers of the remaining varieties, besides German, Jamaican, and West African, were perceived negatively for native speaker status, at 0.1 percent significance level.

Tables 4.24 and 4.25 show that MAE is the most favorably evaluated variety for perceived native speaker status, at 0.1 percent significance level. MAE is followed by MBE (p<0.001), SAE (p<0.001), and SSE (p<0.001) varieties, in that order. It is significantly estimated that once the Indian accent is heard, then the speakers of Indian accent are being perceived as non-native (i.e. foreign) speakers, at 0.1 percent significance level, followed by Turkish (p<0.001), Ukrainian (p<0.001), and French (p<0.001) accents, in that order.

Table 4.24 Perceived Nativeness (combined for gender)

	Estimate	Std.Error	z value	Pr(>|z|)	
FavE	-0.90403	0.24034	-3.762	0.000169	***
GavE	-0.05939	0.23227	-0.256	0.798198	
IvE	-1.57508	0.26601	-5.921	3.20e-09	***
JvE	-0.30687	0.23099	-1.328	0.184014	
MAE	4.11422	0.27489	14.967	< 2e-16	***
MBE	3.99993	0.27017	14.805	< 2e-16	***
SAE	1.91021	0.23112	8.265	< 2e-16	***
SSE	1.23994	0.22957	5.401	6.62e-08	***
TavE	-1.18058	0.24995	-4.723	2.32e-06	***
UavE	-1.01801	0.24587	-4.141	3.46e-05	***
WAvE	-0.11012	0.23354	-0.472	0.637251	
Sig.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

Table 4.25 Native and Foreign Varieties

Rank	**-** **(Foreign\Non-Native Speaker)**	**0** **(No effect)**	**+** **(Native Speaker)**
1	IvE	GavE	MAE
2	TavE	JvE	MBE
3	UavE	WAvE	SAE
4	FavE	CavE	SSE

4.2.2.7 Perceptions of Intelligibility

Table 4.26 shows that all of the inner circle varieties are perceived to be significantly intelligible by the observation sample, at 0.1 percent significance level. The only expanding circle variety that was significantly estimated to be perceived as intelligible was German, at 0.1 percent significance level. MAE variety was perceived as the most intelligible variety,

followed by MBE, SAE, and SSE, in that order, at 0.1 percent significance level. GavE was the only variety that was perceived as intelligible by the population sample, also at 1 percent significance level. Table 4.27 shows the orderings of the varieties for perceived intelligibility.

Table 4.26 Perceived Intelligibility (combined for gender)

	Estimate	Std.Error	z value	Pr(>|z|)
FavE	-0.2268	0.2247	-1.009	0.312974
GavE	0.7505	0.2280	3.292	0.000994 ***
IvE	-0.2495	0.2287	-1.091	0.275303
JvE	0.1362	0.2254	0.604	0.545701
MAE	3.6559	0.2799	13.059	< 2e-16 ***
MBE	3.5233	0.2708	13.012	< 2e-16 ***
SAE	1.4422	0.2355	6.124	9.12e-10 ***
SSE	1.3738	0.2316	5.930	3.02e-09 ***
TavE	0.1759	0.2337	0.753	0.451627
UavE	-0.2940	0.2245	-1.310	0.190201
WAvE	0.2408	0.2256	1.068	0.285724
Sig.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1				

Table 4.27 Intelligible and Unintelligible Varieties

Rank	**-** **(Untelligible)**	**0** **(No effect)**	**+** **(Intelligible)**
1		FavE	MAE
2		JvE	MBE
3		WAvE	SAE
4		TavE	SSE
5		UavE	GavE
		IvE	
		CavE	

Table 4.27 shows that there aren't any significant estimates for the perception of unintelligibility in this observation sample. However, it is significantly estimated that MAE ($p<0.001$) accent is perceived as the most intelligible variety once it is heard, followed by MBE ($p<0.001$), SAE ($p<0.001$), SSE ($p<0.001$), and GavE ($p<0.001$), in that order.

4.2.3 Origin Identification and Perceived Attractiveness

In order to investigate whether the correct identification of the varieties plays a significant role on TPTEs' perceptions and evaluations, an OLR analysis was conducted between the selected speech samples and correct variety recognition rate of the speakers separated for gender. The following statistically significant estimates were found for perceived attractiveness. Results show that being able to identify the origin of the female IvE speaker has a positive effect on perceived attractiveness of IvE, at one percent significance level. Similarly, when the female FavE speaker was identified correctly, it affected the perceptions of attractiveness negatively for FavE ($p<0.05$).

Table 4.28 Origin Identification and Perceived Attractiveness

	Estimate	Std. Error	z value	Pr(>|z|)	
FavE	-0.57516	0.22620	-2.543	0.01100	*
GavE	0.01684	0.22571	0.075	0.94051	
IvE	-0.97104	0.23149	-4.195	2.73e-05	***
JvE	-0.37915	0.22572	-1.680	0.09300	.
MAE	3.19934	0.24833	12.884	< 2e-16	***
MBE	3.23102	0.24770	13.044	< 2e-16	***
SAE	1.12418	0.23340	4.816	1.46e-06	***
SSE	1.52102	0.23146	6.571	4.98e-11	***
TavE	-0.51982	0.23456	-2.216	0.02668	*
UavE	-0.93282	0.23125	-4.034	5.49e-05	***
WAvE	-0.37379	0.22775	-1.641	0.10075	
oiWAvE_f	-0.34726	0.21006	-1.653	0.09829	.
oiSAE_f	0.30601	0.14706	2.081	0.03744	*
oiSAE_m	-0.41677	0.13789	-3.022	0.00251	**
oiMAE_f	0.29240	0.14626	1.999	0.04559	*
oiMBE_m	-0.28292	0.12638	-2.239	0.02518	*
oiSSE_m	-0.69539	0.30069	-2.313	0.02074	*
oiGavE_m	-0.95038	0.34404	-2.762	0.00574	**
oiFavE_f	-0.41596	0.23297	-1.785	0.07418	.
oiFavE_m	0.41653	0.16172	2.576	0.01001	*
oiIvE_f	0.71865	0.27624	2.602	0.00928	**
oiUavE_m	-0.34074	0.16539	-2.060	0.03938	*
Signif.codes: '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

Interestingly, results show that the correct origin identification of the male speakers has affected the perceptions of perceived attractiveness negatively. When the origin of the male UavE speaker is identified correctly, it affects the perceptions of attractiveness negatively, at 3 percent significance level. Similarly, when the origin of the male MBE speaker is identified correctly, it affects the perceived attractiveness of the MBE accent negatively, at 2 percent significance level. Similarly, when the origin of the male SAE speaker is being identified correctly, it affects the evaluations of perceived attractiveness of SAE negatively as well, at 0.3 percent significance level. On the contrary, when the origin of the female SAE speaker is identified correctly, it affects the perceived attractiveness of the SAE accent positively as well, at 4 percent significance level. Although, none of the participants were able to identify the origin of the female SSE speaker, results show that when the origin of the male SSE speaker is identified correctly, it affected the perceptions of attractiveness negatively, at 2 percent significance level. These results clearly demonstrate that the gender of the speakers plays an important role when it comes to TPTEs' evaluations regarding perceived attractiveness while also suggesting that some negative bias against the male speakers of the UavE, MBE, SAE, and SSE exists in relation to perceived attractiveness. It is also worth noting that the majority of TPTEs that took part in Study 1 were females (63%).

4.2.4 Origin Identification and Perceived Education Level

Results show that when the origin of the male MBE speaker is identified correctly, it affects the perceptions of the perceived education level for MBE negatively, at 4 percent significance level. Similarly, the correct identification of the male GavE speaker has a negative effect on perceived education level, at 0.1 percent significance level. When the origin of the female UavE speaker is identified correctly, it affects the perceptions of education level positively ($p<0.001$). However, when the origin of the female FavE speaker is identified correctly, it affects the perception of education level negatively, at 0.4 percent significance level. Similarly, when the origin of the female TavE speaker is identified correctly, it affects the perceptions of education level for TavE negatively, at 10 percent significance level.

Table 4.29 Origin Identification and Perceived Education Level

	Estimate	Std.Error	z value	Pr(>|z|)	
FavE	-0.657397	0.226022	-2.909	0.00363	**
GavE	0.053350	0.232929	0.229	0.81884	
IvE	-1.297360	0.230532	-5.628	1.83e-08	***
JvE	-0.514700	0.229160	-2.246	0.02470	*
MAE	3.305380	0.254723	12.976	< 2e-16	***
MBE	3.152697	0.249205	12.651	< 2e-16	***
SAE	1.060107	0.232098	4.567	4.94e-06	***
SSE	1.159047	0.229757	5.045	4.54e-07	***
TavE	-0.830281	0.239604	-3.465	0.00053	***
UavE	-1.059210	0.227329	-4.659	3.17e-06	***
WAvE	-0.412425	0.225366	-1.830	0.06725	.
oiSAE_f	0.322196	0.145135	2.220	0.02642	*
oiMBE_m	-0.258292	0.129781	-1.990	0.04657	*
oiGavE_f	0.421306	0.241804	1.742	0.08145	.
oiGavE_m	-1.652572	0.335435	-4.927	8.37e-07	***
oiFavE_f	-0.651137	0.229156	-2.841	0.00449	**
oiJvE_f	-0.627333	0.370332	-1.694	0.09027	.
oiIvE_m	0.488178	0.156328	3.123	0.00179	**
oiUavE_f	0.521233	0.115425	4.516	6.31e-06	***
oiCavE_f	-0.766849	0.443469	-1.729	0.08377	.
oiCavE_m	0.547661	0.331345	1.653	0.09836	.
oiTavE_f	0.234055	0.141891	1.650	0.09904	.
Signif.codes: '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

4.2.5 Origin Identification and Perceived Language Proficiency

Results (Table 4.30) show that the correct identification of the origin of the female TavE and female UavE speakers have a negative effect on perceived language proficiency of these varieties, at 4 and 0.3 percent significance levels, respectively. Similarly, when the origin of the male IvE speaker is identified correctly, it has a positive effect on perceived language proficiency of IvE, at 0.4 percent significance level. It was significantly estimated that when the origin of the male CavE speaker is identified correctly, it affects the perceptions of language proficiency positively ($p<0.001$), while the correct origin identification of the female

CavE speaker affects the perceptions of language proficiency for CavE negatively, at 10 percent significance level. Results show that once the origin of the male GavE speaker is identified correctly, it affects the perceptions of language proficiency negatively, at 0.1 percent significance level.

Table 4.30 Origin Identification and Perceived Language Proficiency

	Estimate	Std. Error	z value	Pr(>|z|)	
FavE	-1.05654	0.22333	-4.731	2.24e-06	***
GavE	0.20413	0.22800	0.895	0.370638	
IvE	-1.73593	0.23203	-7.481	7.36e-14	***
JvE	-0.46387	0.22296	-2.080	0.037480	*
MAE	3.78575	0.26735	14.160	< 2e-16	***
MBE	3.51565	0.25890	13.579	< 2e-16	***
SAE	1.36051	0.23317	5.835	5.39e-09	***
SSE	1.36718	0.22641	6.038	1.56e-09	***
TavE	-1.10353	0.23546	-4.687	2.78e-06	***
UavE	-1.39274	0.22914	-6.078	1.22e-09	***
WAvE	-0.55326	0.22149	-2.498	0.012493	*
oiMBE_f	0.22673	0.13601	1.667	0.095517	.
oiSSE_m	0.51221	0.29793	1.719	0.085575	.
oiGavE_m	-1.19317	0.33753	-3.535	0.000408	***
oiJvE_f	-0.66135	0.37215	-1.777	0.075546	.
oiIvE_m	0.41554	0.15311	2.714	0.006649	**
oiUavE_f	0.33570	0.11419	2.940	0.003283	**
oiCavE_f	-0.77068	0.46526	-1.656	0.097631	.
oiCavE_m	1.18769	0.34507	3.442	0.000578	***
oiTavE_f	0.28633	0.14139	2.025	0.042861	*
Signif.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

4.2.6 Origin Identification and Perceived Politeness

OLR analysis shows that when the origin of the male IvE speaker is identified correctly, it affects the perceptions of politeness positively ($p<0.05$), at 0.3 percent significance level. Results also show that when the origin of male and female GavE speakers is identified correctly, it affects the perceptions of politeness of GavE negatively, at 2 and 0.4 percent significance levels, respectively. When the origin of the male UavE speaker is identified

correctly, it affects the perceptions of politeness negatively, at 3 percent significance level. However, when the origin of the female Ukrainian speaker is identified correctly, it affects the perceptions of politeness for UavE positively (p<0.001). Once the origin of the female CavE speaker is recognized correctly, it affects the perceptions of politeness positively, at 0.4 percent significance level. The correct origin identification of the male MBE speaker leads to negative perceptions of politeness for MBE, at 0.1 percent significance level. On the contrary, when the origin of the male MAE speaker is identified correctly, it affects the perceptions of politeness positively (p<0.001).

Table 4.31 Origin Identification and Perceived Politeness

	Estimate	Std. Error	z value	Pr(>|z|)	
FavE	-0.14827	0.21918	-0.676	0.498732	
GavE	-0.62937	0.22488	-2.799	0.005132	**
IvE	-0.45203	0.22194	-2.037	0.041681	*
JvE	-0.50871	0.22107	-2.301	0.021384	*
MAE	1.56269	0.24138	6.474	9.55e-11	***
MBE	1.85147	0.24588	7.530	5.07e-14	***
SAE	0.08899	0.22567	0.394	0.693345	
SSE	0.58441	0.22904	2.552	0.010724	*
TavE	-0.29957	0.23081	-1.298	0.194310	
UavE	-0.71994	0.22081	-3.260	0.001112	**
WAvE	-0.66213	0.22063	-3.001	0.002691	**
oiMAE_m	0.96711	0.16025	6.035	1.59e-09	***
oiMBE_m	-0.39338	0.12718	-3.093	0.001980	**
oiGavE_f	-0.72336	0.25242	-2.866	0.004160	**
oiGavE_m	-0.76255	0.33481	-2.278	0.022755	*
oiIvE_m	0.43853	0.15228	2.880	0.003981	**
oiUavE_f	0.60139	0.11326	5.310	1.10e-07	***
oiUavE_m	-0.35603	0.16748	-2.126	0.033519	*
oiCavE_f	-1.20831	0.42580	-2.838	0.004543	**
oiTavE_m	-0.55443	0.15757	-3.519	0.000434	***
Signif.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

4.2.7 Origin Identification and Perceived Native Speaker Status

Table 4.32 shows the OLR results for correcr origin identification and perceived native speaker statıs.

Table 4.32 Origin Identification and Perceived Native Speaker Status

	Estimate	Std. Error	z value	Pr(>|z|)	
FavE	-0.93987	0.24326	-3.864	0.000112	***
GavE	-0.05705	0.23449	-0.243	0.807765	
IvE	-1.64795	0.26962	-6.112	9.83e-10	***
JvE	-0.32965	0.23399	-1.409	0.158897	
MAE	4.25035	0.28076	15.139	< 2e-16	***
MBE	4.12064	0.27526	14.970	< 2e-16	***
SAE	1.94310	0.23383	8.310	< 2e-16	***
SSE	1.27608	0.23116	5.520	3.38e-08	***
TavE	-1.24584	0.25365	-4.912	9.03e-07	***
UavE	-1.07654	0.24965	-4.312	1.62e-05	***
WAvE	-0.11585	0.23557	-0.492	0.622871	
oiWAvE_f	-0.72432	0.23510	-3.081	0.002064	**
oiWAvE_m	0.80392	0.32733	2.456	0.014050	*
oiMAE_m	0.53208	0.17326	3.071	0.002134	**
oiMBE_f	0.23724	0.14335	1.655	0.097929	.
oiMBE_m	-0.23554	0.13895	-1.695	0.090042	.
oiSSE_m	-0.75940	0.34067	-2.229	0.025803	*
oiJvE_f	-0.87464	0.40262	-2.172	0.029826	*
oiIvE_f	0.84155	0.31545	2.668	0.007635	**
oiIvE_m	-0.41929	0.17182	-2.440	0.014672	*
oiUavE_f	-0.56989	0.12451	-4.577	4.72e-06	***
oiCavE_m	-1.34464	0.40413	-3.327	0.000877	***
oiTavE_f	-0.29293	0.15559	-1.883	0.059737	.
oiTavE_m	0.43987	0.16937	2.597	0.009402	**
Signif.codes:‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1					

Results show that when the origin of the male TavE speaker is identified correctly, it affects the perceptions of native speaker status for TavE positively, at 0.9 percent significance level, whereas the correct origin identification of the male CavE speaker affects perceived native speaker status negatively, at 0.08 percent significance level. When the origin of the male SSE speaker is identified correctly, it affects the perceptions of native speaker status for SSE negatively, at 2 percent significance level. Correct origin identification of the female UavE

speaker affects the perceptions of native speaker status negatively (p<0.001). Once the origin of the male MAE speaker was identified correctly, it affected the perceptions of native speaker status for MAE positively, at 2 percent significance level.

4.2.8 Origin Identification and Perceived Intelligibility

Table 4.32 shows the OLR results for correcr origin identification and perceived intelligibility. When the origin of the male GavE speaker is identified correctly, it affects the perceptions of perceived intelligibility negatively, at 1 percent significance level.

Table 4.33 Origin Identification and Perceived Intelligibility

	Estimate	Std. Error	z value	Pr(>|z|)	
FavE	-0.2665532	0.2250707	-1.184	0.236291	
GavE	0.7747280	0.2288370	3.386	0.000710	***
IvE	-0.2461602	0.2289304	-1.075	0.282257	
JvE	0.1149803	0.2254592	0.510	0.610063	
MAE	3.8651011	0.2856712	13.530	< 2e-16	***
MBE	3.7051684	0.2759089	13.429	< 2e-16	***
SAE	1.5006260	0.2366241	6.342	2.27e-10	***
SSE	1.3978526	0.2333188	5.991	2.08e-09	***
TavE	0.1502458	0.2370220	0.634	0.526153	
UavE	-0.3363889	0.2257868	-1.490	0.136263	
WAvE	0.2132702	0.2262554	0.943	0.345881	
oiSAE_f	-0.2642825	0.1482525	-1.783	0.074643	.
oiMAE_m	0.3783103	0.1637160	2.311	0.020845	*
oiMBE_m	-0.2325371	0.1293678	-1.797	0.072258	.
oiSSE_m	1.0912967	0.3092727	3.529	0.000418	***
oiGavE_f	0.7626974	0.2508209	3.041	0.002359	**
oiGavE_m	-0.8779818	0.3464933	-2.534	0.011280	*
oiJvE_f	-1.0366461	0.3796581	-2.730	0.006324	**
oiIvE_f	-0.5858329	0.2906991	-2.015	0.043878	*
oiUavE_f	0.7227877	0.1162739	6.216	5.09e-10	***
oiUavE_m	-0.3378854	0.1669766	-2.024	0.043017	*
oiCavE_f	-1.7390059	0.4995623	-3.481	0.000499	***
oiTavE_f	0.5388684	0.1426124	3.779	0.000158	***
Signif.codes:‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1					

However, when the origin of the female GavE speaker is identified correctly, it affects the perceptions of intelligibility positively, at 0.2 percent significance level. Once the origin of the male SSE speaker is correctly identified, it affects the perceptions of intelligibility positively, at 0.04 percent significance level. When the female UavE speaker is correctly identified, it affects the perceptions of intelligibility positively ($p<0.001$), while the correct origin identification of the male UavE speaker affects the perceptions of intelligibility negatively, at 4 percent significance level. In the case of Tave, correct origin identification of the female speaker affects the perceptions of intelligibility for TavE positively, at 0.01 percent significance level.

4.2.9 Origin Identification and Perceived Wealth

The results show that when the origin of the female Ukrainian speaker is identified correctly, perceptions of wealth are positively affected, at 0.8 percent significance level. Similarly, when the origin of the female FavE speaker is recognized correctly, it affects the perceptions of wealth negatively, at 0.01 percent significance level. When the origin of the male GavE speaker is identified correctly, it affects the perceptions of wealth negatively, at 0.04 percent significance level, while the correct origin identification of the male SSE speaker affects the perceptions of wealth negatively ($p<0.001$). Similarly, when the origin of the male SAE speaker is identified correctly, it affects the perceptions of wealth negatively, at 3 percent significance level. When results are analyzed at a 90% confidence interval, it can be seen that male speakers are perceived more negatively, slightly but significantly. These findings suggest that gender of the speakers might have an influence on the participants' perceptions.

Table 4.34 Origin Identification and Perceived Wealth

	Estimate	Std.Error	z value	Pr(>|z|)	
FavE	-0.94254	0.22816	-4.131	3.61e-05	***
GavE	-0.02095	0.22840	-0.092	0.926926	
IvE	-0.90441	0.22676	-3.988	6.65e-05	***
JvE	-0.39156	0.22949	-1.706	0.087972	.
MAE	2.85544	0.24396	11.705	< 2e-16	***
MBE	2.72570	0.24094	11.313	< 2e-16	***
SAE	1.06339	0.23226	4.578	4.69e-06	***
SSE	1.26192	0.23136	5.454	4.92e-08	***
TavE	-0.60727	0.23366	-2.599	0.009350	**
UavE	-1.05628	0.22831	-4.626	3.72e-06	***
WAvE	-0.54831	0.22420	-2.446	0.014457	*
oiSAE_m	-0.28772	0.13694	-2.101	0.035635	*
oiMAE_f	0.27907	0.14698	1.899	0.057605	.
oiMBE_f	-0.22433	0.13476	-1.665	0.095982	.
oiSSE_m	-1.57870	0.30340	-5.203	1.96e-07	***
oiGavE_m	-1.17276	0.33340	-3.518	0.000436	***
oiFavE_f	-0.72649	0.22943	-3.167	0.001543	**
oiUavE_f	0.29722	0.11363	2.616	0.008905	**
oiUavE_m	0.29569	0.16656	1.775	0.075860	.
oiTavE_f	0.24729	0.14003	1.766	0.077395	.
Signif.codes:'***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

4.2.10 Exposure to Media and Accent Evaluations

In order to see whether the exposure to English media affects the perceptions of politeness, attractiveness, education level, wealth, intelligibility, language proficiency, and native speaker status, an OLR analysis was conducted. Results show that high exposure to media *on a daily basis* or *regularly* (2-3 times a week) has a significant effect on the perceptions of attractiveness ($p<0.001$) for all varieties besides German, West African, and Jamaican. It was significantly estimated that the participants who were exposed to English media at least once

a month, also evaluated all of the varieties, besides GavE, JvE, and WAvE, positively, at 1 percent significance level.

OLR analysis showed that perceived language proficiency is also affected by the exposure to English media, at 10 percent significance level, for all varieties besides German. Interestingly, when it came to the perceptions of intelligibility, the OLR analysis revealed that daily exposure to English media affected the perceptions of intelligibility positively, at 10 percent significance level, only for the inner circle varieties and German. These results suggest that the majority of the Turkish prospective teachers of English may still perceive a speaker as not being proficient in English, while also finding their speech intelligible. Similarly, results suggest that the participants' perceptions of attractiveness are not linked to the perceptions of intelligibility. No statistically significant relationship was found between the exposure to English media and perceived wealth, native speaker status, and education level (see Appendix A).

4.2.11 Exposure to L2 Courses and Accent Evaluations

In order to test whether exposure to foreign language courses has a significant effect on accent evaluations, OLR analysis was conducted (Table 4.35).

Table 4.35 Exposure to L2 Courses and Accent Evaluations

	Arabic	Russian	French	Chinese	Japanese	Spanish	Greek	German
Attract.	**		(-) *		**		.	
Ed. Lev.	***	*	**					
Lang. Prof.	**	**			*	*		
Intel.	***	*		.	***		**	
Nativ.	(-) .			.	.		(-) ***	(-) *
Polite		**		***		**		
Wealth	*							
Significance Codes: '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1								

Exposure to Arabic courses has a significantly positive effect on the perceptions of attractiveness, education level, language proficiency, intelligibility, and wealth, at 1 percent significance level or less. However, perceptions of native speaker status were affected by the exposure to Arabic, Greek, and German courses negatively, at 10, 0.1, and 5 percent

significance levels, respectively. Exposure to Russian courses also has a significantly positive effect on the perceptions of education level, language proficiency, intelligibility, and politeness, at 5 percent significance level or less. No significant relationship was found between accent evaluations and exposure to Italian and Korean foreign language courses. However, it was significantly estimated that exposure to French courses has a negative effect on the perceptions of attractiveness negatively, at 5 percent significance level. These results suggest that previous exposure to foreign language courses may have a statistically significant effect on listener evaluations, though not necessarily a positive one (Appendix B).

4.2.12 Exposure to Linguistics Courses and Accent Evaluations

An OLR analysis was conducted between the dependent variables and previous exposure to linguistics courses. Table 4.36 shows linguistic courses that have a significant effect on participant perceptions.

Table 4.36 Exposure to Linguistics courses and Accent Evaluations

	Glob.Eng.	Lang.Acq.	Cont.TE	Ling. 2	Lexicon	Socioling.
Attract.	****	**(-) ****				
Ed. Lev.	**(-) ***			**.**		
Lang. Prof.	**(-) ****	**(-) ***			*****	
Intelligibility	**(-) *****				****	**(-) ****
Nativeness	****	**(-) *****				
Politeness	**(-) ***	**(-) ***	***		****	**(-) *****
Wealth		****	**(-) ****		**(-) .**	
Significance Codes: '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1						

Interestingly, exposure to linguistics courses affects the perceptions of participants mostly negatively. Exposure to Global English course was estimated to affect the perceptions of education level, language proficiency, intelligibility, and politeness negatively, at 5, 1, 0.1, and 5 percent significance levels, respectively. Exposure to Language Acquisition courses was also found to affect the perceptions of attractiveness, language proficiency, native speaker status, and politeness negatively, at 1, 5, 0.1, and 5 percent significance levels, respectively. These courses were followed by Sociolinguistics course, exposure to which affected the

perceptions of intelligibility and politeness negatively, at 1 and 0.1 percent significance levels, respectively. These results show that although Turkish prospective teachers of English are being exposed to a variety of linguistics courses, the awareness that these courses raise does not necessarily affect participants' evaluations of different accents of English positively. This may be due to the conflicting nature of language teaching practices and sociolinguistic awareness. In other words, although linguistics courses allow TPTEs to gain a higher awareness of different varieties of English, the realities of their future profession (which requires a more prescriptivist stance) contradict with the descriptive nature of sociolinguistics. After all, it is very likely that the majority of TPTEs will end up teaching grammar and preparing students for various proficiency or university entrance exams, where knowing the targeted language on a native-like level will distinguish them and their students from other non-native speakers of English (Appendix C).

4.2.13 Countries Previously Traveled and Accent Evaluations

In order to test whether a significant relationship exists between the countries traveled and accent evaluations, an OLR analysis was conducted.

Table 4.37 Countries Traveled and Accent Evaluations

	USA	England	Germany	RU&UKR	France
Attract.					***
Ed. Lev.			(-) .	(-) *	***
Lang. Prof.					
Intelligibility	*	(-) *			**
Nativeness	(-) **			*	
Politeness					
Wealth		(-) *	.		
Significance Codes: '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1					

Results reveal that TPTEs' perceptions of attractiveness, education level, and intelligibility are positively affected if they have visited France before (at 1 percent significance level or less). Interestingly, perceptions of intelligibility and wealth were negatively affected if TPTEs have

been to England before, at 5 percent significance level. These results suggest that countries visited by the TPTEs play a significant role in their attitude formation and perceptions. Similarly, if TPTEs have been to the US before, their perceptions of intelligibility were affected positively, at 1 percent significance level, although their perceptions of native speaker status were affected negatively, at 0.1 percent significance level. This may be due to TPTEs gaining a higher exposure to different accents in the US and developing an ability to better differentiate between the native and international varieties of English (Appendix D).

4.2.14 Female Students and Accent Perception

Since the population sample mostly consists of female students, an OLR analysis was conducted in order to interrogate the effects of being a female participant on accent evaluations. Following statistically significant results were reached.

Table 4.38 Participant Gender and Accent Perception

Gender	Attract.	Ed. Lev.	Lang. Prof.	Intel.	Nativ.	Polite	Wealth
Female	**0**	*	**(-) ****	***	**(-) *****	*	·
Significance Codes: '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1							

Results clearly show that being a female participant has a statistically significant effect on the perceptions of education level, language proficiency, intelligibility, native speaker status, and politeness (when accents are combined for gender). It is significantly estimated that being a female in the current population sample, leads to the positive perceptions of education level, politeness, and intelligibility, at 5, 1, and 1 percent significance levels, respectively. However, being a female listener also affects the perceptions of language proficiency and native speaker status negatively, at 1 and 0.1 percent significance levels, respectively. It is worth noting that perceptions of wealth are also positively affected when a female participant is evaluating the accents, at 10 percent significance level.

When it comes to the TPTEs' evaluations of male speakers, it was found that being a female participant affected the perceptions of native speaker status for the male speakers of all varieties besides SSE and GavE negatively, at 0.1 percent significance level. However, perceived education level is positively affected if the participant is female, for all male

speakers of the selected accents, besides SAE, at 5 percent significance level. Relatedly, perceptions of intelligibility are also affected positively for all male speakers besides SSE and SAE, if the evaluator is female, at 0.1 percent significance level. These results suggest that participant's gender has a significant effect on the perception, and therefore evaluations of the selected accents. Relatedly, these results also suggest that female participants in the present population sample were biased against the male speakers when it came to perceptions of native speaker status (Appendix E).

4.2.15 OLR Analysis of All Variables

After primary and secondary variables were analyzed separately, in order to examine the relationships between secondary variables and their effects on each other, an OLR was conducted between the dependent variables and secondary variables (Table 4.39). Some variables are excluded due to singularities, and only statistically significant results for any of the dependent variables are listed below. All of the following results are combined for gender, therefore are subject to variation when compared with the results separated for gender.

Results show that the speakers' age plays a statistically significant role when it comes to TPTEs' perceptions and evaluations and has a negative effect on the perception of all characteristics, at 0.1 percent significance level. Similarly, speakers' gender also has a statistically significant effect on the perceptions of dependent variables, at 5 percent significance level or less, excluding perceived native speaker status. OLR analysis shows that the students' gender only affects the perceptions of intelligibility and native speaker status, former being negatively perceived at 0.1 percent, and the latter being positively perceived at 1 percent significance level.

Results also demonstrate that countries traveled also has a statistically significant effect on TPTEs' perceptions and evaluations. It was significantly estimated that having visited France has a negative effect on perceived intelligibility and native speaker status at 5 and 10 percent significance levels, respectively, while having been to Russia or Ukraine affected the perceptions of intelligibility negatively, at 5 percent significance level. Similarly, having been to the US affects the perceptions of education level and language proficiency negatively, at 5 percent significance level, while having been to England affects the perceptions of intelligibility and native speaker status negatively, at 5 and 10 percent significance levels, respectively. These results suggest that TPTEs' perceptions of education level, language

proficiency, native speaker status, and intelligibility are significantly affected by their previous travel to the US and England. This may be due to TPTEs treating the exposure they have gained in England as a baseline for intelligibility and native speaker status, while treating their exposure and experience in the US as a benchmark for perceived education level and language proficiency, which may have resulted in holding a negative bias toward the expanding circle accents (i.e. French, Russian/Ukrainian), because they are being compared to MBE and MAE. These results are expected, since both of these varieties are being perceived and treated as the model varieties by the majority of English language students and teachers, therefore holding a negative bias toward non-native varieties of English can be explained through how close or distant an accent is perceived to be from MAE and MBE varieties.

OLR analysis shows that the exposure to linguistic courses and foreign language courses has a significant effect on the perceptions of dependent variables, though often a negative one. For instance, exposure to French, German, and Chinese second language courses have a negative effect on the perceptions of native speaker status, at 1 percent significance level, while the exposure to Global English course has a negative effect on the perceptions of language proficiency, at 5 percent significance level. It is not surprising that the exposure to foreign language courses would contribute to the ability to better differentiate between native and non-native varieties of English, however it is interesting that the exposure to Global English has a negative effect on TPTEs' perceptions of language proficiency and education level. This suggests that TPTEs that are exposed to such courses should be further guided toward applying their newly acquired knowledge into their future teaching practices (Appendix E). Table 4.39 provides the OLR results of all statistically significant variables with the following significance codes: '***' 0.001, '**' 0.01, '*' 0.05, '.' 0.1.

