Expression of communicative intents and formality by African-American English and Appalachian English speaking children

Mary Elizabeth Cady

Follow this and additional works at: https://trace.tennessee.edu/utk_gradthes

Recommended Citation

This Thesis is brought to you for free and open access by the Graduate School at TRACE: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Masters Theses by an authorized administrator of TRACE: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.
To the Graduate Council:

I am submitting herewith a thesis written by Mary Elizabeth Cady entitled "Expression of communicative intents and formality by African-American English and Appalachian English speaking children." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Speech Pathology.

Lori A. Swanson, Major Professor

We have read this thesis and recommend its acceptance:

Pearl Gordon, Harold Peterson

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)
To the Graduate Council:

I am submitting herewith a thesis written by Mary Elizabeth Cady entitled “Expression of Communicative Intents and Formality by African-American English and Appalachian English Speaking Children.” I have examined the final copy of the thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Speech Pathology.

Lori A. Swanson
Major Professor

We have read this thesis and recommend its acceptance.

Accepted for the Council:

[Signature]
Associate Vice Chancellor and Dean of the Graduate School
Expression of Communicative Intents and Formality by
African-American English and Appalachian English Speaking Children

A Thesis
Presented for the
Master of Arts
Degree
The University of Tennessee, Knoxville

Mary Elizabeth Cady
May 1997
Acknowledgments

First and foremost, I wish to acknowledge the contributions of my chair, Dr. Lori Swanson, to this thesis. Without her original idea as well as her continuous guidance and support, this project would never have happened. I have benefited greatly from her willingness to share her knowledge and experience with students and am thankful that I had the opportunity to work with her.

I would also like to acknowledge the contributions of my committee members, Dr. Pearl Gordon and Dr. Harold Peterson, to this document. Their suggestions have been invaluable and have certainly strengthened this research. I particularly appreciate Dr. Gordon’s willingness to give of herself during personal illness, and Dr. Peterson’s willingness to take time away from his impending retirement.

I must also recognize the assistance I have received from other students during this project, most notably Stephanie Benson, Stacey Paige, and Cindy McBrayer. Stephanie assisted with reliability and Stacey with organizing the subject folders and videotapes. Cindy, as a fellow master’s thesis student, provided moral support whenever necessary, and for this I am grateful.

Finally, and most importantly, I must acknowledge the contributions of my parents, John and Sue Simpson, and my husband, Dennis Cady, II. They have provided an abundance of encouragement and support, and my husband has served as my "technical support staff." I would not have made it through this project had it not been for their faith in my abilities.
Abstract

African-American English (AAE) and Appalachian English (APPE) are nonstandard dialects of the English language within the United States. Speakers of these dialects follow grammatical, phonological, semantic, and pragmatic rule systems which are distinctive from but not deficient to Standard American English (SAE). Although the development of these rule systems among speakers of SAE has been well documented, research among speakers of nonstandard dialects is sparse. The research literature indicates that information regarding nonstandard dialectal development is necessary for the appropriate assessment of such speakers. In particular, information regarding the developmental sequence for communicative intents and formality is needed to aid in the assessment of pragmatic skill among children who speak AAE and APPE.

The purpose of this study was to determine the linguistic performance of normally developing school-aged speakers who use components of AAE and age-matched speakers who use characteristics of APPE. Fifteen speakers of AAE and 15 speakers of APPE were administered the Let's Talk Inventory for Children (Bray & Wiig, 1987) at each of the following age levels: 5 years, 6 years, and 7 years. The subjects' use of communicative functions or intents were examined as well as the subjects' use of formality.

Both the speakers of AAE and APPE differed significantly from the normative sample in regard to Total Intent Scores. The subjects' performances upon the subtests representing the various communicative intents did not differ significantly from those of
the normative sample, although the subjects did demonstrate a developmental progression in scores. The speakers of AAE differed significantly from the normative sample in their Formality Scores, although the speakers of APPE did not.

The performances of the subjects upon Total Intent Scores provided evidence of differences in development for communicative intents, likely influenced by both dialectal and cultural factors for the subjects. Examination of the various subtests revealed possible explanations for these differences in development. Finally, the discrepancy in performance between the AAE and APPE subjects in regard to formality provided clues to cultural as well as code-switching factors which may have affected subject performances.
# Table of Contents

## INTRODUCTION ................................................................. 1

## I. REVIEW OF THE LITERATURE

- Introduction to Dialects .................................................. 3

- Characteristics of African-American English ....................... 4
  - Grammar ................................................................. 4
  - Phonology ............................................................. 7
  - Semantics ............................................................. 9

- Characteristics of Appalachian English ............................... 10
  - Grammar ............................................................... 10
  - Phonology ............................................................ 11
  - Semantics ............................................................. 11

- SAE Pragmatic Development during the School-Age Years ........ 12
  - Intents ................................................................. 12
  - Formality ............................................................. 13
  - Narratives ........................................................... 14
  - Suprasegmentals ..................................................... 15

- Pragmatic Characteristics of African-American English .......... 16
  - Intents ................................................................. 16
  - Formality ............................................................. 17
  - Narratives ........................................................... 18
  - Suprasegmentals ..................................................... 18

- Pragmatic Characteristics of Appalachian English ................ 19
  - Intents ................................................................. 19
  - Formality ............................................................. 21
  - Narratives ........................................................... 21
  - Suprasegmentals ..................................................... 22

- Code-switching ............................................................. 22
  - Introduction ......................................................... 22
  - Continuum Hypothesis ................................................ 23
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental Acquisition</td>
<td>23</td>
</tr>
<tr>
<td>Assessment Situational Variables</td>
<td>25</td>
</tr>
<tr>
<td>Assessment with Speakers of Nonstandard Dialects</td>
<td>28</td>
</tr>
<tr>
<td>Use of African-American English in the Schools</td>
<td>32</td>
</tr>
<tr>
<td>Teacher Perceptions</td>
<td>32</td>
</tr>
<tr>
<td>Educational Implications</td>
<td>34</td>
</tr>
<tr>
<td>Use of Appalachian English in the Schools</td>
<td>35</td>
</tr>
<tr>
<td>Teacher Perceptions</td>
<td>35</td>
</tr>
<tr>
<td>Educational Implications</td>
<td>37</td>
</tr>
<tr>
<td>Importance of Local Data</td>
<td>38</td>
</tr>
<tr>
<td>Summary of the Review of the Literature</td>
<td>39</td>
</tr>
<tr>
<td>Purpose and Research Questions</td>
<td>42</td>
</tr>
<tr>
<td><strong>II. METHODS</strong></td>
<td></td>
</tr>
<tr>
<td>Subjects</td>
<td>44</td>
</tr>
<tr>
<td>Assessment Site Identification</td>
<td>44</td>
</tr>
<tr>
<td>Subject Identification</td>
<td>45</td>
</tr>
<tr>
<td>Subject Description</td>
<td>45</td>
</tr>
<tr>
<td>Stimuli</td>
<td>48</td>
</tr>
<tr>
<td>Procedure</td>
<td>52</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>54</td>
</tr>
<tr>
<td>Scoring</td>
<td>54</td>
</tr>
<tr>
<td>Training</td>
<td>55</td>
</tr>
<tr>
<td>Procedure for Determination of Significance</td>
<td>57</td>
</tr>
<tr>
<td>Determination of Reliability</td>
<td>60</td>
</tr>
<tr>
<td>Intratranscriber Reliability</td>
<td>60</td>
</tr>
<tr>
<td>Intra- and Interexaminer Reliability</td>
<td>60</td>
</tr>
</tbody>
</table>
III. RESULTS

Reliability .................................................................................................................. 62

Statistical Analyses ................................................................................................. 66
  Differences Between Total Intent Scores ............................................................. 66
  Differences Among Subtest Scores ..................................................................... 68
  Differences Between Formality Scores ............................................................... 76

IV. DISCUSSION

Total Intent Scores ..................................................................................................... 86

Development of Communicative Intents ................................................................ 87
  Subtest Scores for Speakers of AAE ................................................................. 87
  Development of Communicative Intents Among AAE Speakers .................... 89
  Subtest Scores for Speakers of APPE ............................................................... 91
  Development of Communicative Intents Among APPE Speakers .................... 92

Formality Scores and Development of Formality .................................................... 93

Comparison of AAE and APPE Speakers’ Formality Scores .................................. 95

Advantages of Local Norms ..................................................................................... 97

Limitations of the Current Study ............................................................................ 98

Suggestions for Future Research ............................................................................ 100

Summary .................................................................................................................. 103

References ............................................................................................................... 103

Appendices ............................................................................................................. 116
  Appendix A: Grammatical Structures of African-American English ............. 117
  Appendix B: Phonological Characteristics of African-American English ........ 118
  Appendix C: Grammatical Structures of Appalachian English ....................... 119
  Appendix D: Phonological Characteristics of Appalachian English ............... 120
  Appendix E: Fact Sheet ......................................................................................... 121
  Appendix F: Parental Informed Consent for Language Research Project .......... 123
  Appendix G: Administration Protocol for Session 2 .......................................... 125
  Appendix H: Example of Scoring the Formulation Items .................................. 129
  Appendix I: Intraexaminer Reliability Training Procedures ............................. 130
List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Distribution of Age, Gender, and Grade Level for Subjects in Schools A and B</td>
<td>46</td>
</tr>
<tr>
<td>2. Summary of Subjects' Total Intent Scores on the LTI-C</td>
<td>63</td>
</tr>
<tr>
<td>3. Summary of Subjects' Subtest Scores on the LTI-C</td>
<td>64</td>
</tr>
<tr>
<td>4. Summary of Subjects' Formality Scores on the LTI-C</td>
<td>65</td>
</tr>
<tr>
<td>5. Differences Among Total Intent Scores of Normative Sample, AAE Speakers, and APPE Speakers as Shown by One Sample t-Test</td>
<td>67</td>
</tr>
<tr>
<td>6. Two-Way ANOVA of Speech Group and Gender Group Effects</td>
<td>69</td>
</tr>
<tr>
<td>7. ANOVA of the Differences in Total Intent Scores by Age Group for AAE Speakers</td>
<td>70</td>
</tr>
<tr>
<td>8. ANOVA of the Differences in Total Intent Scores by Age Group for APPE Speakers</td>
<td>71</td>
</tr>
<tr>
<td>9. Post Hoc Testing of the Differences in Total Intent Scores by Age Group for AAE Speakers</td>
<td>72</td>
</tr>
<tr>
<td>10. Post Hoc Testing of the Differences in Total Intent Scores by Age Group for APPE Speakers</td>
<td>73</td>
</tr>
<tr>
<td>11. ANOVA of the Differences in Intent Scores by Age Group for AAE Speakers as Compared to the Normative Sample</td>
<td>74</td>
</tr>
<tr>
<td>12. ANOVA of the Differences in Intent Scores by Age Group for APPE Speakers as Compared to the Normative Sample</td>
<td>75</td>
</tr>
<tr>
<td>13. Kruskal-Wallis Nonparametric ANOVA of Differences Among Subtest Scores of AAE and APPE Speakers from the Normative Sample</td>
<td>77</td>
</tr>
<tr>
<td>14. Sign Test of the Differences Among the AAE and APPE Speakers' Formality Scores and the Normative Sample Scores</td>
<td>78</td>
</tr>
</tbody>
</table>
15. Kruskal-Wallis Nonparametric ANOVA of the Difference Between Age Groups for Formality Scores of AAE Speakers


17. Kruskal-Wallis Nonparametric ANOVAs of the Differences Between Age Groups for Formality Scores of AAE Speakers

18. Kruskal-Wallis Nonparametric ANOVAs of the Differences Between Age Groups for Formality Scores of APPE Speakers

19. Kruskal-Wallis Nonparametric ANOVA of the Differences in Formality Scores by Age Group for AAE Speakers as Compared to the Normative Sample

20. Kruskal-Wallis Nonparametric ANOVA of the Differences in Formality Scores by Age Group for APPE Speakers as Compared to the Normative Sample
Introduction

African-American English and Appalachian English are rule-governed, nonstandard dialects found within the United States. Although the grammatic, phonologic, and semantic forms of these dialects have been well-documented by such researchers as Bountress (1994) and Wolfram and Christian (1975), few studies have focused upon the development of these linguistic forms, particularly in the case of Appalachian English. There is less information available regarding the pragmatic characteristics of these dialects, and there is a paucity of research dealing with the development of pragmatic abilities among these dialectal speakers (Stockman, 1986).

Some research has been conducted regarding code-switching among dialectal speakers. Terrell and Terrell (1993) postulate a continuum hypothesis, suggesting that not all dialectal speakers use all dialectal features in every situation, but that those fluent in two dialects will either vary on a continuum between the two or completely alternate codes depending upon the situation. Research conducted by Seymour and Ralabate (1985), Ramer and Rees (1973), and Isaacs (1996) indicate a probable developmental sequence for the acquisition of code-switching. Other researchers, including most notably Agerton and Moran (1995) identify situational variables which may influence code-switching including the race and dialect of an examiner in a testing situation.

In regard to assessment, currently few standardized measures are appropriate for assessing children who speak a nonstandard dialect. In a review of the current literature, Vaughn-Cooke (1986, p. 24) summarizes the options for assessing nonstandard speakers,
noting that the option of revising existing tests is typically reviewed favorably although some tests are unable to be modified. There are no existing modified tests at this time which examine the function of language (Stockman, 1986; Vaughn-Cooke, 1986).

In general, teachers in the public schools feel that African-American English and Appalachian English are inferior ways of speaking (Cecil, 1988; Reck, Reck, & Keefe, 1993). Consequently, teachers may have lower expectations for these students. It is hypothesized that such expectations could adversely impact the academic performance of these children.

It has been noted that dialectal features may be used on a continuum. There is evidence that the usage of Appalachian English is changing among younger speakers (Wolfram, 1986). There is also evidence (Washington & Craig, 1992) that there may be Northern and Southern varieties of African-American English. In order to help local speech-language pathologists accurately identify kids who truly have language disorders as opposed to language differences and to help classroom teachers develop appropriate expectations for dialectal speakers, more basic research is needed regarding both the pragmatic characteristics and development of children who speak nonstandard dialects.
Chapter I

Review of the Literature

Introduction to Dialects

A dialect is a rule-governed variation of a language (Smitherman, 1977, p. 191). Stated another way, a dialect is a speech-language pattern used by a particular language community (Adler, 1991, p. 205). Dialects are differences within a language, not disordered or deficient ways of speaking a language (Adler, 1991). African-American English and Appalachian English are nonstandard dialects of the English language in the United States.

African-American English (sometimes referred to in the literature as Black English Vernacular or Ebonics) is a dialect typically spoken by African-Americans. African-American English represents the evolution of aspects of native African languages, the pidgin languages used by the early slaves to communicate with each other and their masters, and the standard and nonstandard English forms used by the European-American overseers and slaveowners (Smitherman, 1977). Due to the separation of the slaves and the later segregation of African-Americans from mainstream culture, African-American English has developed separately from Standard American English (SAE; Dillard, 1972; Terrell & Terrell, 1993). African-American English is typically considered to be a social dialect used by lower-class African-American speakers. But, features of African-American English may also be used by middle-class African-Americans as well.
as some European-American persons of differing geographical and sociocultural groups (Bountress, 1994, p. 71).

Appalachian English (sometimes referred to as Mountain English) is a variation of English typically used by residents of the Appalachian region of the southeastern United States. The development of Appalachian English was brought about by the interaction of English, Scotch-Irish, and German settlers in the Appalachian region (Cloud, 1994, p. 79), and was influenced by Southern Midland migration and settlement (Wood, 1971). This dialect has remained relatively intact in many rural or remote areas of the southeastern United States (Cloud, 1994, pp. 78-79). Appalachian English is frequently stereotyped as being only spoken by “hillbillies,” or working class European-American residents of the region who have little education (Adler, 1993). However, many persons from eastern Tennessee use components of this dialect in their speech (Cloud, 1994, pp. 78-79), as do individuals from Kentucky, West Virginia, North Carolina, Georgia, and Alabama (Wolfram & Christian, 1975).

**Characteristics of African-American English**

**Grammar.** African-American English (AAE) utilizes a syntax which differs from Standard American English, but which is rule-based and uses regular forms. The following grammatical characteristics of AAE as identified by Stewart and Labov are summarized in Bountress (1994, pp. 56-59): omission of regular -ed in past tense, omission of “have” in perfective constructions, inclusion of the completive “done” in
perfective constructions, omission of -s in third person singular present tense, invariance of “be,” absence of forms of “to be,” future construction of “gonna” instead of using “to be,” use of “ain’t” for negative forms of “to be” and “have,” and use of multiple negation. Although some of these characteristics may be shared with other dialects (Terrell & Terrell, 1993), Willis (1992) states that AAE is most different from SAE in syntax, including the way verbs are used (p. 128). For more information regarding grammatical characteristics of African-American English as well as examples of the above characteristics, see Appendix A.

In a manner similar to other dialects, African-American English appears to be learned in a developmental sequence (Terrell & Terrell, 1993). To date, there is a paucity of research regarding the specific developmental sequence and age of acquisition for AAE features, although much research has been conducted regarding the development of SAE. Stockman (1986) summarizes and critiques eight acquisitional studies regarding the development of African-American English in an effort to provide a preliminary normative data base for the development of African-American English. Stockman notes the following characteristics of grammatical development among AAE speaking children (pp. 147-149): children develop language over a time period; by 18 months, one and two word utterances are common; by age three, children use well-formed multiword constructions consisting of a subject, verb, and object complement; between ages three to seven, children appear to acquire most dialect specific rules for plurals, possessives,
tense, third person singular, indefinite articles, pronominalization, copula deletion, and final consonant segment deletion.