Table 4.39 OLR Analysis of All Variables

Variables	Attract.	Ed. Lev.	Lang. Prof.	Intel.	Nativ.	Polite	Wealth
FavE	(-) **	(-)**	(-) **	0	(-) ***	0	(-) ***
Gave	0	*	*	***	.	0	0
IvE	(-) **	(-) ***	(-) ***	0	(-) ***	0	(-) **
JvE	0	0	0	*	0	0	0
MAE	***	***	***	***	***	***	***
MBE	***	***	***	***	***	***	***
SAE	***	***	***	***	***	*	***
SSE	***	***	***	***	***	**	***
TavE	(-) .	(-) **	(-) **	0	(-) ***	0	(-) *
UavE	(-) **	(-) **	(-) **	0	(-) *	(-) .	(-) ***
WavE	(-) *	(-) *	(-) *	0	0	(-) **	(-) **
SpSex	(-) ***	(-) *	(-) *	(-) *	0	(-) ***	(-) **
SpAge	(-) ***	(-) ***	(-) ***	(-) ***	(-) ***	(-) ***	(-) ***
StsAge	**	0	0	0	0	0	**
StsSex	0	0	0	(-) ***	**	0	0
USA	0	(-) *	(-) *	*	0	0	0
England	0	0	0	(-) *	(-) .	0	0
Germany	0	0	0	0	**	0	0
RU/UKR	0	0	0	(-) *	0	0	0
France	**	***	***	(-) *	(-) .	0	0
Everyday	.	0	0	0	*	(-) .	0
2-3 /wk	.	0	0	0	*	(-) *	0
Once/mo	0	(-) *	*	***	.	(-) *	0
Ling1	0	0	0	*	0	0	0
Ling2	*	*	*	0	0	0	0
Socioling	*	0	0	(-) *	0	(-) ***	***
Glob.Eng	*	(-) *	(-) *	0	*	0	0
Lexicon	.	**	**	***	0	***	0
Lang Acq	.	0	0	0	0	0	***
Contr. TE	0	0	0	*	0	***	(-) ***
L2 German	0	0	0	**	(-) **	.	0
L2 French	(-) ***	(-) *	(-) *	0	(-) **	***	(-) **
L2 Russian	0	**	**	**	*	***	.
L2 Chinese	(-) *	0	0	0	(-) **	***	0
L2 Japanese	***	0	0	0	**	(-) *	**
L2 Spanish	0	0	0	**	0	**	0

4.3 Qualitative Data Analysis: Study 2, METU Ankara Campus

Study 2 was conducted at METU Ankara Campus and was conducted for two main reasons. Firstly, this was done to gain a better understanding of what shapes TPTEs' attitudes toward MAE, MBE, and TavE. Secondly, Study 2 has an aim to gain a deeper understanding of how those attitudes could translate into TPTEs' teaching practices in a classroom environment. First TPTEs were required to compare MBE and MAE based on four main characteristics: attractiveness, education level, wealth, and intelligibility. Based on the results obtained from Study 1, it was clear that MAE and MBE were evaluated very high for perceived native speaker status (Section 4.2.8) and language proficiency (Section 4.2.6). Furthermore, in the origin identification task, model varieties of English received the highest origin identification rates, following TavE, which clearly demonstrates that TPTEs were able to identify MBE and MAE speakers for native speaker status. Therefore, these characteristics were excluded in Study 2. Characteristics of perceived intelligibility, attractiveness, wealth and education level were included in Study 2 based on the previous literature and reasons previously mentioned in Section 3.5.1 of this thesis. Politeness as a characteristic was excluded from Study 2 to have an even number of characteristics. Attractiveness was chosen over politeness as a characteristic for inclusion, because the majority of recent VGT studies exclude the interrogation of perceived physical traits based on audio stimuli alone, after characteristics started being grouped under the dimensions of solidarity and status, as this was also the case with Lambert's (1967) follow up study (see Section 2.4).

The participants (N=44) had to take an online questionnaire consisting of three parts. In the first part of the online questionnaire, the participants had to listen to a set of male speaker recordings representing MAE and MBE varieties and then agree or disagree with statements that further interrogated TPTEs' perceptions of attractiveness, education level, wealth, and intelligibility. Participants had to provide an explanation for their answers in this section. Second part of the questionnaire had an aim to elicit TPTEs' thoughts, beliefs, and personal preferences about native and non-native varieties of English. Third part of the online questionnaire requested demographic information. Participants were provided with an informed consent and a debriefing form prior and after taking part in the study.

A pilot study for Study 2 was conducted at a computer lab in METU Ankara Campus. Given the variation in time spent taking the online questionnaire and other technical difficulties (server and connection errors), it was found appropriate by the researcher to allow the participants to fill out the online questionnaire individually at a time they found appropriate

without external factors interfering with the process. The following section provides demographic information of the participants that took part in Study 2.

4.3.1 Demographic Information of the Participants

TPTEs (N=44) that were enrolled in a four-year Foreign Language Education department at METU Ankara campus took part in Study 2. Just like in Study 1, females constituted the majority (N=31) of the sample population, and male students were in the minority (N=13). Figures 4.12 and 4.13 show that the majority of TPTEs that took part in Study 2 were female, and that the sample population consisted of mostly freshmen (N=16), followed by sophomores (N=15), juniors (N=7), and seniors (N=6).

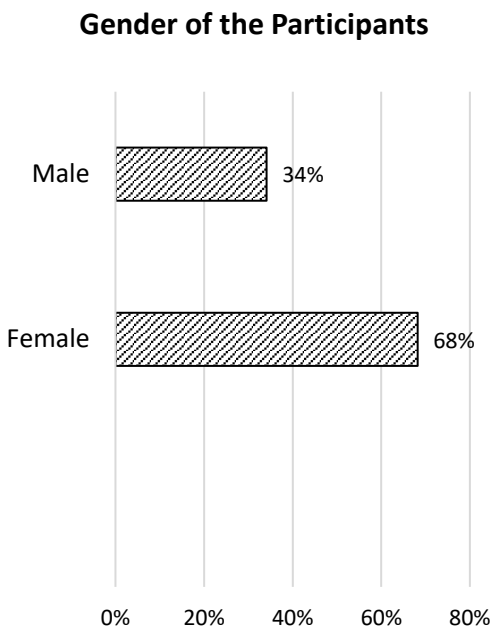


Figure 4.12. Gender of the Participants (N=44)

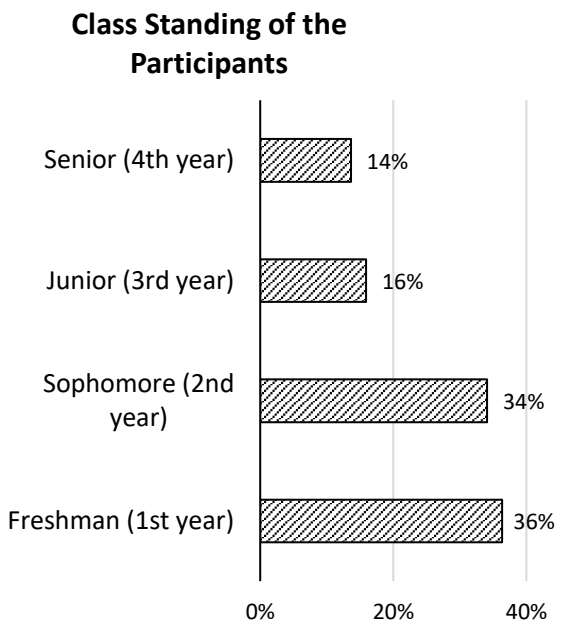


Figure 4.13. Class of the Participants (N=44)

TPTEs' exposure to English series/movies (Figure 4.14) and music (Figure 4.15) was reported to be on a daily basis by the majority of the participants. 57% of TPTEs reported being exposed to English series\movies on a daily babsis, whereas 84% reported being exposed to English music everyday.

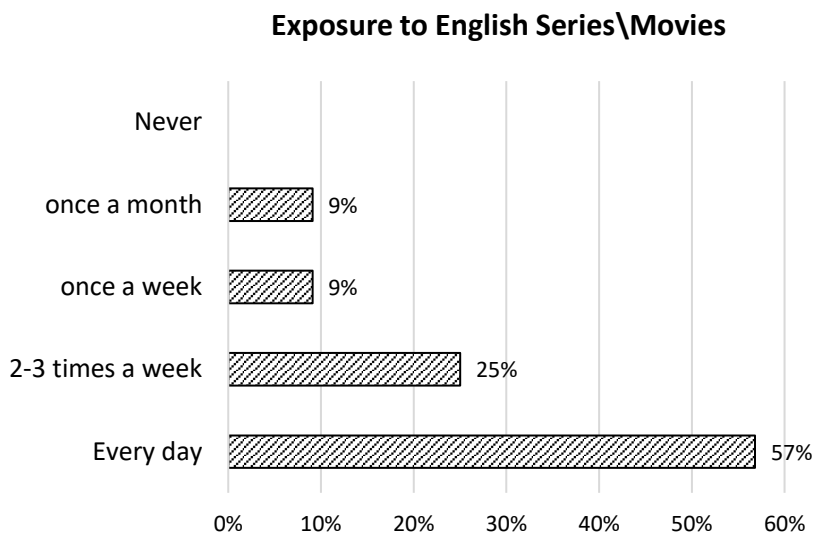


Figure 4.14. Exposure to English Series\Movies (N=44)

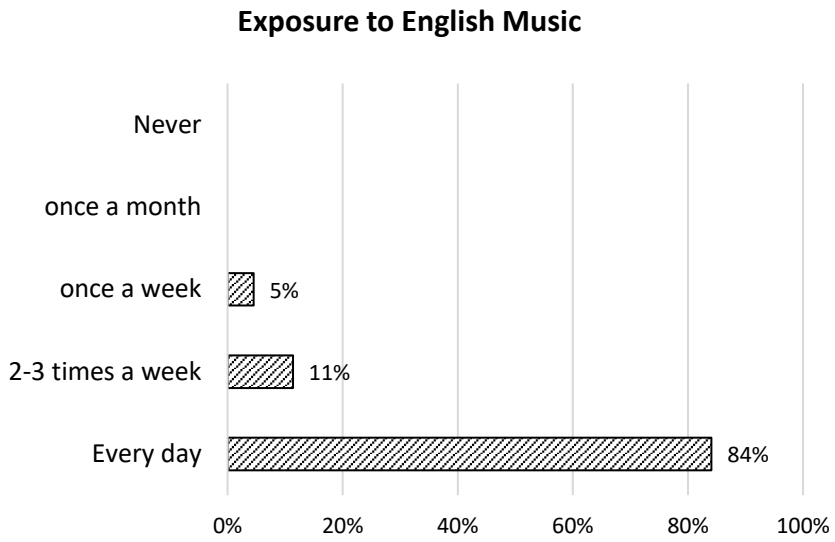


Figure 4.15. Exposure to English Music (N=44)

TPTEs' exposure to L2 courses was requested as well (Figure 4.16). The majority (N=38) of the TPTEs have reported taking German as a foreign language course, followed by French (N=8), Italian (N=7), and Spanish (N=3). Chinese (N=2) and Arabic (N=1) were the least popular choices amongst TPTEs in this population sample. It is worth noting that German and French are the most frequently offered L2 courses within METU.

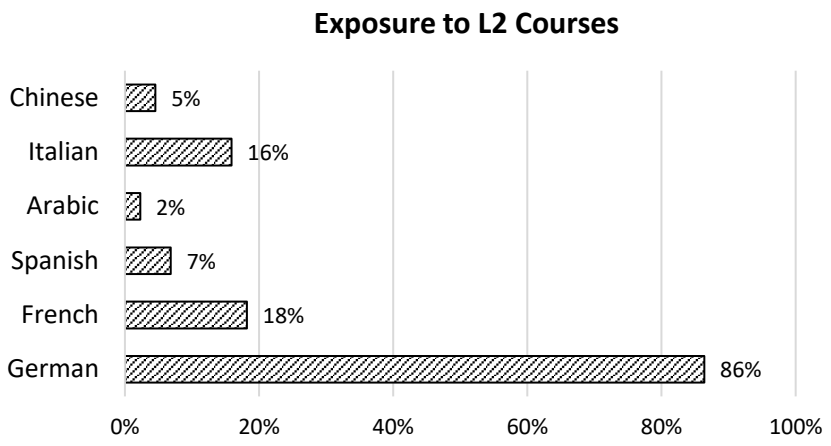


Figure 4.16. Exposure to L2 Courses (N=44)

TPTEs' exposure to linguistics courses is provided in Figure 4.17. In the current population sample, the all of the students have taken Linguistics 1 (N=44) and the majority of TPTEs have taken Listening and Pronunciation (N=29), Linguistics 2 (N=25), and Contractive Turkish English Analysis (N=23) courses, in that order. Some of the participants have reported taking Phonology (N=8) courses listed under the *other* option to this question, however it worth noting that the Listening and Pronunciation course provides the students with the fundamentals of phonetics—vowels, consonants, stress in words, rhythm and intonation-- as well as the usage of phonetic alphabet.

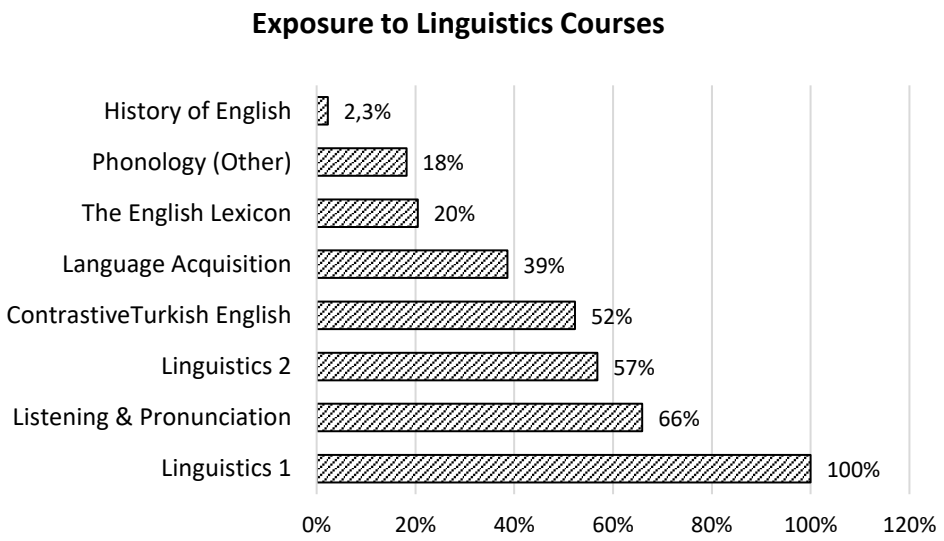


Figure 4.17. Exposure to Linguistics Courses (N=44)

TPTEs' previous exposure to different varieties of English was also requested (Figure 4.18). Expectedly, Turkish accented English was the most encountered variety of English given the local context. However, when it came to the exposure of model varieties, TPTEs' exposure to MAE (N=42) was higher than MBE (N=36). It is worth mentioning that the English language plays an active role in education, media, professional, and daily life among the younger generation in present-day Turkey.

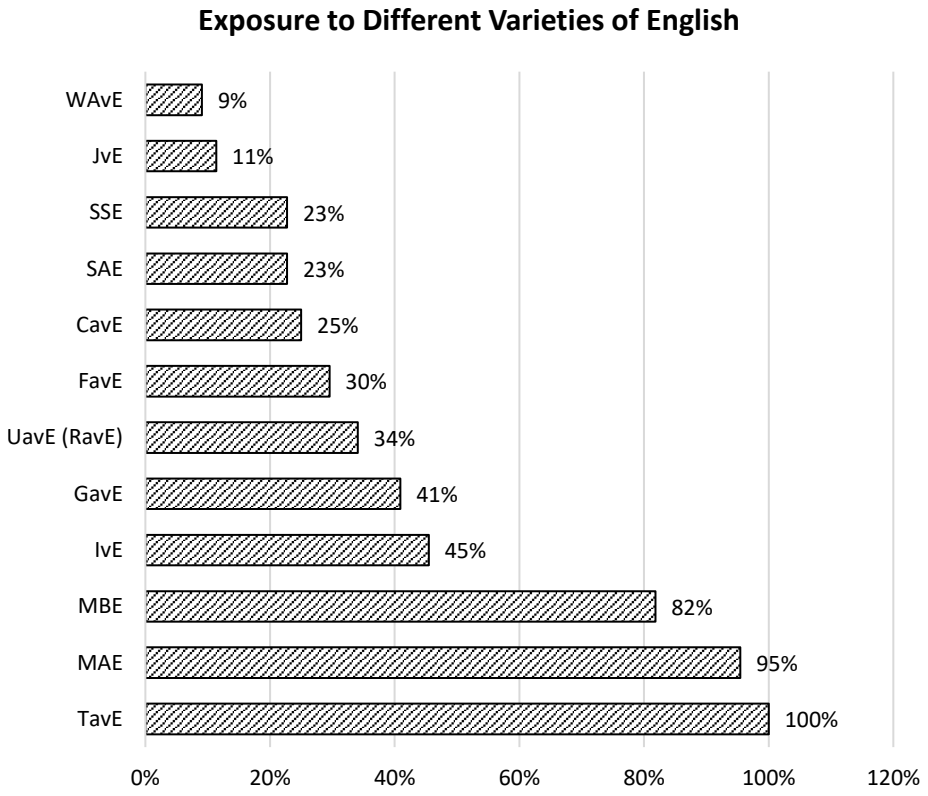


Figure 4.18 Exposure to Different Varieties of English (N=44)

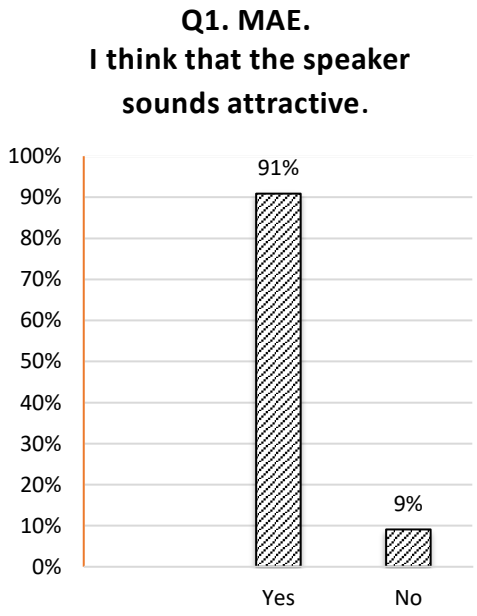
Higher exposure to MAE can be explained by the American media being more dominant in Turkey. Most have a Netflix subscription nowadays and many movie theaters screen movies in English (with Turkish subtitles) in Turkey. Therefore, given MAE's popularity in the international movie industry, which is mostly being dominated by Hollywood nowadays, higher exposure to MAE is not surprising within the Turkish context.

4.3.2 TPTEs' Attitudes Toward MAE and MBE

Participants were required to listen to the male MAE and MBE speakers and evaluate them based on perceived attractiveness, education level, wealth and intelligibility. However, unlike in Study 1, in Study 2 the participants were expected to provide their reasoning behind their evaluations, since Study 2 has an aim to uncover what affects TPTEs' perceptions and evaluations of the model varieties of English, as well as their own Turkish accented variety. First the written answers were compiled for each question and frequency tables were created using Clan Childes. Consequently, a more in-depth analysis of the data was conducted by carefully going through each given response, which resulted in the emergence of initial themes. The researcher then matched each response for every question with the existing themes. Once the data were analyzed, another researcher went through the process of coding in order to cross-validate the results obtained from this section.

4.3.2.1 What Influences TPTEs' Perceptions of Attractiveness for MAE and MBE

Figures 4.19 and 4.20 provide the evaluations of MAE and MBE for perceived attractiveness. In the current population sample (N=44), TPTEs perceive male MAE speaker to sound more attractive (91%, N=40) than the male MBE speaker (70%, N=31).



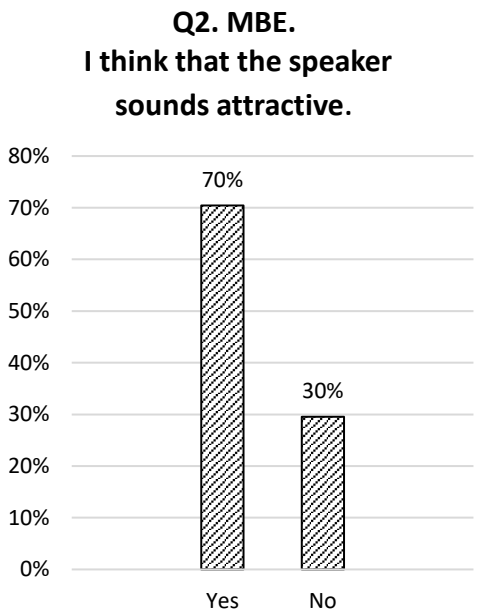


Figure 4.19. Perceived Attractiveness of MAE Figure 4.20. Perceived Attractiveness of MBE

Based on the qualitative analysis, *correct intonation* (43%) was the answer that the majority (N=19) of the TPTEs provided as being the reason for their evaluations, followed by *fluency* (30%, N=13), *clarity* (25%, N=11), and *correct pronunciation* (20%, N=9).

Example 1. Perceived Attractiveness - Positive evaluations for MAE

> *"Because he pays attention to intonation, we can clearly understand what he is talking about. Since he is a native speaker of English, he pronounces every word correctly. He has no mistakes in phonetics. I think these are the reasons why the speaker sounds attractive."*

Interestingly, the remaining 9% (N=4) that reported finding the MAE speaker unattractive, have listed 'intonation' (N=3) and 'the tone of voice' (N=1) to be the reason for their negative evaluations. Even though the MBE speaker was perceived to be less attractive than the MAE speaker, TPTEs' reasonings for such evaluations were similar to those of MAE speaker. TPTEs who perceived MBE speaker to be attractive have listed intonation (43%, N=19) to be the main reason. However, those who perceived male MBE speaker as being unattractive (30%, N=13) have listed slower speech rate (N=8) to be the main reason, followed by the lack of stress (N=5).

Example 2. Perceived Attractiveness – Negative evaluations for MBE

> *"The speaker is clear about what he is saying but he is speaking so slowly that I did not want to listen to him, so it is unattractive for me."*

Example 3. Perceived Attractiveness – Negative evaluations for MBE

> *"He speaks like he is giving a serious lecture. So serious and slow and with no stress."*

These findings suggest that intonation has a noticeable effect on the positive and negative evaluations of the male MAE and MBE speakers for perceived attractiveness. Based on the TPTEs' explanations, slower speech rate and the lack of stress results in MBE speaker being negatively perceived for attractiveness in comparison to the male MAE speaker. It is also worth noting that the evaluations of male MAE and MBE speakers are in line with the results obtained from Study 1, where male MAE speaker was also evaluated higher for perceived attractiveness in comparison to male MBE speaker (see section 4.2.3). Some of the TPTEs (N=9) mentioned that they found the male MBE guise to sound attractive in spite of finding it hard to understand due to stress patterns.

Example 4. Perceived Attractiveness – Positive evaluations for MBE

> *"The British accent always seems so cool and attractive although sometimes it is hard to understand them because of their pronunciation. Maybe this is because of their rhythm…towards the end of the sentences, their stress gets lower and lower, so it is hard to understand them. Or sometimes, they really pronounce the prepositions without making stress; which sounds complex."*

4.3.2.2 What Influences TPTEs' Perceptions of Intelligibility for MAE and MBE

TPTEs' perceptions of intelligibility for the male MAE and MBE speakers are provided in Figures 4.21 and 4.22 Results show that while male MBE speaker was perceived as being intelligible by all participants, 2% (N=1) of the TPTEs perceived male MAE speaker to be unintelligible. Although these findings slightly differ from the results obtained from Study 1 where the participants evaluated MAE as being more intelligible, qualitative data analysis cross-validated that gender of the speakers has a significant impact on the perceptions, and therefore differ from the results combined for gender.

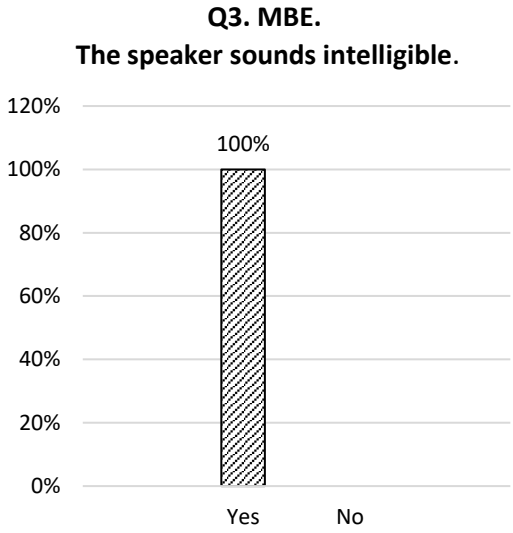


Figure 4.21. Perceived Intelligibility for MBE

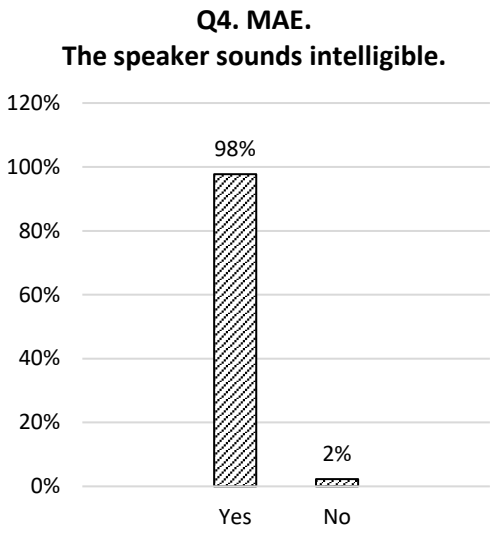


Figure 4.22. Perceived Intelligibility for MAE

TPTEs reported 'clear speech' (95%, N=42) and 'correct pronunciation' (45%, N=20) as the main reasons for their positive evaluations of intelligibility regarding the male MBE speaker. None of the participants perceived male MBE speaker to be unintelligible. These results are interesting when compared to the perceptions of attractiveness because even though TPTEs perceived male MBE speaker to be the most intelligible, they have perceived the male MBE speaker to be less attractive than the male MAE speaker (section 4.3.2.1). These findings suggest that TPTEs' perception of attractiveness does not necessarily depend on perceived intelligibility when it comes to MAE and MBE.

Example 5. Perceived Intelligibility – Positive evaluations for MBE

> *"He speaks clearly with pauses when needed. He knows the sound system."*

Example 6. Perceived Intelligibility – Positive evaluations for MBE

> *"He sounds understandable because he is clear, and he doesn't omit every sound like the common British stereotype."*

Example 6 is interesting due to reflecting a stereotype associated with the MBE speakers amongst TPTEs (based on the respondent's perception). Example 6 also suggests that 'clear speech' is perceived as 'not including any omission of sounds' by the participant. A majority (N=43) of TPTEs perceived male MAE speaker to be intelligible, however not all. Just like with the male MBE speaker, 'clear speech' (48%, N=21) was the main reason for finding the male MAE speaker intelligible, followed by the 'correct/good pronunciation' (35%, N=15).

Example 7. Perceived Intelligibility – Positive evaluations for MAE

> *"He is very understandable because he pronounces the words correctly, the stress and intonation of the words are also perfect. Also, he speaks fluently."*

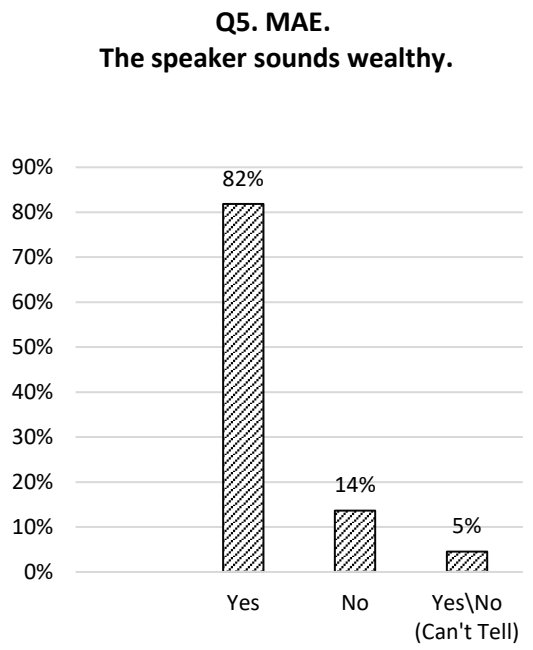
One of the participants that perceived the male MAE speaker's speech to be unintelligible provided *'fast speech'* as the main reason for their negative evaluations.

Example 8. Perceived Intelligibility – Negative evaluations for MAE

> *"I could not catch some words he said because he spoke fast."*

4.3.2.3 What Influences TPTEs' Perceptions of Wealth for MAE and MBE

When it came to the perceptions of wealth, MAE guise was evaluated higher (82%, N=36) than the MBE guise (Figures 4.23 and 4.24). These results are surprising, since previous research shows that MBE is being evaluated higher for status in comparison to MAE (see Carrie, 2017 for further discussion), yet in this study, MAE was evaluated higher for *status* in both studies (see Section 4.2.3).



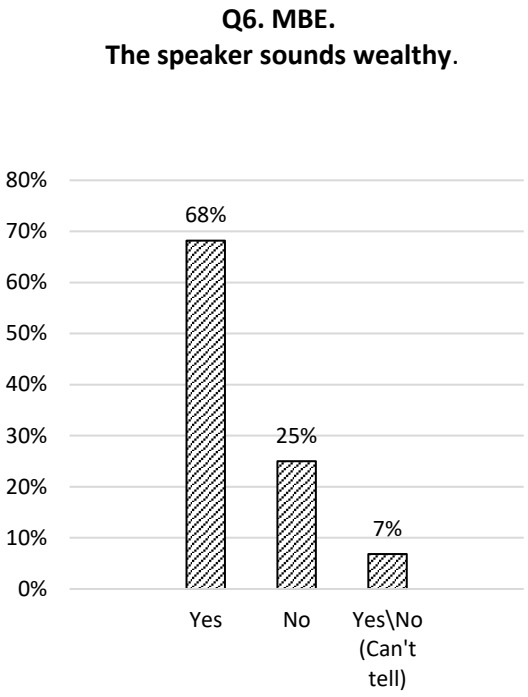


Figure 4.23. Perceived Wealth for MAE Figure 4.24. Perceived Wealth for MBE

Some (11%, N= 5) of the respondents' answers highlighted the possible effects of the American media on the perceptions of wealth.

Example 9. Perceived Wealth – Positive evaluations for MAE

"US accent sounds wealthy probably because of the tv shows and movies."

Majority of TPTEs provided 'sounding confident' (35%, N=15) and 'having an opportunity for good education' (30%, N=13) as the main reason for their positive perceptions of wealth for the male MAE speaker. This reflects that TPTEs tend to associate financial ability with good education and confidence, as the following examples suggest.

Example 10. Perceived Wealth – Positive evaluations for MAE

> *"The speaker sounds confident and clear, this is an indication of proper education. Since education is not free he might be a wealthy person."*

Example 11. Perceived Wealth – Positive evaluations for MAE

> *"He speaks confidently and pronounces every word clearly, it creates an image like he has a high socioeconomic status. It is because the way he speaks causes us to think he got a good education and that he had an opportunity for that."*

TPTEs that did not perceive the male MAE and MBE speakers to be wealthy or chose the 'can't tell' option explained it by not seeing a linkage between the way one sounds and perceived wealth. However, negative evaluations of the male MBE speaker (11%, N=5) were associated with Cockney, which is a variety mostly spoken by the working class in the areas surrounding London.

Example 12. Perceived Wealth – Negative evaluations for MBE

> *"His accent is similar to Cockney accent when he is saying 'maybe', 'train' and 'station'."*

Example 12 suggests that TPTEs' perceptions show a resemblance to those of native speakers, since Cockney is one of the most stigmatized working-class varieties within the UK context, along with Brummie, Scouse, and Glaswegian (McKenzie, 2010, p. 56). TPTEs that perceived the male MBE speaker as being wealthy (68%, N=30) linked MBE to having a lot of prestige (30%, N=13) which was often connected to a belief that people from higher socioeconomic status speak better. MBE speaker was often associated with the 'elite', 'posh' and the 'royal' way of speaking, which also led to the perception of a higher socioeconomic status.

Example 13. Perceived Wealth – Positive evaluations for MBE

> *"I think he has a high socioeconomic status because he speaks very well without any mistakes. I think like that because we have the same problems in Turkey. The higher socioeconomic status people have, the better they speak."*

Example 14. Perceived Wealth – Positive evaluations for MBE

> *"British accent tends to sound posh and it makes me think of wealth and high status."*

4.3.2.4 What Influences TPTEs' Perceptions of Education Level for MAE and MBE

Male MAE speaker was evaluated higher for perceived education level (N=37) in comparison to male MBE speaker (N=34). None of the participants have perceived MAE and MBE speakers as uneducated (see Figures 4.25 and 4.26). Almost half of the TPTEs have listed 'correct pronunciation' (48%, N=18) as the main reason, followed by 'good intonation' (27%, N=12), for their positive evaluations of education level with regards to the male MAE speaker.

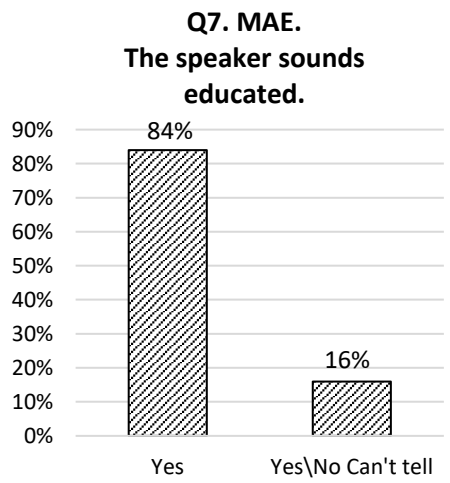


Figure 4.25. Perceived Education Level (MAE)

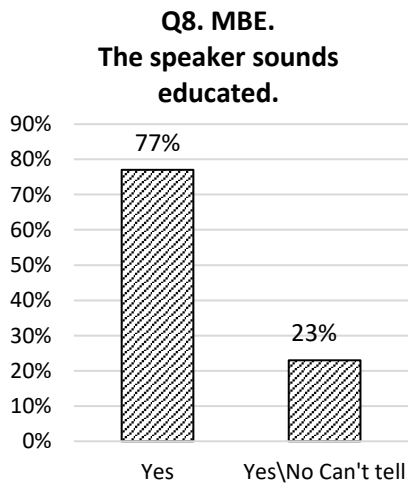


Figure 4.26. Perceived Education Level (MBE)

These results suggest that TPTEs associate pronunciation with a higher education level. This may be due to TPTEs having to learn the pronunciation of the targeted language (English) in their local context, which often happens through education. Furthermore, there is a common misconception in Turkey towards 'proper' pronunciation being a sign of a well-educated individual, regarding both native and non-native speakers.

Example 15. Perceived Education Level – Positive evaluations for MAE

> *"Pronunciation is the first criteria that show whether the speaker is educated or not. His pronunciation is clear and there isn't a word or sound that he has a problem pronouncing."*

Example 16. Perceived Education Level – Positive evaluations for MAE

> *"He does not make any pronunciation or intonation mistakes. People might make such mistakes if they are not well-educated even if it is their native language."*

Additionally, some (9%, N=4) of the respondents have demonstrated similar attitudes to native speakers, where they found the Southern varieties of American English to reflect a lower education level. These results are in line with the native speaker attitudes, where the southern American varieties are often perceived as being 'dumb' and 'uneducated' (see Wolfram & Schilling, 2015, pp.78-79 for a detailed review).

Example 17. Perceived Education Level – Positive evaluations for MAE

> *"An educated American would sound like that I suppose since there are really bad accents in America of Southerners or other less educated Americans."*

When TPTEs had to provide explanations for their positive evaluations of the male MBE speaker, again, pronunciation (46%, N=20) was the main determiner of their perceptions of the speaker's education level, followed by intonation (30%, N=13). However, interestingly, the male MBE speaker still got evaluated less favorably in comparison to the male MAE speaker.

Example 18. Perceived Education Level – Negative evaluations for MBE

> *"He speaks well but it makes me feel like he speaks like a teacher."*

Example 19. Perceived Education Level – Negative evaluations for MBE

> *"He seems like he is trying to be understood by us, so it feels like he is trying to speak slower."*

Examples 18 and 19 demonstrate that TPTEs' negative attitudes towards male MBE speaker might be triggered by the effective component of the attitude structure (see Section 2.2). Both participants based their explanations on how they felt by placing themselves and the speaker into different social groups and roles. In the first response, the divide is created by assigning the role of a teacher to the speaker, and in the second response 'understood by us' involves an us vs them positioning, in case of which 'us' refers to the non-native speaker identity. Both responses highlight an unequal distribution of power while using English, where the teacher and the native speaker's speech is being adjusted with the purposes of either teaching or being understood by the other party, the non-native speaker/student who may not understand the spoken message. Additionally, Example 15 highlights the 'slower speech' of the MBE speaker (compared to the MAE speaker), which was also used as an explanation in Section 4.3.2.1 for less favorable evaluations of attractiveness of the MBE speaker.

4.3.3 TPTEs' Cognitive Evaluations of MAE, MBE, and TavE

The aims of this section of the online questionnaire were:

a) To gain a better understanding of the preference of the variety TPTEs want to use while speaking in English,

b) To uncover TPTEs' thoughts about having a non-native accent,

c) To discover what TPTEs' beliefs are about competent and advanced speakers of English,

d) To uncover what TPTEs' attitudes are towards their own and their students' accents in a classroom environment,

e) To reveal what TPTEs' thoughts are on exposing students to different varieties of English.

4.3.3.1 TPTEs' Accent Preference

Although TPTEs in this study have gained a lot of exposure to linguistics courses, Sections 4.2 and 4.3 have shown that TPTEs are negatively biased towards non-native varieties of English, and positively biased towards MAE and MBE. Therefore, it was expected that these biases would contribute to TPTEs' accent preference (Figure 4.27).

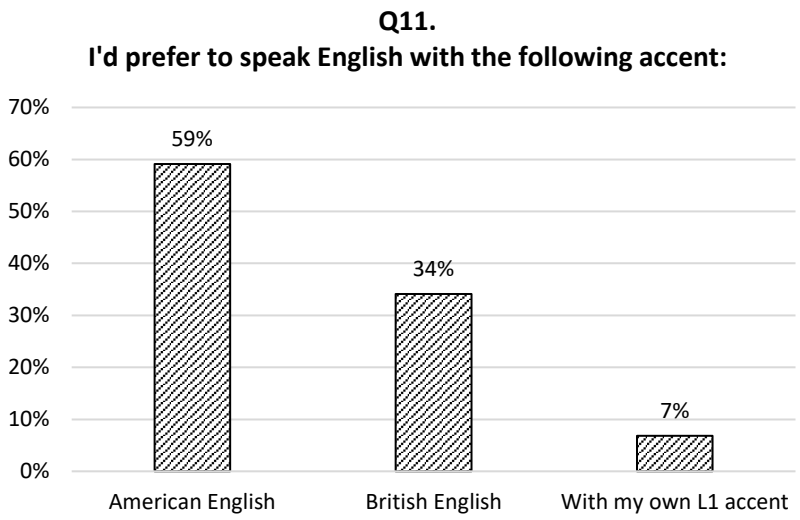


Figure 4.27. TPTEs' Accent Preference (N=44)

An overwhelming majority of the participants (93%, N=41) state that they would like to speak English with a native accent (either MAE or MBE), a finding that is in line with previous research (e.g., Wright, 1998; Buckingam, 2014; McCrocklin & Link, 2016). More than a half

of TPTEs (59%, N=26) have a preference towards speaking English with the model American accent while one-third of them indicate that they would like to speak English with the model British accent (34%, N=15). Although these results are expected due to TPTEs' previous evaluations in Section 4.2.3, where MAE received more favorable evaluations in comparison to MBE, they are in contrast with the findings from previously conducted research in Poland (Janicka et al., 2008) and Denmark (Ladegaard, 1998), where MBE was the preference of the majority.

TPTEs that preferred to speak English with an American accent have provided their ability to understand and pronounce MAE better because they perceived Turkish to be closer to MAE phonologically.

Example 20. Accent Preference – MAE

> *"I think Turkish learners of English have a tendency to understand and use American accent more successfully because we are much more able to produce the sounds in the American accent due to our L1."*

TPTEs that preferred to speak English with a British accent have provided the challenges they face in the phonological production to be the main reason for their preference. Unlike the TPTEs that chose MAE, participants that preferred MBE based their decision on MBE being harder, rather than easier to produce.

Example 21. Accent Preference – MBE

> *"British accent is harder than the American accent, so speaking with a British accent seems to be more attractive."*

These results suggest that when it comes to choosing between an American and British accent, most of the TPTEs base their preference on how 'easy' or 'hard' it is to produce the sounds of the targeted variety. Furthermore, a great majority (93%, N=41) of TPTEs are in agreement that phonologically MAE is easier to produce than MBE.

Only 7% (N=7) of the TPTEs have demonstrated a preference for speaking English with a Turkish accent. In section 4.3.2.1, Turkish was perceived as the most unattractive variety of English by TPTEs, with 3 percent significance level. The following example summarizes TPTEs' rationale behind choosing to speak English with their own L1 accent.

Example 22. Accent Preference – Turkish Accented Variety of English

> *"When we try to speak like others, we do not sound as perfect as we think. Instead, we sound like we are mimicking native speakers and their attitudes as well. If we want to speak a language, it should be in our own way and it should sound original if we don't want to be seen the same with others. Also, we can't completely get rid of our own language or accent anyways."*

4.3.3.2 TPTEs' Description of Turkish Accented English

An open-ended item was placed in this section of the online questionnaire asking TPTEs to describe how Turkish accented variety of English sounds to them. The majority (93%) of the participants have provided very negative descriptions for Turkish accented English (see Table 4.40).

Table 4.40 TPTEs' Description of Turkish Accented English (N=44)

#	**I think that Turkish accented English sounds _____.**	
1	harsh	31%
2	irritating	25%
3	very bad	16%
4	fake/forced	12%
5	thick/rough	9%
6	normal	7%

It is worth noting that TPTEs did not listen to any recordings for this item; therefore, the views above reflect general perceptions of the participants regarding Turkish accented English. Table 4.40 shows that TPTEs describe their L1 accented variety of English as being 'harsh',

‘irritating’, and ‘very bad’. These results explain most of the TPTEs’ preferences toward speaking English with an American or British accent. Only two participants described Turkish accented English as ‘understandable’ and ‘normal’ in this section of the online questionnaire.

4.3.3.3 TPTEs’ Perceptions of Accent in Relation to Advanced and Competent Users

This item was included in order to gain a better understanding of how much accent plays a role in TPTEs’ perceptions of advanced and competent speakers of English.

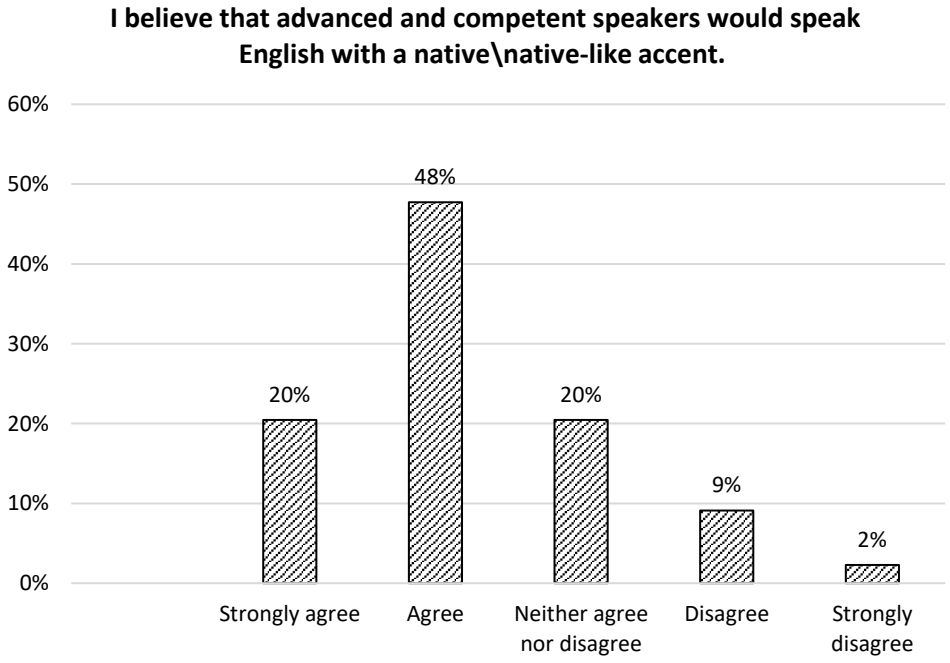


Figure 4.28 TPTEs' Beliefs about Advanced and Competent L2 English Speakers

Results show that the majority of TPTEs think that a native/native-like accent is a sign of advanced and competent speakers of English. These results are interesting since most TPTEs are likely to teach English in a non-native context where they are going to be exposed to non-native accents of English. Therefore, holding a negative bias towards international accents of English with regards to one’s competence may be considered as alarming. Furthermore, after going through extensive training and exposure to different movements such as ELF, EIL and the like, these results highlight a contradiction between awareness and perceptions of

competence. The belief of achieving a native-like accent with proper education and training was provided as the main reason for such evaluations.

Example 23. Accent and competent language users.

> *Those people would try to pronounce everything perfectly and educate themselves in that way, so they would speak like native speakers.*

Example 24. Accent and competent language users.

> *Because after learning the sound system of that language, all people can have a native or native-like accent, I believe.*

Responses provided above show that most TPTEs perceive a non-native accent as a lack of effort to speak otherwise. These results are in line with the findings from section 4.3.2.4, where TPTEs highly associated the perceptions of education level with 'correct pronunciation', therefore it can be suggested that that pronunciation shapes TPTEs' perceptions of education level and competence.

4.3.3.4 TPTEs' Attitudes Towards Pronunciation in a Classroom Environment

Previous sections of the online questionnaire demonstrated that TPTEs reported having negative attitudes towards Turkish accented English (section 4.3.3.2) and a strong preference towards speaking with MAE accent (section 4.3.3.1). Therefore, in order to gain a better understanding of how these attitudes might influence TPTEs' linguistic choices and expectations in a classroom environment, participants were asked about whether or not they would pay attention to their own and their students' pronunciation and accent (Figures 4.29 and 4.30). A majority of TPTEs reported paying attention not only to their own accent and pronunciation in a classroom environment, but also to their students' as well. These results were expected, since in the previous sections TPTEs have reported that pronunciation is the

main determiner of one's perceived education level, which is directly linked to TPTEs' perceptions of wealth, since getting a 'good' education is perceived to be expensive.

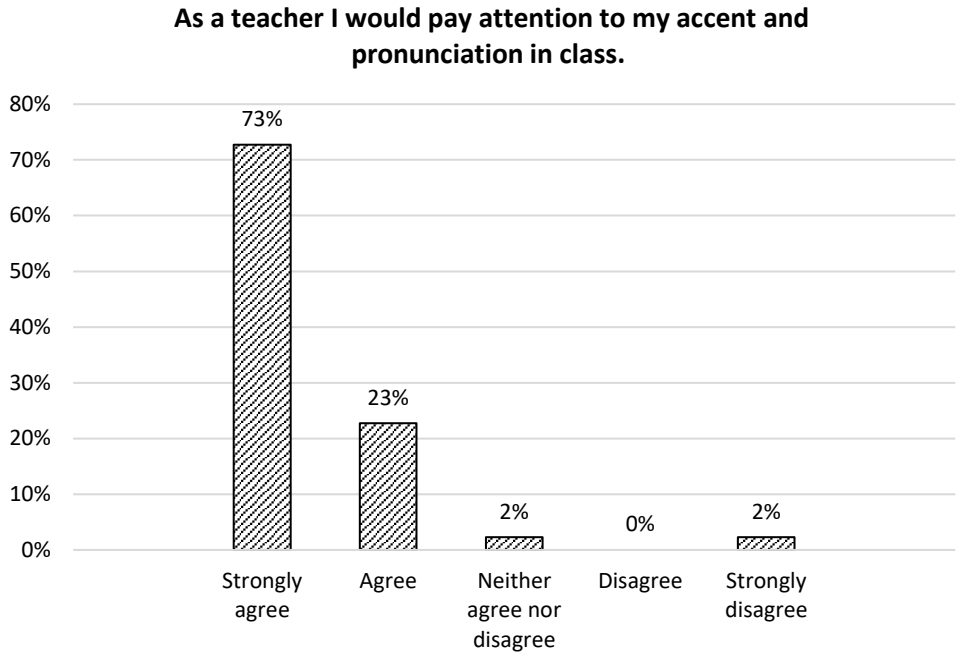


Figure 4.29 TPTEs' Thoughts on their Accent and Pronunciation in Class

A great majority of TPTEs (96%) reported that they would pay attention to their own pronunciation and accent in a classroom environment because they serve as a role model for their students, as a result of which their students would be inclined to imitate the way they sound. Those who *strongly disagreed* reported that accent and pronunciation does not affect communication, and those who *neither agreed or disagreed* have mentioned that although they would try to pay attention to how they sound, their accent and pronunciation is not something they can control.

Example 25. TPTEs' thoughts about their accent in the classroom.

> *I strongly agree, because I will be a role model for my students. They will imitate my accent to learn English, I will definitely pay attention to my accent.*

Example 26. TPTEs' thoughts about their accent and pronunciation in the classroom.

Yes, I would pay attention to my accent because I want my students to learn the pronunciation of the words right.

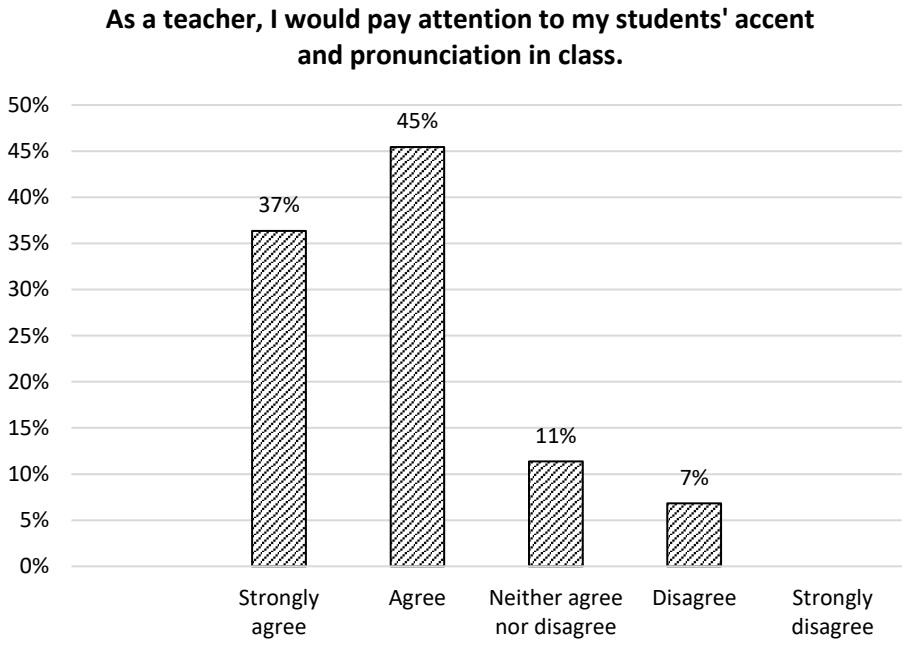


Figure 4.30 TPTEs' Thoughts on Students' Accent and Pronunciation in Class

A great majority of TPTEs reported that they would pay attention to their students' accent and pronunciation in class. TPTEs that *strongly agreed* and *agreed* with the statement provided two main reasons for their evaluations. First reported reason is that correct pronunciation is a reflection of one's speaking skills. Second provided reason is based on a belief that learning a language means speaking it with 'correct' pronunciation rather than knowing grammar. TPTEs that chose *neither agree or disagree* and *disagree* options mentioned that as long as they are able to understand their students, nothing should be corrected.

Example 27. TPTEs' beliefs about their students' pronunciation in the classroom.

> *"We need to show the right pronunciation to our students so that they can develop better speaking skills."*

Example 28. TPTEs' beliefs about their students' accent and pronunciation in the classroom.

> *"Learning a language doesn't mean knowing the grammar rules but speaking the language with correct pronunciation. Accent should be cared about."*

These responses demonstrate that TPTEs' associations of 'better speaking skills' and what 'learning' a language means directly linked to 'correct pronunciation'. Interestingly, TPTEs' answers reveal that 'correct pronunciation' is being focused on more than grammar when it comes to their students. However, these results also suggest that TPTEs do not necessarily focus on their students' communicative competence, given the strong emphasis that is being placed on 'correct' pronunciation. These results might reflect a perceptive gap between the TPTEs' beliefs about how they should be speaking as prospective teachers of English and how their students should since it is very likely that a great majority of their students will not need English for reasons other than communication in the future. Furthermore, these results suggest that there is a common misconception held amongst TPTEs, which is based on associating one's speaking skills with 'correct pronunciation' when it comes to learning a language.

4.3.3.5 TPTEs' Attitudes Toward Exposing Students to Different Varieties of English

The last question of the online questionnaire interrogated TPTEs' attitudes towards exposing their students to different varieties of English (Figure 4.31). Although a majority of the TPTEs think that students should be exposed to different varieties of English, their reasoning behind it might be of questionable nature. TPTEs that chose *strongly agree* and *agree* options have provided two main reasons for their rationale. The first reason is that their students may come across people that may not be easy to understand due to their inability to pronounce words correctly. The second reason is based on the idea that prior exposure to different varieties of English would be helpful in maintaining successful communication.

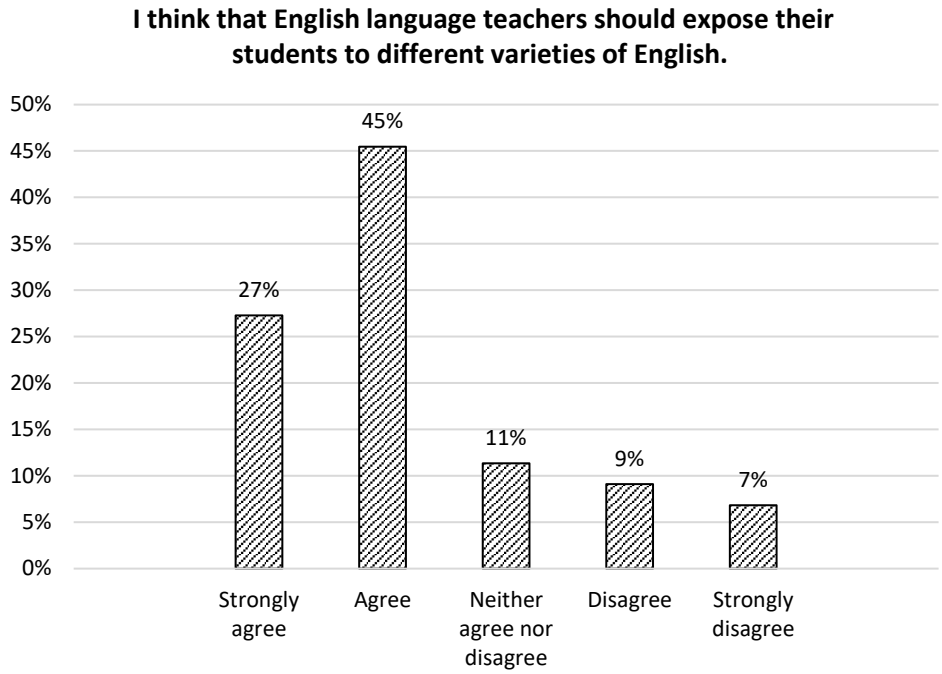


Figure 4.31 TPTEs' Thoughts on Exposing Students to the Varieties of English

Example 29. TPTEs' thoughts on exposing their students to different varieties of English in the classroom.

"Still, not everyone will be able to pronounce words the right way, so they should hear those varieties that they might come across."

Example 30. TPTEs' thought on exposing their students to different varieties of English in the classroom.

"Different varieties of English are actually essential, since there are people whose English can't be understood if not heard before."

These responses highlight the 'less than' perception of other varieties of English that are not the model varieties (i.e., reference accents). Although TPTEs think that students should be exposed to different varieties of English, their reasoning behind it is connected to some people's 'inability to pronounce words correctly' and 'English which can't be understood'. Participants who chose neither agree or disagree with exposing their students to different varieties of English have provided students' possible confusion as the main reason for their evaluations. TPTEs that strongly disagreed or disagreed with exposing their students to different varieties of English have expressed that only standard varieties would constitute 'a proper education' and that other varieties are 'not important to know'. These results suggest that TPTEs are biased towards non-standard varieties of English.

Example 31. TPTEs' thoughts on exposing their students to different varieties of English in the classroom.

> *"I think that standard varieties of English should be used for a proper education."*

Example 32. TPTEs' thoughts on exposing their students to different varieties of English in the classroom.

> *"I think that teachers should only expose their students to native and native-like accents of English as the others are not important to know."*

CHAPTER 5

CONCLUSION

5.1 Summary of the Results

The quantitative results demonstrate that the participants tend to evaluate the inner circle varieties positively while evaluating the outer and expanding circle varieties negatively. Although this is not a novel finding, the fact that TPTEs hold a strong preference towards Model American English and evaluate it more favorably when it comes to perceived wealth, language proficiency, intelligibility, education level, and native speaker status, in comparison to MBE and other accents, is a finding that is in contrast with the majority of previous VGT studies where MBE is usually evaluated higher for status and MBE for solidarity. In the present study, the only two characteristics where the Model British English accent was evaluated more favorably than the Model American English accent were for perceived politeness and attractiveness, both of which fall under the dimension of solidarity (i.e., social attractiveness). These results show that in the Turkish context TPTEs evaluate MAE higher for *status* while evaluating MBE higher for *solidarity*.

The remainder two inner circle varieties (Standard Scottish English and Southern American English) were also perceived very positively, by being evaluated in the top four amongst the selected twelve accents for all characteristics. However, SSE was evaluated more favorably in comparison to SAE for perceived politeness, education level, wealth, attractiveness and language proficiency in English. The only two characteristics where SAE received higher evaluations than the SSE were perceived native speaker status and intelligibility, though it is worth noting that in case of perceived politeness no statistically significant estimations were able to be made for SAE. These findings are interesting because although TPTEs perceive SAE to be more intelligible and native-like in comparison to SSE, they still evaluated SSE higher on the dimensions of status and solidarity. Therefore, it can be concluded that perceived intelligibility and native speaker status does not have a significant impact on the evaluations of inner circle accents by TPTEs. In other words, when it comes to the perceptions of native accents of English, evaluations are not necessarily correlated with the phonological divergence from MAE and MBE (i.e., reference accents).

When it comes to the expanding and outer circle accents, TPTEs have mostly demonstrated a negative bias, especially towards the Indian variety of English (IvE). IvE speakers were perceived as the most unattractive and uneducated, as well as the most improficient in English and foreign. Similarly, Ukrainian accented variety of English (UavE) was perceived as the poorest (i.e., least wealthy) and rudest variety amongst all varieties by the TPTEs. Only German accented variety of English (GavE) was perceived as intelligible, and no statistically significant estimations were able to be made concerning the remainder expanding and outer circle varieties in relation to perceived intelligibility. Overall, none of the expanding and outer circle varieties were perceived as wealthy, educated, attractive, and native-like in English by the participants of this study. Interestingly, only CavE out of the expanding circle varieties was perceived as polite, proficient in English, and wealthy, at 1, 5, and 1 percent significance levels, respectively. These findings suggest that TPTEs hold negative attitudes and are biased toward the speakers of outer circle accents while evaluating the speakers of international accents rather negatively (most of the time). It is also worth noting that in the limited cases when speakers of GavE were perceived as intelligible, and the speakers of CavE were perceived as polite, wealthy, and proficient in English, these varieties were still perceived as the least intelligible, wealthy, polite, and proficient in English when compared to the inner circle speakers of English, by only being ranked in the final position. Therefore, these results demonstrate that TPTEs can differentiate between the native and international phonological patterns of English, while evaluating the former more favorably.

TPTEs have evaluated Turkish accented variety of English rather negatively, by perceiving its speakers to be unattractive, uneducated, improficient in English, and poor. TavE was not perceived positively for any of the characteristics. Results show that TPTEs can differentiate TavE from other varieties of English, by rating it as one of the least native-like (i.e., native speaker status). Relatedly, Turkish accented variety of English has the highest origin identification rate (64%) by the participants. However, although TPTEs can identify Turkish accented variety of English correctly most of the time, there seems to be a disagreement amongst the participants in terms of perceived politeness of TavE, therefore no statistically significant estimations were reached.

Results of the origin identification task show that proceeding TavE (64%), MAE has received the highest origin identification rate (50%), followed by MBE (45%), SAE (37%), and UavE (32%). Varieties that received the lowest recognition rates were JvE (2%), CavE (2%), SSE (3%), and GavE (5%). When the OLR analysis was conducted between the correct origin

identification of the speakers separated for gender and dependent variables, it was observed that TPTEs downgraded the male speakers when it came to the evaluations of perceived attractiveness, politeness, and native speaker status, while downgrading the female speakers for perceived education level, language proficiency, and intelligibility. These findings suggest that the population sample demonstrated some gender bias when it came to attaching various characteristics to female and male speakers, providing further evidence of how the gender of the participants and speakers has a significant effect on the overall perceptions and evaluations.It was found that the exposure to English media has a statistically significant positive influence on the perceptions of attractiveness ($p<0.001$) for the inner and expanding circle varieties (besides German accented variety of English). In the case of outer circle varieties, exposure to English media only had a statistically significant positive influence on the perceptions of IvE speakers in terms of attractiveness ($p<0.001$). These findings suggest that although regular exposure to English media influences the perceptions of attractiveness of the inner, expanding, and IvE speakers of English positively, it was not enough to influence TPTEs' overall evaluations of the speakers of the expanding and IvE accents, since the speakers of those accents were evaluated as unattractive, IvE speakers being perceived as the most unattractive.

Countries previously travelled by the TPTEs was also found to have a statistically significant influence on TPTEs' evaluations. It was significantly estimated that having visited the USA influences the perceptions of intelligibility positively ($p<0.05$), while influencing the perceptions of native speaker status negatively ($p<0.01$). Having visited England influences the perceptions of intelligibility and wealth negatively ($p<0.05$), while having been to France has a positive effect on perceived attractiveness ($p<0.001$), education level ($p<0.001$), and intelligibility ($p<0.01$). Having been to Russia and Ukraine has a negative influence on perceived education level while having a positive effect on perceived native speaker status ($p<0.05$).

Results of this study also show that the exposure to linguistic courses does have a statistically significant influence on TPTEs' evaluations, though often a negative one rather than positive. Exposure to Global English course has a negative influence on the perceptions of education level, language proficiency, intelligibility, and politeness ($p<0.05$), and only influences the perceptions of attractiveness and native speaker status positively, at 1 percent significance level. Similarly, exposure to Language Acquisition course has a statistically significant negative influence on perceived attractiveness, language proficiency, native speaker status,

and politeness ($p<0.05$), while only influencing the perceptions of wealth positively, at 1 percent significance level. Previous exposure to Contrastive Turkish English Analysis course influences the perceptions of politeness positively, at 5 percent significance level, while affecting the perceptions of wealth negatively ($p<0.01$). Exposure to the English Lexicon course influences the perceptions of politeness, intelligibility, and language proficiency positively ($p<0.05$). It is worth mentioning that the only observed statistically negative effect of the English Lexicon course was found for perceived wealth, though at 10 percent significance level (90% confidence interval). Sociolinguistics course was found to have a negative influence on the perceptions of intelligibility and politeness, at 1 and 0.1 percent significance levels, respectively. These results are interesting, since these courses are expected to have a positive influence on TPTEs' evaluations, yet they are doing quite the opposite most of the time.

Qualitative data analysis (Study 2) shows that the majority of TPTEs have a preference towards MAE while speaking, due to finding the pronunciation of MAE to be easier and closer to their L1, Turkish. TPTEs that prefer to speak English with the Model British English accent explained their preference by the level of difficulty in the production of phonetic units of MBE, which according to them made the accent more attractive in comparison to MAE. TPTEs that demonstrated a preference towards speaking English with their L1 accent, based their decision on not sounding original and as if they are mimicking the native speakers of English, since it is not possible to get rid of one's L1 accent. When TPTEs were asked to describe Turkish accented variety of English, their descriptions were rather negative. A vast majority of the participants (93%) have described TavE as 'harsh' (31%), 'irritating' (25%), 'very bad' (16%), 'fake/forced' (12%), and 'thick/rough' (9%). The only close to positive description provided for Turkish accented English was 'normal' given by only 7% of the participants. Results of the qualitative data analysis also show that a great majority of TPTEs would pay attention to their own (96%) and their students' (81%) pronunciation in the classroom environment. However, the majority of TPTEs (82%) agree that exposing their students to different varieties of English is important. Lastly, a great majority of TPTEs (78%) believe that advanced and competent speakers of English would speak with a native/native-like accent, which may be seen as a demonstration of a commonly held misperception that is still valid today.