In addition to the studies summarized by Stockman (1986), Mallory and Chapman (1978) examined the language samples of 12 African-American children ages 18 to 36 months to determine whether their speech contained Brown’s semantic relations as well as certain distinctive AAE features. All subjects were found to exhibit the following features of AAE in their speech by the age of 24 months: copula absence in the present tense, absence of the form “to be,” and phonological simplification of certain consonant clusters. The subjects also displayed ten of the examined semantic relations, omitting only recurrence. Their findings corroborate the premise that AAE speaking children develop grammatical features in a predictable, developmental order that is similar but not parallel to SAE.

In a study of 45 poor, urban, African-American children ages 4 to 5.5 years, Washington and Craig (1994) found that their subjects who were classified as low or moderate users of AAE (92% of the subjects) used AAE specific features in just over one third of their utterances. Upon reexamination of these 45 subjects, a correlation was found between increased use of African-American English and increased linguistic proficiency (Craig & Washington, 1995, p. 91). As argued by the authors, “A robust

Brown’s semantic relations as examined by Mallory and Chapman (1978) include the following: nomination, recurrence, nonexistence, agent and action, action and object, agent and object, action and locative, entity and locative, possessor and possession, entity and attribute, and demonstrative and entity.
relationship between African-American English and linguistic proficiency would imply a need to develop a child language theory specific to African-American English” (p. 91).

Clearly, an assumption that AAE development merely parallels that of SAE is inadequate.

**Phonology.** African-American English also utilizes different phonological systems than other dialects. Again, as summarized by Bountress (1994, pp. 59-62) from the studies by Labov and Stewart phonological differences include: changes in form of /θ/ and ɛ, omissions of /r/ and /l/, omission of “-ing” suffix, replacement of /b/, /d/, and /g/ with voiceless cognates.

According to Terrell and Terrell (1994, pp. 15-16), there are three major phonological rules which account for most of the sound features of African-American English. The first rule is the medial or final consonant in words being silenced or substituted in words. The second rule is the unstressed initial phoneme or syllable being silenced. The last rule refers to the final consonant in a consonant cluster at the end of a word being silenced (for examples of these phonological characteristics, see Appendix B).

As with grammar, there appears to be a developmental sequence in regard to phonological development among AAE speakers as well. Seymour and Seymour (1981) examined some contrasts between AAE and SAE speakers in consonantal development, finding that the AAE speakers produced greater overall “errors.” A different error
distribution among place and manner features was found for AAE and SAE speakers. AAE speakers tended to produce more initial, medial, and final errors regarding dental, labio-dental, and fricative features, while SAE speakers typically produced more initial errors on palatal, affricative, and liquid features. AAE speakers also displayed less distinctive feature disparity between substitution phonemes as evidenced by the typical AAE substitution of /t/ for /θ/ (difference of two distinctive features) as compared with the typical SAE error of /w/ for /r/ (displacement of five distinctive features). Seymour and Seymour assert that more differences exist in consonantal development which were not revealed in their research.

Additionally, there are indications that African-American children tend to retain the phonological process of final consonant deletion longer than would be indicated by current normative phonological data obtained for SAE speakers (Haynes & Moran, 1989). In a follow-up, Moran (1993) concluded that African-American children ages 4 to 9 years did indicate knowledge of the final “deleted” consonants because they tended to lengthen vowels preceding those consonants. This finding provides evidence of a dialectal pronunciation difference rather than a consonantal deletion.

In an examination of the research literature regarding the phonological development of AAE speakers, Stockman (1996) concludes that “phonological articulatory patterns change across age and vary with social class and geographic region” (p. 136). She notes that AAE speakers produce the same phonemic inventory as do SAE
speakers with few exceptions, and that AAE speakers should produce approximately the same number of single initial consonants as SAE speakers at the age of 36 months. Additionally, Stockman reports that the absence of medial and final consonants among AAE speakers is rule-governed, and that children who speak AAE may use alternative means of marking lexical contrasts when a final consonant is absent.

Semantics. Although by no means a complete list, Smitherman (1977) provides some examples of words and phrases derived from African languages which are commonly used among African-American English speakers: okra, gumbo, goober, yam, jazz, cola, banana, banjo, bad mouth, dig, skin, okay (pp. 43-45). Terrell and Terrell (1993) also provide examples of words specific to the culture in which African-American English has developed: “ash/ashy” (dry skin), “glycerine/relaxer/curl” (oil-based preparation for the hair), “shout/get happy” (outward physical and emotional response celebrating God’s goodness and mercy) (p. 20).

In Stockman’s critique of eight AAE acquisitional studies (1986) she found that the number of semantic categories within the speech of AAE speaking children increases with age in a manner similar to that of SAE speaking children. The earliest acquired semantic categories are action and existence, while categories with underlying propositions such as coordination or causality are the latest acquired (pp. 147-149).
Characteristics of Appalachian English

**Grammar.** Appalachian English (APPE) utilizes a rule-based syntax and morphology which differs from that of SAE in some features. Wolfram and Christian (1975) completed a linguistic analysis utilizing 129 audiorecorded samples of Appalachian English speakers from two counties in West Virginia. They analyzed the speech of informants at the following age levels: 7-11 years, 12-14 years, 15-18 years, 20-40 years, and over 40 years. The following is a summary of the grammatical characteristics which they noted and which were also observed by Adler (1976) in East Tennessee: a-verbing, lack of subject-verb agreement, irregular verb forms, perfective “done,” double modals, multiple negation, and use of “ain’t” for forms of be and have (see Appendix C for more information).

In general, developmental sequences for acquisition of grammatical forms among Appalachian English speakers are unavailable due to a lack of research. Wolfram and Christian (1975) dispute claims that language acquisition may occur more slowly for APPE speaking children. They assert that there is evidence that APPE speakers acquire the APPE system “at approximately that same rate as standard English speakers acquire their system” (p. 192).

Appalachian English has undergone much change due to the ending of the isolation of the southeastern United States (Christian, Wolfram, & Dube, 1980; Wolfram & Christian, 1975). Some distinctive features of Appalachian English frequently used by
older speakers of the dialect are used with less frequency or not used at all by younger speakers. In particular, a-verbing, the perfective “done,” and some irregular verb forms appear to be dying out (Christian et al., 1980; Wolfram & Christian, 1975). However, the use of “ain’t” was found to be used to almost an equal extent by all age groups studied. There is a lack of current data regarding the usage of grammatical characteristics among Appalachian English speakers.

**Phonology.** Several researchers report on the phonological features of Appalachian English, highlighting the following characteristics: intrusive /t/, plurals following clusters, /r/ and /l/-lessness, initial /w/ reduction (Adler, 1976; Christian et al., 1980; Wolfram, 1986; Wolfram & Christian, 1975). More examples are provided in Appendix D. Again, information regarding phonological development among Appalachian English speakers is unavailable.

**Semantics.** Dial (1978) attributes the semantic and lexical distinctiveness of Appalachian English directly to Scottish-influenced English from the Elizabethan era. She cites several examples of usages which have varied little since that time, including the pronouns “hit,” “his’n,” “our’n,” and “your’n.”

The following are examples of vocabulary items and their meanings which may be found among speakers of Appalachian English (Adler, 1976): “notion” (idea), “amount-to” (prosper, succeed), “galluses” (suspenders), “ros’neers” (corn on the cob), “play-purty” (toy). There is a need for more research regarding the lexicon of APPE
speakers. The semantic development of APPE speakers has not been adequately researched, but is assumed to develop in a manner similar to that of SAE speakers (Wolfram & Christian, 1980).

SAE Pragmatic Development During the School-Age Years

Intents. The development of communication functions or intents typically follows a sequential order in children who speak SAE. The following is a brief summary of the discussion provided by Bray and Wiig (1987) regarding the major communication functions (pp. 11-28).

The communication function which develops first is ritualizing. The ritualizing function refers to a series of speech acts specific to a particular context (social, religious, educational, or cultural) which may regulate such social interactions as greetings or turn-taking, and may indicate status or identity for the individuals who use them.

The informing function, which tends to develop next, occurs in speech acts which give or request information and is realized in many speech acts that occur in classrooms. In order to effectively impart information, the speaker must be able to present the basic concepts of the message in a way that meets the needs of the listener.

One of the later-developing communication functions is the controlling function, which is characterized by attempts to influence the listener’s behavior. Speakers may try to influence the behavior of listeners through either direct or indirect means. The decision of whether to use direct or indirect means depends on factors such as age, status,
personality, and the relationship between the speaker and listener. Individuals lacking maturity or perspective may have difficulty developing appropriate controlling speech acts.

The last communication function to develop is the feeling function. This function is realized in speech acts that reveal or respond to feelings. Expressions of feelings may be deliberate or impulsive, and may occur in many different forms depending upon context.

Formality. Children appear to follow a developmental sequence in learning to shift to formal register. Nippold, Leonard, and Anastopoulos (1982) identified a developmental sequence for the production of politeness forms. Three-year-old subjects began to use “please” as well as interrogative forms. Five-year-old subjects showed a decreasing use of “please” with imperative forms (“Get that candy please”) as well as a decreasing use of interrogative forms (“Can I have some candy?”). However, the 5-year-olds also showed an increasing use of the interrogative and “please” in the same request (“May I please have some candy?”). Seven-year-olds showed use of the interrogative and “please” within the same request at the approximate level seen in adults. In pilot studies, Bray and Wiig (1987) found that children appeared to begin making appropriate shifts to formal register around the ages of 6 or 7 years, reinforcing the findings of Nippold et al. (1982).
Owens (1992) summarizes research regarding indirect requests. Use of indirect requests generally indicates an awareness of socially appropriate requests and the necessity for formality or politeness within the communication context. Four- and 5-year-olds understand most indirect requests containing "can" or "will," but have much greater difficulty with the modals "must" and "should." Interrogative forms appear to be more difficult for the young child to comprehend than declarative forms. Likewise, negative forms appear to be more difficult than positive forms. In general, 7-year-olds show much greater facility than do younger children with indirect requests as well as politeness forms and other indicators of formal register.

**Narratives.** The four types of narration defined in the research literature are recounts, eventcasts, accounts, and stories. The following definitions of these narrative types are summarized from Heath (1986) and Owens (1992).

A recount is a narrative form that brings past experiences in which the child has been a participant or an observer to current attention. Sometimes in this type of narrative the child may recall information about a story which has been read. Recounts often discuss events in the chronological order in which they occurred using a consistent point of view. Usually a recount is initiated by the requesting of an adult who has shared the experience about which the child will be speaking.

An eventcast is a verbal explanation or anticipation of future events. Children may utilize this genre as they are engaged in dramatic play sequences to negotiate the
scene, script, and characters. Eventcasts may help children as they attempt to analyze the effects of language upon others.

An account is a child-initiated narrative in which the child shares his or her experiences. Unlike recounts, the listener may usually not share the child’s experience. Because children initiate this form rather than adults, accounts tend to be highly individualized across speakers.

A story, unlike an eventcast, tends to have an anticipated form. Stories contain at least some fictionalized elements and they consiously reshape language. In stories, the listener must play an interpretive role.

Owens states that typical families with a SAE background tend to encourage their children to use all forms of narration (recounts, eventcasts, accounts, and stories) by age three. Thus, children who are speakers of SAE are generally familiar with the types of narratives emphasized in school, recounts and accounts, when they enter preschool.

Suprasegmentals. Adler (1979) outlines the following prosodic features of SAE: increase of pitch in excitement, range of loudness from soft to loud depending upon situation, raising final contours in questions, rapid-fire verbalizations in conversation. He notes that those who speak SAE tend to feel that direct eye contact is a communicator of trustworthiness and honesty. Speakers of SAE also tend to look at their listener when they are speaking, and to look away from the speaker when they are listening.
Pragmatic Characteristics of African-American English

Intents. Intents may sometimes be expressed in a different manner by speakers of African-American English than would be expected by speakers of SAE. Stockman (1986) and Vaughn-Cooke (1986) both note that very little research has been conducted regarding the development of pragmatic skills among AAE speaking children. They assert that assumptions of parallel development of pragmatic skills between AAE and SAE speaking children are inadequate without research to support the premise.

The development of speech acts or intents among African-American English speakers has been the subject of some theses and dissertations. In an unpublished thesis, Peters (as cited in Anderson & Battle, 1993, p. 178) found that socioeconomic status affected speech act types produced by 3- and 4-year-old African-American children. Although both groups had acquired the speech acts under study (regulative, social, emotional, imaginative, informative, and requestive), the middle-class children produced almost twice as many requestive and imaginative speech acts as did the working-class children examined. In separate unpublished dissertations, Blake and Bridgeforth (as cited in Wyatt, 1995, p. 13) found that African-American children use language to accomplish the same communication functions as do other children (e.g., informing, controlling) and postulated that development of these communication functions occurs in the same manner for all children.
Many African-American English speakers participate in such verbal games as signification, a form of discourse in which the speaker insults the listener, and the dozens, a form of signification carried out in a group setting (Smitherman, 1977) which may influence the development of intents. Indeed, Heath (1983) reports that by the age of 12 to 14 months, young male infants in a rural milltown in the Piedmont are accepted as players in the verbal interchanges on the town plaza and are expected to be able to participate in the choruses of the older males. It seems that participation in these verbal games could potentially influence the development of the controlling and feeling intents as children who are speakers of AAE may have more opportunities to practice expression of these intents than might speakers of other dialects.

**Formality.** There are several factors which could influence the development of the formal register among African-American English speakers. African-American children may be more likely to interact with adults outside of their immediate family due to the tendency for all adults in the community to act in loco parentis (Willis, 1992), thus affecting their familiarity with and forms of address to adults. Peters and Peterson (1985) reported that low-income African-American mothers from the Appalachian region tended to value as desirable traits for their children conformity and obedience more highly than the mainstream middle-class values of self-direction and imagination. Thus, more value would perhaps be placed upon politeness among these families. When interacting with adults, some African-American children are expected to avoid eye contact as this may be
viewed as a sign of disrespect (Terrell & Terrell, 1993). Willis (1992) advises those in therapeutic relationships with African-Americans against using an individual’s first name without permission as this is seen as a sign of disrespect (p. 148).

**Narratives.** Children who are speakers of African-American English may not be as familiar with some narrative forms, particularly those emphasized in school, as their SAE counterparts. Heath (1986) reports that among lower-class African-Americans, accounts or eventcasts tend to be emphasized. Children frequently have little experience with recounts, “the most common genre of school performance” (Heath, 1986, p. 88), prior to entering Head Start or kindergarten. Consequently, speakers of AAE may not be prepared to verbalize a linear sequence of events about a common theme as is often expected in school.

**Suprasegmentals.** In terms of prosodic features, African-American English speakers tend to utilize different pitch and inflectional patterns than do SAE speakers (Adler, 1979, p. 62). In general, AAE speakers may use a wider pitch range, often going into the falsetto register. Their loudness levels may often be quite high, and they may use falling final contours as opposed to the SAE rising final contour for questions. Instead of the rapid-fire verbalizations of SAE speakers, AAE speakers often have rhythmic timing, utilizing pause time and pitch increases to indicate continuation of an idea.

There are also some significant differences between the typical body language patterns of AAE and SAE speakers. AAE speakers tend to require less personal space,
although they also tend to greet people at greater distances (Adler, 1979, pp. 66-68). As mentioned previously, African-Americans may exhibit a reluctance to gain eye contact as this is a nonverbal pattern in some West African cultures denoting recognition of "an authority subordinate relationship" (Adler, 1979, p. 66). Also, AAE speakers tend to look away from the speaker while they are listening, but tend to look at the listener while they are speaking. This is the opposite of the typical SAE speaker/listener interaction (Adler, 1979, p. 66).

**Pragmatic Characteristics of Appalachian English**

**Intents.** As with African-American English, speakers of Appalachian English may show some differences in their development of the communication functions. Looff (1977) feels that residents of Appalachia may tend to display characteristics of the stereotypical taciturn mountaineer. He reports counseling many Appalachian children in his psychiatric practice who had not adequately learned methods of expressing their emotions. Possibly this reluctance to express emotions could lead to later development of the feeling function.

Alexander (1967) also reported findings which may bear upon the development of the feeling function. During a picture description task, children who were APPE speakers ("disadvantaged" group) tended to utilize approximately the same number of positive descriptors as did their "advantaged" peers who spoke SAE. However, the APPE speakers also used twice as many negative words and many more "emotional" words than
did their same-age SAE peers. The findings of this study imply that development of the feeling function may be expressed differently among children who are speakers of APPE. However, the results of Alexander's research do not suggest a developmental timeline for the feeling function for speakers of APPE.

Children in Appalachia may not be given as many opportunities to mediate disputes due to the culture's low value on verbal conflict. In an examination of differences in conflict talk in a mainstream preschool and an Appalachian preschool, Kovarsky, Stephan, and Braswell (1994) found that fewer disputes occurred in the Appalachian preschool than in the mainstream preschool (64 as compared to 123). In the Appalachian preschool, 6 of the 7 teachers came from working class backgrounds and were native to the county in which the preschool was located, while the teachers in the mainstream preschool came from larger population centers and either held or were working toward university degrees (p. 173). Children in the Appalachian preschool rarely negotiated with teachers or confronted teachers verbally. Teachers in the Appalachian preschool also tended to resolve conflicts for the children rather than encouraging and helping them to resolve their own disputes. These differences in interactions could influence the development of the controlling function among Appalachian English speaking children in that these children may be less adept at negotiating and managing disputes.
Formality. There are some factors which may affect the development of the formal register among Appalachian English speakers. Looff (1977) notes a “stoicism in manner and speech” (p. 110) among APPE speakers, indicating an adherence to certain aspects of form, including formal register. Peters and Peterson (1985) reported that low-income European-American mothers from the Appalachian region tended to value conformity and obedience from their children more than the middle-class values of self-direction and internalization. Again, these values could reflect an increased awareness of politeness among Appalachian families.

In contrast, the development of formal register among Appalachian children may be hindered by their sometimes limited opportunities to respond to adults or to dispute with adults (Heath, 1983; Kovarsky et al., 1994). Children who are taught that they are to be seen and not heard may develop the ability to address adults using formal register at a slower rate than do SAE speakers.