5.2 Contribution of the Study

Present study situates itself at the interface of Social Psychology and Sociolinguistics through the utilization of the mentalist perspective, that often assumes a tripartite attitudinal structure, and by responding to McKenzie's (2010) call for not approaching 'the English language' as a single entity which ignores other native and non-native varieties of English, unlike the majority of previous language attitude studies did (p.58). Therefore, this work addresses this gap by eliciting attitudes towards the inner, outer, and expanding circle varieties of English.

On a macro level, this study furthered research on language attitudes by eliciting TPTEs' perceptions and evaluations towards different accents of English by utilizing VGT within a new context, Turkey. In addition to adding a new context to the existing language attitude literature, VGT studies in particular, the present study also offers a new sophisticated statistical perspective (i.e. OLR) for the analysis of the data - for the first time - which addresses some of the shortcomings of other commonly used statistical techniques (i.e., ANOVA, MANOVA) in the fields of social sciences and humanities.

Majority of the previous language attitude studies (e.g., Rindal, 2010; McKenzie, 2010; Ladegaard, 2000) employed either male or female speakers to represent different varieties of English and mostly failed to provide a valid reason for doing so (Carrie, 2014, p. 278). By including speech samples of both male and female speakers, the present study is able to provide results of a broader picture, since the OLR analyses combined and separated for gender (Sections 4.2.1 and 4.2.2) provides further evidence of how the speaker's gender has a statistically significant effect on participant evaluations. Furthermore, the present study also found a statistically significant relationship between the participant's gender and the evaluations of the speakers combined and separated for gender as well (Section 4.2.14), a contribution which highlights the influence of participant gender as an important factor to be considered whilst interpreting the results of VGT studies in the future.

On a micro level, by being the first VGT study within its local context, this study creates base for future language attitude studies that will hopefully add to the limited language attitude literature within the Turkish context, through the utilization of techniques from social psychology of language (i.e. VGT) and perceptual dialectology (i.e. origin identification task). Additionally, by being the first VGT study which interrogated TPTEs' attitudes towards

different accents of English, this thesis serves a bridging function by addressing the gap between the field of ELT, social psychology, and sociolinguistics within its local context.

5.3 Implications, Limitations, and Future Work

Unfortunately, results of the present study provide further evidence that despite the exposure to movements such as EIL, ELF, GE, WE and a variety of linguistics courses, TPTEs are negatively biased towards the speakers of international accents, along with their own accented variety of English. The existence of these negative attitudes suggests that there is a major gap between TPTEs' exposure to sociolinguistically aware content and their ability to internalize, and therefore translate this content into their future teaching practices. Teacher educators can address this gap by engaging in meaningful discussions and awareness raising activities with their students and the public, since an improved understanding of the nature of foreign language learning may lead to a positive change in attitudes held towards the speakers of international accents of English. Teacher educators are in a position that allows them to facilitate positive attitudes toward different accents of English in the classroom, where the prospective teachers of English can critically reflect on various accented speech and develop necessary sociolinguistic awareness that would allow them to convey this awareness to their students in the future.

Besides having important implications for teacher educators, the present study also highlights the gap between theory and practice in the field of ELT, by providing further evidence of how the exposure to movements such as ELF, WE, GE, and EIL does not necessarily translate into TPTEs' attitudes towards different accents of English, due to often being disconnected from the realities of context-specific learning and teaching practices. This gap can be addressed by supporting teacher research which would provide glocalized samples of praxis (i.e., implementation of theory into teaching practices), and therefore facilitate the development of more practice informed theories in the field of ELT with regards to sociolinguistic awareness raising and ELF-aware pedagogy.

In the context of Turkey, English language teachers often find themselves in a position where they are responsible for preparing their students for various language proficiency, high school and university entrance exams, most of which are designed to elicit grammatical knowledge of the students, along with their reading comprehension. Furthermore, the majority of the state

exams that assess students' foreign language skills in Turkey are multiple choice exams that do not include speaking, writing, and listening comprehension sections. Therefore, the primary focus of foreign language education in state secondary schools remains on teaching grammar, translation, and reading comprehension, since these are the skills required to pass the university entrance exams with regards to foreign language assessment if one wishes to major in TEFL or closely related fields. Similar can be said to be the case with the preparatory schools at English medium universities, such as METU, where teachers are required to follow a curriculum that prepares students for a proficiency exam which the students need to pass at the end of the year in order to become freshmen. These proficiency exams also exclude the assessment of speaking skills, although it is worth noting that a section on listening comprehension where MAE and MBE accents are being utilized is included. While it may be argued that it is not feasible to include a speaking section in the proficiency exams offered at various preparatory programs of English medium universities and in the state university entrance exams (in which listening comprehension section is also excluded), it may also be argued that foreign language assessment within the local educational system in Turkey not only influences English language teachers' attitudes toward exposing their students to different varieties of English, but also the learners' attitudes towards 'good' English and their conceptions of 'proficiency' in English, which is often based on native speaker phonological patterns and 'correct grammar'. Therefore, policy makers and curriculum developers can address this gap by shifting focus towards a more ELF-aware curriculum, which would have an aim to raise sociolinguistic awareness with an emphasis on learners' communicative skills. Relatedly, exposing learners to the core phonology of English and Turkish, along with the phonology of the model varieties of English and International Phonetic Alphabet (IPA) starting from a high school level would allow the learners to gain further phonological awareness along with providing an alternative to decide to what extent each student would like to engage with MAE and MBE, an option that already raises awareness within itself.

Even though VGT is agreed to represent implicit attitudes of the listeners to some extent, through indirectly eliciting the perceptions of the varieties by asking the listeners to evaluate the speakers, unless OLR analysis is being used, more research focusing on TPTEs' implicit attitudes that utilize Implicit Association Test (IAT) should be conducted in order to expand the literature on TPTEs' perceptions and evaluations of different varieties of English methodologically as well. That being said, research utilizing the societal treatment approach

could also be of great value and have some major implications regarding the perception of regional dialects of Turkish, in addition to different varieties of English.

There are several limitations to the present study given its pivotal nature within the local context. Therefore, it is recognized that the research instrument and the theoretical framework could be further modified. Since this thesis is the first VGT study within its local context (Turkey), more studies utilizing VGT should be conducted interrogating TPTEs' attitudes towards different varieties of English in order to achieve a more representative and generalizable set of results.

In this study, no statistically significant estimations were reached regarding perceived politeness of TavE and SAE (Section 4.2.3.7). Future work should focus on eliciting TPTEs' perceptions and evaluations of politeness not only when it comes to their L1 accented variety, but also SAE and other regional and international varieties of English. Additionally, no statistically significant estimations were able to be made regarding the outer circle and expanding circle varieties (besides GavE) in relation to perceived intelligibility (Section 4.2.3.7). Therefore, future work should further focus on TPTEs' perceived intelligibility when it comes to outer and expanding circle varieties of English. Similarly, VGT studies focusing on the TPTEs' perceptions of inner, outer, and expanding circle varieties that were not included in the present study should also be carried out in order to expand the literature on TPTEs' perceptions towards different varieties of English.

The present study used an online corpus as the source for audio stimuli. However, utilizing authentic speech samples collected by the researcher could provide a better representation of the varieties spoken in the local context while also allowing better control of suprasegmental features. Similarly, future VGT studies utilizing samples of spontaneous speech with TPTEs should also be carried out in order to create a base for comparison between the perceptions of casual speech and read aloud samples of audio stimuli. Relatedly, using an online corpus comes with other limitations. Although information about the speakers' place of birth is provided, some of the speech samples may not reflect the regional accent of a speaker's birthplace and serve as a representation of the model varieties of English, since the birth place may not necessarily match a speaker's accent. Therefore, future work specifically focusing on regional varieties of English should include speakers that reside in similar states and cities to the extent possible. This should be considered in order to avoid any sort of ambiguity between the labels assigned to the selected varieties by the researcher and what those speech samples

represent, since there is always a possibility of gender and regional variation affecting participants' perceptions and evaluations of the speakers.

It is worth noting that the present study mostly focused on the cognitive component of the attitudinal structure. Therefore, quantitative VGT studies focusing on the elicitation of all three components and the linkage between language attitudes and behavior could be of great value in terms of expanding the literature on TPTEs' attitudes. Relatedly, VGT studies that utilize OLR or other inferential statistical methods that don't assume normal distribution of data and interval or ratio scale of measurement would only move the field forward due to being able to provide more statistically robust results.

Qualitative analysis in the present study mainly focused on TPTEs' attitudes towards MAE, MBE, and Turkish accented variety of English. Future work should further interrogate what causes TPTEs' negative and positive evaluations of the other inner, outer, and expanding circle varieties of English. Additionally, results of this study revealed that 'correct pronunciation' and 'clear speech' is a continuously reoccurring theme amongst TPTEs. Therefore, future work could focus on further elicitation of such conceptualizations from TPTEs in order to gain a better understanding of what is meant by such usage. In other words, future work that utilizes semi structured interviews in addition to VGT would be of great value.

Finally, although it was not within the scope of this study to interrogate the perceptions of regional dialects of Turkish, VGT studies eliciting the evaluations of Turkish and international participants towards dialects of Turkish could have major contributions to the existing language attitude literature. Furthermore, more language attitude studies utilizing methods from perceptual dialectology in relation to TPTEs' attitudes would make vast contributions to the existing literature.

REFERENCES

Ahn, J., & Moore, D. (2011). The relationship between students' accent perception and accented voice instructions and its effect on students' achievement in an interactive multimedia environment. *Journal of Educational Multimedia and Hypermedia*, *20*(4), 319-335.

Ajzen, I. (2001). Nature and operation of attitudes. *Annual review of psychology*, *52*(1), 27-58.

Al-Kahtany, A. H. (1995). Dialectical ethnographic" cleansing": ESL students' attitudes towards three varieties of English. *Language & Communication*.

Allport, G. W. (1935). Attitudes: A Handbook of Social Psychology, Worcester, Mass. *Clark University Press.*

Anderson-Hsieh, J., Johnson, R., & Koehler, K. (1992). The relationship between native speaker judgments of nonnative pronunciation and deviance in segmentais, prosody, and syllable structure. *Language learning*, 42(4), 529-555.

Anisfeld, M., Bogo, N., & Lambert, W. E. (1962). Evaluational reactions to accented English speech. *The Journal of Abnormal and Social Psychology*, *65*(4), 223.

Baker, C. (1992). *Attitudes and language* (Vol. 83). Multilingual Matters.

Bauer, L. (2013). *Introduction to International Varieties of English*. Edinburgh University Press.

Bolton, K. (2006). *Chinese Englishes: A sociolinguistic history*. Cambridge University Press.

Brennan, E. M., & Brennan, J. S. (1981). Measurements of accent and attitude toward Mexican-American speech. *Journal of Psycholinguistic Research*, *10*(5), 487-501.

Buckingham, L. (2014). Building a career in English: Users of English as an additional language in academia in the Arabian Gulf. *Tesol Quarterly*, *48*(1), 6-33.

Butler, Y. G. (2007). How are nonnative-English-speaking teachers perceived by young learners? *Tesol Quarterly*, *41*(4), 731-755.

Canut, C. (2002). Perceptions of languages in the Mandigo Region of Mali. *Handbook of perceptual dialectology*, 33-39.

Cargile, A.C. (2000) Evaluations of employment suitability: does accent always matter? *Journal of Employment Counselling*, 37, 165-177.

Carrie, E. (2014). *A social-psychological study of foreign learners' attitudes and behaviours towards model varieties of English speech* (Doctoral dissertation, University of St Andrews).

Carrie, E. (2017). 'British is professional, American is urban': attitudes towards English reference accents in Spain. *International Journal of Applied Linguistics*, *27*(2), 427-447.

Carrie, E., & McKenzie, R. M. (2018). American or British? L2 speakers' recognition and evaluations of accent features in English. *Journal of Multilingual and Multicultural Development*, *39*(4), 313-328.

Chen, H. C. (2011). Judgments of intelligibility and foreign accent by listeners of different language backgrounds. *The Journal of AsiaTEFL*, *8*(4), 61-83.

Cheshire, J. (1982) Dialect features and linguistic conflicts in schools. *Educational Review*, 34, 53-67.

Clark, L., & Schleef, E. (2010). The acquisition of sociolinguistic evaluations among Polish-born adolescents learning English: Evidence from perception. *Language Awareness*, *19*(4), 299-322.

Cummins, J. (1980). The cross-lingual dimensions of language proficiency: Implications for bilingual education and the optimal age issue. *TESOL quarterly*, 175-187.

Dalton, C., & Seidlhofer, B. (1994). Is pronunciation teaching desirable? Is it feasible. In *Proceedings of the 4th international NELLE conference. Hamburg: NELLE* (pp. 119-126).

Dalton-Puffer, C., Kaltenboeck, G., & Smit, U. (1997). Learner attitudes and L2 pronunciation in Austria. *World Englishes*, *16*(1), 115-128.

Dann, J. (1999) Dialects. In *Handbook of perceptual dialectology*, ed. D.R. Preston, vol. 1, 9–30. Amsterdam: John Benjamins.

Demirci, M. (1998). Gender and age-based variation in the perception of Turkish dialects. *Language Awareness*, *7*(4), 206-222.

Demirci, M., & Kleiner, B. (1999). The perception of Turkish dialects. *Handbook of perceptual dialectology*, 1, 263-282.

Demirci, M. (2002). Gender differences in the perception of Turkish regional dialects. *Handbook of perceptual dialectology*, *2*, 41-50.

Derwing, T. (2003). What do ESL students say about their accents? *Canadian Modern Language Review*, *59*(4), 547-567.

Derwing, T. M., & Munro, M. J. (1997). Accent, intelligibility, and comprehensibility: Evidence from four L1s. *Studies in second language acquisition*, 19(1), 1-16.

Dewey, M. (2011). Accommodative ELF talk and teacher knowledge. *Latest Trends in ELF Research, Cambridge Scholars Publishing, Newcastle upon Tyne*, 205-227.

Dörnyei, Z., Csizér, K., & Németh, N. (2006). *Motivation, language attitudes and globalisation: A Hungarian perspective*. Multilingual Matters.

Dziubalska-Kołaczyk, K., & Przedlacka, J. (Eds.). (2008). *English pronunciation models: A changing scene* (Vol. 21). Peter Lang.

Eagly, A. H., & Chaiken, S. (2007). The advantages of an inclusive definition of attitude. *Social cognition*, *25*(5), 582-602.

Edwards, J. (1999). Refining our understanding of language attitudes. *Journal of Language and Social Psychology*, *18*(1), 101-110.

Edwards, J. R. (1982). Language attitudes and their implications among English speakers. *Attitudes towards language variation: Social and applied contexts*, 20-33.

EF EPI 2019 - EF English Proficiency Index. (n.d.). Retrieved January 14, 2019, from https://www.ef.com.tr/epi/

Eisenstein, M. (1982). A study of social variation in adult second language aquisition. *Language Learning*, *32*(2), 367-391.

Flaitz, J. (1993). French attitudes toward the ideology of English as an international language. *World Englishes*, *12*(2), 179-191.

Friedrich, P. (2012). ELF; intercultural communication and the strategic aspect of communicative competence. In A. Masuda, C. Nelson (Eds.), Principles and practices of teaching English as an international language (pp. 44-54). Bristol, England: Multilingual Matters.

Galloway, N. (2013). Global Englishes and English language teaching (ELT) – Bridging the gap between theory and practice in a Japanese context. *System 41*, 786-803.

Garrett, P. (2010). *Attitudes to language*. Cambridge University Press.

Garrett, P., Coupland, N., & Williams, A. (2003). *Investigating language attitudes: Social meanings of dialect, ethnicity and performance*. University of Wales Press.

Geography Atlas - Regions. Retrieved January 16, 2019, from https://www.census.gov/geo/reference/webatlas/regions.html

Goktepe, F. T. (2014). Attitudes and motivation of Turkish undergraduate EFL students towards learning English language. *Studies in English Language Teaching*, *2*(3), 314.

Hartikainen, J. (2000). Attitudes of Finnish senior secondary school students towards six standard accents of English. *Unpublished 'Pro Gradua' Thesis, University of Joensuu, Finland*.

Hartley, L. C. (1999). A view from the West: Perceptions of US dialects by Oregon residents. *Handbook of perceptual dialectology*, 1, 315-332.

Hickey, R. (2013). *A dictionary of varieties of English*. John Wiley & Sons.

Hosoda, M. and E. Stone-Romero (2010) The effects of foreign accents on employment-related decisions. *Journal of Managerial Psychology*, 25, 113-132.

Inoue, F. (1999) Subjective dialect division in Great Britain. In *Handbook of perceptual dialectology*, ed. D.R. Preston, vol. 1, 147–160. Amsterdam: John Benjamins.

Jaramillo, M. G. L. (2014). *Are teachers ready for ELF? Evidence from non-native English speaking MA TESOL students*. Southern Illinois University at Carbondale.

Jarvella, R. J., Bang, E., Jakobsen, A. L., & Mees, I. M. (2001). Of mouths and men: non-native listeners' identification and evaluation of varieties of English. *International Journal of Applied Linguistics*, *11*(1), 37-56.

Jenkins, J. (1998). Which pronunciation norms and models for English as an International Language? *ELT journal*, *52*(2), 119-126.

Jenkins, J. (2003). *World Englishes: A resource book for students*. Psychology Press.

Jenkins, J. (2009). English as a lingua franca: Interpretations and attitudes. *World Englishes*, *28*(2), 200-207.

Kachru, B. 1996. Norms, models and identities. The Language Teacher 20(10):1–13.

Kachru, B. B. (1990). World Englishes and applied linguistics. *World Englishes*, *9*(1), 3-20.

Kontra, M. (2002). Where is the 'most beautiful' and the 'ugliest 'Hungarian spoken. *Handbook of perceptual dialectology*, *2*, 207-220.

Labov, W. (1972). *Sociolinguistic patterns* (No. 4). University of Pennsylvania Press.

Labov, W. (2006). *The social stratification of English in New York city*. Cambridge University Press.

Ladegaard, H. J. (1998). National stereotypes and language attitudes: The perception of British, American and Australian language and culture in Denmark. *Language & Communication*, *18*(4), 251-274.

Ladegaard, H. J. (2000). Language attitudes and sociolinguistic behaviour: Exploring attitude-behaviour relations in language. *Journal of sociolinguistics*, *4*(2), 214-233.

Ladegaard, H. J., & Sachdev, I. (2006). 'I like the Americans… But i certainly don't aim for an American accent': Language attitudes, vitality and foreign language learning in Denmark. *Journal of Multilingual and Multicultural Development*, *27*(2), 91-108.

Lambert, W. E. (1967). A social psychology of bilingualism. *Journal of social issues*, *23*(2), 91-109.

Lambert, W. E., Gardner, R. C., Olton, R., & Tunstall, K. (1968). Section V. *Readings in the sociology of language*, 473.

Lambert, W. E., Hodgson, R. C., Gardner, R. C., & Fillenbaum, S. (1960). Evaluational reactions to spoken languages. *The Journal of Abnormal and Social Psychology*, *60*(1), 44.

Lippi-Green, R. (2012) *English with an Accent*. (2nd ed.). London: Routledge.

Long, D. (1999). Geographical perceptions of Japanese dialect regions. *Handbook of perceptual dialectology*, *1*, 177-198.

Long, D., & Yim, Y. C. (2002). Regional differences in the perception of Korean dialects. *Handbook of perceptual dialectology*, *2*, 249-275.

Luk, J. C. M. (1998). Hong Kong students' awareness of and reactions to accent differences. *Multilingua*.

Luk, J. C. M. (1998). Hong Kong students' awareness of and reactions to accent differences. *Multilingua*.

Macafee, C. (1994). *Traditional dialect in the modern world: A Glasgow case study* (Vol. 35). Lang, Peter, Gmbh, Internationaler Verlag Der Wissenschaften.

Magen, H. S. (1998). The perception of foreign-accented speech. *Journal of phonetics*, 26(4), 381-400.

McArthur, Tom (ed.). 1992. *The Oxford Companion to the English Language*. Oxford University Press.

McCrocklin, S., & Link, S. (2016). Accent, Identity, and a Fear of Loss? ESL Students' Perspectives. *Canadian Modern Language Review*, *72*(1), 122-148.

McCullagh, P. (1980). Regression models for ordinal data. *Journal of the royal statistical society. Series B (Methodological)*, 109-142.

McKenzie, R. M. (1996). An examination of language attitudes to the Glasgow vernacular. *Unpublished M. Sc. dissertation, Department of Theoretical and Applied Linguistics, University of Edinburgh*.

McKenzie, R. M. (2004). Attitudes of Japanese nationals towards standard and non-standard varieties of Scottish English speech. *The East Asian Learner*, *1*(1), 16-25.

McKenzie, R. M. (2008). Social factors and non-native attitudes towards varieties of spoken English: a Japanese case study. *International journal of Applied linguistics*, *18*(1), 63-88.

McKenzie, R. M. (2010). *The social psychology of English as a global language: Attitudes, awareness and identity in the Japanese context* (Vol. 10). Springer Science & Business Media.

Menzies, J. (2004). *An investigation of attitudes to Scots and Glasgow dialect among secondary school pupils*. University of Glasgow.

Milroy, L. (1999). Standard English and language ideology in Britain and the United States. *Standard English: the widening debate*, *173*, 206.

Modiano, M. (1999). International English in the global village. *English Today*, *15*(2), 22-28.

Munro, M. J., & Derwing, T. M. (1995). Processing time, accent, and comprehensibility in the perception of native and foreign-accented speech. *Language and speech*, 38(3), 289-306.

Munro, M. J., & Derwing, T. M. (1999). Foreign accent, comprehensibility, and intelligibility in the speech of second language learners. *Language learning*, 49, 285-310.

Munro, M. J., & Derwing, T. M. (2001). Modeling perceptions of the accentedness and comprehensibility of L2 speech the role of speaking rate. *Studies in second language acquisition*, 23(4), 451-468.

Munro, M. J., Derwing, T. M., & Morton, S. L. (2006). The mutual intelligibility of L2 speech. *Studies in second language acquisition*, 28(1), 111-131.

Niedzielski, N. A., & Preston, D. R. (2000). *Folk linguistics* (Vol. 122). Walter de Gruyter.

Omoniyi, T. (2008). 11 West African Englishes. *The handbook of world Englishes*, *28*, 172.

Perloff, R. M. (2003). The dynamics of persuasion. Communication and attitude in the 21st century. *Hillsdale, NJ: LawrenceIbErbaum*.

Preston, D. R. (1996). Whaddayaknow?: The modes of folk linguistic awareness. *Language awareness*, *5*(1), 40-74.

Preston, D. R. (2004). Language attitudes to speech. *Language in the USA*, 480-492.

Preston, D. R. (2011). *Perceptual dialectology: Nonlinguists' views of areal linguistics* (Vol.7). Walter de Gruyter.

Preston, D. R. (Ed.). (1999). *Handbook of perceptual dialectology* (Vol. 1). John Benjamins Publishing.

Rakić, T., Steffens, M. C., & Mummendey, A. (2011). When it matters how you pronounce it: The influence of regional accents on job interview outcome. *British Journal of Psychology*, *102*(4), 868-883.

Ranta, E. (2010). English in the real world vs. English at school: Finnish English teachers' and students' views. *International Journal of Applied Linguistics*, *20*(2), 156-177.

Rindal, U. (2010). Constructing identity with L2: Pronunciation and attitudes among Norwegian learners of English 1. *Journal of Sociolinguistics*, *14*(2), 240-261.

Scales, J., Wennerstrom, A., Richard, D., & Wu, S. H. (2006). Language learners' perceptions of accent. *Tesol Quarterly*, *40*(4), 715-738.

Snell, J. (2013) Dialect, interaction and class positioning at school: from deficit to difference to repertoire. *Language and Education*, 27, 110-128.

Tichenor, S. (2012). A perceptual study of Scottish dialects.

Torrance, K. (2002). *Language attitudes and language change in Glaswegian speech* (Doctoral dissertation, University of Glasgow).

Tsalikis, J., O.W. DeShields and M.S. LaTour (1991) The role of accent on the credibility and effectiveness of the salesperson. *Journal of Personal Selling and Sales Management*, 11, 31–41.

Tucker, G. R., & Lambert, W. E. (1969). White and Negro listeners' reactions to various American-English dialects. *Social forces*, *47*(4), 463-468.

Üzüm, B. (2007). Analysis of Turkish learners' attitudes towards English language and English speaking societies. *Unpublished master's thesis). Middle East Technical University, Ankara*.

Walker, Robin. 1999. 'Proclaimed and Perceived Wants and Needs among Spanish Teachers of English'. *Speak Out!* 24: 25-32.

Watson, S. (1989). Scottish and Irish Gaelic: The giant's bed-fellows. *Investigating obsolescence: Studies in language contraction and death*, 41-59.

Weinberger, Steven. (2015). *Speech Accent Archive*. George Mason University. Retrieved from http://accent.gmu.edu

Wolfram, W., & Schilling, N. (2015). *American English: dialects and variation* (Vol. 25). John Wiley & Sons.

Wright, M. (1999). Influences on learner attitudes towards foreign language and culture. *Educational Research*, *41*(2), 197-208.

Yook, C., & Lindemann, S. (2013). The role of speaker identification in Korean university students' attitudes towards five varieties of English. *Journal of Multilingual and Multicultural Development*, *34*(3), 279-296.

APPENDICES

APPENDIX A. OLR ANALYSIS - EXPOSURE TO MEDIA

A1. Exposure to Media and Perceived Attractiveness

A1. Exposure to Media and Perceived Attractiveness

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2076.99 4189.98 5(0)  6.65e-09 7.3e+02
```

```
Coefficients: (1 not defined because of singularities)
Estimate Std. Error z value Pr(>|z|)
AccentsFavE   -0.54964    0.22589  -2.433 0.014967 *
AccentsGavE    0.01096    0.22569   0.049 0.961255
AccentsIvE    -0.95840    0.23083  -4.152 3.30e-05 ***
AccentsJvE    -0.37987    0.22501  -1.688 0.091362 .
AccentsMAE     3.16254    0.24731  12.788  < 2e-16 ***
AccentsMBE     3.16903    0.24664  12.849  < 2e-16 ***
AccentsSAE     1.10892    0.23262   4.767 1.87e-06 ***
AccentsSSE     1.51840    0.23144   6.561 5.36e-11 ***
AccentsTavE   -0.49624    0.23329  -2.127 0.033410 *
AccentsUavE   -0.94109    0.23069  -4.079 4.51e-05 ***
AccentsWAvE   -0.37462    0.22776  -1.645 0.100010
Everyday       1.53768    0.39244   3.918 8.92e-05 ***
fewtimesaweek  1.30798    0.39626   3.301 0.000964 ***
Onceamonth     1.40411    0.44049   3.188 0.001435 **
Rarely              NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
Threshold coefficients:
Estimate Std. Error z value
1|2   0.3409     0.4175   0.817
2|3   1.7545     0.4189   4.188
3|4   3.1734     0.4247   7.472
4|5   4.7972     0.4374  10.968
```

A2. Exposure to Media and Perceived Education Level

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -1993.40 4022.79 6(0)  1.51e-13 5.1e+02
```

```
Coefficients: (1 not defined because of singularities)
               Estimate Std. Error z value Pr(>|z|)
AccentsFavE   -0.61275    0.22486  -2.725  0.00643 **
AccentsGavE    0.07815    0.23185   0.337  0.73605
AccentsIvE    -1.22533    0.22869  -5.358 8.41e-08 ***
AccentsJvE    -0.45862    0.22731  -2.018  0.04363 *
AccentsMAE     3.22484    0.25087  12.855  < 2e-16 ***
AccentsMBE     3.05884    0.24658  12.405  < 2e-16 ***
AccentsSAE     1.05375    0.23114   4.559 5.14e-06 ***
AccentsSSE     1.16729    0.22812   5.117 3.10e-07 ***
AccentsTavE   -0.79427    0.23666  -3.356  0.00079 ***
AccentsUavE   -1.02084    0.22532  -4.531 5.88e-06 ***
AccentsWAvE   -0.38735    0.22453  -1.725  0.08450 .
Everyday       0.45749    0.36373   1.258  0.20847
fewtimesaweek  0.58708    0.36792   1.596  0.11056
Onceamonth     0.26201    0.41556   0.630  0.52837
Rarely              NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.0221     0.4017  -5.034
2|3  -0.2899     0.3945  -0.735
3|4   1.6600     0.3967   4.185
4|5   3.7263     0.4128   9.026
```

A3. Exposure to Media and Perceived Language Proficiency

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2011.27 4058.55 5(0)  9.24e-07 5.4e+02



Coefficients: (1 not defined because of singularities)
Estimate Std. Error z value Pr(>|z|)
AccentsFavE    -1.0157     0.2230  -4.555 5.24e-06 ***
AccentsGavE     0.2217     0.2275   0.974   0.3299
AccentsIvE     -1.6905     0.2313  -7.309 2.69e-13 ***
AccentsJvE     -0.4325     0.2230  -1.939   0.0525 .
AccentsMAE      3.6803     0.2647  13.902  < 2e-16 ***
AccentsMBE      3.4130     0.2567  13.294  < 2e-16 ***
AccentsSAE      1.3366     0.2336   5.722 1.05e-08 ***
AccentsSSE      1.3460     0.2270   5.929 3.05e-09 ***
AccentsTavE    -1.0601     0.2346  -4.519 6.20e-06 ***
AccentsUavE    -1.3444     0.2289  -5.873 4.27e-09 ***
AccentsWAvE    -0.5330     0.2205  -2.418   0.0156 *
Everyday        0.6208     0.3581   1.733   0.0830 .
fewtimesaweek   0.5917     0.3619   1.635   0.1021
Onceamonth      0.1709     0.4173   0.410   0.6822
Rarely              NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
Estimate Std. Error z value
1|2 -1.61631    0.38913  -4.154
2|3 -0.03006    0.38454  -0.078
3|4  1.45506    0.38625   3.767
4|5  3.43190    0.39963   8.588
```

A4. Exposure to Media and Perceived Politeness

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2242.29 4520.58 5(0)  3.93e-12 7.4e+02
```

```
Coefficients: (1 not defined because of singularities)
Estimate Std. Error z value Pr(>|z|)
AccentsFavE   -0.14959    0.21631  -0.692  0.48921
AccentsGavE   -0.61272    0.22219  -2.758  0.00582 **
AccentsIvE    -0.45881    0.21993  -2.086  0.03696 *
AccentsJvE    -0.48449    0.21809  -2.222  0.02631 *
AccentsMAE     1.47732    0.23604   6.259 3.88e-10 ***
AccentsMBE     1.74748    0.24127   7.243 4.40e-13 ***
AccentsSAE     0.08502    0.22415   0.379  0.70447
AccentsSSE     0.55846    0.22663   2.464  0.01373 *
AccentsTavE   -0.29125    0.22878  -1.273  0.20299
AccentsUavE   -0.72073    0.21943  -3.284  0.00102 **
AccentsWAvE   -0.65884    0.21894  -3.009  0.00262 **
Everyday      -0.36055    0.33322  -1.082  0.27924
fewtimesaweek -0.65953    0.33714  -1.956  0.05044 .
Onceamonth    -0.69140    0.38934  -1.776  0.07576 .
Rarely              NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
Threshold coefficients:
Estimate Std. Error z value
1|2  -3.2651     0.3740  -8.729
2|3  -1.7986     0.3639  -4.942
3|4  -0.5713     0.3599  -1.587
4|5   0.5945     0.3604   1.650
```

A5. Exposure to Media and Perceived Native Speaker Status

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -1772.18 3580.35 5(0)  1.76e-10 9.2e+02



Coefficients: (1 not defined because of singularities)
Estimate Std. Error z value Pr(>|z|)
AccentsFavE   -0.90448    0.24068  -3.758 0.000171 ***
AccentsGavE   -0.06075    0.23249  -0.261 0.793861
AccentsIvE    -1.57929    0.26637  -5.929 3.05e-09 ***
AccentsJvE    -0.30709    0.23134  -1.327 0.184364
AccentsMAE     4.12297    0.27513  14.985  < 2e-16 ***
AccentsMBE     4.00494    0.27060  14.800  < 2e-16 ***
AccentsSAE     1.91106    0.23168   8.249  < 2e-16 ***
AccentsSSE     1.23997    0.23003   5.391 7.02e-08 ***
AccentsTavE   -1.18526    0.25020  -4.737 2.17e-06 ***
AccentsUavE   -1.01890    0.24627  -4.137 3.51e-05 ***
AccentsWAvE   -0.11349    0.23385  -0.485 0.627460
Everyday       0.66369    0.40882   1.623 0.104495
fewtimesaweek  0.49495    0.41319   1.198 0.230966
Onceamonth     0.55517    0.46197   1.202 0.229460
Rarely              NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1


Threshold coefficients:
Estimate Std. Error z value
1|2   0.2940     0.4346   0.677
2|3   1.5379     0.4361   3.527
3|4   2.2762     0.4385   5.191
4|5   3.6321     0.4479   8.109
```

A6. Exposure to Media and Perceived Intelligibility

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2082.87 4201.74 5(0)  2.08e-09 6.5e+02



Coefficients: (1 not defined because of singularities)
Estimate Std. Error z value Pr(>|z|)
AccentsFavE   -0.21395    0.22518  -0.950 0.342051
AccentsGavE    0.75826    0.22824   3.322 0.000893 ***
AccentsIvE    -0.25012    0.22841  -1.095 0.273509
AccentsJvE     0.14108    0.22548   0.626 0.531506
AccentsMAE     3.67527    0.28048  13.104  < 2e-16 ***
AccentsMBE     3.54697    0.27123  13.077  < 2e-16 ***
AccentsSAE     1.45133    0.23595   6.151 7.70e-10 ***
AccentsSSE     1.38668    0.23197   5.978 2.26e-09 ***
AccentsTavE    0.17910    0.23358   0.767 0.443243
AccentsUavE   -0.29944    0.22485  -1.332 0.182937
AccentsWAvE    0.24985    0.22550   1.108 0.267880
Everyday       0.65178    0.35046   1.860 0.062914 .
fewtimesaweek  0.42975    0.35445   1.212 0.225343
Onceamonth    -0.04636    0.40384  -0.115 0.908602
Rarely              NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
Estimate Std. Error z value
1|2 -1.63171    0.38730  -4.213
2|3 -0.07158    0.38108  -0.188
3|4  1.18434    0.38215   3.099
4|5  2.87834    0.38881   7.403
```

A7. Exposure to Media and Perceived Wealth

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2067.62 4171.24 6(0)  2.54e-12 5.7e+02



Coefficients: (1 not defined because of singularities)
Estimate Std. Error z value Pr(>|z|)
AccentsFavE   -0.87636    0.22642  -3.870 0.000109 ***
AccentsGavE   -0.01359    0.22728  -0.060 0.952311
AccentsIvE    -0.87838    0.22467  -3.910 9.24e-05 ***
AccentsJvE    -0.36294    0.22748  -1.596 0.110597
AccentsMAE     2.79793    0.24186  11.569  < 2e-16 ***
AccentsMBE     2.66692    0.23938  11.141  < 2e-16 ***
AccentsSAE     1.04891    0.23202   4.521 6.16e-06 ***
AccentsSSE     1.27258    0.23120   5.504 3.71e-08 ***
AccentsTavE   -0.55848    0.23176  -2.410 0.015964 *
AccentsUavE   -0.99616    0.22640  -4.400 1.08e-05 ***
AccentsWAvE   -0.51097    0.22235  -2.298 0.021559 *
Everyday      -0.20258    0.36414  -0.556 0.577980
fewtimesaweek -0.19217    0.36812  -0.522 0.601653
Onceamonth    -0.28668    0.41498  -0.691 0.489679
Rarely              NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
Estimate Std. Error z value
1|2  -1.8518     0.3964  -4.671
2|3  -0.3607     0.3929  -0.918
3|4   1.6277     0.3962   4.109
4|5   3.0373     0.4047   7.506
```

APPENDIX B. OLR ANALYSIS – EXPOSURE TO LINGUISTICS COURSES

B1. Exposure to Linguistics Courses and Perceived Attractiveness

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2072.64 4189.28 5(0)  7.60e-09 5.6e+02
```

```
Coefficients: (2 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.55124    0.22564  -2.443  0.01457 *
AccentsGavE  0.02312    0.22564   0.102  0.91840
AccentsIvE  -0.95492    0.23108  -4.132 3.59e-05 ***
AccentsJvE  -0.37643    0.22496  -1.673  0.09427 .
AccentsMAE   3.17211    0.24766  12.808  < 2e-16 ***
AccentsMBE   3.17675    0.24707  12.858  < 2e-16 ***
AccentsSAE   1.09249    0.23267   4.696 2.66e-06 ***
AccentsSSE   1.53174    0.23175   6.609 3.86e-11 ***
AccentsTavE -0.49652    0.23322  -2.129  0.03326 *
AccentsUavE -0.95540    0.23059  -4.143 3.42e-05 ***
AccentsWAvE -0.36614    0.22762  -1.609  0.10772
Ling1       -0.01661    0.30043  -0.055  0.95591
Ling2        0.11590    0.29827   0.389  0.69759
Socioling   -0.12518    0.13488  -0.928  0.35336
GlobEng     -0.31502    0.11256  -2.799  0.00513 **
Lexicon      0.06581    0.13556   0.485  0.62735
OrCommSk          NA         NA      NA       NA
ListPronun        NA         NA      NA       NA
LangAcq     -0.61641    0.18793  -3.280  0.00104 **
ContrastTE   0.33059    0.19655   1.682  0.09257 .
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
Threshold coefficients:
    Estimate Std. Error z value
1|2  -1.2466     0.1862  -6.695
2|3   0.1764     0.1833   0.962
3|4   1.6049     0.1910   8.400
4|5   3.2301     0.2115  15.271
```

B2. Exposure to Linguistics Courses and Perceived Education Level

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -1984.18 4012.36 6(0)  1.83e-13 5.5e+02



Coefficients: (2 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.61640    0.22510  -2.738 0.006174 **
AccentsGavE  0.09119    0.23170   0.394 0.693903
AccentsIvE  -1.24526    0.22930  -5.431 5.62e-08 ***
AccentsJvE  -0.47150    0.22760  -2.072 0.038299 *
AccentsMAE   3.23387    0.25143  12.862  < 2e-16 ***
AccentsMBE   3.07335    0.24737  12.424  < 2e-16 ***
AccentsSAE   1.04765    0.23062   4.543 5.55e-06 ***
AccentsSSE   1.16931    0.22853   5.117 3.11e-07 ***
AccentsTavE -0.79350    0.23783  -3.336 0.000849 ***
AccentsUavE -1.03809    0.22635  -4.586 4.51e-06 ***
AccentsWAvE -0.38497    0.22454  -1.714 0.086441 .
Ling1       -0.04237    0.28471  -0.149 0.881708
Ling2        0.51643    0.28320   1.824 0.068225 .
Socioling   -0.13935    0.13471  -1.034 0.300915
GlobEng     -0.28022    0.11249  -2.491 0.012735 *
Lexicon      0.13953    0.13682   1.020 0.307816
OrCommSk          NA         NA      NA       NA
ListPronun        NA         NA      NA       NA
LangAcq     -0.28136    0.19583  -1.437 0.150791
ContrastTE   0.22928    0.20469   1.120 0.262662
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.2888     0.1959 -11.681
2|3  -0.5488     0.1817  -3.020
3|4   1.4179     0.1856   7.639
4|5   3.4979     0.2142  16.333
```

B3. Exposure to Linguistics Courses and Language Proficiency

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2000.32 4044.64 6(0)  4.42e-14 5.4e+02
```

```
Coefficients: (2 not defined because of singularities)
             Estimate Std. Error z value Pr(>|z|)
AccentsFavE -1.031484   0.223062  -4.624 3.76e-06 ***
AccentsGavE  0.221905   0.228005   0.973  0.33043
AccentsIvE  -1.699173   0.231888  -7.328 2.34e-13 ***
AccentsJvE  -0.429643   0.223998  -1.918  0.05510 .
AccentsMAE   3.713643   0.266163  13.953  < 2e-16 ***
AccentsMBE   3.446601   0.258042  13.357  < 2e-16 ***
AccentsSAE   1.346263   0.234565   5.739 9.50e-09 ***
AccentsSSE   1.379438   0.227158   6.073 1.26e-09 ***
AccentsTavE -1.069688   0.234765  -4.556 5.20e-06 ***
AccentsUavE -1.343098   0.229442  -5.854 4.81e-09 ***
AccentsWAvE -0.531049   0.221527  -2.397  0.01652 *
Ling1        0.361162   0.281010   1.285  0.19871
Ling2        0.003084   0.280877   0.011  0.99124
Socioling    0.001101   0.135757   0.008  0.99353
GlobEng     -0.313548   0.113523  -2.762  0.00575 **
Lexicon      0.562001   0.137773   4.079 4.52e-05 ***
OrCommSk           NA         NA      NA       NA
ListPronun         NA         NA      NA       NA
LangAcq     -0.494680   0.197565  -2.504  0.01228 *
ContrastTE   0.087079   0.207487   0.420  0.67471
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.0680     0.1922 -10.759
2|3  -0.4656     0.1816  -2.564
3|4   1.0314     0.1838   5.611
4|5   3.0241     0.2088  14.483
```

B4. Exposure to Linguistics Courses and Perceived Politeness

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2223.10 4490.19 5(0)  5.67e-12 5.4e+02



Coefficients: (2 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE  -0.1431     0.2176  -0.658 0.510834
AccentsGavE  -0.5935     0.2234  -2.656 0.007899 **
AccentsIvE   -0.4344     0.2208  -1.968 0.049088 *
AccentsJvE   -0.4847     0.2192  -2.212 0.026990 *
AccentsMAE    1.5246     0.2375   6.419 1.37e-10 ***
AccentsMBE    1.7955     0.2427   7.397 1.39e-13 ***
AccentsSAE    0.1009     0.2242   0.450 0.652859
AccentsSSE    0.5882     0.2268   2.593 0.009511 **
AccentsTavE  -0.2540     0.2303  -1.102 0.270271
AccentsUavE  -0.7315     0.2196  -3.332 0.000863 ***
AccentsWAvE  -0.6539     0.2202  -2.969 0.002986 **
Ling1        -0.0802     0.2970  -0.270 0.787121
Ling2         0.3824     0.2937   1.302 0.192871
Socioling    -0.7601     0.1340  -5.675 1.39e-08 ***
GlobEng      -0.2369     0.1104  -2.146 0.031909 *
Lexicon       0.3537     0.1348   2.624 0.008683 **
OrCommSk          NA         NA      NA       NA
ListPronun        NA         NA      NA       NA
LangAcq      -0.4027     0.1934  -2.082 0.037328 *
ContrastTE    0.4224     0.2030   2.080 0.037486 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
     Estimate Std. Error z value
1|2 -2.712775   0.197679 -13.723
2|3 -1.240766   0.180197  -6.886
3|4  0.003019   0.176961   0.017
4|5  1.195109   0.180202   6.632
```

B5. Exposure to Linguistics Courses and Perceived Native Speaker Status

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -1747.97 3539.95 5(0)  2.05e-10 4.8e+02
```

```
Coefficients: (2 not defined because of singularities)
             Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.943353   0.242313  -3.893 9.90e-05 ***
AccentsGavE -0.059817   0.233607  -0.256 0.797907
AccentsIvE  -1.637179   0.268551  -6.096 1.09e-09 ***
AccentsJvE  -0.316656   0.232624  -1.361 0.173439
AccentsMAE   4.183114   0.277437  15.078  < 2e-16 ***
AccentsMBE   4.063631   0.272781  14.897  < 2e-16 ***
AccentsSAE   1.949655   0.232906   8.371  < 2e-16 ***
AccentsSSE   1.245173   0.230947   5.392 6.98e-08 ***
AccentsTavE -1.230981   0.251948  -4.886 1.03e-06 ***
AccentsUavE -1.059337   0.247490  -4.280 1.87e-05 ***
AccentsWAvE -0.121793   0.234604  -0.519 0.603660
Ling1        0.214975   0.301471   0.713 0.475790
Ling2       -0.464300   0.300987  -1.543 0.122930
Socioling   -0.236495   0.150949  -1.567 0.117179
GlobEng      0.352669   0.123896   2.846 0.004420 **
Lexicon      0.005387   0.151312   0.036 0.971597
OrCommSk           NA         NA      NA       NA
ListPronun         NA         NA      NA       NA
LangAcq     -0.753351   0.207304  -3.634 0.000279 ***
ContrastTE   0.270663   0.216407   1.251 0.211040
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
Threshold coefficients:
    Estimate Std. Error z value
1|2  -0.5971     0.1863  -3.206
2|3   0.6790     0.1869   3.633
3|4   1.4287     0.1926   7.417
4|5   2.8010     0.2113  13.258
```

B6. Exposure to Linguistics Courses and Perceived Intelligibility

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2067.37 4178.74 5(0)  3.54e-09 5.6e+02



Coefficients: (2 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE  -0.2229     0.2247  -0.992 0.321234
AccentsGavE   0.7873     0.2275   3.461 0.000538 ***
AccentsIvE   -0.2450     0.2288  -1.071 0.284346
AccentsJvE    0.1351     0.2252   0.600 0.548483
AccentsMAE    3.7307     0.2815  13.251  < 2e-16 ***
AccentsMBE    3.6008     0.2725  13.213  < 2e-16 ***
AccentsSAE    1.4682     0.2363   6.213 5.19e-10 ***
AccentsSSE    1.4006     0.2318   6.043 1.51e-09 ***
AccentsTavE   0.1914     0.2343   0.817 0.413843
AccentsUavE  -0.2856     0.2245  -1.272 0.203435
AccentsWAvE   0.2472     0.2258   1.094 0.273782
Ling1         0.5067     0.3085   1.643 0.100448
Ling2        -0.2546     0.3090  -0.824 0.410022
Socioling    -0.5928     0.1387  -4.274 1.92e-05 ***
GlobEng      -0.3363     0.1154  -2.915 0.003552 **
Lexicon       0.6933     0.1401   4.948 7.52e-07 ***
OrCommSk          NA         NA      NA       NA
ListPronun        NA         NA      NA       NA
LangAcq      -0.2762     0.1999  -1.382 0.167118
ContrastTE    0.2619     0.2101   1.247 0.212529
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.0377     0.1996 -10.210
2|3  -0.4585     0.1857  -2.469
3|4   0.8173     0.1863   4.388
4|5   2.5330     0.1986  12.757
```

B7. Exposure to Linguistics Courses and Perceived Wealth

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2061.29 4166.57 6(0)  2.85e-12 5.5e+02



Coefficients: (2 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.88878    0.22691  -3.917 8.97e-05 ***
AccentsGavE -0.02257    0.22720  -0.099  0.92085
AccentsIvE  -0.88464    0.22511  -3.930 8.50e-05 ***
AccentsJvE  -0.36967    0.22783  -1.623  0.10469
AccentsMAE   2.79838    0.24200  11.563  < 2e-16 ***
AccentsMBE   2.66946    0.23936  11.153  < 2e-16 ***
AccentsSAE   1.05580    0.23184   4.554 5.26e-06 ***
AccentsSSE   1.26591    0.23115   5.477 4.34e-08 ***
AccentsTavE -0.55396    0.23218  -2.386  0.01703 *
AccentsUavE -1.00135    0.22682  -4.415 1.01e-05 ***
AccentsWAvE -0.52535    0.22268  -2.359  0.01831 *
Ling1        0.28840    0.28639   1.007  0.31393
Ling2       -0.19376    0.28451  -0.681  0.49586
Socioling    0.10529    0.13422   0.784  0.43277
GlobEng     -0.02827    0.11176  -0.253  0.80032
Lexicon     -0.25733    0.13481  -1.909  0.05628 .
OrCommSk          NA         NA      NA       NA
ListPronun        NA         NA      NA       NA
LangAcq      0.52739    0.20050   2.630  0.00853 **
ContrastTE  -0.55065    0.20981  -2.624  0.00868 **
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
    Estimate Std. Error z value
1|2  -1.6933     0.1859  -9.111
2|3  -0.1978     0.1795  -1.102
3|4   1.7974     0.1899   9.467
4|5   3.2157     0.2079  15.468
```

APPENDIX C. OLR ANALYSIS - EXPOSURE TO L2 COURSES

C1. Exposure to L2 Courses and Perceived Attractiveness

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2072.24 4190.49 5(0)  8.24e-09 2.8e+02
```

```
Coefficients: (1 not defined because of singularities)
             Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.557564   0.225537  -2.472  0.01343 *
AccentsGavE  0.009416   0.225509   0.042  0.96670
AccentsIvE  -0.955533   0.230676  -4.142 3.44e-05 ***
AccentsJvE  -0.372327   0.224721  -1.657  0.09755 .
AccentsMAE   3.174032   0.247643  12.817  < 2e-16 ***
AccentsMBE   3.200604   0.247144  12.950  < 2e-16 ***
AccentsSAE   1.101277   0.232695   4.733 2.22e-06 ***
AccentsSSE   1.519418   0.230701   6.586 4.52e-11 ***
AccentsTavE -0.500002   0.232779  -2.148  0.03172 *
AccentsUavE -0.948853   0.229795  -4.129 3.64e-05 ***
AccentsWAvE -0.364426   0.227200  -1.604  0.10872
LLGerman    -0.047769   0.121104  -0.394  0.69325
LLFrench    -0.303092   0.130732  -2.318  0.02043 *
LLRussian    0.162824   0.213716   0.762  0.44614
LLChinese   -0.249427   0.447663  -0.557  0.57741
LLJapanese   0.566581   0.198983   2.847  0.00441 **
LLSpanish   -0.007320   0.200846  -0.036  0.97093
LLGreek     -0.353906   0.210830  -1.679  0.09322 .
LLArabic     1.069544   0.357580   2.991  0.00278 **
LLKorean           NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
Threshold coefficients:
    Estimate Std. Error z value
1|2  -1.2791     0.2194  -5.830
2|3   0.1482     0.2164   0.685
3|4   1.5776     0.2228   7.081
4|5   3.1979     0.2412  13.260
```

C2. Exposure to L2 Courses and Perceived Education Level

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -1981.19 4008.38 6(0)  1.73e-13 2.7e+02


Coefficients: (1 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.61729    0.22482  -2.746 0.006037 **
AccentsGavE  0.09104    0.23181   0.393 0.694510
AccentsIvE  -1.25801    0.22998  -5.470 4.50e-08 ***
AccentsJvE  -0.46666    0.22762  -2.050 0.040351 *
AccentsMAE   3.25228    0.25158  12.928  < 2e-16 ***
AccentsMBE   3.08145    0.24731  12.460  < 2e-16 ***
AccentsSAE   1.06492    0.23141   4.602 4.19e-06 ***
AccentsSSE   1.16422    0.22825   5.101 3.39e-07 ***
AccentsTavE -0.79358    0.23747  -3.342 0.000832 ***
AccentsUavE -1.04536    0.22599  -4.626 3.73e-06 ***
AccentsWAvE -0.37575    0.22444  -1.674 0.094091 .
LLGerman    -0.06011    0.12200  -0.493 0.622202
LLFrench    -0.34375    0.13095  -2.625 0.008666 **
LLRussian    0.51843    0.22110   2.345 0.019039 *
LLChinese   -0.40101    0.42814  -0.937 0.348948
LLJapanese   0.29960    0.20686   1.448 0.147526
LLSpanish    0.12249    0.20187   0.607 0.543987
LLGreek      0.29971    0.20895   1.434 0.151471
LLArabic     1.45666    0.39810   3.659 0.000253 ***
LLKorean          NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1


Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.6962     0.2300 -11.725
2|3  -0.9558     0.2168  -4.409
3|4   1.0144     0.2176   4.661
4|5   3.1044     0.2411  12.877
```

C3. Exposure to L2 Courses and Perceived Language Proficiency

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -1995.84 4037.68 6(0)  6.67e-14 2.6e+02
```

```
Coefficients: (1 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -1.05180    0.22356  -4.705 2.54e-06 ***
AccentsGavE  0.20885    0.22832   0.915  0.36033
AccentsIvE  -1.72457    0.23201  -7.433 1.06e-13 ***
AccentsJvE  -0.44222    0.22319  -1.981  0.04755 *
AccentsMAE   3.73597    0.26637  14.025  < 2e-16 ***
AccentsMBE   3.46357    0.25834  13.407  < 2e-16 ***
AccentsSAE   1.34639    0.23366   5.762 8.30e-09 ***
AccentsSSE   1.36297    0.22738   5.994 2.04e-09 ***
AccentsTavE -1.07035    0.23492  -4.556 5.21e-06 ***
AccentsUavE -1.36761    0.22981  -5.951 2.66e-09 ***
AccentsWAvE -0.54679    0.22136  -2.470  0.01351 *
LLGerman    -0.09167    0.12336  -0.743  0.45743
LLFrench    -0.20989    0.13351  -1.572  0.11593
LLRussian    0.69369    0.22342   3.105  0.00190 **
LLChinese   -0.69284    0.42733  -1.621  0.10495
LLJapanese   0.47978    0.20811   2.305  0.02114 *
LLSpanish    0.41150    0.20295   2.028  0.04261 *
LLGreek      0.34229    0.20075   1.705  0.08819 .
LLArabic     1.03600    0.38176   2.714  0.00665 **
LLKorean          NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.2884     0.2269 -10.084
2|3  -0.6828     0.2167  -3.150
3|4   0.8226     0.2179   3.775
4|5   2.8292     0.2392  11.828
```

C4. Exposure to L2 Courses and Perceived Politeness

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2232.41 4510.81 5(0)  4.42e-12 3.7e+02
```

```
Coefficients: (1 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.15224    0.21678  -0.702 0.482501
AccentsGavE -0.63703    0.22297  -2.857 0.004277 **
AccentsIvE  -0.46068    0.22058  -2.089 0.036751 *
AccentsJvE  -0.49316    0.21969  -2.245 0.024782 *
AccentsMAE   1.49311    0.23753   6.286 3.25e-10 ***
AccentsMBE   1.77144    0.24261   7.302 2.84e-13 ***
AccentsSAE   0.09326    0.22547   0.414 0.679150
AccentsSSE   0.55297    0.22740   2.432 0.015028 *
AccentsTavE -0.29572    0.22969  -1.287 0.197930
AccentsUavE -0.72912    0.22015  -3.312 0.000927 ***
AccentsWAvE -0.65830    0.21999  -2.992 0.002767 **
LLGerman     0.03210    0.12145   0.264 0.791569
LLFrench    -0.06872    0.13024  -0.528 0.597766
LLRussian    0.59619    0.21105   2.825 0.004729 **
LLChinese    1.62016    0.48386   3.348 0.000813 ***
LLJapanese  -0.01197    0.19807  -0.060 0.951829
LLSpanish    0.57579    0.19951   2.886 0.003901 **
LLGreek     -0.21338    0.19911  -1.072 0.283862
LLArabic    -0.26941    0.35220  -0.765 0.444310
LLKorean          NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
Threshold coefficients:
    Estimate Std. Error z value
1|2 -2.76046    0.23170 -11.914
2|3 -1.28745    0.21618  -5.956
3|4 -0.05198    0.21231  -0.245
4|5  1.12523    0.21486   5.237
```

C5. Exposure to L2 Courses and Perceived Native Speaker Status

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -1758.31 3562.62 5(0)  1.68e-10 3.4e+02
```

```
Coefficients: (1 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.92582    0.24181  -3.829 0.000129 ***
AccentsGavE -0.05526    0.23316  -0.237 0.812644
AccentsIvE  -1.60046    0.26759  -5.981 2.22e-09 ***
AccentsJvE  -0.32167    0.23254  -1.383 0.166570
AccentsMAE   4.15823    0.27598  15.067  < 2e-16 ***
AccentsMBE   4.04093    0.27189  14.863  < 2e-16 ***
AccentsSAE   1.92054    0.23157   8.294  < 2e-16 ***
AccentsSSE   1.25243    0.23019   5.441 5.30e-08 ***
AccentsTavE -1.21719    0.25159  -4.838 1.31e-06 ***
AccentsUavE -1.04468    0.24736  -4.223 2.41e-05 ***
AccentsWAvE -0.11285    0.23456  -0.481 0.630445
LLGerman    -0.30697    0.13296  -2.309 0.020961 *
LLFrench    -0.21296    0.14181  -1.502 0.133154
LLRussian    0.24158    0.23282   1.038 0.299429
LLChinese   -0.81298    0.45353  -1.793 0.073040 .
LLJapanese   0.42392    0.22940   1.848 0.064603 .
LLSpanish    0.25768    0.22421   1.149 0.250434
LLGreek     -0.85084    0.23485  -3.623 0.000291 ***
LLArabic    -0.80342    0.43800  -1.834 0.066607 .
LLKorean          NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
Threshold coefficients:
    Estimate Std. Error z value
1|2  -0.6493     0.2275  -2.854
2|3   0.6122     0.2284   2.680
3|4   1.3633     0.2326   5.860
4|5   2.7346     0.2475  11.048
```

C6. Exposure to L2 Courses and Perceived Intelligibility

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2045.40 4136.80 5(0)  1.26e-08 3.0e+02



Coefficients: (1 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.23871    0.22458  -1.063 0.287834
AccentsGavE  0.77833    0.22817   3.411 0.000647 ***
AccentsIvE  -0.24864    0.22963  -1.083 0.278887
AccentsJvE   0.14234    0.22606   0.630 0.528901
AccentsMAE   3.81615    0.28347  13.462  < 2e-16 ***
AccentsMBE   3.68094    0.27398  13.435  < 2e-16 ***
AccentsSAE   1.49796    0.23679   6.326 2.51e-10 ***
AccentsSSE   1.41467    0.23311   6.069 1.29e-09 ***
AccentsTavE  0.21318    0.23437   0.910 0.363031
AccentsUavE -0.30496    0.22516  -1.354 0.175613
AccentsWAvE  0.23982    0.22597   1.061 0.288548
LLGerman     0.20363    0.12625   1.613 0.106760
LLFrench     0.08372    0.13568   0.617 0.537206
LLRussian    0.52457    0.22717   2.309 0.020935 *
LLChinese   -0.84169    0.43314  -1.943 0.051987 .
LLJapanese   1.10206    0.21797   5.056 4.28e-07 ***
LLSpanish    0.08314    0.20026   0.415 0.678035
LLGreek      0.61396    0.21090   2.911 0.003601 **
LLArabic     2.18073    0.39334   5.544 2.95e-08 ***
LLKorean          NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
    Estimate Std. Error z value
1|2  -1.8480     0.2326  -7.944
2|3  -0.2674     0.2211  -1.209
3|4   1.0363     0.2224   4.659
4|5   2.8087     0.2348  11.961
```

C7. Exposure to L2 Courses and Perceived Wealth

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2061.03 4168.07 6(0)  3.09e-12 2.8e+02
```

```
Coefficients: (1 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.88116    0.22658  -3.889 0.000101 ***
AccentsGavE -0.02191    0.22721  -0.096 0.923178
AccentsIvE  -0.89009    0.22471  -3.961 7.46e-05 ***
AccentsJvE  -0.37198    0.22740  -1.636 0.101878
AccentsMAE   2.80546    0.24199  11.593  < 2e-16 ***
AccentsMBE   2.67703    0.23965  11.171  < 2e-16 ***
AccentsSAE   1.04848    0.23197   4.520 6.19e-06 ***
AccentsSSE   1.27250    0.23108   5.507 3.66e-08 ***
AccentsTavE -0.56161    0.23175  -2.423 0.015377 *
AccentsUavE -1.00933    0.22663  -4.454 8.44e-06 ***
AccentsWAvE -0.51543    0.22263  -2.315 0.020601 *
LLGerman    -0.10794    0.12086  -0.893 0.371830
LLFrench    -0.10996    0.13081  -0.841 0.400557
LLRussian    0.33722    0.20825   1.619 0.105378
LLChinese    0.07501    0.42480   0.177 0.859848
LLJapanese   0.14543    0.20154   0.722 0.470525
LLSpanish   -0.13713    0.20079  -0.683 0.494648
LLGreek     -0.21017    0.20419  -1.029 0.303336
LLArabic     0.80495    0.36184   2.225 0.026107 *
LLKorean          NA         NA      NA       NA
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
Threshold coefficients:
    Estimate Std. Error z value
1|2  -1.7764     0.2202  -8.067
2|3  -0.2757     0.2141  -1.288
3|4   1.7249     0.2218   7.776
4|5   3.1391     0.2372  13.232
```

APPENDIX D. OLR ANALYSIS - COUNTRIES TRAVELED

D1. Countries Traveled and Perceived Attractiveness

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2069.90 4179.79 5(0)  7.46e-09 2.6e+02



Coefficients: (2 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.54369    0.22576  -2.408    0.016 *
AccentsGavE  0.03463    0.22602   0.153    0.878
AccentsIvE  -0.93528    0.23090  -4.051 5.11e-05 ***
AccentsJvE  -0.35578    0.22470  -1.583    0.113
AccentsMAE   3.21233    0.24723  12.993  < 2e-16 ***
AccentsMBE   3.21762    0.24692  13.031  < 2e-16 ***
AccentsSAE   1.13364    0.23289   4.868 1.13e-06 ***
AccentsSSE   1.53508    0.23144   6.633 3.30e-11 ***
AccentsTavE -0.47693    0.23344  -2.043    0.041 *
AccentsUavE -0.92110    0.23012  -4.003 6.26e-05 ***
AccentsWAvE -0.35585    0.22733  -1.565    0.118
USA         -0.46928    0.37193  -1.262    0.207
England     -0.45826    0.39382  -1.164    0.245
Scotland          NA         NA      NA       NA
Germany     -0.62806    0.44942  -1.397    0.162
RUUKR       -0.46260    0.36602  -1.264    0.206
China             NA         NA      NA       NA
France       1.75915    0.33571   5.240 1.61e-07 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
    Estimate Std. Error z value
1|2  -1.1156     0.1690  -6.601
2|3   0.3098     0.1666   1.860
3|4   1.7349     0.1755   9.885
4|5   3.3683     0.1984  16.976
```

D2. Countries Traveled and Perceived Education Level

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -1988.29 4016.57 6(0)  1.61e-13 2.0e+02



Coefficients: (2 not defined because of singularities)
             Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.623753   0.224875  -2.774 0.005541 **
AccentsGavE  0.074491   0.232262   0.321 0.748424
AccentsIvE  -1.240169   0.228965  -5.416 6.08e-08 ***
AccentsJvE  -0.470500   0.227727  -2.066 0.038822 *
AccentsMAE   3.233732   0.250824  12.892  < 2e-16 ***
AccentsMBE   3.064986   0.246431  12.438  < 2e-16 ***
AccentsSAE   1.050649   0.230936   4.550 5.38e-06 ***
AccentsSSE   1.164189   0.227938   5.107 3.26e-07 ***
AccentsTavE -0.793016   0.236747  -3.350 0.000809 ***
AccentsUavE -1.031438   0.225344  -4.577 4.71e-06 ***
AccentsWAvE -0.389018   0.224317  -1.734 0.082877 .
USA         -0.001327   0.367405  -0.004 0.997119
England      0.237566   0.394849   0.602 0.547398
Scotland           NA         NA      NA       NA
Germany     -0.739193   0.441608  -1.674 0.094157 .
RUUKR       -0.951730   0.385187  -2.471 0.013480 *
China              NA         NA      NA       NA
France       1.255477   0.344323   3.646 0.000266 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.5300     0.1820 -13.904
2|3  -0.7964     0.1653  -4.819
3|4   1.1614     0.1676   6.929
4|5   3.2414     0.1976  16.406
```

D3. Countries Traveled and Perceived Language Proficiency

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2010.47 4060.95 5(0)  9.52e-07 2.4e+02



Coefficients: (2 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -1.02818    0.22302  -4.610 4.02e-06 ***
AccentsGavE  0.21432    0.22769   0.941   0.3466
AccentsIvE  -1.69440    0.23133  -7.325 2.40e-13 ***
AccentsJvE  -0.43734    0.22305  -1.961   0.0499 *
AccentsMAE   3.68119    0.26492  13.895  < 2e-16 ***
AccentsMBE   3.41428    0.25687  13.292  < 2e-16 ***
AccentsSAE   1.33986    0.23387   5.729 1.01e-08 ***
AccentsSSE   1.33834    0.22697   5.896 3.71e-09 ***
AccentsTavE -1.06608    0.23464  -4.543 5.53e-06 ***
AccentsUavE -1.34539    0.22916  -5.871 4.33e-09 ***
AccentsWAvE -0.53286    0.22089  -2.412   0.0159 *
USA          0.43604    0.39132   1.114   0.2651
England     -0.12073    0.45037  -0.268   0.7887
Scotland          NA         NA      NA       NA
Germany     -0.33132    0.49167  -0.674   0.5004
RUUKR       -0.01908    0.38460  -0.050   0.9604
China             NA         NA      NA       NA
France       0.51831    0.33601   1.543   0.1229
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.2087     0.1764 -12.523
2|3  -0.6231     0.1642  -3.794
3|4   0.8640     0.1657   5.216
4|5   2.8446     0.1917  14.840
```