Narratives. Children who are speakers of Appalachian English may not be as familiar with some narrative types because other types of narratives are emphasized in their culture (Heath, 1986; see again Appendix E for descriptions of narrative forms). Heath (1986) reports that parents in lower-class European-American Piedmont families frequently model eventcasts (p. 91). Recounts, which are most common in school, were the predominant genre encouraged during the preschool years, but accounts were rarely encouraged prior to a child’s entering school.
Suprasegmentals. In general, just as AAE speakers tend to utilize different prosodic features and body language than do SAE speakers, so do Appalachian English speakers. Adler (1979) outlines the following prosodic features of APPE: emotionless, monotonous pitch; little variation in loudness; rare usage of inflection; and slow, deliberate timing with much pause and spacing between words (p. 62). Appalachian English speakers may portray little facial expression in conversation, causing them to appear uninterested, or they may smile throughout a conversation, as in disbelief (Adler, 1976). Additionally, Appalachian English speakers tend to have guarded, slow-moving body movements with a drooped posture, and that they tend to require more personal space when speaking than the typical SAE 20-28 inches (Adler, 1976). According to Cloud (1994, p. 79), Appalachian speech tends to be slow and drawling, and its intonational contours tend to be flat and monotonous.

Code-switching

Introduction. Code-switching refers to the capability to alternate between one or more dialects or languages. Many individuals who speak a nonstandard dialect are also fluent in SAE (Terrell & Terrell, 1993). Facility with code-switching appears to be acquired along a developmental sequence (Isaacs, 1996; Ramer & Rees, 1973; Seymour & Ralabate, 1985). Depending upon the effect of different variables which may be present in assessment situations, children who are speakers of nonstandard dialects may
code-switch in these situations (Agerton & Moran, 1995; Ratusnik & Koenigsknec, 1975).

**Continuum hypothesis.** Terrell and Terrell (1993) postulate a continuum hypothesis for the use of features of a dialect, arguing that factors as diverse as age, educational level, occupational level, income, and geographic region influence the use of dialect. They report that those individuals who are fluent in both AAE and SAE will vary on a continuum between the two or may completely alternate codes depending upon the situation (Terrell & Terrell, 1993). Those proficient only in African-American English tend to be less talkative, giving short, unelaborate responses, particularly in formal settings such as school or a testing situation where there are unfamiliar European-American listeners (Terrell & Terrell, 1993). Also providing support for the continuum hypothesis, Wolfram and Christian (1975) state that most of the features they describe for Appalachian English are variable rather than categorical. This means that a speaker who has a rule for a particular form may not use it in every situation but may switch between it and an alternate form.

**Developmental acquisition.** Different viewpoints have been expressed in the literature in regard to code-switching. Some research reports that it is very difficult for children to learn to code-switch as the findings of these researchers indicate that nonstandard dialects represent different cognitive encodings of the same language (Hall & Freedle, 1973). Other research indicates the importance of nonstandard speakers
learning to code-switch, strongly advocating a policy of bidialectalism or "school talk" and "home talk" (Adler, 1972, 1991, 1993). However, a few studies have been conducted which suggest that the emergence of code-switching may follow a developmental sequence with increasing linguistic maturity.

In an analysis of the productions of /θ/ among first through fourth grade AAE and SAE speakers, Seymour and Ralabate (1985) observed that a majority of the first and second grade AAE speakers produced /θ/ for /θ/ exclusively. However, by the third grade AAE speaking subjects were observed to use the /θ/ in spontaneous individual words while retaining the dialectal pattern in spontaneous conversational speech (p. 146). The researchers postulate that this change in production is influenced by the development of code-switching, and they argue that this development follows a sequence of acquisition although they do not outline this sequence (p. 147).

Ramer and Rees (1973) explored the usage of six morphological rules, as a function of age, by African-American children. They found that eighth grade African-American children tended to use forms of AAE and SAE with nearly equal facility although no subject was found to make a total shift away from AAE. A gradual progression of facility with SAE forms was found as subjects increased in age from preschool through eighth grade (Ramer & Rees, 1973, p. 575), again indicating a developmental sequence for code-switching.
In an examination of the use of SAE and nonstandard dialectal forms, Isaacs (1996) reported that significant differences existed among third through fifth graders for the usage of such forms. In general, the use of nonstandard dialectal features tended to decrease with age, with the features in order of decline being: presence of “be,” subject-verb disagreement, absence of possession, absence of copula, and multiple negation. The subjects’ production levels of nonstandard dialects and their comprehension of SAE appeared to be unrelated, providing empirical evidence that nonstandard dialect users comprehend SAE. Interestingly, Isaacs conducted the above research with both African-American and European-American speakers of nonstandard dialects, and similar results were found for both groups. Also, no differences were found among groups who had higher or lower family incomes or who belonged to rural or suburban settings.

Assessment situational variables. Although other situations also elicit code-switching behaviors, researchers have emphasized the occurrence of code-switching during assessment. Code-switching may be triggered during assessment by the race of the examiner. Ratusnick and Koenigsknecht (1975) provided evidence that 4- and 5-year-old AAE speakers were beginning to show signs of code-switching by changing their speech sound usage depending on whether they interacted with African-American or European-American clinicians. The middle class preschool subjects showed more signs of code-switching than did their lower class counterparts. The researchers postulate that
the middle class subjects may have had more exposure to SAE, thus influencing their facility with code-switching.

In an examination of 79 European-American and African-American children who were attending an integrated elementary school, Seymour, Ashton, and Wheeler (1986) found that neither the race of the examiner nor the race of the child pictured in stimulus materials affected language performance. The researchers obtained their language samples by asking the subjects to respond to five questions regarding two stimulus pictures (one with European-American interactants, another with African-American interactants). Language performance was assessed only in terms of verbal output and latency response time. Although the authors found no significant effects, they argued that clinicians should not consider race irrelevant, and cited three methodological limitations of their research. These were that the subjects were accustomed to interacting with individuals of other races due to their integrated school setting, that isolating race as an independent variable was difficult due to varying clinician interaction styles, and that the restrictive nature of the experimental task may have limited opportunities for observing language. As the researchers only addressed language performance (latency response time and number of words produced) in this study, and not code-switching or the influence of dialects, it is difficult to draw conclusions regarding nonstandard speakers based upon this study.
Agerton and Moran’s (1995) study of 4- and 5-year-old African-American children from Headstart programs in Alabama reported that the children produced significantly more and different features of African-American English while with an African-American clinician who was speaking AAE than they produced while with either an African-American clinician speaking SAE or a European-American clinician speaking SAE. Although these differences did not reach significant levels, the fewest features of AAE were produced with the European-American clinician who spoke SAE, more features were produced with the African-American clinician who spoke SAE, and, as stated, the most were produced with the African-American clinician who spoke AAE. Because this progression did not reach significant levels and because of the limited sample size, the researchers state that it cannot be clearly determined whether race or dialect of the examiner is the most important factor in predicting whether or not code-switching occurred. But, they did conclude that both race and dialect of the examiner are factors that contribute to code-switching.

Additionally, a child may possess all features of a nonstandard dialect, but may not use those features in a testing situation. Wyatt (1995) argues that children who speak AAE are very likely aware that their dialect may be socially stigmatized and that they may therefore attempt to code-switch during testing. Code-switching requires a higher level of language functioning, and the child’s responses to test items may be compromised if he or she is struggling to code-switch. Because many children who are
speakers of nonstandard dialects develop the ability to code-switch, Seymour and Miller-Jones (1981) argue that a bidialectal referent should be used “as the standard against which language is evaluated” (p. 255). Specifically, they argue that assessment of speakers of nonstandard dialects should take into consideration the child’s use of both SAE and the nonstandard dialect. Clinicians should be aware that a child may be age-appropriate in usage of a nonstandard dialect, although the child may not use that dialect in a test situation. The child may, in an attempt to code-switch, use “delayed” SAE forms during assessment, resulting in test scores which suggest a language delay. In other words, a clinician should not assume that a child is a speaker of a standard dialect just because that child does not produce obvious nonstandard dialectal features in his or her first interaction with that clinician.

Assessment with Speakers of Nonstandard Dialects

Few standardized measures are appropriate for testing children who speak a nonstandard dialect. Vaughn-Cooke (1986) summarizes the suggestions from a review of the literature which she regards as valid means for assessing nonstandard speakers as follows:

1. Standardize existing tests on nonmainstream English speakers.

2. Modify or revise existing tests in ways that will make them appropriate for nonmainstream speakers.
3. Use a language sample when assessing the language of nonmainstream speakers.

4. Develop new tests that can provide more appropriate assessments of the language of nonmainstream speakers (p. 24).

Each of these suggestions will be briefly examined.

Some existing tests have been standardized on nonstandard dialect speakers. For example, the Grammatic Closure Subtest of the Illinois Test of Psycholinguistic Abilities (ITPA) has been standardized by Evard and associates on nonstandard dialect speakers from Arizona (as cited in Vaughn-Cooke, 1986). This resulted in the creation of lower norms for nonstandard dialect speakers. Vaughn-Cooke (1986) argues that lower norms are a serious shortcoming of this option as they may create the impression that nonmainstream groups are "inferior." In regard to the ITPA, Wolfram (1983) suggests alternate responses for African-American English and Appalachian English speakers (pp. 26-29). He argues that providing alternate correct responses which reflect the dialectal rules of the examinee is a preferred alternative to establishing lower norms. Some measures which have been designed specifically to assess SAE forms or which require set SAE responses may not be able to be adequately modified to accommodate nonstandard speakers (Vaughn-Cooke, 1986).

Some existing tests have been modified or revised for appropriate use with populations who speak nonstandard dialects. Taylor and Payne (1983) suggest that there
are some professionally ethical techniques for altering standardized measures, and offer a checklist for determination of potential discrimination of an assessment instrument (p. 16). An example of a measure which has been modified is Nelson’s (1990) development of the Black English Sentence Scoring (BESS) from the Developmental Scoring System (DSS; Lee & Canter, 1976). The original DSS provides a method for analyzing eight categories of grammatical English forms. Nelson’s BESS accounts for AAE forms in scoring. Stockman (1986) and Vaughn-Cooke (1986) state that virtually all the measures which have been modified to examine AAE deal with the form rather than the function of language.

Some researchers have advocated use of a language sample when assessing the language of children who speak nonstandard dialects. Leonard and Weiss (1983) suggest trying to make a surface observation of a child’s dialectal features to determine whether standard assessment procedures are appropriate. They then suggest that nonstandardized observations should be conducted by speech-language pathologists and other professionals in order to assess the child’s language abilities. Although language samples and observations are certainly needed to adequately plan assessment, Stockman (1986) has asserted that more information is needed about the development of African-American English. Also, relatively little is known about the development of Appalachian English, and Wolfram and Christian (1980) argue that knowledge of the dialect is essential for professionals who may be involved in the consideration of educational placement for
Appalachian children. Before more information is available, it may be difficult to adequately assess a child using only nonstandardized approaches. Terrell and Terrell (1983) state that speech-language pathologists (SLPs) need to be familiar with the dialects of the children for whom they provide services. Without adequate knowledge of a child’s dialect, an SLP may overcompensate and assume that the child has a speech or language disorder when he/she does not, or they may undercompensate and not treat a child who actually has a speech or language disorder.

The development of new tests to provide appropriate assessment for nonstandard dialectal speakers has been advocated by other researchers. Adler and Birdsong (1983, pp. 83-85) describe the Denver Articulation Screening Exam (DASE; Drumwright, 1971) as “culture-fair” because it has been developed for use with nonstandard dialectal populations. The DASE has been standardized upon a population of nonmainstream speakers from Denver, Colorado, and therefore may be restricted in what it can predict regarding nonmainstream speakers from other parts of the country. They also describe the Sentence Repetition Task (SRT) as a good measurement for use with nonstandard dialect populations. The SRT is a nonstandardized task in which children are asked to repeat a sentence stated by the examiner after a brief delay (3 seconds as suggested by McDade, Simpson, & Lamb, 1982). It is generally agreed that children can often understand sentences which they cannot repeat, and if they can repeat a sentence, they typically have those syntactic elements in their speech (Peterson & Marquardt, 1994). Thus, if a child
cannot repeat a SAE utterance it may mean that that the child does not have that form in his/her dialectal repertoire. As with the use of language samples to assess nonstandard dialectal speakers, development of standardized tests targeting the language skills of nonstandard speakers may be difficult until more information is obtained about the language development of these speakers.

Use of African-American English in the Schools

Teacher perceptions. Unless a child who speaks a nonstandard dialect receives early intervention, his or her use of dialectal features is typically not assessed or questioned by professionals prior to entering elementary school. In fact, some children may have little exposure to SAE forms in their home environments (Heath, 1986; Ratusnik & Koenigsknecht, 1975). However, when children who are speakers of AAE enter school, they may be viewed negatively if they cannot exhibit both linguistic and pragmatic forms appropriate to SAE.

Unfortunately, the public schools tend to reflect mainstream society’s view of African-American English as inferior. Cecil (1988) audiorecorded the responses of two groups of second grade African-American children to the same thought-provoking question regarding a stuffed animal stimulus. One group of children was composed of AAE speakers, and the other group was composed of SAE speakers. All the children in both groups were within four months of one another in age, and all children had normal intelligence as determined by Stanford-Binet scores with no more than an eight point
variance in IQ. Cecil provided 52 European-American second grade teachers with audiotapes of the children and asked the teachers to listen to the tapes to determine the answers to the following questions:

1. What do you think this child’s chances are of successfully completing second grade?
2. What would you imagine to be the IQ of this child?
3. How would you predict this child might perform in reading?

The teachers used a 5-point scale ranging from 1 (very low) to 5 (very high). Analysis of the teacher responses showed higher scores for the SAE speakers at the 0.0001 significance level for all three questions, indicating higher expectations for the SAE speakers. Cecil (1988) concluded by arguing that "teachers must be made aware of the potency of negative expectations" (p. 36) held for speakers of African-American English.

In a similar study, Taylor (1983) audiotaped two second grade males reading a grade level passage and recalling information from the passage. One of the males was a speaker of SAE, and one was a speaker of AAE. Interestingly, the speaker of SAE was rated by three judges as having more total reading miscues than the speaker of AAE as well as more miscues which changed the meaning of the passage. Taylor provided 72 teachers, 64 European-Americans and 8 African-Americans, each with one of the audiotapes, asking them to evaluate the reading comprehension of the speaker in the same manner that they would evaluate one of their students. After evaluation of the tape, each
teacher was asked to complete an inventory which assessed his or her attitudes toward AAE. Based on the data analysis, Taylor concluded that there were indications that AAE speakers were “rated lower in reading comprehension than equivalent standard English speakers when their teacher holds a negative attitude” (p. 667) toward African-American English.

Educational implications. It is likely that negative attitudes in the public schools regarding African-American English have an impact upon students using this dialect. Washington and Miller-Jones (1989) examined the interactions of two African-American teachers with their nonstandard English speaking pupils during reading instruction. One of the teachers examined was rated as being highly knowledgeable of African-American English, and the other was rated as being moderately knowledgeable based upon their performance on a written test assessing general knowledge about the dialect. The teacher who was more knowledgeable of AAE showed more positive behaviors in responses to readers who used nonstandard dialects than did the other teacher examined. Washington and Miller-Jones (1989) conclude that “the importance of teachers’ ability to recognize dialectal influences on speech and reading and respond to them appropriately may be essential for effective reading instruction” (p. 299).

Expanding the conclusion of Washington and Miller-Jones (1989), Foster (1992) and Siddle Walker (1992) in separate articles summarize current research regarding literacy and writing among African-American youths. Both Foster and Siddle Walker
conclude that “many African-American students are misunderstood by the teachers who are attempting to teach them . . . literacy skills” (Siddle Walker, 1992, p. 321). As a consequence of this misunderstanding and lack of cultural awareness, many teachers may utilize language or teaching styles which simply may not be effective for these students. Foster (1992) summarized the need for more research in this area as follows:

“Researchers seeking to develop linguistically responsive interventions have yet to turn their attention from the linguistic code itself to subtle differences between the way language is used at home and the way it is used at school” (p. 308), that is, pragmatics. Teachers need more information in order to better understand the intents and interactional styles of their students, and, in so doing, develop more appropriate methods of relating with and conveying information to students who speak nonstandard dialects.

**Use of Appalachian English in the Schools**

**Teacher perceptions.** It appears that speakers of Appalachian English are also often viewed negatively within the public schools. In an ethnographic study, Reck, Reck, and Keefe (1993) sought to explore teacher perceptions of students, examining “the kinds of distinctions teachers made between Appalachian and nonAppalachian students and the extent to which these distinctions coincide with stereotyped images of Appalachian versus mainstream Americans” (p. 118). The study was conducted in a county school system in western North Carolina, and a total of 46 teachers were selected to participate, approximately half representing the elementary grades and half representing the high
school grades. Of the teachers surveyed, 58% were born and reared in Appalachia. The teachers were asked questions regarding their perceptions of differences between Appalachian and nonAppalachian students and their perceptions of differential treatment of these groups. The questions covered such areas as behavior, language, family life, academic abilities, and socialization in school. Virtually all of the teachers reported that they felt there were significant differences between the groups of students, although the feelings expressed by the teachers native to the area varied. Reck et al. (1993) reported that many negative attitudes were expressed by the teachers regarding Appalachian students including the idea that Appalachian students had poorer manners, grammar, and descriptive language skills. The teachers surveyed also expressed the perception that nonAppalachian students tended to be treated better in school. Interestingly, 67% of the high school teachers indicated that they personally treated students differently based upon the ethnic background of the students while only 17% of the elementary school teachers felt the same way (Reck et al., p. 120). The authors state that although cultural differences do exist in areas such as family relationships and social networks, most of the other differences between the Appalachian and nonAppalachian students were SES-linked and not “ethnic in nature” (p. 120) as conceptualized by teachers, students, and parents. Reck et al. (1993) conclude that “teacher perceptions both reflect and reinforce the dominance hierarchy which shapes inequitable educational experience in Appalachia” (p. 121).
In regard to Appalachian English, Wolfram and Christian (1975) argue that teacher knowledge of nonstandard dialects is a crucial goal of the study of these dialects. They assert that teachers who consider nonstandard dialects to be legitimate are less likely to make judgments regarding intelligence or language disabilities based on an individual's use of dialect. Additionally, they state that educators who are knowledgeable of nonstandard dialects will spend more time concentrating on "essential educational skills as opposed to expending a great deal of effort on correcting phonological and grammatical manifestations that differ from standard varieties" (p. 194).