D4. Countries Traveled and Perceived Politeness

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2241.17 4522.35 5(0)  4.40e-12 3.4e+02



Coefficients: (2 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.15054    0.21651  -0.695  0.48687
AccentsGavE -0.60644    0.22256  -2.725  0.00643 **
AccentsIvE  -0.45106    0.21980  -2.052  0.04015 *
AccentsJvE  -0.47136    0.21808  -2.161  0.03067 *
AccentsMAE   1.48264    0.23586   6.286 3.26e-10 ***
AccentsMBE   1.75444    0.24118   7.274 3.48e-13 ***
AccentsSAE   0.09806    0.22396   0.438  0.66150
AccentsSSE   0.57373    0.22677   2.530  0.01140 *
AccentsTavE -0.28563    0.22914  -1.247  0.21257
AccentsUavE -0.71870    0.21962  -3.273  0.00107 **
AccentsWAvE -0.65249    0.21952  -2.972  0.00296 **
USA         -0.18630    0.34526  -0.540  0.58948
England     -0.83764    0.41928  -1.998  0.04574 *
Scotland          NA         NA      NA       NA
Germany      0.90127    0.46105   1.955  0.05061 .
RUUKR       -0.55284    0.36110  -1.531  0.12577
China             NA         NA      NA       NA
France       0.01506    0.32567   0.046  0.96311
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.8291     0.1838 -15.396
2|3  -1.3628     0.1642  -8.301
3|4  -0.1368     0.1596  -0.857
4|5   1.0301     0.1623   6.348
```

D5. Countries Traveled and Perceived Native Speaker Status

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -1768.18 3576.35 5(0)  1.92e-10 3.3e+02



Coefficients: (2 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE  -0.9088     0.2411  -3.769 0.000164 ***
AccentsGavE  -0.0672     0.2328  -0.289 0.772883
AccentsIvE   -1.5938     0.2668  -5.973 2.34e-09 ***
AccentsJvE   -0.3167     0.2317  -1.367 0.171677
AccentsMAE    4.1309     0.2758  14.977  < 2e-16 ***
AccentsMBE    4.0170     0.2711  14.820  < 2e-16 ***
AccentsSAE    1.9082     0.2318   8.233  < 2e-16 ***
AccentsSSE    1.2422     0.2297   5.409 6.35e-08 ***
AccentsTavE  -1.1931     0.2507  -4.759 1.94e-06 ***
AccentsUavE  -1.0239     0.2465  -4.154 3.27e-05 ***
AccentsWAvE  -0.1275     0.2342  -0.545 0.586036
USA          -1.3022     0.4155  -3.134 0.001723 **
England      -0.5244     0.4537  -1.156 0.247826
Scotland          NA         NA      NA       NA
Germany       0.2962     0.5047   0.587 0.557193
RUUKR         0.8303     0.4006   2.073 0.038184 *
China             NA         NA      NA       NA
France        0.0175     0.3604   0.049 0.961264
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
    Estimate Std. Error z value
1|2  -0.3330     0.1681  -1.981
2|3   0.9168     0.1706   5.374
3|4   1.6591     0.1773   9.356
4|5   3.0184     0.1975  15.284
```

D6. Countries Traveled and Perceived Intelligibility

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2081.14 4202.29 5(0)  2.45e-09 3.0e+02



Coefficients: (2 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE  -0.2367     0.2247  -1.053  0.29225
AccentsGavE   0.7458     0.2279   3.272  0.00107 **
AccentsIvE   -0.2500     0.2287  -1.093  0.27427
AccentsJvE    0.1395     0.2253   0.619  0.53570
AccentsMAE    3.6791     0.2807  13.109  < 2e-16 ***
AccentsMBE    3.5451     0.2715  13.060  < 2e-16 ***
AccentsSAE    1.4615     0.2359   6.197 5.77e-10 ***
AccentsSSE    1.3782     0.2317   5.947 2.73e-09 ***
AccentsTavE   0.1846     0.2339   0.789  0.43004
AccentsUavE  -0.3004     0.2244  -1.339  0.18061
AccentsWAvE   0.2273     0.2257   1.007  0.31385
USA           0.7998     0.4071   1.964  0.04948 *
England      -0.8455     0.3818  -2.214  0.02680 *
Scotland          NA         NA      NA       NA
Germany       0.4974     0.4288   1.160  0.24605
RUUKR        -0.6041     0.4044  -1.494  0.13522
China             NA         NA      NA       NA
France        0.8865     0.3423   2.590  0.00959 **
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.1699     0.1852 -11.719
2|3  -0.6061     0.1698  -3.569
3|4   0.6527     0.1696   3.847
4|5   2.3505     0.1816  12.940
```

D7. Countries Traveled and Perceived Wealth

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -2066.50 4173.00 6(0)  2.54e-12 2.3e+02
```

```
Coefficients: (2 not defined because of singularities)
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.88155    0.22656  -3.891 9.98e-05 ***
AccentsGavE -0.01694    0.22745  -0.074   0.9406
AccentsIvE  -0.88453    0.22479  -3.935 8.32e-05 ***
AccentsJvE  -0.36382    0.22753  -1.599   0.1098
AccentsMAE   2.80019    0.24198  11.572  < 2e-16 ***
AccentsMBE   2.66674    0.23964  11.128  < 2e-16 ***
AccentsSAE   1.04852    0.23219   4.516 6.31e-06 ***
AccentsSSE   1.27419    0.23146   5.505 3.69e-08 ***
AccentsTavE -0.56222    0.23174  -2.426   0.0153 *
AccentsUavE -0.99979    0.22658  -4.412 1.02e-05 ***
AccentsWAvE -0.51302    0.22246  -2.306   0.0211 *
USA         -0.14470    0.35948  -0.403   0.6873
England     -0.09876    0.40689  -0.243   0.8082
Scotland          NA         NA      NA       NA
Germany      0.06481    0.45456   0.143   0.8866
RUUKR       -0.37495    0.36725  -1.021   0.3073
China             NA         NA      NA       NA
France       0.43367    0.33089   1.311   0.1900
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
Threshold coefficients:
    Estimate Std. Error z value
1|2  -1.6492     0.1706  -9.665
2|3  -0.1559     0.1635  -0.954
3|4   1.8334     0.1745  10.507
4|5   3.2434     0.1943  16.697
```

APPENDIX E. OLR ANALYSIS – FEMALE PARTICIPANT PERCEPTIONS

Female Evaluations of Accents for Perceived Attractiveness Combined for Gender

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2087.06 4206.13 5(0)  6.10e-09 2.7e+02

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.53818    0.22540  -2.388   0.0170 *
AccentsGavE  0.01510    0.22553   0.067   0.9466
AccentsIvE  -0.94539    0.23042  -4.103 4.08e-05 ***
AccentsJvE  -0.35925    0.22456  -1.600   0.1097
AccentsMAE   3.14415    0.24692  12.733  < 2e-16 ***
AccentsMBE   3.15930    0.24635  12.825  < 2e-16 ***
AccentsSAE   1.10308    0.23219   4.751 2.03e-06 ***
AccentsSSE   1.50702    0.23119   6.519 7.10e-11 ***
AccentsTavE -0.49524    0.23290  -2.126   0.0335 *
AccentsUavE -0.92966    0.23008  -4.041 5.33e-05 ***
AccentsWAvE -0.36647    0.22711  -1.614   0.1066
StsF         0.02007    0.09957   0.202   0.8403
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1


Threshold coefficients:
    Estimate Std. Error z value
1|2  -1.0648     0.1805  -5.898
2|3   0.3369     0.1783   1.889
3|4   1.7488     0.1870   9.354
4|5   3.3629     0.2084  16.140
```

Female Evaluations of Accents for Perceived Education Level Combined for Gender

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -1992.54 4017.08 6(0)  1.31e-13 2.2e+02

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.61838    0.22485  -2.750 0.005956 **
AccentsGavE  0.07567    0.23205   0.326 0.744354
AccentsIvE  -1.23731    0.22930  -5.396 6.82e-08 ***
AccentsJvE  -0.45876    0.22761  -2.016 0.043851 *
AccentsMAE   3.21572    0.25109  12.807  < 2e-16 ***
AccentsMBE   3.05696    0.24701  12.376  < 2e-16 ***
AccentsSAE   1.04877    0.23145   4.531 5.86e-06 ***
AccentsSSE   1.16245    0.22847   5.088 3.62e-07 ***
AccentsTavE -0.79871    0.23693  -3.371 0.000749 ***
AccentsUavE -1.02958    0.22588  -4.558 5.16e-06 ***
AccentsWAvE -0.38994    0.22493  -1.734 0.082989 .
StsF         0.25555    0.10069   2.538 0.011152 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.3361     0.1934 -12.077
2|3  -0.6027     0.1785  -3.376
3|4   1.3480     0.1821   7.404
4|5   3.4149     0.2109  16.190
```

Female Evaluations of Accents for Perceived Language Proficiency
Combined for Gender

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2013.77 4059.53 5(0)  9.07e-07 2.3e+02

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE  -1.0105     0.2227  -4.537 5.71e-06 ***
AccentsGavE   0.2213     0.2276   0.972   0.3310
AccentsIvE   -1.6814     0.2310  -7.279 3.35e-13 ***
AccentsJvE   -0.4290     0.2230  -1.924   0.0543 .
AccentsMAE    3.6747     0.2648  13.879  < 2e-16 ***
AccentsMBE    3.4083     0.2567  13.278  < 2e-16 ***
AccentsSAE    1.3405     0.2337   5.735 9.76e-09 ***
AccentsSSE    1.3480     0.2270   5.939 2.87e-09 ***
AccentsTavE  -1.0545     0.2344  -4.499 6.83e-06 ***
AccentsUavE  -1.3398     0.2288  -5.856 4.74e-09 ***
AccentsWAvE  -0.5285     0.2205  -2.397   0.0165 *
StsF          0.1251     0.1012   1.236   0.2163
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1


Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.1053     0.1879 -11.207
2|3  -0.5201     0.1774  -2.933
3|4   0.9627     0.1794   5.365
4|5   2.9352     0.2039  14.395
```

Female Evaluations of Accents for Perceived Politeness Combined for Gender

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2246.20 4524.41 5(0)  3.91e-12 3.5e+02

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.15009    0.21689  -0.692  0.48893
AccentsGavE -0.61816    0.22234  -2.780  0.00543 **
AccentsIvE  -0.45631    0.22044  -2.070  0.03845 *
AccentsJvE  -0.47755    0.21884  -2.182  0.02909 *
AccentsMAE   1.47884    0.23644   6.255 3.98e-10 ***
AccentsMBE   1.75039    0.24142   7.250 4.16e-13 ***
AccentsSAE   0.09453    0.22466   0.421  0.67393
AccentsSSE   0.55447    0.22677   2.445  0.01448 *
AccentsTavE -0.28487    0.22967  -1.240  0.21484
AccentsUavE -0.72026    0.21986  -3.276  0.00105 **
AccentsWAvE -0.65617    0.21994  -2.983  0.00285 **
StsF         0.20953    0.09889   2.119  0.03411 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2 -2.63863    0.19351 -13.635
2|3 -1.17363    0.17547  -6.689
3|4  0.04641    0.17180   0.270
4|5  1.20670    0.17511   6.891
```

Female Evaluations of Accents for Perceived Native Speaker Status Combined for Gender

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -1763.38 3558.76 5(0)  2.29e-10 3.2e+02

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.91690    0.24100  -3.804 0.000142 ***
AccentsGavE -0.06442    0.23251  -0.277 0.781728
AccentsIvE  -1.59441    0.26683  -5.975 2.30e-09 ***
AccentsJvE  -0.31184    0.23125  -1.349 0.177493
AccentsMAE   4.15250    0.27588  15.052  < 2e-16 ***
AccentsMBE   4.03893    0.27115  14.896  < 2e-16 ***
AccentsSAE   1.92919    0.23134   8.339  < 2e-16 ***
AccentsSSE   1.25905    0.23001   5.474 4.41e-08 ***
AccentsTavE -1.18662    0.25065  -4.734 2.20e-06 ***
AccentsUavE -1.03368    0.24633  -4.196 2.71e-05 ***
AccentsWAvE -0.10530    0.23413  -0.450 0.652890
StsF        -0.50846    0.10775  -4.719 2.37e-06 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2  -0.6477     0.1818  -3.562
2|3   0.6105     0.1826   3.343
3|4   1.3534     0.1885   7.181
4|5   2.7154     0.2070  13.121
```

Female Evaluations of Accents for Perceived Intelligibility Combined for Gender

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2080.33 4192.67 5(0)  2.29e-09 3.1e+02

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE  -0.2302     0.2248  -1.024 0.305924
AccentsGavE   0.7687     0.2287   3.361 0.000777 ***
AccentsIvE   -0.2490     0.2286  -1.089 0.276083
AccentsJvE    0.1349     0.2259   0.597 0.550399
AccentsMAE    3.6891     0.2813  13.114  < 2e-16 ***
AccentsMBE    3.5542     0.2720  13.067  < 2e-16 ***
AccentsSAE    1.4642     0.2368   6.183 6.28e-10 ***
AccentsSSE    1.3800     0.2321   5.945 2.77e-09 ***
AccentsTavE   0.1880     0.2347   0.801 0.423090
AccentsUavE  -0.3051     0.2253  -1.354 0.175732
AccentsWAvE   0.2432     0.2260   1.076 0.281769
StsF          0.4617     0.1026   4.499 6.83e-06 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2  -1.8557     0.1956  -9.486
2|3  -0.2841     0.1832  -1.550
3|4   0.9744     0.1846   5.278
4|5   2.6671     0.1967  13.561
```

Female Evaluations of Accents for Perceived Wealth Combined for Gender

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2066.51 4165.02 6(0)  2.48e-12 2.4e+02

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
AccentsFavE -0.88224    0.22650  -3.895 9.82e-05 ***
AccentsGavE -0.02091    0.22730  -0.092   0.9267
AccentsIvE  -0.88300    0.22467  -3.930 8.49e-05 ***
AccentsJvE  -0.36663    0.22763  -1.611   0.1073
AccentsMAE   2.80001    0.24186  11.577  < 2e-16 ***
AccentsMBE   2.66398    0.23932  11.132  < 2e-16 ***
AccentsSAE   1.04684    0.23199   4.513 6.41e-06 ***
AccentsSSE   1.27338    0.23123   5.507 3.65e-08 ***
AccentsTavE -0.55790    0.23169  -2.408   0.0160 *
AccentsUavE -0.99904    0.22631  -4.415 1.01e-05 ***
AccentsWAvE -0.51503    0.22240  -2.316   0.0206 *
StsF        -0.16403    0.09969  -1.645   0.0999 .
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1


Threshold coefficients:
    Estimate Std. Error z value
1|2  -1.7684     0.1840  -9.609
2|3  -0.2752     0.1767  -1.558
3|4   1.7140     0.1861   9.208
4|5   3.1242     0.2044  15.282
```

Female Evaluations of Male Speakers – Perceived Attractiveness

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2166.53 4367.06 5(0)  1.56e-12 9.2e+01

Coefficients:
       Estimate Std. Error z value Pr(>|z|)
MAE_M   2.69859    0.25669  10.513  < 2e-16 ***
MBE_M   2.57814    0.25598  10.072  < 2e-16 ***
SAE_M  -0.20724    0.24204  -0.856    0.392
SSE_M   0.30433    0.22689   1.341    0.180
TavE_M -2.64620    0.28408  -9.315  < 2e-16 ***
GavE_M  0.09707    0.21992   0.441    0.659
FavE_M -0.88654    0.22351  -3.966 7.30e-05 ***
CavE_M -1.69525    0.23867  -7.103 1.22e-12 ***
JvE_M  -1.38915    0.22963  -6.049 1.45e-09 ***
IvE_M  -2.16143    0.25357  -8.524  < 2e-16 ***
WAvE_M -1.40140    0.24068  -5.823 5.79e-09 ***
UavE_M -1.44292    0.23589  -6.117 9.55e-10 ***
StsF    0.02728    0.10029   0.272    0.786
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2 -1.62498    0.10871 -14.948
2|3 -0.24156    0.09868  -2.448
3|4  0.96499    0.10299   9.370
4|5  2.37456    0.12824  18.517
```

Female Evaluations of Male Speakers – Perceived Education Level

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2094.29 4222.57 5(0)  1.17e-07 6.7e+01

Coefficients:
       Estimate Std. Error z value Pr(>|z|)
MAE_M   2.73119    0.25561  10.685  < 2e-16 ***
MBE_M   2.47155    0.24903   9.925  < 2e-16 ***
SAE_M  -0.01362    0.22551  -0.060 0.951834
SSE_M   0.47784    0.22760   2.099 0.035775 *
TavE_M -2.58767    0.25304 -10.227  < 2e-16 ***
GavE_M  0.70056    0.23241   3.014 0.002575 **
FavE_M -0.52523    0.22699  -2.314 0.020677 *
CavE_M -1.16415    0.22957  -5.071 3.96e-07 ***
JvE_M  -1.27242    0.22849  -5.569 2.56e-08 ***
IvE_M  -2.20908    0.23462  -9.416  < 2e-16 ***
WAvE_M -0.85926    0.23152  -3.711 0.000206 ***
UavE_M -1.13430    0.22934  -4.946 7.58e-07 ***
StsF    0.22863    0.09998   2.287 0.022204 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.7287     0.1318 -20.699
2|3  -0.9286     0.1028  -9.033
3|4   0.8280     0.1014   8.163
4|5   2.5467     0.1292  19.707
```

Female Evaluations of Male Speakers – Perceived Language Proficiency

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2171.07 4376.15 5(0)  9.13e-11 8.7e+01

Coefficients:
       Estimate Std. Error z value Pr(>|z|)
MAE_M    2.9321     0.2816  10.412  < 2e-16 ***
MBE_M    2.8020     0.2782  10.074  < 2e-16 ***
SAE_M    0.6777     0.2340   2.896 0.003780 **
SSE_M    0.7560     0.2243   3.370 0.000752 ***
TavE_M  -2.9080     0.2603 -11.172  < 2e-16 ***
GavE_M   0.8193     0.2202   3.721 0.000198 ***
FavE_M  -0.8385     0.2223  -3.772 0.000162 ***
CavE_M  -1.2334     0.2278  -5.416 6.10e-08 ***
JvE_M   -1.2382     0.2271  -5.453 4.95e-08 ***
IvE_M   -2.6571     0.2489 -10.673  < 2e-16 ***
WAvE_M  -0.9343     0.2202  -4.242 2.21e-05 ***
UavE_M  -0.7153     0.2258  -3.168 0.001534 **
StsF     0.1146     0.1007   1.138 0.255035
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.3296     0.1228 -18.968
2|3  -0.7234     0.1025  -7.060
3|4   0.5525     0.1016   5.437
4|5   2.0418     0.1187  17.201
```

Female Evaluations of Male Speakers – Perceived Politeness

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2261.54 4557.08 5(0)  1.04e-11 1.1e+02

Coefficients:
       Estimate Std. Error z value Pr(>|z|)
MAE_M   1.24571    0.25548   4.876 1.08e-06 ***
MBE_M   1.71262    0.28245   6.063 1.33e-09 ***
SAE_M  -1.11127    0.24027  -4.625 3.75e-06 ***
SSE_M  -0.47740    0.23214  -2.057   0.0397 *
TavE_M -1.58498    0.25193  -6.291 3.15e-10 ***
GavE_M -0.06469    0.22081  -0.293   0.7696
FavE_M -0.38524    0.22058  -1.746   0.0807 .
CavE_M -1.06393    0.23367  -4.553 5.29e-06 ***
JvE_M  -0.96776    0.22289  -4.342 1.41e-05 ***
IvE_M  -1.31723    0.22807  -5.775 7.67e-09 ***
WAvE_M -0.95049    0.22520  -4.221 2.44e-05 ***
UavE_M -1.15047    0.23009  -5.000 5.73e-07 ***
StsF    0.18693    0.09902   1.888   0.0591 .
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2 -2.94366    0.13512 -21.786
2|3 -1.44575    0.10537 -13.720
3|4 -0.22274    0.09734  -2.288
4|5  0.89354    0.09995   8.940
```

Female Evaluations of Male Speakers – Perceived Native Speaker Statu
s

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -1978.78 3991.56 6(0)  2.85e-13 3.2e+02

Coefficients:
       Estimate Std. Error z value Pr(>|z|)
MAE_M    3.2140     0.3111  10.331  < 2e-16 ***
MBE_M    3.1773     0.3115  10.200  < 2e-16 ***
SAE_M    1.0542     0.2184   4.827 1.39e-06 ***
SSE_M    0.2607     0.2311   1.128  0.25928
TavE_M  -3.1804     0.4711  -6.752 1.46e-11 ***
GavE_M   0.2346     0.2209   1.062  0.28818
FavE_M  -1.1045     0.2481  -4.452 8.51e-06 ***
CavE_M  -1.5992     0.2760  -5.795 6.83e-09 ***
JvE_M   -1.2196     0.2485  -4.907 9.25e-07 ***
IvE_M   -3.1587     0.4713  -6.701 2.07e-11 ***
WAvE_M  -1.0725     0.2495  -4.298 1.73e-05 ***
UavE_M  -0.7007     0.2351  -2.981  0.00288 **
StsF    -0.4445     0.1054  -4.218 2.47e-05 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2 -0.95228    0.10395  -9.161
2|3  0.06733    0.10108   0.666
3|4  0.59018    0.10339   5.708
4|5  1.53287    0.11458  13.378
```

Female Evaluations of Male Speakers – Perceived Intelligibility

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2176.81 4387.62 5(0)  3.22e-10 1.0e+02

Coefficients:
       Estimate Std. Error z value Pr(>|z|)
MAE_M    2.8672     0.3389   8.459  < 2e-16 ***
MBE_M    2.7477     0.3280   8.378  < 2e-16 ***
SAE_M    0.2905     0.2377   1.222 0.221598
SSE_M    0.1133     0.2335   0.485 0.627585
TavE_M  -1.8478     0.2432  -7.596 3.05e-14 ***
GavE_M   0.4982     0.2263   2.201 0.027721 *
FavE_M  -0.6644     0.2217  -2.997 0.002728 **
CavE_M  -2.1139     0.2416  -8.751  < 2e-16 ***
JvE_M   -0.8682     0.2250  -3.859 0.000114 ***
IvE_M   -1.4893     0.2326  -6.402 1.53e-10 ***
WAvE_M  -0.8698     0.2236  -3.889 0.000101 ***
UavE_M  -0.5115     0.2163  -2.364 0.018072 *
StsF     0.4192     0.1015   4.129 3.65e-05 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2 -2.73683    0.13432 -20.375
2|3 -1.11256    0.10491 -10.605
3|4  0.09472    0.09981   0.949
4|5  1.53314    0.10789  14.211
```

Female Evaluations of Male Speakers – Wealth

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2162.17 4358.33 5(0)  1.52e-07 7.6e+01


Coefficients:
       Estimate Std. Error z value Pr(>|z|)
MAE_M   2.42637    0.24731   9.811  < 2e-16 ***
MBE_M   2.14324    0.24211   8.852  < 2e-16 ***
SAE_M   0.35959    0.23558   1.526 0.126904
SSE_M   0.66702    0.23522   2.836 0.004572 **
TavE_M -2.11896    0.24997  -8.477  < 2e-16 ***
GavE_M  0.24462    0.22896   1.068 0.285329
FavE_M -0.83501    0.22707  -3.677 0.000236 ***
CavE_M -1.26541    0.23152  -5.466 4.61e-08 ***
JvE_M  -1.12370    0.23082  -4.868 1.13e-06 ***
IvE_M  -1.73172    0.23411  -7.397 1.39e-13 ***
WAvE_M -0.92116    0.22613  -4.074 4.63e-05 ***
UavE_M -1.23667    0.23028  -5.370 7.87e-08 ***
StsF   -0.12728    0.09944  -1.280 0.200562
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1


Threshold coefficients:
    Estimate Std. Error z value
1|2 -2.04035    0.11422 -17.863
2|3 -0.57169    0.09982  -5.727
3|4  1.16027    0.10513  11.036
4|5  2.41823    0.12864  18.799
```

APPENDIX F. OLR ANALYSIS OF ALL VARIABLES

Perceived Attractiveness

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -1995.11 4070.23 5(0)  7.88e-08 7.9e+06

Coefficients: (4 not defined because of singularities)
              Estimate Std. Error z value Pr(>|z|)
AccentsFavE   -0.63770    0.22722  -2.807 0.005007 **
AccentsGavE    0.32522    0.23439   1.388 0.165280
AccentsIvE    -0.69122    0.24066  -2.872 0.004077 **
AccentsJvE    -0.03130    0.23905  -0.131 0.895824
AccentsMAE     3.30748    0.25101  13.177  < 2e-16 ***
AccentsMBE     3.41154    0.24929  13.685  < 2e-16 ***
AccentsSAE     1.53178    0.24766   6.185 6.21e-10 ***
AccentsSSE     1.66183    0.23002   7.225 5.02e-13 ***
AccentsTavE   -0.42092    0.23373  -1.801 0.071720 .
AccentsUavE   -0.72146    0.23765  -3.036 0.002399 **
AccentsWAvE   -0.44743    0.22731  -1.968 0.049026 *
SpSexM        -0.49874    0.09624  -5.182 2.19e-07 ***
SpAge         -0.02069    0.00457  -4.527 5.98e-06 ***
StsAge         0.12206    0.03587   3.403 0.000667 ***
Class         -0.89258    0.16624  -5.369 7.91e-08 ***
USA           -0.70183    0.63388  -1.107 0.268213
England       -0.59930    0.43139  -1.389 0.164764
Scotland            NA         NA      NA       NA
Germany        0.33026    0.54083   0.611 0.541423
RUUKR         -0.47197    0.58515  -0.807 0.419907
China               NA         NA      NA       NA
France         1.23527    0.43972   2.809 0.004966 **
Everyday       1.72945    0.82159   2.105 0.035290 *
fewtimesaweek  1.72790    0.86212   2.004 0.045044 *
Onceamonth     1.03129    0.88110   1.170 0.241814
Ling1         -0.13012    0.39619  -0.328 0.742592
Ling2          0.91909    0.47298   1.943 0.051993 .
Socioling      0.32634    0.16133   2.023 0.043090 *
GlobEng       -0.33767    0.13952  -2.420 0.015513 *
Lexicon        0.42288    0.26304   1.608 0.107913
OrCommSk            NA         NA      NA       NA
ListPronun          NA         NA      NA       NA
LangAcq        0.47638    0.27045   1.761 0.078160 .
ContrastTE    -0.09398    0.23649  -0.397 0.691081
LLGerman      -0.24746    0.14637  -1.691 0.090906 .
LLFrench      -0.55304    0.14569  -3.796 0.000147 ***
LLRussian      0.37373    0.24285   1.539 0.123831
LLChinese     -1.01634    0.51792  -1.962 0.049725 *
LLJapanese     0.91585    0.27219   3.365 0.000766 ***
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
```

```
Threshold coefficients:
    Estimate Std. Error z value
1|2   0.4249     1.4331   0.297
2|3   1.9755     1.4332   1.378
3|4   3.4919     1.4346   2.434
4|5   5.1654     1.4392   3.589

> convergence(c)
 nobs logLik   niter max.grad cond.H  logLik.Error
 1560 -1995.11 5(0)  7.88e-08 7.9e+06 <1e-10

              Estimate Std.Err  Gradient     Error Cor.Dec Sig.Dig
1|2            0.42495 1.43306  3.48e-10  1.06e-11      10      10
2|3            1.97552 1.43316  3.11e-08  1.64e-11      10      11
3|4            3.49191 1.43460 -2.97e-08 -1.81e-10       9      10
4|5            5.16544 1.43919 -4.27e-09 -2.13e-10       9      10
AccentsFavE   -0.63770 0.22722  3.22e-10  2.40e-11      10      10
AccentsGavE    0.32522 0.23439  6.25e-10 -5.35e-12      10      10
AccentsIvE    -0.69122 0.24066  2.38e-10  1.16e-11      10      10
AccentsJvE    -0.03130 0.23905  3.52e-10 -2.19e-12      11      10
AccentsMAE     3.30748 0.25101 -3.86e-10 -1.91e-10       9      10
AccentsMBE     3.41154 0.24929 -4.05e-10 -1.94e-10       9      10
AccentsSAE     1.53178 0.24766  1.61e-10 -9.14e-11       9      10
AccentsSSE     1.66183 0.23002 -1.96e-10 -1.12e-10       9      10
AccentsTavE   -0.42092 0.23373  4.75e-10  1.32e-11      10      10
AccentsUavE   -0.72146 0.23765  2.34e-10  1.40e-11      10      10
AccentsWAvE   -0.44743 0.22731  4.77e-10  1.86e-11      10      10
SpSexM        -0.49874 0.09624  9.50e-10  1.54e-11      10      10
SpAge         -0.02069 0.00457  7.88e-08  7.51e-13      11      10
StsAge         0.12206 0.03587  5.20e-08 -2.46e-12      11      11
StsSexM       -0.07369 0.12425  7.19e-10  2.64e-12      11      10
Class         -0.89258 0.16624  5.30e-09  1.98e-11      10      10
USA           -0.70183 0.63388  5.89e-11  1.40e-11      10      10
England       -0.59930 0.43139  2.33e-10  2.75e-11      10      10
Germany        0.33027 0.54083  2.14e-10 -2.25e-11      10      10
RUUKR         -0.47197 0.58515  1.26e-10  2.06e-11      10      10
France         1.23527 0.43972  2.26e-10 -3.54e-11      10      11
Everyday       1.72945 0.82159  1.59e-09 -3.52e-11      10      11
fewtimesaweek  1.72790 0.86212  7.76e-10 -4.21e-11      10      11
Onceamonth     1.03129 0.88110  1.18e-10 -1.34e-11      10      11
Ling1         -0.13012 0.39618  1.62e-09  6.77e-12      10      10
Ling2          0.91909 0.47298  1.55e-09 -2.55e-11      10      10
Socioling      0.32634 0.16133  2.61e-10 -1.91e-13      12      12
GlobEng       -0.33767 0.13952  5.07e-10  1.07e-11      10      10
Lexicon        0.42288 0.26304  5.23e-10 -9.17e-12      10      10
LangAcq        0.47638 0.27045  7.88e-10 -1.10e-11      10      10
ContrastTE    -0.09398 0.23649  1.04e-09 -2.77e-13      12      11
LLGerman      -0.24746 0.14637  1.68e-09  6.91e-12      10      10
LLFrench      -0.55304 0.14569  1.47e-09  1.83e-11      10      10
LLRussian      0.37373 0.24286  2.01e-10 -1.09e-11      10      10
LLChinese     -1.01634 0.51792  5.18e-11  2.22e-11      10      11
LLJapanese     0.91585 0.27219  3.30e-10 -2.41e-11      10      10
```

```
Eigen values of Hessian:
7.599e+05 2.614e+04 7.926e+02 5.414e+02 3.049e+02 2.161e+02 1.807e+0
2 1.548e+02 1.410e+02 1.130e+02 9.942e+01 8.571e+01 7.306e+01 5.762e
+01 4.936e+01 4.032e+01 3.929e+01 3.900e+01 3.899e+01 3.840e+01 3.70
3e+01 3.654e+01 3.581e+01 3.470e+01 3.058e+01 2.778e+01 2.459e+01 1.
975e+01 1.853e+01 1.416e+01 1.376e+01 1.066e+01 6.650e+00 5.910e+00
4.572e+00 3.488e+00 2.793e+00 2.283e+00 1.330e+00 9.598e-02

Convergence message from clm:
(0) successful convergence
In addition: Absolute and relative convergence criteria were met
```

Perceived Education Level

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -1934.85 3949.71 6(0)  5.91e-12 7.7e+06

Coefficients: (4 not defined because of singularities)
               Estimate Std. Error z value Pr(>|z|)
AccentsFavE   -0.689489   0.226289  -3.047 0.002312 **
AccentsGavE    0.502583   0.240348   2.091 0.036522 *
AccentsIvE    -0.873510   0.238355  -3.665 0.000248 ***
AccentsJvE     0.051039   0.244471   0.209 0.834627
AccentsMAE     3.307957   0.253570  13.046  < 2e-16 ***
AccentsMBE     3.263486   0.248491  13.133  < 2e-16 ***
AccentsSAE     1.647529   0.249202   6.611 3.81e-11 ***
AccentsSSE     1.300754   0.229249   5.674 1.40e-08 ***
AccentsTavE   -0.671915   0.240924  -2.789 0.005289 **
AccentsUavE   -0.716404   0.233567  -3.067 0.002161 **
AccentsWAvE   -0.448973   0.224970  -1.996 0.045967 *
SpSexM        -0.234858   0.096144  -2.443 0.014575 *
SpAge         -0.026469   0.004650  -5.693 1.25e-08 ***
StsAge         0.004083   0.035398   0.115 0.908175
StsSexM       -0.118136   0.124583  -0.948 0.343003
Class         -0.551291   0.154098  -3.578 0.000347 ***
USA           -1.493219   0.614472  -2.430 0.015095 *
England        0.158463   0.431785   0.367 0.713623
Scotland             NA         NA      NA       NA
Germany       -0.801341   0.528344  -1.517 0.129342
RUUKR         -0.313121   0.582948  -0.537 0.591175
China                NA         NA      NA       NA
France         1.732891   0.440741   3.932 8.43e-05 ***
Everyday      -1.055280   0.789929  -1.336 0.181576
fewtimesaweek -0.949247   0.830031  -1.144 0.252778
Onceamonth    -1.817052   0.854340  -2.127 0.033433 *
Ling1         -0.203997   0.371464  -0.549 0.582888
Ling2          1.032398   0.445916   2.315 0.020600 *
Socioling      0.031760   0.159325   0.199 0.841997
```

```
GlobEng       -0.356679   0.138778  -2.570 0.010166 *
Lexicon        0.732235   0.255049   2.871 0.004092 **
OrCommSk             NA         NA      NA       NA
ListPronun           NA         NA      NA       NA
LangAcq        0.365565   0.268843   1.360 0.173902
ContrastTE     0.199074   0.244405   0.815 0.415345
LLGerman       0.049545   0.147004   0.337 0.736091
LLFrench      -0.326470   0.144768  -2.255 0.024125 *
LLRussian      0.738705   0.251189   2.941 0.003273 **
LLChinese     -0.225158   0.497414  -0.453 0.650796
LLJapanese     0.158165   0.273008   0.579 0.562358
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2   -5.013      1.411  -3.552
2|3   -3.216      1.407  -2.287
3|4   -1.151      1.404  -0.820
4|5    1.005      1.408   0.714


> convergence(c)
 nobs logLik   niter max.grad cond.H  logLik.Error
 1560 -1934.85 6(0)  5.91e-12 7.7e+06 <1e-10

              Estimate Std.Err  Gradient     Error Cor.Dec Sig.Dig
1|2          -5.012767 1.41132 -3.89e-15 -3.66e-14      13      14
2|3          -3.216469 1.40661  1.35e-12 -3.61e-14      13      14
3|4          -1.150951 1.40392 -1.30e-12 -4.61e-14      13      14
4|5           1.005281 1.40762 -2.26e-13 -4.87e-14      13      14
AccentsFavE  -0.689489 0.22629  5.00e-14  1.57e-15      14      14
AccentsGavE   0.502583 0.24035  8.33e-15 -3.70e-15      14      14
AccentsIvE   -0.873510 0.23835  8.56e-15 -2.53e-16      15      15
AccentsJvE    0.051039 0.24447  1.68e-14 -2.44e-15      14      13
AccentsMAE    3.307957 0.25357 -2.44e-15 -9.43e-15      13      14
AccentsMBE    3.263486 0.24849 -1.11e-14 -1.00e-14      13      14
AccentsSAE    1.647529 0.24920 -3.34e-14 -8.37e-15      13      14
AccentsSSE    1.300754 0.22925 -4.98e-14 -7.69e-15      13      14
AccentsTavE  -0.671915 0.24092  4.35e-14  9.23e-16      14      14
AccentsUavE  -0.716404 0.23357  3.03e-14  4.40e-16      15      15
AccentsWAvE  -0.448973 0.22497  4.71e-14  8.19e-16      14      14
SpSexM       -0.234858 0.09614  6.90e-14  2.48e-16      15      15
SpAge        -0.026469 0.00465  5.91e-12  1.01e-16      15      14
StsAge        0.004083 0.03540  3.47e-12 -1.03e-15      14      12
StsSexM      -0.118136 0.12458  4.50e-14  5.37e-16      14      14
Class        -0.551291 0.15410  3.87e-13 -5.73e-16      14      14
USA          -1.493219 0.61447  3.19e-15 -5.40e-15      13      14
England       0.158463 0.43179  1.68e-14 -1.15e-15      14      14
Germany      -0.801341 0.52834  1.72e-14 -1.75e-15      14      14
RUUKR        -0.313121 0.58295  8.41e-15  6.24e-15      13      13
France        1.732891 0.44074  1.43e-14  1.57e-15      14      15
```

```
Everyday      -1.055280 0.78993  9.78e-14 -2.18e-14      13      14
fewtimesaweek -0.949247 0.83003  5.90e-14 -2.37e-14      13      13
Onceamonth    -1.817052 0.85434  3.39e-15 -2.10e-14      13      14
Ling1         -0.203997 0.37146  1.30e-13 -5.25e-16      14      14
Ling2          1.032398 0.44592  1.13e-13  2.08e-15      14      15
Socioling      0.031760 0.15933  3.33e-14 -5.47e-16      14      13
GlobEng       -0.356679 0.13878  6.83e-14  1.49e-15      14      14
Lexicon        0.732235 0.25505  4.74e-14  3.60e-15      14      14
LangAcq        0.365565 0.26884  6.11e-14  2.40e-16      15      15
ContrastTE     0.199074 0.24441  6.73e-14  9.07e-16      14      14
LLGerman       0.049545 0.14700  8.93e-14  1.39e-15      14      13
LLFrench      -0.326470 0.14477  1.17e-13  1.22e-15      14      14
LLRussian      0.738705 0.25119  5.33e-15 -1.02e-15      14      14
LLChinese     -0.225158 0.49741  2.44e-15  4.99e-15      14      14
LLJapanese     0.158165 0.27301  1.08e-14 -3.62e-15      14      14

Eigen values of Hessian:
7.707e+05 2.651e+04 8.029e+02 4.270e+02 2.292e+02 2.136e+02 1.838e+0
2 1.393e+02 1.278e+02 1.113e+02 9.879e+01 8.817e+01 7.117e+01 5.940e
+01 5.200e+01 3.990e+01 3.975e+01 3.888e+01 3.859e+01 3.779e+01 3.68
3e+01 3.611e+01 3.517e+01 3.306e+01 3.183e+01 2.677e+01 2.439e+01 1.
900e+01 1.864e+01 1.485e+01 1.450e+01 1.052e+01 6.831e+00 6.281e+00
4.523e+00 3.632e+00 2.906e+00 2.306e+00 1.402e+00 1.007e-01

Convergence message from clm:
(0) successful convergence
In addition: Absolute and relative convergence criteria were met
```

Perceived Language Proficiency

```
link  threshold nobs logLik   AIC     niter max.grad cond.H
logit flexible  1560 -1939.62 3959.24 6(0)  2.52e-12 7.6e+06

Coefficients: (4 not defined because of singularities)
               Estimate Std. Error z value Pr(>|z|)
AccentsFavE   -1.150070   0.224918  -5.113 3.17e-07 ***
AccentsGavE    0.735768   0.234660   3.135 0.001716 **
AccentsIvE    -1.240232   0.239859  -5.171 2.33e-07 ***
AccentsJvE     0.198147   0.237554   0.834 0.404217
AccentsMAE     3.779076   0.268406  14.080  < 2e-16 ***
AccentsMBE     3.699599   0.260153  14.221  < 2e-16 ***
AccentsSAE     2.091477   0.253734   8.243  < 2e-16 ***
AccentsSSE     1.554018   0.228774   6.793 1.10e-11 ***
AccentsTavE   -0.958704   0.239368  -4.005 6.20e-05 ***
AccentsUavE   -0.899778   0.235062  -3.828 0.000129 ***
AccentsWAvE   -0.664067   0.222697  -2.982 0.002864 **
SpSexM        -0.141241   0.096710  -1.460 0.144162
SpAge         -0.035406   0.004605  -7.688 1.49e-14 ***
StsAge         0.080344   0.035834   2.242 0.024954 *
StsSexM       -0.011411   0.123738  -0.092 0.926526
```

```
Class          -0.512277   0.157661  -3.249 0.001157 **
USA             0.648419   0.633517   1.024 0.306061
England         0.022311   0.492146   0.045 0.963841
Scotland              NA         NA      NA       NA
Germany        -0.423979   0.580680  -0.730 0.465304
RUUKR          -1.000879   0.584446  -1.713 0.086800 .
China                 NA         NA      NA       NA
France          1.004520   0.437535   2.296 0.021684 *
Everyday        0.342164   0.795156   0.430 0.666970
fewtimesaweek   0.304213   0.837218   0.363 0.716335
Onceamonth     -0.820805   0.864331  -0.950 0.342294
Ling1           0.626539   0.354533   1.767 0.077191 .
Ling2           0.097998   0.430413   0.228 0.819892
Socioling       0.289880   0.162660   1.782 0.074729 .
GlobEng        -0.345926   0.139714  -2.476 0.013288 *
Lexicon         0.865505   0.257491   3.361 0.000776 ***
OrCommSk              NA         NA      NA       NA
ListPronun            NA         NA      NA       NA
LangAcq        -0.137415   0.270925  -0.507 0.612009
ContrastTE      0.005409   0.246039   0.022 0.982460
LLGerman       -0.127191   0.147697  -0.861 0.389150
LLFrench       -0.095660   0.146823  -0.652 0.514704
LLRussian       0.599151   0.250694   2.390 0.016850 *
LLChinese      -0.996787   0.500641  -1.991 0.046479 *
LLJapanese      0.569159   0.277645   2.050 0.040369 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2  -2.0269     1.4222  -1.425
2|3  -0.3342     1.4208  -0.235
3|4   1.2619     1.4216   0.888
4|5   3.3232     1.4256   2.331


> convergence(c)
 nobs logLik   niter max.grad cond.H  logLik.Error
 1560 -1939.62 6(0)  2.52e-12 7.6e+06 <1e-10

               Estimate  Std.Err  Gradient     Error Cor.Dec Sig.Dig
1|2           -2.026875 1.422234  3.35e-14  1.08e-13      12      13
2|3           -0.334187 1.420783  1.85e-14  1.09e-13      12      12
3|4            1.261937 1.421604  8.93e-14  1.09e-13      12      13
4|5            3.323150 1.425575 -6.38e-14  1.08e-13      12      13
AccentsFavE   -1.150070 0.224918 -6.12e-15  3.95e-16      15      16
AccentsGavE    0.735768 0.234660 -9.49e-15  5.77e-16      14      14
AccentsIvE    -1.240232 0.239859 -1.51e-14  3.77e-16      15      16
AccentsJvE     0.198147 0.237554 -1.22e-14  4.32e-16      15      15
AccentsMAE     3.779076 0.268406  6.99e-15  9.47e-16      14      15
AccentsMBE     3.699599 0.260153  2.11e-15  7.81e-16      14      15
AccentsSAE     2.091477 0.253734  2.89e-15  9.46e-16      14      15
```

```
AccentsSSE      1.554018 0.228774 -5.50e-15  6.90e-16      14      15
AccentsTavE    -0.958704 0.239368 -2.11e-15  4.73e-16      15      15
AccentsUavE    -0.899778 0.235062 -9.94e-15  5.98e-16      14      14
AccentsWAvE    -0.664067 0.222697 -8.88e-15  5.84e-16      14      14
SpSexM         -0.141241 0.096710 -3.82e-14  6.38e-18      16      16
SpAge          -0.035406 0.004605 -2.52e-12 -4.30e-18      17      16
StsAge          0.080344 0.035834  3.48e-13  2.90e-15      14      13
StsSexM        -0.011411 0.123738 -1.62e-14 -1.44e-15      14      13
Class          -0.512277 0.157661 -1.88e-13  3.26e-16      15      15
USA             0.648419 0.633517  1.11e-15  2.12e-14      13      13
England         0.022311 0.492146 -9.05e-15 -1.99e-16      15      14
Germany        -0.423979 0.580680 -6.22e-15  8.56e-15      13      13
RUUKR          -1.000879 0.584446  1.11e-16 -1.28e-14      13      14
France          1.004520 0.437535  0.00e+00 -1.14e-14      13      14
Everyday        0.342164 0.795156 -3.02e-14  5.40e-14      12      12
fewtimesaweek   0.304213 0.837218 -2.59e-14  5.71e-14      12      12
Onceamonth     -0.820805 0.864331  3.33e-16  5.57e-14      12      12
Ling1           0.626539 0.354533 -3.37e-14  5.02e-15      13      13
Ling2           0.097998 0.430413 -2.91e-14 -8.59e-15      13      12
Socioling       0.289880 0.162660 -1.40e-14  2.06e-15      14      14
GlobEng        -0.345926 0.139714 -2.82e-14 -1.23e-15      14      14
Lexicon         0.865505 0.257491 -1.90e-14 -8.40e-15      13      13
LangAcq        -0.137415 0.270925 -3.35e-14  4.23e-16      15      15
ContrastTE      0.005409 0.246039 -4.15e-14 -4.86e-15      14      12
LLGerman       -0.127191 0.147697 -9.10e-15 -3.15e-15      14      14
LLFrench       -0.095660 0.146823 -4.02e-14 -8.81e-16      14      13
LLRussian       0.599151 0.250694  4.44e-16 -2.02e-15      14      14
LLChinese      -0.996787 0.500641  5.55e-16 -9.18e-15      13      13
LLJapanese      0.569159 0.277645 -1.50e-15  6.05e-15      13      13

Eigen values of Hessian:
7.512e+05 2.639e+04 7.900e+02 4.844e+02 2.617e+02 2.078e+02 1.809e+0
2 1.533e+02 1.290e+02 1.109e+02 9.598e+01 8.442e+01 7.225e+01 5.673e
+01 5.044e+01 4.126e+01 4.028e+01 3.929e+01 3.863e+01 3.802e+01 3.74
2e+01 3.482e+01 3.364e+01 3.065e+01 2.941e+01 2.546e+01 2.272e+01 1.
833e+01 1.697e+01 1.418e+01 1.403e+01 1.056e+01 6.711e+00 6.143e+00
4.577e+00 3.569e+00 2.829e+00 1.903e+00 1.397e+00 9.864e-02

Convergence message from clm:
(0) successful convergence
In addition: Absolute and relative convergence criteria were met
```

Perceived Politeness

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2161.04 4402.07 5(0)  1.19e-10 7.9e+06

Coefficients: (4 not defined because of singularities)
               Estimate Std. Error z value Pr(>|z|)
AccentsFavE   -0.154956   0.218701  -0.709  0.47862
AccentsGavE   -0.310164   0.231528  -1.340  0.18036
```

```
AccentsIvE     -0.124704   0.230046  -0.542  0.58776
AccentsJvE     -0.097768   0.236187  -0.414  0.67891
AccentsMAE      1.558961   0.239761   6.502 7.92e-11 ***
AccentsMBE      1.950071   0.245402   7.946 1.92e-15 ***
AccentsSAE      0.508589   0.241418   2.107  0.03515 *
AccentsSSE      0.690072   0.227554   3.033  0.00242 **
AccentsTavE    -0.169748   0.230726  -0.736  0.46191
AccentsUavE    -0.446896   0.229858  -1.944  0.05187 .
AccentsWAvE    -0.716512   0.220710  -3.246  0.00117 **
SpSexM         -0.492228   0.095628  -5.147 2.64e-07 ***
SpAge          -0.020880   0.004489  -4.652 3.29e-06 ***
StsAge         -0.048538   0.035593  -1.364  0.17267
StsSexM         0.033726   0.121154   0.278  0.78072
Class          -0.128564   0.156953  -0.819  0.41272
USA            -0.599158   0.614516  -0.975  0.32956
England        -0.620718   0.457131  -1.358  0.17451
Scotland              NA         NA      NA       NA
Germany         0.067608   0.546463   0.124  0.90154
RUUKR          -1.078610   0.587426  -1.836  0.06633 .
China                 NA         NA      NA       NA
France          0.818517   0.427475   1.915  0.05552 .
Everyday       -2.046751   0.780047  -2.624  0.00869 **
fewtimesaweek -2.394548   0.820798  -2.917  0.00353 **
Onceamonth     -2.469210   0.843629  -2.927  0.00342 **
Ling1           0.613775   0.401280   1.530  0.12613
Ling2          -0.023719   0.473379  -0.050  0.96004
Socioling      -0.859512   0.163622  -5.253 1.50e-07 ***
GlobEng        -0.171669   0.136716  -1.256  0.20924
Lexicon         1.163004   0.260621   4.462 8.10e-06 ***
OrCommSk              NA         NA      NA       NA
ListPronun            NA         NA      NA       NA
LangAcq        -0.511939   0.269300  -1.901  0.05730 .
ContrastTE      0.615957   0.241688   2.549  0.01082 *
LLGerman        0.354824   0.147194   2.411  0.01593 *
LLFrench        0.094979   0.144094   0.659  0.50980
LLRussian       0.597236   0.243088   2.457  0.01402 *
LLChinese       2.280393   0.552107   4.130 3.62e-05 ***
LLJapanese     -0.424317   0.274382  -1.546  0.12200
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2   -6.401      1.415  -4.523
2|3   -4.895      1.413  -3.465
3|4   -3.584      1.411  -2.541
4|5   -2.312      1.409  -1.64


> convergence(c)
 nobs logLik   niter max.grad cond.H  logLik.Error
 1560 -2161.04 5(0)  1.19e-10 7.9e+06 <1e-10
```

	Estimate	Std.Err	Gradient	Error	Cor.Dec	Sig.Dig
1|2	-6.40124	1.415359	1.35e-11	1.81e-13	12	13
2|3	-4.89459	1.412754	4.33e-12	7.79e-14	12	13
3|4	-3.58443	1.410829	-1.41e-11	2.34e-14	13	14
4|5	-2.31249	1.408640	-2.20e-13	2.60e-14	13	14
AccentsFavE	-0.15496	0.218701	-3.23e-13	-1.69e-15	14	14
AccentsGavE	-0.31016	0.231528	-3.83e-13	4.23e-15	14	14
AccentsIvE	-0.12470	0.230046	-3.36e-13	5.85e-16	14	14
AccentsJvE	-0.09777	0.236187	-2.80e-13	2.35e-15	14	13
AccentsMAE	1.55896	0.239761	-6.20e-14	-1.31e-14	13	14
AccentsMBE	1.95007	0.245402	-2.40e-14	-1.53e-14	13	14
AccentsSAE	0.50859	0.241418	-3.33e-13	-1.44e-14	13	13
AccentsSSE	0.69007	0.227554	-2.20e-13	-9.72e-15	13	13
AccentsTavE	-0.16975	0.230726	-4.67e-13	-3.76e-16	15	15
AccentsUavE	-0.44690	0.229858	-3.76e-13	7.48e-15	13	13
AccentsWAvE	-0.71651	0.220710	-3.71e-13	1.41e-14	13	13
SpSexM	-0.49223	0.095628	-2.03e-12	7.49e-15	13	13
SpAge	-0.02088	0.004489	-1.19e-10	5.04e-16	14	13
StsAge	-0.04854	0.035593	-7.29e-11	3.08e-16	15	14
StsSexM	0.03373	0.121154	-1.12e-12	-9.60e-16	14	13
Class	-0.12856	0.156953	-8.45e-12	-5.36e-16	14	14
USA	-0.59916	0.614516	-6.01e-14	-1.70e-15	14	14
England	-0.62072	0.457131	-4.81e-13	2.07e-14	13	13
Germany	0.06761	0.546463	-4.10e-13	-1.34e-14	13	12
RUUKR	-1.07861	0.587426	-1.97e-13	2.31e-14	13	14
France	0.81852	0.427475	-3.14e-13	-1.07e-14	13	13
Everyday	-2.04675	0.780047	-2.05e-12	2.26e-14	13	14
fewtimesaweek	-2.39455	0.820798	-1.19e-12	2.85e-14	13	14
Onceamonth	-2.46921	0.843629	-1.86e-13	3.03e-14	13	14
Ling1	0.61378	0.401280	-2.42e-12	-1.04e-14	13	13
Ling2	-0.02372	0.473379	-2.29e-12	1.87e-15	14	13
Socioling	-0.85951	0.163622	-6.52e-13	1.67e-14	13	13
GlobEng	-0.17167	0.136716	-1.23e-12	7.32e-16	14	14
Lexicon	1.16300	0.260621	-8.55e-13	-1.36e-14	13	14
LangAcq	-0.51194	0.269300	-1.38e-12	8.21e-15	13	13
ContrastTE	0.61596	0.241688	-1.58e-12	-6.06e-15	13	13
LLGerman	0.35482	0.147194	-2.04e-12	-5.49e-15	13	13
LLFrench	0.09498	0.144094	-2.39e-12	-6.24e-17	15	14
LLRussian	0.59724	0.243088	-1.46e-13	-6.56e-15	13	13
LLChinese	2.28039	0.552107	-2.70e-14	-2.41e-14	13	14
LLJapanese	-0.42432	0.274382	-2.40e-13	2.51e-15	14	14

Eigen values of Hessian:
7.871e+05 2.729e+04 8.162e+02 7.625e+02 3.993e+02 2.297e+02 1.933e+0
2 1.417e+02 1.374e+02 1.146e+02 1.008e+02 9.226e+01 7.491e+01 6.072e
+01 5.137e+01 4.226e+01 4.203e+01 4.164e+01 3.999e+01 3.935e+01 3.76
8e+01 3.697e+01 3.610e+01 3.316e+01 3.174e+01 2.938e+01 2.646e+01 2.
438e+01 1.941e+01 1.521e+01 1.339e+01 1.089e+01 7.417e+00 6.326e+00
4.622e+00 3.233e+00 2.910e+00 2.161e+00 1.374e+00 9.988e-02

Convergence message from clm:

```
(0) successful convergence
In addition: Absolute and relative convergence criteria were met
```

Perceived Native Speaker Status

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -1687.44 3454.88 5(0)  1.16e-09 7.4e+06

Coefficients: (4 not defined because of singularities)
               Estimate Std. Error z value Pr(>|z|)
AccentsFavE   -1.047185   0.245380  -4.268 1.98e-05 ***
AccentsGavE    0.464341   0.243917   1.904 0.056952 .
AccentsIvE    -1.178786   0.281152  -4.193 2.76e-05 ***
AccentsJvE     0.265663   0.250423   1.061 0.288754
AccentsMAE     4.294527   0.281539  15.254  < 2e-16 ***
AccentsMBE     4.364487   0.276978  15.758  < 2e-16 ***
AccentsSAE     2.742515   0.259684  10.561  < 2e-16 ***
AccentsSSE     1.428272   0.232543   6.142 8.15e-10 ***
AccentsTavE   -1.108165   0.256614  -4.318 1.57e-05 ***
AccentsUavE   -0.618916   0.257300  -2.405 0.016154 *
AccentsWAvE   -0.193258   0.237303  -0.814 0.415421
SpSexM        -0.136407   0.105362  -1.295 0.195443
SpAge         -0.035520   0.005084  -6.986 2.82e-12 ***
StsAge         0.032940   0.038862   0.848 0.396657
StsSexM        0.490387   0.135610   3.616 0.000299 ***
Class         -0.431958   0.172274  -2.507 0.012163 *
USA           -0.184646   0.679192  -0.272 0.785729
England       -0.931659   0.495977  -1.878 0.060322 .
Scotland             NA         NA      NA       NA
Germany        1.716580   0.607917   2.824 0.004747 **
RUUKR         -0.235660   0.627057  -0.376 0.707051
China                NA         NA      NA       NA
France        -0.707727   0.487525  -1.452 0.146592
Everyday       1.770018   0.879633   2.012 0.044196 *
fewtimesaweek  1.665471   0.923954   1.803 0.071459 .
Onceamonth     1.576042   0.946656   1.665 0.095942 .
Ling1          0.305073   0.386128   0.790 0.429479
Ling2          0.010785   0.467156   0.023 0.981582
Socioling      0.053672   0.181242   0.296 0.767126
GlobEng        0.348793   0.152589   2.286 0.022264 *
Lexicon        0.075181   0.285705   0.263 0.792440
OrCommSk             NA         NA      NA       NA
ListPronun           NA         NA      NA       NA
LangAcq       -0.254210   0.291539  -0.872 0.383231
ContrastTE    -0.020858   0.261966  -0.080 0.936540
LLGerman      -0.411844   0.161558  -2.549 0.010797 *
LLFrench      -0.459352   0.160175  -2.868 0.004133 **
LLRussian      0.560981   0.262750   2.135 0.032758 *
LLChinese     -1.603934   0.534869  -2.999 0.002711 **
LLJapanese     1.060969   0.302329   3.509 0.000449 ***
```

```
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2 -0.01128    1.54347  -0.007
2|3  1.35680    1.54390   0.879
3|4  2.14415    1.54336   1.389
4|5  3.55974    1.54482   2.304


> convergence(c)
 nobs logLik   niter max.grad cond.H  logLik.Error
 1560 -1687.44 5(0)  1.16e-09 7.4e+06 <1e-10

              Estimate  Std.Err  Gradient     Error Cor.Dec Sig.Dig
1|2           -0.01128 1.543465  2.69e-10  8.68e-13      11      10
2|3            1.35680 1.543903 -2.77e-10 -6.59e-13      11      12
3|4            2.14415 1.543365  2.96e-10 -5.45e-13      11      12
4|5            3.55974 1.544819 -3.19e-10 -3.58e-12      11      12
AccentsFavE   -1.04718 0.245380  4.01e-12  5.21e-13      11      12
AccentsGavE    0.46434 0.243917  5.32e-12 -2.54e-13      12      12
AccentsIvE    -1.17879 0.281152  7.62e-12  6.19e-13      11      12
AccentsJvE     0.26566 0.250423  3.88e-12 -1.92e-13      12      12
AccentsMAE     4.29453 0.281539 -6.35e-12 -3.82e-12      11      12
AccentsMBE     4.36449 0.276978 -6.43e-12 -3.84e-12      11      12
AccentsSAE     2.74251 0.259684  5.09e-13 -2.08e-12      11      12
AccentsSSE     1.42827 0.232543  3.19e-12 -1.01e-12      11      12
AccentsTavE   -1.10816 0.256614  3.95e-12  5.26e-13      11      12
AccentsUavE   -0.61892 0.257300  4.89e-12  2.58e-13      12      12
AccentsWAvE   -0.19326 0.237303  5.87e-12  1.87e-13      12      12
SpSexM        -0.13641 0.105362  1.74e-11  1.20e-13      12      12
SpAge         -0.03552 0.005084  1.16e-09  1.90e-14      13      12
StsAge         0.03294 0.038862  6.79e-10 -6.89e-15      13      12
StsSexM        0.49039 0.135610  7.91e-12 -2.97e-13      12      12
Class         -0.43196 0.172274  8.27e-11  2.15e-13      12      12
USA           -0.18465 0.679192  6.86e-13 -4.47e-15      14      14
England       -0.93166 0.495977  5.04e-12  5.16e-13      11      11
Germany        1.71658 0.607917  4.32e-12 -8.40e-13      11      12
RUUKR         -0.23566 0.627057  1.65e-12  1.22e-13      12      12
France        -0.70773 0.487525  2.72e-12  3.27e-13      12      12
Everyday       1.77002 0.879633  1.87e-11 -7.16e-13      11      12
fewtimesaweek  1.66547 0.923954  1.07e-11 -6.63e-13      11      12
Onceamonth     1.57604 0.946656  1.31e-12 -5.50e-13      11      12
Ling1          0.30507 0.386128  2.49e-11 -1.57e-13      12      12
Ling2          0.01078 0.467156  2.42e-11 -3.82e-14      13      12
Socioling      0.05367 0.181242  6.35e-12  1.28e-14      13      12
GlobEng        0.34879 0.152589  1.08e-11 -2.12e-13      12      12
Lexicon        0.07518 0.285705  9.13e-12 -9.75e-14      12      11
LangAcq       -0.25421 0.291539  1.48e-11  1.61e-13      12      12
ContrastTE    -0.02086 0.261966  1.78e-11  5.60e-14      12      11
LLGerman      -0.41184 0.161558  1.90e-11  2.30e-13      12      12
```

```
LLFrench      -0.45935 0.160175  2.05e-11  2.32e-13      12      12
LLRussian      0.56098 0.262750  2.55e-12 -2.35e-13      12      12
LLChinese     -1.60393 0.534869  4.00e-13  8.61e-13      11      12
LLJapanese     1.06097 0.302329  3.35e-12 -5.61e-13      11      12

Eigen values of Hessian:
6.135e+05 2.173e+04 6.703e+02 6.340e+02 3.141e+02 1.771e+02 1.757e+0
2 1.543e+02 1.135e+02 9.429e+01 8.362e+01 7.485e+01 5.924e+01 4.748e
+01 4.068e+01 3.744e+01 3.686e+01 3.403e+01 3.256e+01 3.036e+01 2.94
6e+01 2.763e+01 2.628e+01 2.590e+01 2.375e+01 2.192e+01 2.118e+01 1.
594e+01 1.542e+01 1.269e+01 1.207e+01 9.139e+00 5.561e+00 5.301e+00
3.864e+00 3.067e+00 2.616e+00 1.794e+00 1.212e+00 8.310e-02

Convergence message from clm:
(0) successful convergence
In addition: Absolute and relative convergence criteria were met
```

Perceived Intelligibility

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -1974.33 4028.66 5(0)  1.18e-07 7.8e+06

Coefficients: (4 not defined because of singularities)
               Estimate Std. Error z value Pr(>|z|)
AccentsFavE   -0.262702   0.224942  -1.168 0.242861
AccentsGavE    1.169946   0.238316   4.909 9.14e-07 ***
AccentsIvE     0.049049   0.238687   0.205 0.837184
AccentsJvE     0.551794   0.241943   2.281 0.022568 *
AccentsMAE     3.978915   0.288500  13.792  < 2e-16 ***
AccentsMBE     3.957499   0.278649  14.202  < 2e-16 ***
AccentsSAE     1.995853   0.255996   7.796 6.37e-15 ***
AccentsSSE     1.571440   0.233974   6.716 1.86e-11 ***
AccentsTavE    0.356140   0.237532   1.499 0.133787
AccentsUavE   -0.035634   0.233036  -0.153 0.878468
AccentsWAvE    0.232021   0.224922   1.032 0.302278
SpSexM        -0.226921   0.097277  -2.333 0.019663 *
SpAge         -0.021164   0.004491  -4.712 2.45e-06 ***
StsAge         0.017996   0.036321   0.495 0.620263
StsSexM       -0.426637   0.127572  -3.344 0.000825 ***
Class         -1.136115   0.158852  -7.152 8.55e-13 ***
USA            0.988067   0.648400   1.524 0.127545
England       -1.012867   0.425685  -2.379 0.017342 *
Scotland             NA         NA      NA       NA
Germany        0.661223   0.528023   1.252 0.210475
RUUKR         -1.928708   0.599258  -3.218 0.001289 **
China                NA         NA      NA       NA
France         1.973310   0.442521   4.459 8.22e-06 ***
Everyday      -1.229768   0.800559  -1.536 0.124505
fewtimesaweek -1.483860   0.842882  -1.760 0.078330 .
```

```
Onceamonth    -3.286950   0.868420  -3.785 0.000154 ***
Ling1          0.998176   0.376893   2.648 0.008087 **
Ling2          0.230567   0.454314   0.508 0.611800
Socioling     -0.257781   0.166678  -1.547 0.121964
GlobEng       -0.025333   0.141556  -0.179 0.857966
Lexicon        1.640999   0.262855   6.243 4.29e-10 ***
OrCommSk             NA         NA      NA       NA
ListPronun           NA         NA      NA       NA
LangAcq        0.411377   0.278795   1.476 0.140064
ContrastTE     0.407502   0.250391   1.627 0.103638
LLGerman       0.491801   0.151605   3.244 0.001179 **
LLFrench       0.270928   0.149409   1.813 0.069780 .
LLRussian      0.550415   0.256559   2.145 0.031923 *
LLChinese     -0.588689   0.509797  -1.155 0.248191
LLJapanese     0.517261   0.289946   1.784 0.074425 .
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Threshold coefficients:
    Estimate Std. Error z value
1|2  -4.7716     1.4436  -3.305
2|3  -3.0823     1.4392  -2.142
3|4  -1.6829     1.4374  -1.171
4|5   0.1658     1.4381   0.115