**Educational implications.** In an examination of factors contributing to achievement levels among economically disadvantaged Appalachian middle school students from Tennessee and Kentucky, Henry, Hare, Phelps, Raftery, and Franklin (1992) concluded several points. First, unlike many similar studies, they determined that economic characteristics alone were limited in their ability to discriminate between high- or low-achieving students. They did find that school-related characteristics were highly important in determining academic success and stated that "teachers and administrators . . . may be guilty of expecting students from certain locales or from certain families to behave poorly and to perform poorly in academics as well . . . These expectations . . . may be met by the students" (pp. 34-35). They also concluded that family variables such as family attitudes toward education and educational level achieved by parents are important factors in determining academic success.
Importance of Local Data

The features of any language are used on a continuum. Although an African-American child may use some features of African-American English it does not mean that the child uses all features of the dialect (Leonard & Weiss, 1983). Likewise, one should not assume that a child exhibiting some features of Appalachian English will necessarily exhibit all features of the dialect. Cole and Taylor (1990) and Washington and Craig (1992) both compared the performance of AAE speaking children upon standardized articulation tests but reported different findings. Washington and Craig postulated that these discrepancies in results could be due to dialectal differences between Northern and Southern varieties of African-American English. Wolfram also noted that the usage of Appalachian English forms has changed among younger speakers (1986).

In order to help speech-language pathologists accurately identify students who truly have a delayed language system, as opposed to a different language system, it seems that local acceptable responses to language tests need to be defined. Also, it seems important to provide information for classroom teachers regarding cultural and linguistic differences as teacher perceptions of these differences may affect the classroom environment as well as teacher interactions with individual students. Teacher perceptions of these differences may ultimately affect the learning potential of students who speak AAE or APPE.
Summary of the Review of the Literature

The grammatic, phonologic, semantic, and pragmatic structures of AAE and APPE have been described in research literature (Adler, 1976, 1979; Anderson & Battle, 1993; Bountress, 1994; Christian et al., 1980; Dial, 1978; Heath, 1983, 1986; Smitherman, 1977; Stockman, 1986; Terrell & Terrell, 1993; Wolfram, 1986; Wolfram & Christian, 1975; Wyatt, 1995). In many instances, little is known about the developmental sequence of these structures (Anderson & Battle, 1993; Stockman, 1986; Wolfram & Christian, 1975, 1980). Often, the assumption has been that language development among speakers of nonstandard dialects follows the same pattern as that of SAE speakers (Stockman, 1986; Vaughn-Cooke, 1986). However, research indicates that linguistic development is not always the same for SAE speakers and nonstandard dialect speakers (Craig & Washington, 1995; Haynes & Moran, 1989; Mallory & Chapman, 1978; Moran, 1993; Seymour & Seymour, 1981). Therefore, assumptions that nonstandard dialectal development merely parallels that of SAE are tenuous (Craig & Washington, 1995). There is evidence that speakers of AAE and APPE may develop communicative intents at a different rate than SAE speakers although more information is needed (Alexander, 1967; Anderson & Battle, 1993; Looff, 1977; Kovarsky et al., 1994; Wyatt, 1995). The development and use of formal register may also differ for speakers of AAE and APPE (Looff, 1977; Peters & Peterson, 1985; Terrell & Terrell, 1993; Willis, 1992).
It is difficult to discuss the linguistic development of nonstandard dialect speakers without considering code-switching. There is evidence that AAE speakers as young as four years already show signs of code-switching when placed with European-American clinicians (Ratusnik & Koenigskecht, 1975). As indicated by Terrell and Terrell’s continuum hypothesis (1993), it is unlikely that individuals who speak nonstandard dialects utilize all dialectal features in every situation. The use of dialectal features appears to be variable (Wolfram & Christian, 1975), although the ability to code-switch does appear to follow a developmental sequence (Issacs, 1996). Nearly equal linguistic abilities between SAE and AAE were evident by the eighth grade level for AAE speakers (Ramer & Rees, 1973). It appears that, during assessment, both the race of the examiner and the dialect spoken by the examiner are factors that contribute to code-switching (Agerton & Moran, 1995). Seymour and Miller-Jones (1981) argue that a bidialectal referent should be used during assessment of nonstandard dialect speakers because so many nonstandard speakers do code-switch.

As of yet, very few standardized assessment procedures are appropriate for use with speakers of nonstandard dialects (Adler & Birdsong, 1983; Taylor, 1983; Vaughn-Cooke, 1986). Until more information is obtained regarding the linguistic development of nonstandard speakers, norming existing tests on nonstandard speakers and modifying existing tests for nonstandard speakers appear to be the most viable options (Vaughn-Cooke, 1986). Provision of lower norms for nonstandard speakers is unacceptable due to
the negative connotations of such norms (Vaughn-Cooke, 1986). Therefore, alternative correct responses for nonstandard speakers have been suggested (Wolfram, 1983). Some tests are designed to permit only set SAE responses and these types of measures may be impossible to modify for speakers of nonstandard dialects (Vaughn-Cooke, 1986). Of the measures that have been modified, virtually all assess the form rather than the function of language (Stockman, 1986; Vaughn-Cooke, 1986).

The public schools tend to view nonstandard dialects such as AAE and APPE as inferior, and this attitude may be reflected in teacher evaluations of student potential and performance (Cecil, 1988; Reck et al., 1993; Taylor, 1983). Such attitudes may ultimately have a negative impact upon student performance as teachers interact differently with these students (Foster, 1992; Siddle Walker, 1992; Washington & Miller-Jones, 1989). Eventually, students may embody teachers’ low expectations (Henry et al., 1992; Washington & Miller-Jones, 1989).

In conclusion, there is a lack of research, particularly in regard to pragmatic development (Stockman, 1986; Vaughn-Cooke, 1986), which examines the developmental acquisition of nonstandard dialectal forms (Anderson & Battle, 1993; Stockman, 1986; Wolfram & Christian, 1975, 1980). Code-switching may occur as a result of a testing situation (Wyatt, 1995), and few standardized measures are appropriate for use with nonstandard speakers (Vaughn-Cooke, 1986). Of the measures which have been modified for use with nonstandard speakers, none assesses pragmatics (Vaughn-
Cooke, 1986). Dialectal features may be used on a continuum (Terrell & Terrell, 1993) with evidence indicating that the usage of APPE may be changing (Wolfram, 1986), and that Northern and Southern varieties of AAE may exist (Washington & Craig, 1992). In order to aid local speech-language pathologists in accurately identifying children who truly have language disorders as opposed to language differences and to assist classroom teachers in developing appropriate expectations for dialectal speakers, more research is needed regarding the pragmatic abilities of children who speak African-American English and Appalachian English.

Purpose and Research Questions

The purpose of this study was to examine the linguistic performance of normally developing school-aged speakers who use components of African-American English and age-matched speakers who use characteristics of Appalachian English on the Let's Talk Inventory for Children (LTI-C; Bray & Wiig, 1987). I sought to determine the following:

1. Are there significant differences among the normative sample, speakers of AAE, and speakers of APPE in Total Intent Scores obtained on the LTI-C?

2. Are there significant differences among the five year-olds, six year-olds, and seven year-olds within each subject group (speakers of AAE, speakers of APPE) in the intent scores obtained on the LTI-C for the Ritualizing, Informing, Controlling, and Feeling subtests?
3. Are there significant differences among the normative sample, speakers of AAE, and speakers of APPE for Formality Scores obtained on the LTI-C?

4. Are there significant differences among the five year-olds, six year-olds, and seven year-olds within each group (normative sample, speakers of AAE and speakers of APPE) in Formality Scores obtained on the LTI-C?
Chapter II

Method

Subjects

Assessment site identification. A proposal for this project was submitted to Dr. Samuel E. Bratton, Coordinator of Research and Development for Knox County Schools. Dr. Bratton identified two elementary schools (Schools A and B) which would be appropriate for the purposes of this project. The enrollment of School A consisted predominantly of African-American students (80.1%), and the enrollment of School B consisted primarily of European-American students (95.9%). The majority of the students attending Schools A and B were from lower middle class backgrounds as determined by National Free Lunch Standards (Child Nutrition Programs, 1994), with 79% of the students in School A and 95% of the students in School B receiving free lunches. Due to the high number of students receiving free lunches, both schools were designated as school-wide Chapter One schools. This designation allowed the schools to receive additional funding for ancillary personnel and literature. However, not all students in Schools A and B were receiving pull-out Chapter One services. In the cooperating grades of kindergarten, first, and second, both schools had one African-

---

2 As of January 1995, School A had a total of 699 students, with 139 of those students being European-American and 560 of those being African-American. School B had a total of 248 students with 10 of those being African-American and 238 of those being European-American.
American teacher and the rest were European-Americans. Both schools cooperated willingly with this project.

**Subject identification.** Fact sheets describing the study and parental consent forms were distributed to kindergarten through second grade students by classroom teachers in the cooperating schools (see Appendices E and F). These forms gave information regarding the potential benefits of the study and how parents might obtain results of the study. Parents or guardians who were willing for their child to participate returned the consent form to the classroom teacher prior to the child’s being tested.

**Subject description.** Ninety children residing in Knoxville, Tennessee were recruited from Schools A and B. The communication of the majority of students in School A was characterized by use of components of African-American English. Likewise, in School B, the communication of the majority of students contained characteristics of Appalachian English.

At each of the following age levels: 5 years, 0 months to 5 years, 11 months; 6 years, 0 months to 6 years, 11 months; and 7 years, 0 months to 7 years, 11 months; 15 African-American children from School A and 15 European-American children from School B were included in data collection. As shown in Table 1, the subjects at each school were counterbalanced for gender within each age range. Subjects were divided into groups based on chronological age rather than grade in school. There were 42 males and 48 females participating in the study.
Table 1

**Distribution of Age, Gender, and Grade Level for Subjects in Schools A and B**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>School A</th>
<th></th>
<th>School B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5:2-5:11</td>
<td>5:7</td>
<td>7</td>
<td>8</td>
<td>15 0 0</td>
</tr>
<tr>
<td>6:0-6:11</td>
<td>6:5</td>
<td>8</td>
<td>7</td>
<td>6 9 0</td>
</tr>
<tr>
<td>7:0-7:11</td>
<td>7:4</td>
<td>8</td>
<td>7</td>
<td>0 12 3</td>
</tr>
</tbody>
</table>

**Note.** Abbreviations are defined as follows: M = mean age, School A = school composed of primarily AAE speakers, School B = school composed of primarily APPE speakers, M = male, F = female, K = kindergarten. Age ranges and means are reported as years:months.
In order to verify that the subjects from Schools A and B represented the categories of African-American English and Appalachian English respectively, five subjects were randomly drawn from both School A and School B. The investigator and a GRA analyzed the verbal responses of these subjects for frequency of occurrence of nonstandard dialectal features and the types of nonstandard dialect features which occurred. Specifically, the subjects’ responses were examined for occurrence of those grammatical features of AAE and APPE located in Appendices A through D. It was determined that the subjects exhibited moderate usage of dialectal features according to the guidelines established by Washington and Craig (13 - 21% of utterances containing dialectal features; Washington & Craig, 1994), thus all subjects were considered as being speakers of AAE if they attended School A or APPE if they attended School B. If the subjects from one school had exhibited dialectal features in less than an average of 13% of their utterances, then the subject responses from that school would have been retranscribed using the audiotapes.

Frequency counts of dialectal features based on group subsets (5 randomly selected subjects from each group, AAE and APPE) revealed that the AAE subjects selected utilized dialectal features in 17.6% of their utterances, with a range of usage from 11% to 22%. The APPE subjects utilized dialectal features in 13.6% of their utterances, with a range of usage from 3% to 18%. Interrater reliability for the use of dialectal features was calculated to be 96.1%.
Only data from those children enrolled in a regular classroom setting were included. Five subjects from School A (11.1% of subjects from School A) and 4 subjects from School B (8.9%) were receiving pull-out Chapter One reading services, but these services were not considered as special services due to the schools' designations as Chapter One schools. Children requiring services for special education, learning disabilities, and/or speech-language were excluded from data collection. The data from 19 children were excluded due to the following reasons: inappropriate race for school in question (8 children), noncompliance during testing (4), recipient of special services (3), failure of recording equipment (2), inappropriate age level (1), and interference of extended absence during testing (1). Of the subjects whose data were not used, 8 were from School A and 11 were from School B.

**Stimuli**

The subjects were administered a standardized test of pragmatics, the *Let's Talk Inventory for Children* (LTI-C; Bray & Wiig, 1987). This instrument was chosen because it 1) examines the function or social usage of language, 2) does not require set SAE responses, and 3) has the potential for modification to be made appropriate for

---

3 These 19 children were in addition to the 90 subjects whose data were included in this project. Thus, data were collected from a total of 109 subjects.

4 Only the data collected from African-American subjects in School A were used and only the data collected from European-American subjects in School B were used. However, if a European-American student from School A or an African-American student from School B returned a permission form and his/her name was selected, data were still collected from that student although the data were not included in the study.
children who are speakers of nonstandard dialects. Norris (1995) states that evaluation of child responses to items on the LTI-C "provides a means for describing the dynamics involved when a specific pragmatic behavior is elicited, and comparing responses of children within and across age groups for patterns," (p. 351) thus being an effective measure to utilize in research examining child pragmatics. The LTI-C was designed to help professionals identify children ages 4 through 8 with inadequate or delayed social communication skills. The LTI-C probes the following areas: (1) the child's ability to produce various communication functions, i.e., intents, (2) the child's ability to shift to a formal register when addressing adults rather than peers, i.e., formality, and (3) the child's ability to receptively identify a pictured interaction corresponding to an expressed intent, i.e., association. Additionally, the LTI-C includes a checklist to aid the examiner in noting the child's nonverbal behaviors during testing. The LTI-C was standardized on 214 children: 68.9% European-American, 17.3% African-American, and 12.9% Other (Bray & Wiig, 1987, p. 46). The children in the standardization sample represented lower to upper middle class socioeconomic backgrounds, with the majority being speakers of SAE. Therefore, the standardization sample is not currently representative of nonstandard dialects such as African-American English or Appalachian English. The authors acknowledge that the instrument is purposely biased to reflect expectations for speakers of SAE, and because of this, all test items depict European-American individuals as the primary participants in the interactions.
The LTL-C contains 36 Speech Act Formulation Items: 2 practice items, 24 items depicting child-peer interactions, and 10 items depicting child-adult interactions. Each of the formulation items consists of a stimulus picture and a corresponding narrative. The narrative describes the interaction depicted in the stimulus picture and asks the examinee to assume the role of one of the participants in the interaction, e.g., “Jane and Mike were playing a game. Mike said something to Jane. Jane did not hear what Mike said. What did Jane say to Mike?” (Bray & Wiig, 1987, p. 8). The child-peer formulation items require the examinee to answer as if responding to a peer and analyze only the examinee’s ability to appropriately express intent. The child-adult items require the examinee to answer as if responding to an adult, and these items examine both the expression of intent and the use of formal register. Fewer items depicting child-adult interactions were included because pilot testing for the instrument revealed that “the ability to adjust to register (peer or adult) emerged most strongly at 6-7 years” (Bray & Wiig, 1987, p. 6), and it was therefore thought that younger children would respond to adults in the same manner that they would respond to peers. Prior to the formulation items, two demonstration items are provided. The demonstration items follow the format of the formulation items, but, as an example to the child, require the examiner to provide a response rather than the child. The 24 child-peer items focus on the ritualizing, informing, controlling, and feeling functions of language (see pp. 9-10 of the literature.
review for definitions). The 10 child-adult items only focus on the later developing controlling and feeling functions of language.

The inventory also includes a Speech Act Association Segment consisting of 12 items, 2 trial items and 10 test items. The association items are administered only if the child being tested responds to more than five formulation items in the third person despite repeated prompting by the examiner to reply in the first person. Each association item features three pictures of a child-peer interaction and requires the child to select the picture which appropriately displays the intent of the speech act expressed by the examiner. For example, “The examiner says, ‘Who said, “Hey, Sue”? ’ ” (Bray & Wiig, 1987, p. 32), and the task of the child is to point to the picture which correctly portrays the interaction. The association items focus on the informing, controlling, and feeling functions of language. After administration of the association items, the examiner returns to the formulation items and gives the child another opportunity to respond correctly in the first person. If a child intermittently responds in third person, he or she is reminded to use first person and the response is still counted as correct if it conveys the appropriate intent.

The LTI-C concludes with a five-item Behavioral Observations Checklist which enables the examiner to obtain more information regarding the child’s nonverbal behaviors. The data obtained from the Behavioral Observations Checklist will not be analyzed for the purposes of this thesis.
Procedure

The data utilized in this project were collected as part of a larger study. Only the methods used to collect the data pertinent to this project are described in this document.

Although 4 graduate research assistants (GRAs) were primarily responsible for data collection (84% of data collected or 76 of 90 subjects), a total of 7 GRAs participated in data collection. All of the GRAs were female, European-American, speech-language pathology graduate students in their early twenties who had prior experience working with children. European-American GRAs were chosen because the project director sought to control for ethnicity of the examiners and European-American GRAs were primarily available. During each session, one of the GRAs administered the LTI-C, following the scripted guidelines (see Appendix G). The GRAs all used SAE during their sessions with the subjects. Prior to testing subjects, each GRA was trained in the administration of the LTI-C and in use of the scripted guidelines. As part of this training, the GRAs each administered the complete LTI-C to three different normally-developing children who were all approximately the same age as the subjects in this project. Each GRA also received training in the use and placement of an audiocassette deck (Sony model RX606ES), tie-pin microphones (Sony model ECM-T150), and a video camera and recorder (Panasonic model AG-195MUP), which were used to audio- and videorecord each session. GRAs were instructed to display a neutral but friendly demeanor with all subjects, to ensure that examiners would not display exaggerated
enthusiasm with some subjects and indifference with others, but that all subjects would receive the same treatment. All GRAs tested subjects at both Schools A and B.

Names of participating children were selected from the returned consent forms at each school. The classroom teachers and participating children mutually agreed upon times for testing to occur. An examiner met each child at his or her classroom and escorted him or her to the room which had been set aside by the school for testing. Following the scripted guidelines (see Appendix G), the examiner introduced herself to the child, briefly explained testing procedures, and obtained verbal assent to participate from the child.

Before beginning testing, each subject was asked if he or she could pretend. If the subject responded “Yes,” then the GRA proceeded with the LTI-C. If the subject responded negatively, then the GRA led the child in examples of pretending (e.g., “What does Santa Claus say?”). If the subject was still unable to pretend, he or she was thanked and returned to the classroom.

Each subject who was able to pretend was administered the LTI-C during a 30 to 45 minute session. During each session, the subject was seated across the table from the examiner so that the subject might easily see the stimulus items. The video camera was positioned behind the examiner at an angle in order to obtain the best possible view of the subject’s face and upper body during testing. The audio recorder was placed on the table near the subject. In each session, administration of the LTI-C was begun with the two
demonstration items, followed by the Speech Act Formulation Items. If a subject experienced difficulty in phrasing responses as if he or she were speaking for someone else, e.g., the subject frequently responded “He would say he...,” the examiner again provided examples of appropriate responses during test administration. The Speech Act Association Items were administered only if the subject responded to five consecutive items in third person despite prompting. The association items were therefore used as additional training items during administration if necessary. Subjects were given the option of ending testing and returning to their classrooms if they wished to stop at any point during the session. During testing, reinforcement was randomly given to the subjects once during each set of seven test items. Reinforcement was positive, but neutral in regard to the child’s responses, e.g., “You’re listening well,” or “[Child’s name] I can see that you’re looking at the pictures carefully.” All children received a sticker for their participation. GRAs recorded behavioral observations immediately after each session. Verbal responses were recorded by the GRAs at a later time using the audio tapes. GRAs noted the items for which individual subjects required repeated demonstrations or if it was necessary to administer the association items.

**Data Analysis**

**Scoring.** Subject responses both to the child-peer and child-adult Speech Act Formulation Items were scored as correct, i.e., received one point, if the subject adequately reflected the intent of the speech act in his or her response. The sample
responses located in the LTI-C manual (Bray & Wiig, 1987, pp. 55-61; see Appendix H for an example of scoring) were used as a guideline for scoring. If a few items were intermittently answered in third person, then the child received credit for those items provided the correct intent was represented in the child’s response. If items were repeatedly answered in third person despite prompting and the practice of the Association Items, then the responses were no longer scored as correct. The total score for the formulation items was obtained by summing the points received. The subjects’ scores were compared to the score means and standard deviations of the field test sample (Bray & Wiig, 1987, p. 45).

For child-adult formulation items, a subject received one point for utilizing a formal register in his or her response. A point was not received for formality if the same item was not scored as correctly indicating intent (see Appendix H for an example of scoring). A formality score was obtained by summing the subject responses. Because few items require a formal register, the authors noted that the formality score should be viewed qualitatively rather than quantitatively (Bray & Wiig, 1987, p. 44).

The Speech Act Association Items were only obtained for the subjects who were administered those items because they required additional practice. Therefore, the responses to these items were not scored.

Training. Prior to scoring the subject responses, the investigator underwent training to prepare herself for scoring (see Appendix I for complete procedure). The
investigator familiarized herself with the examiner's manual, stimuli, and the test form for the LTI-C. The investigator viewed two video tapes of sessions conducted during the pilot study for the larger project, following along with the test form. Test forms from subjects whose data were excluded (2 African-Americans and 2 European-Americans) were scored. Then, utilizing audio and video tapes, the investigator recorded verbal responses for 5 children. After recording these subject responses, the investigator scored the test forms following the guidelines outlined in the previous section.

After completion of the training procedures, the investigator scored the test forms of 3 subjects. The investigator then rescored these 3 subjects without access to the original scores in order to determine intraexaminer reliability. If intraexaminer reliability had been found to be less than 93% (41 of 44 items scored the same), the investigator would have repeated the training procedure. The value of 93% agreement corresponds with the interexaminer values reported by the authors of the LTI-C (Bray & Wiig, 1987, p. 50).

Prior to scoring subject responses to determine interexaminer reliability, the SLP, Lori A. Swanson, also underwent training (see Appendix J). The SLP attended one training session which lasted approximately one and a half hours. During the session, the investigator familiarized the SLP with the manual, stimuli, and test forms for the LTI-C. Scoring procedures were discussed and examples were provided. The SLP was required to score the responses of subjects previously scored by the investigator and
agreement between the SLP's scoring and the investigator's scoring was examined. Primarily, the SLP scored subjects whose data were not used (see p. 39 for explanation), although it was necessary to include the data from a few actual subjects in the SLP's training. The SLP continued scoring until an average of 93% agreement was obtained for three consecutively scored tests. The value of 93% agreement corresponds with the interexaminer values reported by the authors of the LTI-C (Bray & Wiig, 1987, p. 50).

Procedure for determination of significance. In order to determine if there were significant differences among the normative sample, speakers of AAE, and speakers of APPE in Total Intent Scores obtained on the LTI-C, a histogram was first plotted in order to determine whether or not the data were normally distributed. The Total Intent Scores for both the AAE and APPE subjects were not found to be normally distributed when a histogram was plotted. Six subjects (4 AAE, 2 APPE) were found to be outliers whose lower performances upon the LTI-C were affecting the distribution of the entire group. Upon reexamination of the test forms of these outlying subjects, it was observed that seven of these subjects did not condition to the assessment task, i.e., provide responses in first person. Because these seven outlying subjects did not appropriately perform the assessment task, their responses were omitted from statistical analyses. When a histogram was again plotted without these seven outliers, the data were found to be normally distributed, allowing parametric statistical analysis to be performed. In order to

---

5 The scores of these outlying subjects are reported and their exclusion from statistical analysis is indicated in Appendix K.
provide consistency to the data analysis, the responses of these subjects were excluded from all further data analyses.

Two one sample t-tests were performed to determine if there were significant differences among the performance of each subject group and the performance of the standardization sample for Total Intent Scores. These t-tests were performed on the difference in the subjects’ scores from the mean of the corresponding age group of the normative sample. An alpha level of 0.05 was set for these analyses. As t-tests are parametric methods of statistical analysis, performance of these t-tests allowed for more powerful and sensitive statistical analysis than nonparametric procedures.

The Intent Scores were examined to determine if there were significant differences among age levels for the ritualizing, informing, controlling, and feeling communicative functions. In order to examine whether or not there were significant differences among the five year-olds, six year-olds, and seven year-olds within each subject group (speakers of AAE, speakers of APPE) in the communicative function scores obtained on the LTI-C, a Kruskal-Wallis nonparametric analysis of variance (ANOVA) was performed for each communicative function with an alpha level set at 0.05. The Kruskal-Wallis was chosen instead of a one-way ANOVA as planned because plotting of histograms for the various subtests, representing different communicative functions, revealed that the data were not normally distributed.
The Formality Scores were also examined to determine if there were significant differences among subject group performance. The authors of the LTI-C report that Formality Scores should be viewed primarily qualitatively rather than quantitatively as there are few of these items on the test and as the subjects within the normative sample appeared to be still developing the formal register and did not perform well on these items (Bray & Wiig, 1987, p. 48). The authors do report the means and standard deviations for the Formality Scores of the normative sample, so it was possible to compare their performance to that of the AAE and APPE speakers. Among the standardization sample, the following means were obtained out of a possible 10 points: for 5-year-olds, $M = 2.5$; for 6-year-olds, $M = 2.7$; and for 7-years-olds, $M = 3.6$ (Bray & Wiig, 1987, p. 48). Because of the small number of responses, parametric analyses were not possible. Therefore, the Sign Test, a nonparametric procedure parallel to the parametric $t$-test, was performed to determine whether significant differences existed among the AAE and APPE subjects' Formality Scores and those of the normative sample.

The Formality Scores were further examined to determine if there were differences among the various age levels. Again, due to the low possible number of scores, a Kruskal-Wallis nonparametric ANOVA was performed to compare the Formality Scores among the various age groups for the AAE and APPE subjects.
Determination of Reliability

Intratranscriber reliability. In order to determine intraexaminer reliability for the transcription of responses, each of the four GRAs primarily responsible for data collection randomly drew names from the pool of subjects they tested. For the data collected for this portion of the overall study, each GRA drew two names for a total of eight subjects. Without access to the original test forms, each GRA recorded verbal responses for the randomly selected subjects a second time. After approximately one week had elapsed, the GRAs checked one another's transcriptions for accuracy. Intratranscriber reliability was calculated by the investigator using the eight transcriptions which had been checked. Transcription of responses was considered as reliable if word order was preserved and if the intent/formality of subject responses was unchanged. If any GRA had obtained a reliability average of less than 92% (less than 33 of 36 items transcribed the same), all subject responses recorded by that GRA would have been transcribed again by this investigator for data analysis.

Intra- and interexaminer reliability. After the subject responses were scored by the investigator, subjects from each age level at each school were numbered from 1-15. Numbers were randomly drawn by an assistant in order to select two subjects from each level at both schools. The responses of these 12 subjects were rescored by the investigator without access to the original scores. The investigator then calculated intraexaminer reliability for scoring.
In order to determine interexaminer reliability for scoring, an ASHA-certified speech-language pathologist (SLP) who has experience with child language randomly drew the names of two subjects from each age level at each school. The responses of these 12 subjects were then rescored by an ASHA-certified speech-language pathologist (SLP) without access to the original scores. The investigator calculated interexaminer reliability for scoring.
Chapter III

Results

The Total Intent Scores, subtests scores, and Formality Scores of the 90 subjects which were utilized in data analysis are summarized in Tables 2, 3, and 4 respectively (for individual subject scores see Appendix K). In general, the AAE and APPE speakers performed significantly different than the normative sample in regard to Total Intent Scores, although significant differences were not found in performance upon the various subtests of the LTI-C. The Formality Scores obtained by the speakers of AAE differed significantly from those of the normative sample as well, although the APPE speakers’ Formality Scores did not.

Reliability

Following transcription, intratranscriber reliability was calculated by the investigator. For the eight randomly selected subjects whose responses were retranscribed, GRA intratranscriber reliability showed an overall mean of 97% intratranscriber reliability, with a transcriber range of 94% to 98.5%. Percentages were calculated by determining whether or not differences in transcription would affect scoring.

Intra- and interjudge reliability for the scoring of intent and formality were also calculated by the investigator. Intrajudge reliability for scoring was calculated as 96.59% for the twelve randomly selected subjects with a range from 93.18% to 100%. Interjudge reliability was calculated at 92.23% for the twelve randomly selected subjects, with a
Table 2

Summary of Subjects' Total Intent Scores on the LTI-C

<table>
<thead>
<tr>
<th>Age</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>18.31</td>
<td>3.57</td>
<td>13 to 25</td>
</tr>
<tr>
<td>6</td>
<td>19.38</td>
<td>4.96</td>
<td>12 to 27</td>
</tr>
<tr>
<td>7</td>
<td>23.27</td>
<td>5.65</td>
<td>8 to 30</td>
</tr>
<tr>
<td>APPE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>20.54</td>
<td>4.86</td>
<td>12 to 28</td>
</tr>
<tr>
<td>6</td>
<td>23.33</td>
<td>3.85</td>
<td>14 to 31</td>
</tr>
<tr>
<td>7</td>
<td>25.87</td>
<td>2.67</td>
<td>22 to 30</td>
</tr>
</tbody>
</table>

Note. The maximum Total Intent Score possible = 34. Group means of the normative sample are as follows: for 5 year-olds, 22.0; 6 year-olds, 24.5; 7 year-olds, 27.3. Scores of subjects found to be outliers, as discussed in the Statistical Analysis section, are not included in these summary statistics. Age is reported in years.
Table 3

Summary of Subjects’ Subtest Scores on the LTI-C

<table>
<thead>
<tr>
<th>Age</th>
<th>Ritualizing</th>
<th>Informing</th>
<th>Controlling</th>
<th>Feeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1.69</td>
<td>2.15</td>
<td>8.69</td>
<td>5.77</td>
</tr>
<tr>
<td>6</td>
<td>1.92</td>
<td>1.92</td>
<td>8.77</td>
<td>6.77</td>
</tr>
<tr>
<td>7</td>
<td>2.15</td>
<td>2.92</td>
<td>12.00</td>
<td>9.77</td>
</tr>
<tr>
<td>APPE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1.61</td>
<td>2.38</td>
<td>9.31</td>
<td>7.23</td>
</tr>
<tr>
<td>6</td>
<td>2.20</td>
<td>2.80</td>
<td>9.87</td>
<td>8.47</td>
</tr>
<tr>
<td>7</td>
<td>2.67</td>
<td>3.20</td>
<td>10.93</td>
<td>9.13</td>
</tr>
</tbody>
</table>

Note. Scores are reported in terms of group means. The maximum Ritualizing score possible = 4, Informing score = 4, Controlling score = 13, Feeling score = 13. Scores of subjects found to be outliers, as discussed in the Statistical Analysis section, are not included in these summary statistics. Age is reported in years.
Table 4

Summary of Subjects' Formality Scores on the LTI-C

<table>
<thead>
<tr>
<th>Age</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AAE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1.46</td>
<td>0.88</td>
<td>0 to 3</td>
</tr>
<tr>
<td>6</td>
<td>1.69</td>
<td>1.32</td>
<td>0 to 4</td>
</tr>
<tr>
<td>7</td>
<td>2.13</td>
<td>1.64</td>
<td>0 to 6</td>
</tr>
<tr>
<td></td>
<td>APPE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1.54</td>
<td>1.27</td>
<td>0 to 4</td>
</tr>
<tr>
<td>6</td>
<td>2.53</td>
<td>1.81</td>
<td>0 to 5</td>
</tr>
<tr>
<td>7</td>
<td>3.33</td>
<td>1.45</td>
<td>0 to 6</td>
</tr>
</tbody>
</table>

Note. The maximum Formality Score possible = 10. Group means for the normative sample are as follows: 5 year-olds, 2.5; 6 year-olds, 2.7; 7 year-olds, 3.6. Scores of subjects found to be outliers, as discussed in the Statistical Analysis section, are not included in these summary statistics. Age is reported in years.
range from 84.1% to 97.7%. As intent and formality scores are derived from the same
test items, separate calculations were not performed for each type of score.

Statistical Analyses

Differences between Total Intent Scores. The primary purpose of this
investigation was to determine if there were differences among speakers of AAE and
APPE as compared to speakers of SAE in the development of pragmatic skills. As stated
previously, the LTI-C (Bray & Wiig, 1987) was administered to provide a quantitative
means of measuring potential developmental differences.

Performance of 2 one sample t-tests revealed that the Total Intent Scores achieved
by both speakers of AAE and APPE differed significantly from those of the normative
sample as shown in Table 5, (α = 0.05 for all statistical analyses; p = 0.000 and p = 0.023,
respectively). As shown on Table 5, the confidence intervals of the AAE and APPE
speakers do not overlap, indicating significant differences in their performances, with the
scores of the APPE speakers more closely approaching those of the normative sample.

To determine if there were significant differences among the scores of the group
members in regard to gender, post hoc analysis utilizing a two-way ANOVA was
performed with two factors, gender and speech, and two levels for each factor, male,
female; and AAE, APPE speakers; respectively. This two-way ANOVA yielded p =
0.747 for the the effect of gender, indicating no significant differences, p = 0.004 for
speech group, indicating significant differences, and p = 0.012 for the overall model (see
Table 5

Differences Among Total Intent Scores of Normative Sample, AAE Speakers, and APPE Speakers as Shown by One Sample t-Tests

<table>
<thead>
<tr>
<th>Speech</th>
<th>M</th>
<th>Lower</th>
<th>Upper</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAE</td>
<td>-4.268</td>
<td>-5.773</td>
<td>-2.763</td>
<td>-5.73</td>
<td>40</td>
<td>0.000*</td>
</tr>
<tr>
<td>(Total Intent Score -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>normative)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPE</td>
<td>-1.349</td>
<td>-2.503</td>
<td>-0.194</td>
<td>-2.36</td>
<td>42</td>
<td>0.023*</td>
</tr>
<tr>
<td>(Total Intent Score -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>normative)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * = p < 0.05.
In order to determine whether a developmental progression existed for Total Intent Scores, a one-way ANOVA was performed for each group with a factor of age group (5, 6, and 7 year-olds). For the speakers of AAE, this analysis yielded $p = 0.024$, and for the speakers of APPE, this analysis yielded $p = 0.003$ (see Tables 7 and 8), indicating that significant differences do exist among Total Intent Scores by age group. Post hoc testing as shown in Tables 9 and 10 revealed that the significant differences occurred between the scores of the 5 year-olds and 7 year-olds for both AAE and APPE subjects ($p = 0.027$ and $p = 0.002$, respectively).

To determine whether the two groups' rate of development in test scores differed from that of the normative sample, 2 one-way ANOVAs were performed using a factor of age group (5, 6, and 7 year-olds). These analyses revealed $p = 0.737$ for the speakers of AAE and $p = 0.947$ for the speakers of APPE, indicating no significant differences from the normative sample in rate of test score development for the Total Intent Scores (see Tables 11 and 12).

**Differences among subtest scores.** A second purpose of this study was to determine whether the speakers of AAE and APPE differed in their development of communicative intents. The subtests of the LTI-C (Bray & Wiig, 1987) were administered to provide a quantitative means of measuring such differences. To determine whether there was a significant difference among the performance of the AAE and APPE speakers and the normative sample in subtest scores, a Kruskal-Wallis
Table 6

Two-Way ANOVA of Speech Group and Gender Group Effects

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>F</th>
<th>Exact Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech</td>
<td>158.67</td>
<td>1</td>
<td>8.67</td>
<td>0.004*</td>
</tr>
<tr>
<td>Gender</td>
<td>1.916</td>
<td>1</td>
<td>0.11</td>
<td>0.747</td>
</tr>
<tr>
<td>2-way Model</td>
<td>214.472</td>
<td>3</td>
<td>3.905</td>
<td>0.012*</td>
</tr>
</tbody>
</table>

Note. * = p < 0.05
Table 7

ANOVA of the Differences in Total Intent Scores by Age Group for AAE Speakers

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>F</th>
<th>Exact Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>193.416</td>
<td>2</td>
<td>4.107</td>
</tr>
<tr>
<td>Within Groups</td>
<td>894.779</td>
<td>38</td>
<td></td>
</tr>
</tbody>
</table>

Note. * = p < 0.05
Table 8

ANOVA of the Differences in Total Intent Scores by Age Group for APPE Speakers

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>F</th>
<th>Exact Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>197.749</td>
<td>2</td>
<td>6.700</td>
<td>0.003*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>590.297</td>
<td>40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * = p < 0.05
Table 9

Post Hoc Testing of the Differences in Total Intent Scores by Age Group for AAE Speakers

<table>
<thead>
<tr>
<th>Age Group Comparison</th>
<th>Exact Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 vs. 6</td>
<td>0.839</td>
</tr>
<tr>
<td>6 vs. 7</td>
<td>0.101</td>
</tr>
<tr>
<td>5 vs. 7</td>
<td>0.027*</td>
</tr>
</tbody>
</table>

*Note. * = p < 0.05
Table 10

Post Hoc Testing of the Differences in Total Intent Scores by Age Group for APPE Speakers

<table>
<thead>
<tr>
<th>Age Group Comparison</th>
<th>Exact Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 vs. 6</td>
<td>0.146</td>
</tr>
<tr>
<td>6 vs. 7</td>
<td>0.181</td>
</tr>
<tr>
<td>5 vs. 7</td>
<td>0.002*</td>
</tr>
</tbody>
</table>

Note. * = p < 0.05
Table 11

ANOVA of the Differences in Intent Scores by Age Group for AAE Speakers as Compared to the Normative Sample

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>F</th>
<th>Exact Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>14.469</td>
<td>2</td>
<td>0.307</td>
</tr>
<tr>
<td>Within Groups</td>
<td>894.779</td>
<td>38</td>
<td></td>
</tr>
</tbody>
</table>

Note. No statistically significant differences between age groups.
Table 12

ANOVA of the Differences in Intent Scores by Age Group for APPE Speakers as Compared to the Normative Sample

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>F</th>
<th>Exact Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>0.770</td>
<td>2</td>
<td>0.026</td>
<td>0.974</td>
</tr>
<tr>
<td>Within Groups</td>
<td>590.297</td>
<td>40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. No statistically significant differences between age groups.
nonparametric ANOVA was performed. The Kruskal-Wallis test was chosen because plotting of histograms for the various subtests revealed that the data were not normally distributed and the data were also not symmetrical. Performance of the Kruskal-Wallis ANOVA revealed no significant differences (all p’s > 0.05) among the performance of the AAE and APPE speakers from the normative sample in regard to subtest scores (see Table 13).

**Differences between Formality Scores.** An additional purpose of this study was to determine whether AAE and APPE speakers differ in their use and development of formality. Again, to provide a quantitative means of measuring such differences the LTI-C (Bray & Wiig, 1987) was administered and the Formality Scores of the subjects examined. In order to determine whether the speakers of AAE and APPE differed from the normative sample in their Formality Scores, a Sign Test was performed. The Sign Test was performed because of its similarity to a one sample t-test, which was utilized to answer the earlier question regarding Total Intent Scores. Performance of the Sign Test yielded p = 0.001 for the speakers of AAE and p = 0.222 for the speakers of APPE, indicating that the performance of the AAE speakers differed significantly from the normative sample, but that of the APPE speakers did not (see Table 14). In order to determine whether a developmental progression existed for Formality Scores, a Kruskal-Wallis nonparametric ANOVA was performed for the factor of age (5, 6, and 7 year-olds). For the speakers of AAE, this analysis yielded p = 0.624, and for the speakers of
Table 13

Kruskal-Wallis Nonparametric ANOVA of Differences Among Subtest Scores of AAE and APPE Speakers from the Normative Sample

<table>
<thead>
<tr>
<th></th>
<th>Contdiff</th>
<th>Feeldiff</th>
<th>Infodiff</th>
<th>Ritdiff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>0.493</td>
<td>0.394</td>
<td>1.508</td>
<td>2.476</td>
</tr>
<tr>
<td>df</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Exact Probability</td>
<td>0.781</td>
<td>0.821</td>
<td>0.470</td>
<td>0.290</td>
</tr>
</tbody>
</table>

Note. Contdiff = Normative Controlling Scores - (AAE + APPE Controlling Scores);
Feeldiff = Normative Feeling Scores - (AAE + APPE Feeling Scores); Infodiff = Normative Informing Scores - (AAE + APPE Informing Scores); and Ritdiff = Normative Ritualizing Scores - (AAE + APPE Ritualizing Scores). No statistically significant differences for subtest scores.
Table 14

Sign Test of the Differences Among the AAE and APPE Speakers' Formality Scores and the Normative Sample Scores

<table>
<thead>
<tr>
<th>Speech</th>
<th>Z</th>
<th>p (2-Tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAE</td>
<td>-3.436</td>
<td>0.001*</td>
</tr>
<tr>
<td>APPE</td>
<td>-1.220</td>
<td>0.222</td>
</tr>
</tbody>
</table>

Note. * = p < 0.05
APPE, this analysis yielded \( p = 0.017 \) (see Tables 15 and 16). This indicates that significant differences do exist among the age groups in regard to Formality Scores for the speakers of APPE, but not for the speakers of AAE. Kruskal-Wallis ANOVAs were performed among the various age groups to determine specifically where differences occurred among the age groups. These analyses indicated that significant differences in Formality Scores did not occur among the age groups for speakers of AAE, and significant differences existed only among the 5 year-olds and 7 year-olds for speakers of APPE \( (p = 0.003) \) as shown in Tables 17 and 18. The difference between the scores of the 5 and 7 year-old APPE subjects is still significant when applying the Bonferroni method, thus reducing the necessary alpha level to 0.0167. To determine whether the two groups’ rate of development in test scores differed from that of the normative sample, two Kruskal-Wallis nonparametric ANOVAs were performed using a factor of age group and three levels (5, 6, and 7 year-olds). These analyses revealed \( p = 0.328 \) for the speakers of AAE and \( p = 0.656 \) for the speakers of APPE, indicating no significant differences from the normative sample in rate of test score development for the Formality Scores (see Tables 19 and 20).
Table 15

**Kruskal-Wallis Nonparametric ANOVA of the Difference Between Age Groups for Formality Scores of AAE Speakers**

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.947</td>
<td>2</td>
<td>0.624</td>
</tr>
</tbody>
</table>

*Note.* No statistically significant differences between age groups.
Table 16

Kruskal-Wallis Nonparametric ANOVA of the Difference Between Age Groups for Formality Scores of APPE Speakers

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.987</td>
<td>2</td>
<td>0.017*</td>
</tr>
</tbody>
</table>

Note. * = p < 0.05
Table 17

Kruskal-Wallis Nonparametric ANOVAs of the Differences Between Age Groups for Formality Scores of AAE Speakers

<table>
<thead>
<tr>
<th>Age Group Comparison</th>
<th>Chi-Square</th>
<th>df</th>
<th>Exact Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 vs. 6</td>
<td>0.183</td>
<td>1</td>
<td>0.669</td>
</tr>
<tr>
<td>6 vs. 7</td>
<td>0.353</td>
<td>1</td>
<td>0.552</td>
</tr>
<tr>
<td>5 vs. 7</td>
<td>0.884</td>
<td>1</td>
<td>0.347</td>
</tr>
</tbody>
</table>

Note. No statistically significant differences between age groups.
Table 18

Kruskal-Wallis Nonparametric ANOVAs of the Differences Between Age Groups for Formality Scores of APPE Speakers

<table>
<thead>
<tr>
<th>Age Group Comparison</th>
<th>Chi-Square</th>
<th>df</th>
<th>Exact Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 vs. 6</td>
<td>2.122</td>
<td>1</td>
<td>0.145</td>
</tr>
<tr>
<td>6 vs. 7</td>
<td>1.355</td>
<td>1</td>
<td>0.244</td>
</tr>
<tr>
<td>5 vs. 7</td>
<td>8.885</td>
<td>1</td>
<td>0.003*</td>
</tr>
</tbody>
</table>

Note. * = p < 0.05
Table 19

Kruskal-Wallis Nonparametric ANOVA of the Differences in Formality Scores by Age Group for AAE Speakers as Compared to the Normative Sample

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.259</td>
<td>2</td>
<td>0.328</td>
</tr>
</tbody>
</table>

Note. No statistically significant differences between age groups.
Table 20

Kruskal-Wallis Nonparametric ANOVA of the Differences in Formality Scores by Age Group for APPE Speakers as Compared to the Normative Sample

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.716</td>
<td>2</td>
<td>0.656</td>
</tr>
</tbody>
</table>

Note. No statistically significant differences between age groups.
Chapter IV

Discussion

The purpose of this study was to examine the use and development of communicative intents and formality among school-aged speakers of African-American English and Appalachian English through utilization of the Let's Talk Inventory for Children (Bray & Wiig, 1987). The Total Intent Scores for both the AAE and APPE subjects were found to differ significantly from those of the normative sample, while only the Formality Scores of the AAE subjects were found to differ significantly from the normative sample.

Total Intent Scores

As stated previously, the performance of both the speakers of AAE and APPE differed significantly from that of the normative sample in regard to Total Intent Scores. However, both subject groups demonstrated improved performance with increasing age, indicating that these subjects were acquiring the pragmatic skills necessary to express the required communicative intents. Thus, the question may be, are these speakers of AAE and APPE merely developing their abilities to express communicative intents at a slower rate than are speakers of SAE? A comparison of the subjects’ rates of development and the normative sample’s rate of development in Total Intent Scores revealed no significant differences. This lack of difference does not support an argument that speakers of AAE and APPE are learning to express communicative intents more slowly. Rather, this lack
of significance implies that speakers of AAE and APPE are developing these pragmatic abilities in a different manner than speakers of SAE.

Interestingly, the performances of the two subject groups were also found to differ significantly from one another, with the APPE subjects' performance more nearly approximating that of the normative sample. As will be considered more thoroughly in the discussion regarding formality, the use of all European-American GRAs could have been a factor influencing the lower scores of the AAE subjects.

**Development of Communicative Intents**

It would seem that the various subtests of the LTI-C, which represent different communicative intents, might be a place to begin examining these differences in development of communicative intents. No significant differences were found among the performances of the subjects and the normative sample for the different subtests, probably due to the small number of items provided in each subtest. What then could be the source of these differences in Total Intent Scores? Examination of the various subtest scores for the subject groups reveals some possible causes for the differences in scores.

**Subtest scores for speakers of AAE.** As previously mentioned, no significant differences were found among the subtest scores of the speakers of AAE and of the normative sample. However, comparison of subtest score means for the speakers of AAE and the normative sample reveals some notable differences in performance.
Examination of the subtest means by age group indicates that the performance of the 5- and 6-year-old speakers of AAE lags behind that of the normative sample for all subtests. However, there is a striking proportionate increase in subtest scores between the 6- and 7-year-old AAE speakers as compared to the normative sample. From age 6 to 7, Informing subtest scores increased by an average of 1 point for the AAE speakers as opposed to 0.2 points for the normative sample, Controlling subtest scores by an average of 3.23 as opposed to 1, and Feeling subtest scores by an average of 3 as opposed to 1.1.

What could be the cause of this sudden growth in scores? This increase in scores could indicate that academic exposure to SAE in an academic setting made a difference in the older subjects' performance. Almost all of the 7-year-olds were in at least their second year of school, first or second grade, at the time of testing. All of the 5-year-olds and many of the 6-year-olds were only in kindergarten, limiting their opportunities for academic exposure to SAE. In the same way, greater familiarity with European-American authority figures could be a factor influencing the high rate of development among the 7-year-olds. Finally, all subjects (5-, 6-, and 7-year-olds) could be attempting to code-switch and these attempts could be compromising the subjects' performance, particularly among the younger subjects. As postulated by Isaacs (1996), subjects may have acquired greater facility with code-switching with an increased amount of time spent receiving SAE instruction in school, thus explaining the notably higher scores of the 7-year-olds.
Closer examination of the Controlling subtest scores for the speakers of AAE revealed that these scores were an average of 1 point lower than those of the normative sample among the 5-year-olds. However, by the age of 7, the speakers of AAE were scoring an average of 0.8 points higher than the normative sample. This finding lends credence to the argument posited in the review of the literature that speakers of AAE may learn how to control their listeners in different ways than do speakers of SAE.

In the same way, the Feeling subtest scores of the AAE speakers were found to increase by an average of 4 points while the scores of the normative sample were only found to increase by an average of 2.5 points. While the AAE speakers' Feeling subtest scores did remain slightly lower overall, this increase in scores does not indicate that speakers of AAE are developing communicative intents more slowly than do speakers of SAE. Rather, these increases in Controlling and Feeling scores support the contention of Craig and Washington (1995), that AAE speakers use more linguistically "robust" discourse with increased use of AAE features, and that there is a need to develop a child language theory specific to AAE.

**Development of communicative intents among AAE speakers.** As suggested, the various communicative intents may develop differently among speakers of AAE. In particular, the controlling and feeling intents may not develop in the same manner as among SAE speakers.
The controlling communicative intent may be expressed in different forms among speakers of AAE. As reported by Heath (1983), young male speakers of AAE are expected to participate in verbal games which are precursors to signification and the use of dozens at a very early age. Participation in this verbal play could enable the speaker of AAE to develop different means of controlling his or her listener than would typically be used among SAE speakers. For example, "putting down" one’s listener, often socially unacceptable among SAE speakers, may be utilized instead of negotiation to achieve what one wants. Also, the subjects could have employed subtle behavioral cues intended to influence their listeners which would not have been obvious in the transcription of their responses. Indeed, some young speakers of AAE may neither be exposed to nor have a need to use indirect means of controlling listeners prior to entering the SAE environment of public school. This assumption would explain why the AAE subjects’ scores are improving at a rate significantly comparable to that of the normative sample in that the AAE subjects are as capable of developing linguistic skills as their SAE peers given exposure to an SAE environment, i.e. school.

---

6 Although the LTI-C does include a behavioral checklist which may be utilized to record examinee behaviors, this checklist is not designed to describe subtle nuances of behavior. The discussion of the results of the LTI-C’s behavioral checklist and of the addended checklist of behaviors is forthcoming (Swanson & Cady, 1997). However, it is likely that the behavioral checklist and addendum are not sensitive enough to detect such possible differences as use of timing, eye gaze, inflection, etc. that could alter the intent of a message (Adler, 1979).
In the same manner, expression of the feeling intent may develop differently among speakers of AAE. Again, participation in verbal games could influence the manner in which young speakers of AAE express their feelings. Likewise, subtle behavioral cues that would not be readily obvious from transcription alone could be used to express feelings. Peters and Peterson (1985) report that low-income African-American mothers regard conformity as a valuable trait in their children. Could this emphasis upon conformity discourage expression of emotions and opinions among speakers of AAE? Greathouse and Miller (1981) also report that African-American parents often feel that “children must not be encouraged to talk about their problems” because they should not waste time talking about things that cannot be changed. This statement could indicate that expression of feelings is not encouraged among speakers of AAE, thus leading to fewer opportunities to practice this pragmatic skill prior to entering school. It may be possible that assessing the communicative intents of controlling and feeling among AAE speakers may be less appropriate than assessing some other intents not assessed by the LTI-C. Possibly tests of pragmatics such as the LTI-C are only assessing what speakers of AAE have learned from a SAE environment rather than what they have achieved developmentally in terms of communicative intents.

Subtest scores for speakers of APPE. Among the speakers of APPE, the average scores for the Ritualizing, Informing, and Controlling subtests all increased by more points than did those of the normative sample. This provides evidence that increased
exposure to SAE and increased facility with code-switching could influence the scores of the APPE speakers in the same manner as was proposed for the AAE speakers.

However, the average score for the Feeling subtest increased by 0.6 points fewer for the APPE speakers than it did for the normative sample. This subtest score remained comparatively the lowest among even the 7-year-old speakers of APPE. Could these low Feeling subtest scores bear out Looff's assertions (1977) regarding the Appalachian cultural custom of restraining feelings?

Interestingly, the Ritualizing subtest scores of the 6- and 7-year-old APPE speakers were slightly higher than those of the normative sample. This possibly reflects the emphasis on conformity valued by Appalachian mothers (Peters & Peterson, 1985).

**Development of communicative intents among APPE speakers.** As suggested for speakers of AAE, the development of communicative intents may be different for speakers of APPE. In particular, it appears that development of the feeling communicative intent may proceed differently than it does among those learning SAE.

Looff (1977) has reported a reluctance on the part of many speakers of APPE to express their feelings. Young speakers of APPE who lack adult models of expressing feelings may not begin to develop this intent until they reach school and are exposed to SAE models. As was reported for African-Americans, Appalachian mothers have also indicated that they value the trait of conformity in their children (Peters & Peterson, 1985). Perhaps children who speak APPE are conforming to cultural norms of
suppressing discussions of feelings and, consequently, develop this intent differently. In
the same way, it is also possible that the subjects were entirely capable of utilizing the
feeling communicative intent, but did not adequately do so because of cultural
restrictions. Speakers of APPE may simply utilize the feeling function in a more limited
manner than it is utilized by speakers of SAE.

**Formality Scores and Development of Formality**

Although Formality Scores were not found to differ from the normative sample
for speakers of APPE, the speakers of AAE differed significantly from the normative
sample in their performance. Upon examination of age group differences, a
developmental progression in use of formality was apparent for the APPE speakers with
significant differences existing among the performances of the various age groups. Such
a significant progression among age groups was not found for the speakers of AAE,
although neither the speakers of AAE nor APPE were found to differ significantly from
the normative sample in overall rate of Formality Score development.

Item-by-item analysis of the subjects' responses to the items requiring formal
register revealed several trends in subject responses (see Appendix L for distribution of
subject responses by age). In general, both subject groups (AAE and APPE subjects)
performed best upon those Feeling subtest items which required formal register. Upon
examination of the Feeling subtest items alone, notably more subjects responded
correctly to the items which elicited apologizing, approving, and congratulating, than
they did to the items which elicited disagreeing and disapproving. The only Controlling subtest item upon which most subjects performed well required the subjects to ask an adult to change her action, i.e., “Excuse me.” This indicates that subjects were more adept at expressing feelings to adults, particularly positive feelings, than they were at attempting to control the behavior of adults. This finding is not surprising when considering Adler’s (1979) descriptions of respect shown by young African-Americans to authority figures and Kovarsky et al.’s (1994) descriptions of interactions among young Appalachians and authority figures. The subjects have likely been socialized not to dispute, question, or disagree with adults, and thus, may not know the appropriate ways in which to do so. Thus, the pattern of responses evidenced by both the AAE and APPE speakers may be influenced by cultural mores as well as dialectal differences.

As stated in regard to the total Formality Scores, an increase in correct responses was generally observed with an increase in age, indicating a developmental progression for the acquisition of formal register. Among 5 year-old AAE subjects, the following items were not answered in formal register by any subjects: reminding, giving warning, delaying action, disapproving, congratulating. By age 7, the only item still not answered correctly by any subject was one which elicited reminding an adult. For all three AAE age groups, subjects performed poorly upon both the item which elicited reminding and
one which elicited disagreeing. Among 5 year-old APPE subjects, the items which elicited reminding and disagreeing were not answered correctly by any subjects, but by the age of 7, there were no items which did not receive a correct response from at least one subject. For all three APPE age groups, subjects performed poorly upon the item which elicited reminding as well as one which elicited giving warning. Interestingly, for both the speakers of AAE and APPE, the difficult formality items were those in which the communicative intent would highlight adult faults. Perhaps the high value placed upon obedience by both African-American and Appalachian mothers, as described by Peters and Peterson (1985), influenced the subjects’ responses.

**Comparison of AAE and APPE Speakers’ Formality Scores**

Why does a difference exist among the Formality Scores of the AAE and APPE speakers? One explanation could be that APPE is more similar to SAE in its use of formal register than is AAE. This is highly plausible given the common linguistic heritage of speakers of SAE and APPE. Another explanation is that AAE subjects could have utilized subtle behavioral evidences of politeness that would not have been readily discernible from transcription alone. A final factor possibly relating to the lower performance of the AAE speakers could be that all GRAs were European-Americans and

---

7 It should be noted that AAE subjects may have performed poorly on these, particularly the item which elicited disagreeing, because they felt uncomfortable expressing such intents when all GRAs and pictured interactants were European-Americans.
test materials pictured primary interactants who were European-Americans. These various explanations will be discussed in turn.

The manner in which the LTI-C is scored may have overlooked subtle differences in the way that speakers of AAE expressed formal register such as use of timing, pauses, eye gaze, etc. (Adler, 1979). The devices used to signal formality by the speakers of AAE may have been simply regarded as “incorrect” based upon the SAE model. It has been proposed that these possible subtle differences in the way that language is used need to be examined more thoroughly (Foster, 1992), but they are not described in this study due to the small number of responses requiring formal register.

As previous research indicates, a delicate balance may exist in a testing situation with a young child who is of a different race and dialect than the examiner (Agerton & Moran, 1995; Seymour et al., 1986; Taylor & Payne, 1983; Terrell & Terrell, 1983; Vaughn-Cooke, 1986). Although all the subjects had previous exposure to European-American teachers, being alone in a room with an unfamiliar adult of another race may have inhibited the responses of the subjects. The subjects may have felt as if they should respond as simply as possible, thus eliminating characteristics of formal register. Indeed, examination of the audio- and videotapes reveals that some of the AAE subjects even whispered their responses, indicating a reluctance to speak to the examiner. In this testing situation, the subjects were faced not only with a person who was an unfamiliar European-American and a speaker of SAE, but also with test materials which only
highlighted European-Americans. Perhaps the subjects did not feel as if they knew how
to role-play for a child of another racial, cultural, and dialectal background.

The high value placed upon the trait of conformity may have also influenced the
that from a young age, individuals who speak nonstandard dialects perceive language
tests as “designed to measure them according to someone else’s standards, not their own”
(p. 181). These young speakers of AAE may have conformed to their perceptions of the
examiners’ and the test’s expectations, attempting to utilize SAE forms with which they
had not yet acquired fluency. Such attempts to code-switch could have unduly
compromised the subjects’ abilities to respond to test items (Wyatt, 1995).

Advantages of Local Norms

Current standardized tests are generally inappropriate for use with nonstandard
dialectal populations (Vaughn-Cooke, 1986). As concluded in the review of the
literature, the most practical alternative is often to modify an existing test to make it
appropriate for use with other populations, usually by providing alternative correct
responses for different populations. How might such alternative correct responses be
obtained? Wolfram and Christian (1980) state that with regard to APPE speakers, “The
only fair way to ‘norm’ a particular test for A[PP]E children . . . would appear to be by
comparing them to other A[PP]E children” (p. 198). Thus, administration of standardized
tests, such as the LTL-C (Bray & Wiig, 1987), to populations such as AAE and APPE
speaking children in Knox County, Tennessee, followed by quantification and description of these subjects’ responses, would appear to be the preferred method of determining local norms at this time.

The local normative data obtained in this study will potentially be a valuable resource for the school speech-language pathologist as well as the classroom teacher. These data will enable the speech-language pathologist to better make decisions regarding the appropriateness of AAE and APPE speakers’ pragmatic abilities. Understanding of the possible causes for differences in pragmatic abilities and the culture underlying these differences could assist the speech-language pathologist in developing intervention strategies for those nonstandard dialectal speakers evincing language delays and difficulty with pragmatic skills. In the same way, provision of information regarding possible differences in pragmatic abilities among these speakers could assist teachers in developing appropriate expectations for such students. Hopefully the results of this study will assist school speech-language pathologists and classroom teachers in making decisions regarding student differences based on respect for their dialects and cultures rather than on stereotypes.

**Limitations of the Current Study**

The current study represents an initial attempt to examine the development of pragmatics, particularly communicative intents and formality, among speakers of AAE and APPE. Although the information obtained is believed to be representative of
speakers of the targeted dialects in Knox County, Tennessee, generalizations regarding this information must be made with caution. In particular, there may be a difference between Northern and Southern varieties of African-American English, as postulated by Washington and Craig (1992). Thus, assumptions should not be made regarding speakers of a Northern or of a Deep South variety of African-American English based upon the data in the current study alone.

The LTI-C provided an expedient means of collecting initial data on a large number of subjects, however, its use limits the generalizability of this data. Use of the LTI-C allowed for only a relatively small number of utterances to be collected from each subject, and these utterances were neither spontaneous nor representative of actual interactions. In addition, several potential subjects were unable to appropriately complete the assessment task, thus eliminating some potentially important sources of variation in responses. In order to more thoroughly examine the development of pragmatics among these dialectal speakers, spontaneous language samples need to be collected. The collection of spontaneous language samples would allow observation of these dialectal speakers in a variety of communicative settings with differing communicative partners.

Because all examiners were European-American speakers of SAE, it is difficult to separate out the possible effects of race and dialect upon the subject responses, particularly for the speakers of AAE. Different results may have been obtained from the AAE subjects had African-American examiners been utilized during test administration.
In the same way, variation of examiner factors could have changed the responses of the APPE subjects.

**Suggestions for Future Research**

After examining the limitations of the current study, future research seems warranted. First and foremost, as this is the first examination of communicative intents and formality among school-aged speakers of AAE and APPE, this study should be replicated to enhance the validity of these and future results.

Further research should be conducted with the same basic paradigm, altering the race and dialect of the examiners in order to determine if these factors could have affected the data. Also, utilization of test materials similar to the LTI-C (Bray & Wiig, 1987) picturing African-American children and adults as well as European-Americans may influence the results of a similar study. Particularly for the speakers of AAE, it may be difficult to obtain accurate information regarding their pragmatic skills without controlling for potential racial and cultural factors relating to examiners which could confound the results.

The results of the current study should also be replicated using a different methodology for subject selection. If speech samples were collected from subjects prior to their participation in such a project, it would be possible for the researcher to accurately identify whether or not potential subjects were nonstandard dialectal speakers. In addition to the collection of speech samples, the researcher could interview the parents
of potential subjects in order to determine whether or not the child was a part of the nonstandard dialectal group. This having been done, the researcher could be certain that each subject was truly representative of the dialectal group he or she was representing.

Future research utilizing the same paradigm with European-American subjects of lower socioeconomic status from the same geographic areas as the normative sample might provide information regarding the effect of socioeconomic status upon the scores obtained on the LTI-C (Bray & Wiig, 1987). If, as argued by Henry et al. (1992) and Reck et al. (1993), socioeconomic status is more important than cultural or dialectal factors in determining the educational outcomes of Appalachian English speakers, then information regarding the performance of other low SES groups would be valuable in the interpretation of the results of the current study. Possibly many low SES children have a lack of experience with role-playing which leads to poor performances upon the LTI-C regardless of dialectal background.

It might be revealing to conduct a study utilizing a format similar to that of LTI-C (Bray & Wiig, 1987) in which subjects were asked to provide responses for the pictured interactant in both “school talk” and “home talk.” This could enable researchers not only to control for the possible effects of code-switching, but also to determine whether and when children are fully aware of the distinction between their nonstandard dialect and SAE. If the ability to code-switch does indeed follow a developmental progression as implied by various researchers (Isaacs, 1996; Seymour & Ralabate, 1985), then it would
seem that older school-age subjects would be more proficient at providing standard "school talk" responses than would the younger subjects.

A complimentary study to the one discussed previously could involve presenting subjects with pictured interactions, again utilizing a format similar to the LTI-C (Bray & Wiig, 1987), in which the subjects are provided with a situation and asked how the pictured interactant should respond. However, instead of asking the subjects to generate a response, the examiner could provide them with two possible responses, one response in SAE and one response in the child's nonstandard dialect. The subjects could then be asked to select from the two possible responses what the pictured interactant should say if they were talking in "school talk" versus "home talk." When these results were compared with the results of a study asking subjects to generate both "school talk" and "home talk" responses, the relationship between receptive understanding of another dialect and production of that dialect might be better understood.

In order to examine whether the scoring system of the LTI-C (Bray & Wiig, 1987) was indeed too rigid to detect subtle ways of signalling formality among AAE speakers, it might be informative for a panel of AAE speaking adults to review the audio- and videotapes of the subjects' responses. It is possible that these adults could judge some subject responses as indicating politeness that were not scored as being formal based upon the LTI-C instructions. These adults could also describe the factors which made the
response formal, providing more detailed information about the use of formality among this population.

Finally, as stated before, spontaneous language samples ideally should be collected in a variety of settings for the purpose of examining the development of pragmatics among these dialectal speakers. Inclusion of a variety of settings could help ensure that reliable information was collected. In addition, utilization of different settings may provide information regarding the development of code-switching. Perhaps use of spontaneous speech samples would more clearly reveal developmental differences both for the use of communicative intents and formal register.

Summary

The results of the current study indicate that significant differences exist among the expression of communicative intents for African-American English, Appalachian English, and Standard American English speaking children as based upon the *Let’s Talk Inventory for Children* (Bray & Wiig, 1987). Specifically, the development of the Feeling intent appears to differ from the normative sample for both AAE and APPE speakers, and the controlling intent appears to differ between AAE speakers and the normative sample. Significant differences in expression of formality were also observed between the AAE and SAE speakers, although such differences were not observed between the APPE and SAE speakers. These findings provide valuable local normative data for the speech-language pathologist and the classroom teacher, as well as a first step
toward describing possible developmental differences in pragmatics among the nonstandard dialectal speakers of AAE and APPE.
REFERENCES
References


Appendix A

Grammatical Structures of African-American English

<table>
<thead>
<tr>
<th>Rules</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omission of regular -ed in past tense</td>
<td>&quot;She cook the food yesterday.&quot;</td>
</tr>
<tr>
<td>Perfective constructions omitting &quot;have&quot; or including the completive &quot;done&quot;</td>
<td>&quot;I seen the dog.&quot;  &quot;I done gone there.&quot;</td>
</tr>
<tr>
<td>Omission of -s in 3rd person singular present tense</td>
<td>&quot;He talk about that before.&quot;</td>
</tr>
<tr>
<td>Invariant &quot;be&quot;</td>
<td>&quot;They be working.&quot;</td>
</tr>
<tr>
<td>Absence of forms of &quot;to be&quot;</td>
<td>&quot;She going home.&quot;</td>
</tr>
<tr>
<td>Omission of plural and possessive suffixes</td>
<td>&quot;Five dog are in the yard.&quot;  &quot;That John Dad house.&quot;</td>
</tr>
<tr>
<td>Future construction using &quot;gonna&quot;</td>
<td>&quot;He gonna go tomorrow.&quot;</td>
</tr>
<tr>
<td>Use of &quot;ain't&quot; for negative forms of &quot;be&quot; and &quot;have&quot;</td>
<td>&quot;I ain't going.&quot;</td>
</tr>
<tr>
<td>Remote time &quot;been&quot;</td>
<td>&quot;I been had it there for&quot;</td>
</tr>
<tr>
<td>Multiple negation</td>
<td>&quot;I wasn't sure that nothing wasn't going to come up.&quot;</td>
</tr>
<tr>
<td>Pronominal apposition</td>
<td>&quot;My brother, he got a job.&quot;</td>
</tr>
</tbody>
</table>

**Note.** All rules and examples are obtained from Bountress (1994) as cited in *Oral Communication Problems in Children and Adolescents*, pp. 51-74, and from Wolfram (1986) as cited in *Nature of Communication Disorders in Culturally and Linguistically Diverse Populations*, pp. 73-115.
Appendix B

Phonological Characteristics of African-American English

<table>
<thead>
<tr>
<th>Rules</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final cluster reduction</td>
<td>“ches’” for “chest”</td>
</tr>
<tr>
<td>/θ/ and ʌ</td>
<td>“toof” for “tooth,” “brover” for “brother”</td>
</tr>
<tr>
<td>/r/ and /l/-lessness</td>
<td>“sto’y” for “story,” “hep” for “help”</td>
</tr>
<tr>
<td>“-ing” suffix</td>
<td>“goin’” for “going”</td>
</tr>
<tr>
<td>Initial /w/ reduction</td>
<td>“he uz” for “he was”</td>
</tr>
<tr>
<td>/b/, /d/, /g/ devoicing</td>
<td>“cap” for “cab,” “pat” for “pad”</td>
</tr>
<tr>
<td>Nasalized vowel</td>
<td>“ma’” (with nasal vowel) for “man”</td>
</tr>
<tr>
<td>/k/ in initial /str/ clusters</td>
<td>“skreet” for “street”</td>
</tr>
</tbody>
</table>

Note. All rules and examples are obtained from Bountress (1994) as cited in Oral Communication Problems in Children and Adolescents, pp. 51-74, and from Wolfram (1986) as cited in Nature of Communication Disorders in Culturally and Linguistically Diverse Populations, pp. 73-115.
Appendix C
Grammatical Characteristics of Appalachian English

<table>
<thead>
<tr>
<th>Rules</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-Verbing</td>
<td>“He was a-runnin’ home.”</td>
</tr>
<tr>
<td>Irregular verbs</td>
<td>“We foun’t some money.”</td>
</tr>
<tr>
<td>Perfective “done”</td>
<td>“I done told you not to mess around.”</td>
</tr>
<tr>
<td>Verb subclass shifts.</td>
<td>“Our dog treed a coon.”</td>
</tr>
<tr>
<td>Double modals</td>
<td>“I might could make up one.”</td>
</tr>
<tr>
<td>Subject-verb agreement</td>
<td>“There was five in our family.”</td>
</tr>
<tr>
<td>Time adverb placement</td>
<td>“Everwhat the case may be”</td>
</tr>
<tr>
<td>Comparatives and superlatives</td>
<td>“It was the awfulest mess.”</td>
</tr>
<tr>
<td>Intensifying adverbs</td>
<td>“It was right large. I scared you plumb to death.”</td>
</tr>
<tr>
<td>-ly absence</td>
<td>“He was terrible hard to follow.”</td>
</tr>
<tr>
<td>“Druther”</td>
<td>“Would you druther I did something?”</td>
</tr>
<tr>
<td>Use of “ain’t” for negative be</td>
<td>“I ain’t scared.”</td>
</tr>
<tr>
<td>Multiple negation</td>
<td>“There wasn’t nothing to do.”</td>
</tr>
<tr>
<td>Plurals</td>
<td>“two policiemens,” “two foot long”</td>
</tr>
<tr>
<td>Possessive pronouns</td>
<td>“hisin,” “yourn”</td>
</tr>
<tr>
<td>Unstressed “-ing”</td>
<td>“He’s goin’ to the store.”</td>
</tr>
</tbody>
</table>

Note. All rules and examples are obtained from Adler’s (1976) Checklist of Appalachian Dialect User’s Phonological, Grammatical, Lexical, and Body Language as Compared to Standard English User’s, and from Wolfram (1986) as cited in Nature of Communication Disorders in Culturally and Linguistically Diverse Populations, pp. 73-115.
Appendix D
Phonological Characteristics of Appalachian English

<table>
<thead>
<tr>
<th>Rules</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final consonant simplification</td>
<td>“des’” for “desk”</td>
</tr>
<tr>
<td>Plurals following clusters</td>
<td>“ghostes” for “ghosts”</td>
</tr>
<tr>
<td>Intrusive /t/</td>
<td>“acrosst” for “across”</td>
</tr>
<tr>
<td>“th” sounds</td>
<td>“modder” for “mother,” “nuttin” for “nothing”</td>
</tr>
<tr>
<td>Initial /w/ reduction</td>
<td>“First ‘un” for “first one”</td>
</tr>
<tr>
<td>Intrusive /h/</td>
<td>“hit” for “it”</td>
</tr>
<tr>
<td>Unstressed initial syllable deletion</td>
<td>“lectrician” for “electrician”</td>
</tr>
<tr>
<td>Final unstressed “ow”</td>
<td>“holler” for “hollow”</td>
</tr>
</tbody>
</table>

Note. All rules and examples are obtained from Adler (1976) Checklist of Appalachian Dialect User’s Phonological, Grammatical, Lexical, and Body Language as Compared to Standard English User’s, and from Wolfram (1986) as cited in Nature of Communication Disorders in Culturally and Linguistically Diverse Populations, pp. 73-115.
Appendix E

Fact Sheet

Dear Parents:
Please consider allowing your child to participate in this research project. Your child's help would be appreciated.

Dr. Lori A. Swanson

Fact Sheet About the School-Age Child Language Study
Conducted by Dr. Lori A. Swanson
Department of Audiology and Speech Pathology
The University of Tennessee

Site of Testing: Child's school

Time of Testing: Spring of 1996

Task: Child takes two tests that involve looking at pictures

Length of Testing: Two forty-five minute sessions

Test Administrators: Trained research assistants

Number of Questions on Each Test: Test 1 - 36 questions
Test 2 - 32 questions

Test Format: Drawings of children talking to adults or other children. Each picture has a corresponding "story."

Number of students being tested: 150 normally-developing children
Test results: Overall results of the study will be made available to the parents upon request. The collapsed results will also be shared with local speech-language pathologists in the schools.

Approval for Study Has Been Obtained From: The University of Tennessee School Superintendent School Principals

Benefit of Project: Information obtained from this study will be used to assist Speech-Language Pathologists in the Knoxville area.

For Additional Information Call: (615) 974-1794 Hearing and Speech Center The University of Tennessee

PLEASE SIGN AND RETURN THE ATTACHED CONSENT FORM. THANK YOU!
Appendix F

Parental Informed Consent for Language Research Project

Lori A. Swanson, Ph.D.
Department of Audiology & Speech Pathology
The University of Tennessee

We have received permission from your school system to conduct a study of normal child language development. We are interested in determining the typical performance of local children (African American and Caucasian) on a standardized test that measures social communication skills. Each child will be tested in two sessions lasting approximately 45 minutes by a research assistant. All children will be asked to speak for one character in a total of 68 pictured situations. All of the testing will be completed at the child's school at times agreed upon by the child and the child's teacher.

The testing will be audiotaped and videotaped in order to assure accurate record keeping. Information collected during this study will be completely confidential. All audio- and videotapes will be kept in a locked cabinet in the professor's office. These tapes will be erased at the end of the project. Neither the parents' names nor the child's name will be used at any time.

The information obtained from this project will be given to the speech-language pathologists in the schools in the Knoxville area so that testing social communication will be improved. A summary of the general findings of the study will be made available to parents upon request.

Permission Form

Name of Parent or Legal Guardian

Name of Child

Child's Date of Birth

Child's Teacher
I have read this informed consent and have agreed to allow my child to participate in this study. *I understand that my child's participation in this project is completely voluntary. I am also aware that I may withdraw my child from this study at any time without penalty to me or my child.* I may also request a general summary of the findings of the study (phone 974-1794).

________________________________________
Signature of Parent or Legal Guardian
Appendix G

Administration Protocol for Session 1
Let's Talk Inventory for Children

I. An informed consent form will be completed for all children participating in the research study. The classroom teacher and the child will decide upon a mutually agreeable time for the first session. At this time, the examiner, who will be a research assistant, will follow this script and these guidelines when administering the test to the child:

E: Hello, (child's name), my name is (name of graduate research assistant). Your parents and your teacher say that you are willing to help me with my special project. Did they tell you what we are going to do? (Child answers yes or no.) All you have to do is look at some pictures and pretend you are one of the children in each picture. Today you will look at this book, then on _______ you will look at that book. Some of the pictures in these books will be easy, some others might be a bit hard. All you have to do is your best. I think what we learn from your work may help other school children. Are you willing to help me with this project? (Child's response.) Great! I think you will like this game, but if you want to stop at any time just let me know. You can just say "I don't want to play this anymore." Okay?

Response should be look, listen, and then talk. Remind or correct the child if his/her answer is "I don't know" or incorrect.

E: Since this is a pretend game, do you know how to pretend/ play like you are someone else?

C: Response.
If no, one or more of the following models will be presented. Ask the child to pretend he/she is a monster. Ask the child what kind of noise he/she would make. Other models include asking the child what Santa Claus says or what the child would say to the examiner if she had a piece of candy he/she wanted. If the child is unable to pretend, the session will be discontinued. The child will be thanked and returned to the classroom.

E: I'm glad you know how to pretend so you can play this game. Remember, no one will grade you, and we won't tell your family or teacher anything about what you say or do during this exercise. Just do your best. Let's get started! Remember to turn on your eyes and ears, so you can look at each of the pictures carefully and listen to me closely.

Let's practice!

Open the Picture Manual.

E: (Demo A) Here is a picture of two boys playing. They are good friends. They do a lot of things together. They like to talk to each other. This is Mike. (Point to dark-haired boy). This is Ben. (Point to the other boy). Mike was playing at Ben's house. It was time for dinner. Mike had to go home. This is what I think Mike said to Ben, "Bye, Ben. See you tomorrow."

Turn to Demo B.

E: This is Debbie. (Point). This is Mrs. Brown (point), the next door neighbor. Debbie was visiting Mrs. Brown. It was time for lunch. Debbie has to go home. This is what I think Debbie said to Mrs. Brown. "Goodbye, Mrs. Brown. I'll see you soon."

Turn to Trial A.

E: Here are some more pictures of people doing things. They talk to each other. They ask questions. They tell others about how they feel. They tell others what they want. Remember that for each picture you are going to look, listen, and then talk.

Begin with Trial A.

E: This is the first picture. This is Debbie. (Point). This is Mike. (Point). Debbie and Mike were playing at Mike's house. Debbie saw that Mike had a new toy. She didn't know what it was called. Debbie wanted to ask Mike. What did Debbie say to Mike?

C: Response. If response is incorrect, repeat the item. If the answer is incorrect after the repetition, the examiner formulates the response.
E: This is Ben. This is Mrs. Brown. (Point to the characters). Ben and Mrs. Brown were shopping. Ben saw a new game. He didn't know what it was called. He wanted to ask Mrs. Brown. What did Ben say to Mrs. Brown?

C: Response. Repeat procedures used for Trial A. Modeling or prompting of speech acts is not continued after these trials.

E: Here are some more pictures of people. Look at each one and listen carefully (point to ears) to what I say about each picture. Then I will ask you to talk for one of the people in the picture. You will tell me what the person said.

II. The examiner will use the following procedures during the course of test administration:

- Maintain a pleasant facial expression.

- Give general reinforcement by means of these example comments:

  "You're working hard."
  "Good work!"
  "I can see that you're looking at the pictures carefully."
  "You're listening well!"
  "[Child's name], I'm proud of the hard work you're doing!"
  "You did turn on your eyes and ears, didn't you!"

- Each item will be read at a normal rate with normal intonation.

III. The examiner will use the following procedures at the end of test administration.

- If the child wishes to stop during the testing, the examiner will maintain a neutral expression, close the booklet, and say, "All right, thank you for helping me. Let's go back to your classroom."

- When the testing is completed, the examiner will say, "You've done a terrific job! Thank you for helping me. Let's go back to your classroom."
IV. These behavior management guidelines will be followed during test administration:

- Prompts will include phrases such as:

  "Remember to stay in your seat so that you can do a good job."
  "Keep listening carefully!"
  "Please wait until I ask the question before you give an answer."
  "Please keep your eyes and ears turned on!"
  "Please don't touch the tape recorder."

- If the child is unable to be conditioned to take the test, administration will be discontinued.

V. Errors noted on the 1987 test version were as follows:

- C-5B contains a typographic error. The character is Mr. Brown, not Mrs. Brown as is written on the Record Form.

- In the Picture Manual narrative stimuli, Ms. King is the name of the pictured character. On the Record Form, she is referred to as Mrs. King. During testing, she will be called Mrs. King.

VI. Further test administration guidelines will be followed as stated in the Let's Talk Inventory for Children Manual. Narratives for pictured items are included in the manual.
Appendix H

Example of Scoring the Formulation Items

This example of scoring is obtained from the *Let's Talk Inventory for Children* (Bray & Wiig, 1987, pp. 55-61).

C-1B Asking to Change Action (adult)

Stimulus Item:

"Jane was helping her father buy food. Mrs. Pike's cart was in the way. Jane needed to get by. What did Jane say to Mrs. Pike?"

Suggested Scoring:

(1) Mrs. Pike, your cart is in the way. Move, please. 'Scuse me. You're right in the way. Move a little bit. Can you move your cart? I gotta get by. Please, move your cart.

(1-F) Excuse me (Mrs. Pike). Excuse me, could I/we get by? Could you please move to the side? May/Can I get by, please? Please, could/can you move your cart? Will you please move your cart?

(0) I'll go the other way. Hi, Mrs. Pike. I'll push by.

Rule: To earn 1 point, the response must request that cart be moved or that it is in the way or indicate need to get by. A request to move using a question form and devices such as modals (*would/could*) and modifiers, *please or Excuse me* makes the speech act formal. "Excuse me" is a formal request to move or change action.
Appendix I

Intraexaminer Reliability Training Procedures

Familiarity With Test

The investigator familiarized herself with the *Let's Talk Inventory for Children* (LTI-C; Bray & Wiig, 1987) by reviewing the examiner’s manual, the pictorial and narrative stimuli, and the test forms. Special attention was accorded to the following areas in the examiner’s manual: the discussion of formality (pp. 39-41), the discussion of intents (pp. 14-16), and the examples of scoring (pp. 55-71). After becoming familiar with the test materials, the investigator viewed two videorecorded administrations of the LTI-C, following along with a test form and manual to become familiar with the administration of the test. The videotapes used for this purpose came from those recorded during the pilot study for the larger project from which the current data are taken.

**Trial Recording and Scoring**

From the data excluded due to subjects’ being the inappropriate race for the school in question, the investigator randomly selected 4 subjects: 2 African-American and 2 European-American. The verbal responses of the selected subjects were scored by the investigator.
After scoring the excluded subjects, the investigator then practiced recording the responses of five subjects using the audiocassettes from the sessions. The investigator compared her transcription of subject responses with those of the GRAs.

After practicing, the investigator selected three subjects and scored the responses of those subjects following the specified guidelines. Two days after scoring these subjects, the investigator, without access to the original scores, rescored the responses of the selected subjects. The investigator then calculated intraexaminer reliability.
Appendix J

Interexaminer Reliability Training Procedures

The speech-language pathologist (SLP) selected to perform interexaminer reliability attended a training session lasting approximately one and a half hours. The investigator and SLP reviewed the *Let's Talk Inventory for Children* examiner’s manual (Bray & Wiig, 1987), and then the SLP was asked to read the features of formal register (pp. 39-40). The investigator and SLP scored together the responses of 4 subjects (2 African-American, 2 European-American) whose data were excluded from data analysis.

Using a test form previously filled with responses from a subject, the SLP scored the intent and formality of the responses. She was allowed to use the handouts provided during the training session to aid in scoring. The SLP then obtained a Total Intent Score and a Formality Score. In order to help the SLP assess her performance, the investigator provided her with a scored copy of the test form she assessed. If there were any discrepancies in scoring, these were discussed. The SLP was required to score the responses of three subjects whose responses were previously scored by the investigator. If interexaminer reliability was less than 93%, the SLP continued scoring until she and the investigator obtained an average of 93% agreement for three consecutively scored tests.
**Appendix K**

**Individual Subject Scores by Group**

**School A (AAE Speakers)**

<table>
<thead>
<tr>
<th>Subj. Age</th>
<th>Intent</th>
<th>Formality</th>
<th>Ritualizing</th>
<th>Informing</th>
<th>Controlling</th>
<th>Feeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>20</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>20</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>24</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>15</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>19</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>18</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>13</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>9*</td>
<td>5*</td>
<td>6*</td>
<td>1*</td>
<td>1*</td>
<td>1*</td>
<td>4*</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>16</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>11</td>
<td>5</td>
<td>14</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>12*</td>
<td>5*</td>
<td>4*</td>
<td>0*</td>
<td>0*</td>
<td>1*</td>
<td>2*</td>
</tr>
<tr>
<td>13</td>
<td>5</td>
<td>17</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>14</td>
<td>5</td>
<td>20</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>15</td>
<td>5</td>
<td>25</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>1</td>
<td>6</td>
<td>22</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>16</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>4*</td>
<td>6*</td>
<td>6*</td>
<td>0*</td>
<td>3*</td>
<td>2*</td>
<td>1*</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>27</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>6*</td>
<td>6*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td>12</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>22</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>6</td>
<td>24</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>10</td>
<td>6</td>
<td>23</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>11</td>
<td>6</td>
<td>19</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>12</td>
<td>6</td>
<td>26</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>6</td>
<td>15</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>14</td>
<td>6</td>
<td>14</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>15</td>
<td>6</td>
<td>18</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>29</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>29</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>29</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>11</td>
</tr>
</tbody>
</table>
### School B (APPE Speakers)

<table>
<thead>
<tr>
<th>Subj. Age</th>
<th>Intent</th>
<th>Formality</th>
<th>Ritualizing</th>
<th>Informing</th>
<th>Controlling</th>
<th>Feeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>20</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>24</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>12</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>24</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>5*</td>
<td>5*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>25</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>28</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>26</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>22</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>16</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>11</td>
<td>5</td>
<td>21</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>12*</td>
<td>5*</td>
<td>3*</td>
<td>0*</td>
<td>0*</td>
<td>0*</td>
<td>3*</td>
</tr>
<tr>
<td>13</td>
<td>5</td>
<td>16</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>14</td>
<td>5</td>
<td>15</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>15</td>
<td>5</td>
<td>18</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>1</td>
<td>6</td>
<td>22</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>31</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>23</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>22</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Subj. Age</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subj. Age</td>
<td>Intent</td>
<td>Formality</td>
<td>Ritualizing</td>
<td>Informing</td>
<td>Controlling</td>
<td>Feeling</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>25</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>25</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>26</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>6</td>
<td>24</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>6</td>
<td>21</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>11</td>
<td>6</td>
<td>28</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>6</td>
<td>20</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>13</td>
<td>6</td>
<td>21</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>14</td>
<td>6</td>
<td>24</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>15</td>
<td>6</td>
<td>24</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>26</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>24</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>29</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>30</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>26</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>28</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>22</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>7</td>
<td>24</td>
<td>3</td>
<td>0</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>9</td>
<td>7</td>
<td>22</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
<td>27</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>7</td>
<td>27</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>12</td>
<td>7</td>
<td>23</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>13</td>
<td>7</td>
<td>30</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>14</td>
<td>7</td>
<td>24</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>15</td>
<td>7</td>
<td>26</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>12</td>
</tr>
</tbody>
</table>

* indicates outlying subjects whose data were excluded from statistical analysis.
Appendix L

Distribution of Responses to Formality Items by Subject and Age Groups

<table>
<thead>
<tr>
<th>Communicative Intent</th>
<th>Item</th>
<th>AAE</th>
<th>APPE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Controlling</td>
<td>Asking to change action</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Reminding</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Giving warning</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Delaying action</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Negotiating</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Feeling</td>
<td>Disagreeing</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Disapproving</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Apologizing</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Approving</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Congratulating</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

**Note:** Maximum possible number for each age group is 15.
Vita

Mary Elizabeth Cady was born in Atlanta, Georgia on November 1, 1973. She moved with her parents, John and Sue Simpson, to Bradley County, Tennessee, in 1975. She attended schools in the public school system of Bradley County, where she graduated from Bradley Central High School in May 1992. In Fall of 1992, she entered the University of Tennessee, Knoxville (UTK). As an undergraduate, she was a recipient of the Andrew D. Holt scholarship, the Ned McWherter scholarship, and the Carlos and Winnie Simpson scholarship. Mrs. Cady was a member of the University Honors Program at UTK and completed a Senior Honors Project entitled “The Effectiveness of Training Parents in Problem-Solving Techniques in Intervention with Language-Impaired Children.” In May 1995, she received the Bachelor of Arts in Speech Pathology, graduating Magna Cum Laude.

Mrs. Cady entered the Master’s program in Speech Pathology at the University of Tennessee, Knoxville in August of 1995. As a graduate student, she was a recipient of the Sol Adler Memorial Scholarship and the Carlos and Winnie Simpson scholarship. The Master of Arts degree was received May 1997. Mrs. Cady will begin a Clinical Fellowship position following graduation.