> convergence(c)
 nobs logLik   niter max.grad cond.H  logLik.Error
 1560 -1974.33 5(0)  1.18e-07 7.8e+06 <1e-10

              Estimate  Std.Err  Gradient     Error Cor.Dec Sig.Dig
1|2           -4.77158 1.443604  7.35e-10  7.26e-11       9      10
2|3           -3.08230 1.439224 -6.30e-11  6.38e-11       9      10
3|4           -1.68287 1.437384  3.52e-08  6.86e-11       9      10
4|5            0.16583 1.438133 -3.95e-08 -2.11e-10       9       9
AccentsFavE   -0.26270 0.224942  3.68e-10  1.03e-11      10      10
AccentsGavE    1.16995 0.238316  6.21e-10 -4.64e-11      10      11
AccentsIvE     0.04905 0.238687  4.89e-10 -1.35e-12      11      10
AccentsJvE     0.55179 0.241943  4.78e-10 -2.12e-11      10      10
AccentsMAE     3.97891 0.288500 -2.89e-10 -2.63e-10       9      10
AccentsMBE     3.95750 0.278649 -4.23e-10 -2.65e-10       9      10
AccentsSAE     1.99585 0.255996 -3.49e-11 -1.31e-10       9      10
AccentsSSE     1.57144 0.233974  1.42e-10 -9.88e-11       9      10
AccentsTavE    0.35614 0.237532  6.08e-10 -8.74e-12      10      10
AccentsUavE   -0.03563 0.233036  3.68e-10  2.15e-12      11      10
AccentsWAvE    0.23202 0.224922  6.50e-10 -9.23e-13      11      11
SpSexM        -0.22692 0.097277  1.71e-09  8.11e-12      10      10
SpAge         -0.02116 0.004491  1.18e-07  8.49e-13      11      10
StsAge         0.01800 0.036321  7.76e-08 -9.26e-13      11      10
StsSexM       -0.42664 0.127572  1.26e-09  1.69e-11      10      10
Class         -1.13612 0.158852  8.79e-09  3.04e-11      10      11
USA            0.98807 0.648400  1.25e-10 -8.78e-11       9       9
```

```
England       -1.01287 0.425685  3.65e-10  2.06e-11      10      11
Germany        0.66122 0.528023  3.33e-10 -9.72e-12      10      10
RUUKR         -1.92871 0.599258  1.75e-10  1.59e-10       9      10
France         1.97331 0.442521  1.96e-10 -1.21e-10       9      10
Everyday      -1.22977 0.800559  2.23e-09  2.23e-11      10      11
fewtimesaweek -1.48386 0.842882  1.35e-09  2.78e-11      10      11
Onceamonth    -3.28695 0.868420  9.26e-12  1.24e-10       9      10
Ling1          0.99818 0.376893  2.56e-09 -7.30e-11       9       9
Ling2          0.23057 0.454314  2.50e-09  4.46e-11      10      10
Socioling     -0.25778 0.166678  8.14e-10  1.93e-11      10      10
GlobEng       -0.02533 0.141556  1.10e-09 -4.07e-12      11      10
Lexicon        1.64100 0.262855  9.09e-10 -4.22e-11      10      11
LangAcq        0.41138 0.278795  1.54e-09  8.63e-12      10      10
ContrastTE     0.40750 0.250391  1.77e-09 -3.50e-11      10      10
LLGerman       0.49180 0.151605  2.17e-09 -1.79e-11      10      10
LLFrench       0.27093 0.149409  2.66e-09 -8.10e-12      10      10
LLRussian      0.55041 0.256559  2.07e-10 -2.10e-11      10      10
LLChinese     -0.58869 0.509797  9.98e-11  8.88e-11       9       9
LLJapanese     0.51726 0.289946  9.15e-11 -7.34e-11       9       9

Eigen values of Hessian:
7.538e+05 2.646e+04 7.747e+02 5.670e+02 2.830e+02 2.053e+02 1.823e+0
2 1.339e+02 1.305e+02 1.091e+02 8.869e+01 8.260e+01 7.079e+01 5.488e
+01 5.035e+01 4.225e+01 4.196e+01 4.073e+01 3.993e+01 3.846e+01 3.63
7e+01 3.556e+01 3.507e+01 2.988e+01 2.847e+01 2.407e+01 2.145e+01 1.
798e+01 1.763e+01 1.417e+01 1.387e+01 9.821e+00 6.684e+00 5.952e+00
4.481e+00 3.388e+00 2.710e+00 2.324e+00 1.326e+00 9.632e-02

Convergence message from clm:
(0) successful convergence
In addition: Absolute and relative convergence criteria were met
```

Perceived Wealth

```
 link  threshold nobs logLik   AIC     niter max.grad cond.H
 logit flexible  1560 -2018.06 4116.12 6(0)  3.57e-11 7.7e+06

Coefficients: (4 not defined because of singularities)
               Estimate Std. Error z value Pr(>|z|)
AccentsFavE   -0.960384   0.228442  -4.204 2.62e-05 ***
AccentsGavE    0.234589   0.235397   0.997 0.318975
AccentsIvE    -0.657251   0.234270  -2.806 0.005023 **
AccentsJvE    -0.032375   0.242397  -0.134 0.893748
AccentsMAE     2.823244   0.243156  11.611  < 2e-16 ***
AccentsMBE     2.788563   0.240204  11.609  < 2e-16 ***
AccentsSAE     1.424390   0.249117   5.718 1.08e-08 ***
AccentsSSE     1.338679   0.230371   5.811 6.21e-09 ***
AccentsTavE   -0.487677   0.233321  -2.090 0.036604 *
AccentsUavE   -0.797504   0.234358  -3.403 0.000667 ***
AccentsWAvE   -0.591454   0.222833  -2.654 0.007949 **
SpSexM        -0.282376   0.095182  -2.967 0.003010 **
```

```
SpAge          -0.017753   0.004583  -3.873 0.000107 ***
StsAge          0.114816   0.035526   3.232 0.001230 **
StsSexM         0.093605   0.123172   0.760 0.447284
Class          -0.666135   0.157601  -4.227 2.37e-05 ***
USA            -0.541200   0.614828  -0.880 0.378726
England        -0.310204   0.443401  -0.700 0.484177
Scotland              NA         NA      NA       NA
Germany         0.822752   0.544798   1.510 0.130993
RUUKR          -0.091059   0.578410  -0.157 0.874906
China                 NA         NA      NA       NA
France          0.065907   0.433260   0.152 0.879093
Everyday        1.279594   0.793284   1.613 0.106737
fewtimesaweek   1.391757   0.834793   1.667 0.095477 .
Onceamonth      0.835500   0.856326   0.976 0.329223
Ling1           0.234131   0.372494   0.629 0.529645
Ling2           0.387784   0.446211   0.869 0.384814
Socioling       0.532953   0.161189   3.306 0.000945 ***
GlobEng        -0.158861   0.137287  -1.157 0.247213
Lexicon        -0.098136   0.257970  -0.380 0.703635
OrCommSk              NA         NA      NA       NA
ListPronun            NA         NA      NA       NA
LangAcq         1.399015   0.280494   4.988 6.11e-07 ***
ContrastTE     -1.011254   0.252126  -4.011 6.05e-05 ***
LLGerman       -0.193966   0.145520  -1.333 0.182560
LLFrench       -0.439235   0.144076  -3.049 0.002299 **
LLRussian       0.550716   0.237940   2.315 0.020639 *
LLChinese      -0.625420   0.495535  -1.262 0.206909
LLJapanese      0.796951   0.272559   2.924 0.003456 **
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1


Threshold coefficients:
    Estimate Std. Error z value
1|2  0.07896    1.40374   0.056
2|3  1.64023    1.40427   1.168
3|4  3.70811    1.40699   2.635
4|5  5.14905    1.41013   3.651


> convergence(c)
 nobs logLik   niter max.grad cond.H  logLik.Error
 1560 -2018.06 6(0)  3.57e-11 7.7e+06 <1e-10

              Estimate  Std.Err  Gradient     Error Cor.Dec Sig.Dig
1|2            0.07896 1.403742  1.42e-13 -4.98e-14      13      12
2|3            1.64023 1.404267  8.38e-12 -4.89e-14      13      14
3|4            3.70811 1.406987 -9.38e-12 -1.21e-13      12      13
4|5            5.14905 1.410135 -2.41e-13 -1.19e-13      12      13
AccentsFavE   -0.96038 0.228442  1.44e-13  8.69e-15      13      13
AccentsGavE    0.23459 0.235397  2.85e-13 -3.09e-15      14      14
AccentsIvE    -0.65725 0.234270  1.39e-13  3.45e-15      14      14
```

AccentsJvE	-0.03238	0.242397	2.08e-13	-3.43e-15	14	13
AccentsMAE	2.82324	0.243156	-8.84e-14	-5.96e-14	12	13
AccentsMBE	2.78856	0.240204	-1.18e-13	-6.09e-14	12	13
AccentsSAE	1.42439	0.249117	-1.38e-13	-4.12e-14	13	14
AccentsSSE	1.33868	0.230371	-2.26e-13	-4.41e-14	13	14
AccentsTavE	-0.48768	0.233321	2.21e-13	5.50e-15	13	13
AccentsUavE	-0.79750	0.234358	1.34e-13	4.61e-15	14	14
AccentsWAvE	-0.59145	0.222833	2.19e-13	7.72e-15	13	13
SpSexM	-0.28238	0.095182	4.69e-13	3.02e-15	14	14
SpAge	-0.01775	0.004583	3.57e-11	2.63e-16	15	14
StsAge	0.11482	0.035526	2.42e-11	-1.90e-15	14	14
StsSexM	0.09360	0.123172	3.79e-13	-3.74e-16	15	14
Class	-0.66613	0.157601	2.70e-12	3.31e-15	14	14
USA	-0.54120	0.614828	3.64e-14	-7.46e-15	13	13
England	-0.31020	0.443401	2.08e-13	2.58e-15	14	14
Germany	0.82275	0.544798	1.95e-13	-1.25e-14	13	13
RUUKR	-0.09106	0.578410	7.09e-14	1.08e-14	13	12
France	0.06591	0.433260	1.30e-13	4.81e-15	14	13
Everyday	1.27959	0.793284	6.39e-13	-3.61e-14	13	14
fewtimesaweek	1.39176	0.834793	3.45e-13	-3.99e-14	13	14
Onceamonth	0.83550	0.856326	4.53e-14	-2.99e-14	13	13
Ling1	0.23413	0.372494	8.29e-13	-1.04e-14	13	13
Ling2	0.38778	0.446211	7.99e-13	7.41e-15	13	13
Socioling	0.53295	0.161189	2.49e-13	-3.54e-15	14	14
GlobEng	-0.15886	0.137287	3.79e-13	3.99e-15	14	14
Lexicon	-0.09814	0.257970	2.56e-13	7.39e-15	13	12
LangAcq	1.39901	0.280494	4.97e-13	-9.24e-15	13	14
ContrastTE	-1.01125	0.252126	5.55e-13	7.86e-15	13	14
LLGerman	-0.19397	0.145520	5.95e-13	2.71e-15	14	14
LLFrench	-0.43924	0.144076	7.14e-13	4.03e-15	14	14
LLRussian	0.55072	0.237940	9.27e-14	-5.46e-15	13	13
LLChinese	-0.62542	0.495535	1.63e-14	8.74e-15	13	13
LLJapanese	0.79695	0.272559	1.05e-13	-1.04e-14	13	13

```
Eigen values of Hessian:
7.733e+05 2.697e+04 8.182e+02 5.032e+02 3.045e+02 2.227e+02 1.831e+0
2 1.470e+02 1.423e+02 1.136e+02 1.025e+02 9.009e+01 7.297e+01 5.905e
+01 5.228e+01 4.036e+01 4.006e+01 3.912e+01 3.874e+01 3.813e+01 3.77
6e+01 3.717e+01 3.656e+01 3.561e+01 3.219e+01 2.708e+01 2.463e+01 2.
184e+01 1.906e+01 1.489e+01 1.459e+01 1.029e+01 7.032e+00 6.222e+00
4.651e+00 3.690e+00 2.912e+00 2.212e+00 1.403e+00 1.005e-01

Convergence message from clm:
(0) successful convergence
In addition: Absolute and relative convergence criteria were met.
```

APPENDIX G. RECORDING ORDERINGS

Order 1		Order 2		Order 3		Order 4	
F 39	SAE	M 33	CavE	F 37	TavE	F 53	GavE
M 27	MAE	M 27	MBE	F 19	JvE	F 37	TavE
F 53	UavE	F 37	TavE	M 26	UavE	F 18	MAE
F 37	TavE	F 53	GavE	M 28	FavE	M 49	IvE
M 27	MBE	M 52	SAE	M 49	IvE	M 27	MBE
M 26	UavE	F 18	MAE	M 18	WAvE	F 19	JvE
M 28	FavE	M 27	GavE	M 52	SAE	F 53	UavE
F 18	MAE	F 33	IvE	F 18	CavE	M 28	FavE
F 30	MBE	F 20	FavE	F 28	WAvE	M 35	SSE
F 53	GavE	F 22	SSE	M 33	CavE	F 22	SSE
M 69	JvE	F 18	CavE	F 30	MBE	M 24	TavE
F 18	CavE	M 26	UavE	M 27	MAE	M 27	MAE
F 20	FavE	M 69	JvE	F 39	SAE	M 69	JvE
M 24	TavE	F 39	SAE	M 27	MBE	F 20	FavE
F 28	WAvE	M 28	FavE	F 22	SSE	M 52	SAE
M 49	IvE	M 35	SSE	F 53	UavE	M 18	WAvE
M 18	WAvE	F 30	MBE	F 53	GavE	M 33	CavE
M 33	CavE	M 18	WAvE	M 69	JvE	F 39	SAE
M 27	GavE	F 28	WAvE	M 35	SSE	F 30	MBE
F 22	SSE	M 24	TavE	F 33	IvE	F 33	IvE
M 52	SAE	F 19	JvE	F 18	MAE	M 26	UavE
M 35	SSE	M 49	IvE	M 27	GavE	F 18	CavE
F 19	JvE	M 27	MAE	M 24	TavE	F 28	WAvE
F 33	IvE	F 53	UavE	F 20	FavE	M 27	GavE
Order 5		**Order 6**		**Order 7**		**Order 8**	
F 28	WAvE	F 19	JvE	M 26	UavE	F 22	SSE
F 39	SAE	M 33	CavE	F 18	CavE	M 28	FavE
F 18	CavE	M 27	GavE	F 30	MBE	F 37	TavE
M 49	IvE	M 28	FavE	F 53	UavE	M 18	WAvE
M 24	TavE	F 53	UavE	M 28	FavE	F 30	MBE
F 37	TavE	M 52	SAE	M 33	CavE	M 27	MAE
M 26	UavE	F 20	FavE	F 33	IvE	F 19	JvE
F 18	MAE	M 69	JvE	M 35	SSE	F 20	FavE
M 27	GavE	M 49	IvE	M 27	MAE	M 52	SAE
F 53	UavE	M 35	SSE	F 53	GavE	M 69	JvE
M 6	JvE	F 18	MAE	F 39	SAE	M 33	CavE
F 33	IvE	F 37	TavE	F 22	SSE	M 24	TavE
M 35	SSE	F 53	GavE	F 19	JvE	F 39	SAE
M 28	FavE	M 18	WAvE	M 18	WAvE	F 18	MAE
M 52	SAE	M 26	UavE	F 37	TavE	M 35	SSE
F 19	JvE	M 24	TavE	M 49	IvE	M 27	MBE
F 53	GavE	F 22	SSE	F 20	FavE	M 26	UavE
F 30	MBE	F 28	WAvE	M 69	JvE	M 49	IvE
M 33	CavE	M 27	MBE	M 27	MBE	F 28	WAvE
F 20	FavE	F 30	MBE	M 24	TavE	F 53	UavE
M 18	WAvE	F 39	SAE	F 28	WAvE	M 27	GavE
F 22	SSE	M 27	MAE	F 18	MAE	F 33	IvE
M 27	MBE	F 18	CavE	M 52	SAE	F 53	GavE
M 27	MAE	F 33	IvE	M 27	GavE	F 18	CavE

APPENDIX I. LINKS TO THE RECORDINGS

#	Gender	Age	Variety	Link
1	M	27	MBE	http://accent.gmu.edu/searchsaa.php?function=detail&speakerid=97
2	F	30	MBE	http://accent.gmu.edu/searchsaa.php?function=detail&speakerid=77
3	M	27	MAE	http://accent.gmu.edu/searchsaa.php?function=detail&speakerid=1297
4	F	18	MAE	http://accent.gmu.edu/searchsaa.php?function=detail&speakerid=597
5	M	52	SAE	http://accent.gmu.edu/searchsaa.php?function=detail&speakerid=132
6	F	39	SAE	http://accent.gmu.edu/searchsaa.php?function=detail&speakerid=75
7	M	35	SSE	http://accent.gmu.edu/searchsaa.php?function=detail&speakerid=611
8	F	22	SSE	http://accent.gmu.edu/searchsaa.php?function=detail&speakerid=1502
9	M	49	IvE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=1612
10	F	33	IvE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=836
11	M	69	JvE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=967
12	F	19	JvE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=1944
13	M	24	TavE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=2032
14	F	37	TavE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=1291
15	M	26	UavE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=649
16	F	53	UavE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=844
17	M	18	WAvE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=1953
18	F	28	WAvE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=1771
19	M	33	CavE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=1975
20	F	18	CavE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=1558
21	M	28	FavE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=1427
22	F	20	FavE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=1945
23	M	27	GavE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=1383
24	F	53	GavE	http://accent.gmu.edu/browse_language.php?function=detail&speakerid=1619

APPENDIX J. STUDY 2. ONLINE QUESTIONNAIRE

1. Section 1, VGT. Attitudes towards MAE and MBE accents.

In this section, you will be asked to listen to a series of recordings. Once you click on the blue link, a new pop up window will open. You have to click play and listen to the audio file before answering the following yes-no questions. You may choose to select both (yes and no answers) in order to express uncertainty. All of the questions in this section should be answered. Please try to explain your answers in the comment boxes in detail, by providing examples. Please read the following translations before you start the online questionnaire.

The speaker sounds...
- attractive: çekici
- educated: eğitimli
- intelligible: anlaşılır
- wealthy: zengin

* 1. Recording 1 (MAE) I think that the speaker sounds attractive.

☐ Yes ☐ No

Why? What makes\doesn't make the speaker sound attractive to you?

Please explain your answer below (required)

* 2. Recording 2 (MBE) I think that the speaker sounds attractive.

☐ Yes ☐ No

Why? What makes\doesn't make the speaker sound attractive to you?

Please explain your answer below (required)

* 3. Recording 3 (MBE) The speaker sounds intelligible\understandable.

☐ Yes ☐ No

Why? What makes\doesn't make the speaker sound intelligible\understandable?

Please explain your answer below (required)

* 4. Recording 4 (MAE)The speaker sounds intelligible\understandable.

☐ Yes ☐ No

Why? What makes\doesn't make the speaker sound intelligible\understandable to you?

Please explain your answer below (required)

* 5. Recording 5 (MAE) The speaker sounds wealthy.

☐ Yes ☐ No

Why? What makes\doesn't make the speaker sound wealthy to you?

Please explain your answer below (required)

* 6. Recording 6 (MBE) The speaker sounds wealthy.

☐ Yes ☐ No

Why? What makes\doesn't make the speaker sound wealthy to you?

Please explain your answer below (required)

* 7. Recording 7 (MAE) The speaker sounds educated.

- [ ] Yes
- [ ] No

Why? What makes\doesn't make the speaker sound educated?

Please explain your answer below (required)

* 8. Recording 8 (MBE) The speaker sounds educated.

- [ ] Yes
- [ ] No

Why?

Please explain your answer in detail (required)

2. Section 2. TPTEs' cognitive evaluations of MAE, MBE, and TavE in educational settings.

In this section, you will be required to answer a series of multiple choice, agree-disagree, and open-ended questions. Please explain your answers in the comment box provided below each question.

* 9. I would prefer to speak English with the following accent

- ◯ American English
- ◯ With my own L1 accent
- ◯ British English

Why? Please explain your answer below (required)

* 10. I think that native varieties of English sound better than the non native varieties of English

- ◯ Strongly agree
- ◯ Disagree
- ◯ Agree
- ◯ Strongly disagree
- ◯ Neither agree nor disagree

Why? Please explain your answer below (required)

* 11. Please complete the following statement.
'I think that Turkish accented English sounds _____'

* 12. I believe that advanced and competent speakers would speak English with a native\native-like accent

- ◯ Strongly agree
- ◯ Agree
- ◯ Neither agree nor disagree
- ◯ Disagree
- ◯ Strongly disagree

Why? Please explain your answer below (required)

* 13. As a teacher I would pay attention to my accent\pronunciation in class

- ◯ Strongly agree
- ◯ Agree
- ◯ Neither agree nor disagree
- ◯ Disagree
- ◯ Strongly disagree

Why? Please explain your answer below (required)

* 14. As a teacher, I would pay attention to my students' accent and pronunciation in class.

- ◯ Strongly agree
- ◯ Agree
- ◯ Neither agree nor disagree
- ◯ Disagree
- ◯ Strongly disagree

Why? Please explain your answer below (required)

* 15. I think that English language teachers should expose their students to different varieties of English (native, non-native, standard, not standard).

- ◯ Strongly agree
- ◯ Agree
- ◯ Neither agree nor disagree
- ◯ Disagree
- ◯ Strongly disagree

Why? Please explain your answer (required)

3. Stage 3. Demographic Information

* 16. What is your gender?

- ◯ Female
- ◯ Male

Other (please specify)

* 17. What is your age?

* 18. What year of study are you in ?

- ◯ Freshman (1st year)
- ◯ Sophmore (2nd year)
- ◯ Junior (3rd year)
- ◯ Senior (4th year)

* 19. What is your first language?

- ◯ Turkish
- ◯ Other (please specify)

* 20. How often do you watch series\shows in English ?

- ◯ Every day
- ◯ 2-3 times a week
- ◯ once a month
- ◯ Never

* 21. How often do you listen to music in English ?

- ◯ Every day
- ◯ 2-3 times a week
- ◯ once a week
- ◯ once a month
- ◯ Never

* 22. Which of the following courses have you taken thus far ? (you can choose more than one)

- [ ] Listening and Pronunciation
- [ ] The English Lexicon
- [ ] Linguistics 1
- [ ] Contrastive Turkish English
- [ ] Linguistics 2
- [ ] Corpus Linguistics
- [ ] Language Acquisition
- [ ] History of English
- [ ] Sociolinguistics
- [ ] Other (please specify)

* 23. Which of the following courses are you taking\have taken this far?

- [ ] German
- [ ] Arabic
- [ ] French
- [ ] Italian
- [ ] Spanish
- [ ] Greek
- [ ] Russian
- [ ] Chinese

* 24. Which of the following varieties you have been exposed to before? (can choose multiple answers)

- [ ] Model American English
- [ ] German accented English
- [ ] Southern American English
- [ ] French accented English
- [ ] Model British English
- [ ] Indian accented English
- [ ] Standard Scottish English
- [ ] Chinese accented English
- [ ] Turkish accented English
- [ ] Jamaican English
- [ ] Russian\Ukrainian accented English
- [ ] West African English
- [ ] Other (please specify)

* 25. Please provide your e-mail address below.

APPENDIX K. STUDY 1. QUESTIONNAIRE

M1. Instructions

- You will be asked to listen to twenty-four 30-second long recordings and rate each speaker by circling the correct numeric response to the statements that are provided. Then you will be required to guess the origin of the speaker for each recording.
- You don't have to wait until the end of each recording, you can start rating while you are listening.
- You should signal after you are done rating each recording in order to proceed to the next one.
- You will get a 5-minute break after the 12th recording, but you may request a break at any time if you find it necessary.
- You are expected to rate and answer the questions based on your first reaction, so don't think too much about it.
- You may not ask any questions once the experiment has started, so please ask any questions that you may have after reading the instructions and going through the instructions with the researcher.

SAMPLE: 1A 2B 3C 4D 5E 6F 7G 8H

M2. Study 1. Questionnaire Part 1.

	Circle the correct numeric response to each question					
#	Question	Survey Scale: 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree				
1	The speaker sounds rude	1	2	3	4	5
2	The speaker sounds educated	1	2	3	4	5
3	The speaker sounds attractive	1	2	3	4	5
4	The speaker's language proficiency is high	1	2	3	4	5
5	The speaker sounds rich	1	2	3	4	5
6	The speaker is a native speaker of English	1	2	3	4	5
7	The speaker's speech is understandable	1	2	3	4	5

I think the origin of the speaker is:

M3. Study 1. Questionnaire Part 2, Demographics

Age: **Date:**

Gender:

What year of study are you in?

What language(s) do you speak at home?

Have you studied any other languages besides English?

How often do you watch series/movies in English?

Have you taken any linguistics courses? If yes, please list them below.

Have you been to any other country other than Turkey and TRNC? If yes, please list where and for how long.

APPENDIX L. APPLIED ETHICS RESEARCH CENTER APPROVAL

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER

ORTA DOĞU TEKNİK ÜNİVERSİTESİ
MIDDLE EAST TECHNICAL UNIVERSITY

DUMLUPINAR BULVARI 06800
ÇANKAYA ANKARA/TURKEY
T: +90 312 210 22 91
F: +90 312 210 79 59
ueam@metu.edu.tr
www.ueam.metu.edu.tr

30 KASIM 2016

Sayı: 28620816 /447

Konu: Değerlendirme Sonucu

Gönderilen: Mary Ann Walter

Gönderen: Prof. Dr. Canan SÜMER
İnsan Araştırmaları Etik Kurulu Başkanı

İlgi: Etik Onayı

Sayın Mary Ann Walter;

Danışmanlığını yaptığınız Ceren Yağmur ÖZTÜRK'ün "Preservice Teachers' Dialect Perception of varieties of english" başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek gerekli onay **2016-SOS-139** protokol numarası ile **30.11.2016-01.09.2017** tarihleri arasında geçerli olmak üzere verilmiştir.

Bilgilerinize saygılarımla sunarım.

Prof. Dr. Canan SÜMER
İnsan Araştırmaları Etik Kurulu Başkanı

APPENDIX M. CODEBOOK

CODEBOOK		
Abbreviation	**Variable**	**Value**
Sts	Turkish Prospective English Language Teacher participants	1-65
Class	Class standing of the participants	1st, 2nd, 3rd, and 4th
StsAge	Age of the participants	18-37
F (f)	Female	F
M (m)	Male	M
StsSex	Gender of the participants	F - M
SAE_F	Female speaker of Southern American English	1: selected, 0:unselected
SAE_M	Male speaker of Southern American English	1: selected, 0:unselected
MAE_F	Female speaker of Model American English	1: selected, 0:unselected
MAE_M	Male speaker of Model American English	1: selected, 0:unselected
MBE_F	Female speaker of Model British English	1: selected, 0:unselected
MBE_M	Male speaker of Model British English	1: selected, 0:unselected
SSE_F	Female Speaker of Scottish English	1: selected, 0:unselected
SSE_M	Male Speaker of Scottish English	1: selected, 0:unselected
WAvE_F	Female speaker of West African variety of English	1: selected, 0:unselected
WAvE_M	Male speaker of West African variety of English	1: selected, 0:unselected
IvE_F	Female speaker of Indian variety of English	1: selected, 0:unselected
IvE_M	Male speaker of Indian variety of English	1: selected, 0:unselected
JvE_F	Female speaker of Jamaican variety of English	1: selected, 0:unselected
JvE_M	Male speaker of Jamaican variety of English	1: selected, 0:unselected
UavE_F	Female speaker of Ukrainian accented variety of English	1: selected, 0:unselected
UavE_M	Male speaker of Ukrainian accented variety of English	1: selected, 0:unselected
TavE_F	Female speaker of Turkish accented variety of English	1: selected, 0:unselected
TavE_M	Male speaker of Turkish accented variety of English	1: selected, 0:unselected
FavE_F	Female speaker of French accented variety of English	1: selected, 0:unselected
FavE_M	Male speaker of French accented variety of English	1: selected, 0:unselected
GavE_F	Female speaker of German accented variety of English	1: selected, 0:unselected

GavE_M	Male speaker of German accented variety of English	1: selected, 0:unselected
CavE_F	Female speaker of Chinese accented English	1: selected, 0:unselected
CavE_M	Male speaker of Chinese accented English	1: selected, 0:unselected
SAE_F	Female speaker of Southern American English	1: selected, 0:unselected
SAE_M	Male speaker of Southern American English	1: selected, 0:unselected
MAE_F	Female speaker of Model American English	1: selected, 0:unselected
MAE_M	Male speaker of Model American English	1: selected, 0:unselected
MBE_F	Female speaker of Model British English	1: selected, 0:unselected
MBE_M	Male speaker of Model British English	1: selected, 0:unselected
Polite	evaluations of a speaker's perceived politeness	Likert Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=strongly agree
EdLev	evaluations of a speaker's perceived education level	Likert Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=strongly agree
Attract	evaluations of a speaker's perceived attractiveness	Likert Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=strongly agree
LangProf	evaluations of a speaker's perceived proficiency in English	Likert Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=strongly agree
Wealth	evaluations of a speaker's perceived wealth	Likert Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=strongly agree
Nativ	evaluations of a speaker's perceived native status	Likert Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=strongly agree
Intel	evaluations of a speaker's perceived understandability	Likert Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=strongly agree
L2\LL	Foreign language	French, German, Russian…
LL_French	Have taken\are taking French as a foreign language	1=yes, 0=no
LL_German	Have taken\are taking German as a foreign language	1=yes, 0=no
LL_Spanish	Have taken\are taking Spanish as a foreign language	1=yes, 0=no
LL_Arabic	Have taken\are taking Arabic as a foreign language	1=yes, 0=no
LL_Japanese	Have taken\are taking Japanese as a foreign language	1=yes, 0=no
LL_Russian	Have taken\are taking Russian as a foreign language	1=yes, 0=no
LL_Greek	Have taken\are taking Greek as a foreign language	1=yes, 0=no

LL_Chinese	Have taken\are taking Chinese as a foreign language	1=yes, 0=no
LL_Korean	Have taken\are taking Korean as a foreign language	1=yes, 0=no
LL_Italian	Have taken\are taking Italian as a foreign language	1=yes, 0=no
Ling1	Have taken\are taking Linguistics 1	1=yes, 0=no
Ling2	Have taken\are taking Linguistics 2	1=yes, 0=no
Socioling	Have taken\are taking Sociolinguistics	1=yes, 0=no
GlobEng	Have taken\are taking Global English	1=yes, 0=no
ContrastTE	Have taken\are taking Contrastive Turkish English Structure	1=yes, 0=no
LangAcq	Have taken\are taking Language Acquisition	1=yes, 0=no
List&Pronun	Have taken\are taking Listening and Pronunciation	1=yes, 0=no
OrCommSk	Have taken\are taking Oral Communication Skills	1=yes, 0=no
Lexicon	Have taken\are taking Lexicon	1=yes, 0=no
HistEngl	Have taken\are taking History of English	1=yes, 0=no
Exp2Media	Participant's exposure to English media	Everyday, 2-3 times a week, Once a month, Rarely
CountVis	Countries visited by the participants	Text input
oi	Origin identification	1=correct, 0=incorrect
SpAge	Speaker's age	18-69
SpSex	Speaker's gender	F, M
Stsn	Student number	1,2,3,4,5,6,7,8,9…
Accents	All selected accents combined for gender	MAE, MBE, TavE, JvE, WAvE, CavE…
StsF	Female participants\students	F=1
RU&UKR	Have been to Russia\Ukraine (for countries visited)	RUUKR=1
SpSexM	Only male speakers	1= yes, 0= no

Appendix M: Sample Tez Fotokopisi İzin Formu

TEZ FOTOKOPİSİ İZİN FORMU

PROGRAM

SEES ☐

PSIR ☐

ELT ☐

YAZARIN

Soyadı :
Adı :
Bölümü :

TEZİN ADI (İngilizce) :

TEZİN TÜRÜ : Yüksek Lisans ☐ Doktora ☐

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir. ☐
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir. ☐
3. Tezimden bir bir (1) yıl süreyle fotokopi alınamaz. ☐

TEZİN KÜTÜPHANEYE TESLİM TARİHİ: