

1993

The study of idioms and its application to ESL and intercultural communication

Yōko Itō

San Jose State University

Follow this and additional works at: https://scholarworks.sjsu.edu/etd_theses

Recommended Citation

Itō, Yōko, "The study of idioms and its application to ESL and intercultural communication" (1993). *Master's Theses*. 632.

DOI: <https://doi.org/10.31979/etd.jnxy-8edr>

https://scholarworks.sjsu.edu/etd_theses/632

This Thesis is brought to you for free and open access by the Master's Theses and Graduate Research at SJSU ScholarWorks. It has been accepted for inclusion in Master's Theses by an authorized administrator of SJSU ScholarWorks. For more information, please contact scholarworks@sjsu.edu.

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

U·M·I

University Microfilms International
A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
313/761-4700 800/521-0600

Order Number 1354147

**The study of idioms and its application to ESL and intercultural
communication**

Ito, Yoko, M.A.

San Jose State University, 1993

U·M·I

300 N. Zeeb Rd.
Ann Arbor, MI 48106

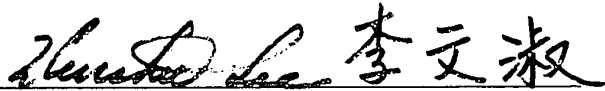
THE STUDY OF IDIOMS
AND ITS APPLICATION TO
ESL AND INTERCULTURAL COMMUNICATION

A Thesis
Presented to
The Faculty of the Department of Communication Studies
San Jose State University

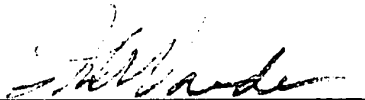
In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

By
Yoko Ito
August, 1993

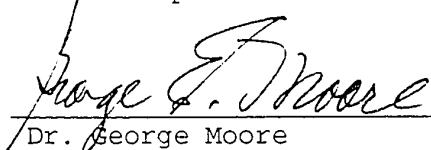
APPROVED FOR THE DEPARTMENT
OF COMMUNICATION STUDIES

 李文淑

Dr. Wen-Shu Lee

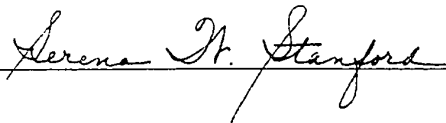


Dr. Philip Wander



Dr. George Moore

APPROVED FOR THE UNIVERSITY



ABSTRACT

THE STUDY OF IDIOMS
AND ITS APPLICATION TO
ESL AND INTERCULTURAL COMMUNICATION

By Yoko Ito

This study first explains non-native speakers' difficulty with idiom comprehension from the psycholinguistic perspective. Then it points out that the ESL literature neglects interpersonal relationships indicated by idioms. It also takes the position that one of the barriers to building a close intercultural relationship might lie in the idiom use.

Three video clips (formal, natural, and idiomatic versions) were created and shown to both native and non-native college students (N=168) to empirically explore the link between the use of idioms and perceptions of interpersonal relationships via Knapp's dimensions in an intercultural context.

The results show significant differences in comprehension and ability to use idiomatic speech style, perceived interpersonal relationships, identification of what age group of people used each speech style, and comfortableness in using idioms in selected locations between native and non-native speakers of English.

Implications of this research to ESL and communication research are discussed.

ACKNOWLEDGEMENTS

I thank Dr. Wen-Shu Lee, my advisor, who supported me to do socially meaningful research. I am grateful to you for inspiring me to pursue a degree in communication. I also thank Dr. Philip Wander and Dr. George Moore, my committee members, both of whom supported and encouraged me.

I am grateful to Michelle Bach, Mark Bach, Lisa Ives, Lisa Whitney, and Hiroko Tabuchi, for helping me to create video clips.

I am grateful to the faculty and students of the Department of Communication Studies for their cooperation.

I thank Yushi Kaneda for his encouragement and computer expertise.

I thank Rob Dewis, Marianne Neuwirth, Tasha Souza, and Laurel Joakimides, for proofreading my thesis.

I thank Jeff Carlberg and Mayumi Enoki, who have been supportive friends from the beginning.

I thank Penrods, Juels, Kevin Bariteau, and Ruby Goodnight, my American families, for their hospitality, support, and good humor.

I thank members of Pacific Neighbors of San Jose and International Friendship Association of Okayama, Japan for giving me the opportunity to stay and study in San Jose.

Finally, I thank Hajime Ito and Tatsuji Ito, my parents, for their financial support and commitment to higher education. Mom, Dad, I love you.

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	viii
CHAPTER I	1
Introduction	1
Literature Review I	5
Idiom Comprehension	5
Idiomatic Processing Model.....	6
Lexicalization.....	7
Idiom Comprehension	
Non-native Speakers' Case.....	7
Literature Review II	9
Idiom and Interpersonal Relationship.....	9
Developmental View of Interpersonal	
Relationship.....	10
Personal Idioms.....	14
Application of the Measurement of the	
Developmental View of Interpersonal	
Relationship and Personal Idioms to the	
Study.....	16
Importance of Idiom Learning to Non-	
native Speakers.....	17
Summary and Research Questions	19
CHAPTER II	22
Methods	22
Phase 1	
The Creation of Video Clips.....	23
Scripts Production.....	24
Producing and Editing Video Clips.....	25
Phase 2	
Presentation of the Video Clips and	
Survey of Responses.....	26
Operationalizing Variables.....	26

Questionnaire Construction and Face	
Validity.....	27
Questionnaire Items.....	28
Demographics.....	29
Idiom comprehension.....	29
Perceived interpersonal	
relationship.....	29
Use of idioms.....	30
Intercultural experience.....	30
Design.....	30
Subjects.....	30
Procedure.....	32
CHAPTER III.....	33
Results.....	33
Research Findings.....	33
Two-Way Analyses of Variance.....	33
One-Way Analyses of Variance.....	35
Native speakers.....	36
Non-native speakers.....	36
Significance of Mean Differences for	
Native and Non-native Speakers.....	37
Formal version.....	38
Natural version.....	38
Idiomatic version.....	39
Mean Differences for Native and Non-	
native Speakers' Idiom Use.....	41
CHAPTER IV.....	42
Discussion.....	42
Research Question 1: Comprehension.....	42
Research Question 2: Ability.....	43
Research Question 3: Perceived Interpersonal	
Relationship.....	44
Research Question 4: Generation	
Identification.....	46

Research Question 5: Use of Idioms	48
Summary	49
Recommendations to ESL	51
Implication to Communication Research	52
REFERENCES	54
APPENDIXES	61
APPENDIX A Three Scripts for the Video Clips	62
APPENDIX B Questionnaires for Native and Non-native Speakers of English	66
APPENDIX C Tables	80

LIST OF TABLES AND FIGURE

FIGURE in CHAPTER I

1.1 Developmental view of interpersonal relationship 11

TABLE in CHAPTER II

2.1 Experimental conditions 30

TABLES in CHAPTER III

3.1 Main and interaction effects between status and stimulus 34

3.1-1 Dependent variables 34

3.2 Native and non-native speakers' responses across stimuli 35

3.3 Significance of mean differences of dependent variables for native and non-native speakers 37

3.4 Results of t-tests for comfortableness in using idioms in selected locations 41

TABLES in APPENDIX C

C.1: Two-Way ANOVA 81

1.1. Comprehension 81

1.2. Ability 81

1.3. Informality 81

1.4. Efficiency 82

1.5. Flexibility 82

1.6. Smoothness 82

1.7. Spontaneity 83

1.8. Closeness 83

1.9. Female teen-agers 83

1.10. Female college students 84

1.11. Middle-aged women 84

1.12. Female senior citizens	84
C.2: One-Way ANOVA: Native Speakers	85
2.1. Perceived interpersonal relationship	85
2.2. Perceived interpersonal relationship	85
2.3. Perceived interpersonal relationship	85
2.4. Perceived interpersonal relationship	85
2.5. Perceived interpersonal relationship	86
2.6. Perceived interpersonal relationship	86
2.7. Generation identification	86
2.8. Generation identification	86
2.9. Generation identification	87
2.10. Generation identification	87
C.3 One-Way ANOVA: Non-native Speakers	88
3.1. Comprehension by speech style	88
3.2. Ability by speech style	88
3.3. Perceived interpersonal relationship	88
3.4. Generation identification	88
C.4 T-tests: Formal Version	89
4.1. Comprehension	89
4.2. Ability	89
4.3. Perceived interpersonal relationship (Informality) ...	89
4.4. Perceived interpersonal relationship (Efficiency)	89
4.5. Perceived interpersonal relationship (Flexibility) ...	89
4.6. Perceived interpersonal relationship (Smoothness)	90
4.7. Perceived interpersonal relationship (Spontaneity) ...	90

4.8. Perceived interpersonal relationship (Closeness)	90
4.9. Generation identification (Female teen-agers)	90
4.10. Generation identification (Female college students)	90
4.11. Generation identification (Middle-aged women)	91
4.12. Generation identification (Female senior citizens)	91
C.5 T-tests: Natural Version	92
5.1. Comprehension	92
5.2. Ability	92
5.3. Perceived interpersonal relationship (Informality)	92
5.4. Perceived interpersonal relationship (Efficiency)	92
5.5. Perceived interpersonal relationship (Flexibility)	92
5.6. Perceived interpersonal relationship (Smoothness)	93
5.7. Perceived interpersonal relationship (Spontaneity)	93
5.8. Perceived interpersonal relationship (Closeness)	93
5.9. Generation identification (Female teen-agers)	93
5.10. Generation identification (Female college students)	93
5.11. Generation identification (Middle-aged women)	94
5.12. Generation identification (Female senior citizens)	94
C.6 T-tests: Idiomatic Version	95
6.1. Comprehension	95
6.2. Ability	95
6.3. Perceived interpersonal relationship (Informality)	95
6.4. Perceived interpersonal relationship (Efficiency)	95
6.5. Perceived interpersonal relationship (Flexibility)	95

6.6. Perceived interpersonal relationship (Smoothness)	96
6.7. Perceived interpersonal relationship (Spontaneity) ...	96
6.8. Perceived interpersonal relationship (Closeness)	96
6.9. Generation identification (Female teen-agers)	96
6.10. Generation identification (Female college students)	96
6.11. Generation identification (Middle-aged women)	97
6.12. Generation identification (Female senior citizens)	97
C.7 T-tests: Comfortableness in Using Idioms	98
7.1 In church	98
7.2 At work	98

CHAPTER I

Introduction

Native and non-native speakers of English often experience communication breakdown when they interact with one another. "What's cooking?" "Your goose is cooked." "John kicked the bucket." "Ross Perot threw his hat in the ring." Non-native speakers are usually confused or lost in the midst of conversation when they come across such idioms.

Lynch (1988) states that native speakers who used idioms with native speakers opted to replace such items when talking to non-native speakers at lower English proficiency levels. Native speakers modify their use of idioms. For example, instead of saying "having cottoned on to their joke," native speakers use "then the man decided it was a big joke and he started laughing" for non-native speakers.

Lynch also points out that it is not uncommon to find native speakers who talk to non-native speakers as if non-native speakers were on a different intellectual plane, not simply linguistically disadvantaged.

These examples allude to the distant relationship between native and non-native speakers of English related to the use and avoidance of idioms. In other words, according to Knapp (1984), their message exchange is difficult, the flow of the conversation is awkward, and the conversation is not spontaneous.

The researcher's daily encounter of intercultural communication supports Lynch's ideas. The researcher would like to share her own experience which inspired this study.

Like many foreign students in American universities, the Japanese researcher has been studying at San Jose State University for three years while living with several American families. The first family had two high school students. They were the researcher's American brother and sister. The researcher was often lost in the midst of conversation with them, feeling left out and stupid. This experience was attributed to the lack of English ability, rather than to a lack of culturally specific knowledge about the conversation. Having realized they used idioms, including teen-age slang, the researcher tried to ask for meanings of unfamiliar idioms. Sometimes they were good teachers and enjoyed teaching idioms. However, the researcher's intention of reaching out for knowledge was occasionally discouraged by their answers, such as, "Never mind. It's just a silly American expression." Limited recognition of idioms and inability to use them kept the researcher behind a thick wall of isolation among Americans.

The stage of active learning of idioms arrived when the researcher had another American brother. He was twenty-one years old and used many idioms. He liked to talk and share stories. Therefore, the researcher felt comfortable asking him questions in the midst of conversation. Whenever

unfamiliar idioms popped up, the conversation was stopped and he provided meanings of the idioms. Although he had to scratch his head sometimes in order to find the best explanation, he was always willing to explain meanings of various idioms. The idiom vocabulary gradually improved and the researcher started to use some idioms. Then the feelings of being at home, of joy, and of happiness emerged and they began knocking down the thick wall of isolation in American culture.

The researcher experienced a change in interpersonal relationships through the use of idioms. English classes in Japan did not teach idioms. Therefore, formal English was the only option for the researcher when she first came to the United States. Americans were likely to talk back in a formal manner. Consequently, interpersonal relationships were rigid, distant and awkward. The conversation consumed much energy on both sides. After the researcher started using idioms, however, American friends became more relaxed and sometimes swore in front of the researcher. That was phenomenal! The use of idioms played a role of breaking the ice. Interpersonal relationships became more flexible, close, and smooth. There was more laughter and things to share in the relationships. The use of idioms brought happier interpersonal and intercultural relationships.

There are many non-native speakers of English who study hard at American universities without experiencing close

intercultural relationships. They may feel that they are stuck in their English language acquisition. Even advanced non-native speakers of English are not aware that they are stuck or why. They are not able to strike up a conversation with native speakers naturally. By the same token, American students do not know why it is awkward to talk with foreign students. They do not realize the interpersonal relationships indicated by the use of idioms.

An intercultural communication class and a seminar dealing with humor and idiom research at San Jose State University conducted by Dr. Lee, marked the beginning of a systematic dialogical exploration of idioms. Lee's (1992) qualitative exploration of how to explain the meanings of idioms interculturally helped the researcher to enrich her idiom vocabulary and daily conversation with Americans. It also initiated the present study which empirically attempts to explore the link between the use of idioms and perceptions of interpersonal relationship via Knapp's (1984) dimensions in an intercultural context.

This study intends to show that one of the barriers to building close intercultural relationships between native and non-native speakers of English lies in problems related to idioms used in conversation. It provides three scripts which contain the same message using three different speech styles; formal, natural, and idiomatic ones. It asks if native and non-native speakers of English can differentiate and detect

the nature of interpersonal relationship according to the speech style. In addition, this study asks if native and non-native speakers of English can comprehend and produce the three speech styles.

The remainder of this chapter reviews literature in two areas. The first literature review deals with idiom comprehension from ESL (English as a Second Language) and the perspectives of psycholinguistics. The second literature review explores idiom and interpersonal relationships from ESL and the viewpoints of interpersonal communication. At the end of this chapter, the research questions that guide this project will be presented.

Literature Review I

Idiom Comprehension

This section introduces idiomatic processing models and lexicalization in order to illustrate how native speakers comprehend idioms. In addition, non-native speakers' difficulty in idiom comprehension will be described based on the inapplicability of idiom processing models and lexicalization to non-native speakers.

As Silc (1990) states, ESL literature recognizes that idiomatic phrases are the most difficult part of any language to learn because the meaning behind each word usually has nothing to do with the words spoken. According to Celona (1983), non-native speakers mention idioms as a hindrance in their communication.

Lee (1992) reviewed psycholinguistic literature to examine how people process idioms. She reported three idiomatic processing models. Also, she illustrated lexicalization. The followings are the digest of her review.

Idiomatic Processing Model

Idioms, a special form of human verbal communication, have been studied by socio- and psycholinguists over the past decade (Cacciari & Jabossi, 1988; Gibbs, Nayak, & Cutting, 1989; Glass, 1983; Mueller & Gibbs, 1987; Schraw, Trathen, Reynolds, & Lapan, 1988; Schweigert & Moates, 1988).

Schweigert and Moates (1988) define idioms as common expressions used in colloquial speech with accepted, figurative meanings that differ from their present-day literal meanings. For example, the idiomatic meaning of the idiom kick the bucket is "to die," while the literal meaning is "to strike a pail with the foot" (p.281).

According to Schweigert and Moates (1988), three theoretical models have been proposed by scholars to help understand how people process idioms. The first model is called Literal-then-Figurative Processing Model. Bobrow and Bell (1973) suggest that people have an "idiom word dictionary." In other words, idioms are stored as single lexical items. This model of idiom comprehension indicates that an idiom is processed literally first; if the meaning does not match the context, it is interpreted figuratively by accessing one's "idiom word dictionary."

The second model is called Simultaneous Processing Model. Swinney and Cutler (1979) suggest that people store idioms as single lexical units. This model claims that an idiom is processed literally and figuratively at the same time.

The third model is called Figurative-then-Literal Processing Model. Gibbs (1980) suggests that the literal meaning of the idioms is of less importance in idiom comprehension because idioms have strong conventional figurative meanings. This is the opposite of the first model. An idiom is processed figuratively first, and only if the meaning is inappropriate to the context is it then interpreted literally.

Lexicalization

Schraw, Trathen, Reynolds, and Lapan (1988) claim that one has to be capable of lexicalization, which means developing wordlike units in lexical memory for idioms in order to comprehend them. In other words, it is the process by which a word or a recognizable phrase becomes easily identified as being wordlike in meaning. Idiomatic meanings develop wordlike units whereas literal meanings do not.

Idiom Comprehension: Non-native Speakers' Case

Lee states that the three models presented: Literal-then-Figurative Processing Model, Simultaneous Processing Model, Figurative-then-Literal Processing Model, deal only

with native speakers' idiom comprehension. Researchers assume that people already possess an "idiom word dictionary" or store idioms in single lexical units and neglect non-native speakers' cases.

Schraw, et al., compared native and non-native speakers' idiom processing. They discovered that non-native speakers attempt to understand idioms using a word-by-word analysis, unlike native speakers. In other words, non-native speakers have not reached the lexicalization process yet. They have to rely solely on the literal interpretation of idioms.

Lee explains this point through an example from Schraw, et al.: when attempting to paraphrase the meaning of chew the fat, one non-native speaker suggested that lifting weights helped chew fat off the body (p.421). The key here is that when non-native speakers come across an idiom, they look for its literal meaning; if it does not make sense in the given context, they get "confused" or "lost" in the conversation because they have no resort to the figurative interpretation. Thus, the idiom processing model for non-native speakers should be a Literal Processing Only Model.

Lee also illustrates the difference in native and non-native speakers' idiom comprehension. Native speakers do not have to go through literal meanings of single words when they interpret idioms because they have begun lexicalization. For instance, when a native speaker hears "hit the sack," he or

she can draw the meaning "go to bed" without analyzing the verb "hit" or the noun "sack." Non-native speakers, however, have little access to lexicalization and they are baffled when they attempt to interpret the figurative meaning. They have to rely on their Literal Processing Only Model. They might ask, "Where is the sack?" or say, "Why?" due to the literal interpretation of the idiom. One can see that inability to interpret figurative meanings of idioms impairs the prospect of close relationships because it brings communication breakdown.

Literature Review II

Idiom and Interpersonal Relationship

Knapp (1984) indicates that most messages contain information about relationship and every human communication takes place within the context of some type of relationship. The point here is that the interpersonal relationship can be identified by the exchanged message.

This section explains Knapp's developmental view of interpersonal relationships in order to have a better understanding of the link between the interpersonal relationship and the exchanged message. Next, it introduces Hopper, Knapp, and Scott's (1981) personal idioms as one of the factors of the exchanged message. It then finds a connection between the developmental view of interpersonal relationships, idioms and the present study. This section

also reinforces the importance of learning idioms from ESL literature.

Developmental View of Interpersonal Relationship

Knapp (1984) proposes a measurement for the developmental view of interpersonal relationships. The concept of the measurement is that as relationships reach for more intimacy, communication becomes broad, unique, efficient, flexible, smooth, personal, and spontaneous. The opposite of these characteristics of communication indicates distant and deteriorating relationships. The measurement determines developing and decaying relationships by analyses of conversations using bipolar adjective criteria. An explanation of the bipolar adjective criteria needs to be provided. Knapp's diagram will show the general dimensions of communication behavior in developing and decaying relationships, and thus clarify our understanding of the measurement.

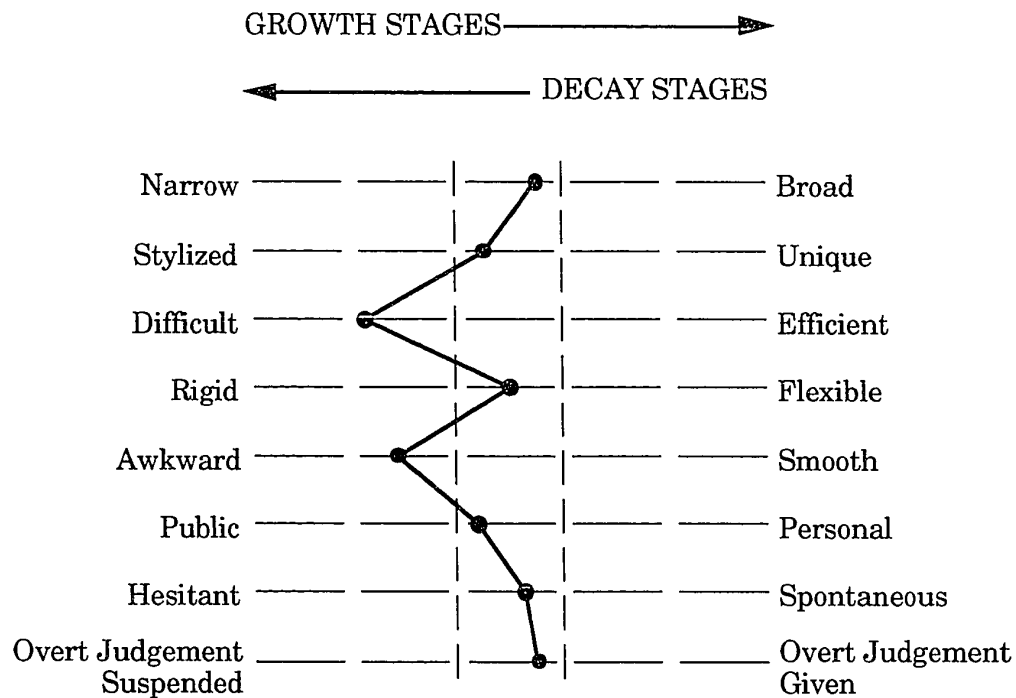


Figure 1.1 Developmental view of interpersonal relationship.

From Knapp (p. 20).

Narrow-Broad: "The amount of interaction with each category is referred to as breadth frequency. Thus, for any given situation, the number of categories opened up and the frequency of interaction within each category can be identified" (p. 14). During the growth stage of the interpersonal relationship, more topics are covered in various ways. For instance, facts, ideas, experiences, feelings, opinions, and attitudes could be exchanged with each other. On the other hand, the scope of the message exchange stagnates or decreases in a decaying relationship.

Stylized-Unique: "Uniqueness in communication simply suggests the adoption of a more idiosyncratic communication system adapted to the peculiar nature of the interacting parties" (p. 16). An example of stylized or conventional behavior is a greeting expression, "How are you?" A formal relationship may employ "How are you?" Then, as the relationship becomes closer, "How's it going?" can be a gambit. The relationship may establish unique greetings over time. Also, the return of stylized behaviors is often observed in a deteriorating interpersonal relationship.

Difficult-Efficient: "As a relationship grows and as more of the other person is revealed to us, there will be increased accuracy, speed, and efficiency in our communication" (p. 16). When the relationship becomes more intimate, less energy is required to communicate intended meanings.

Rigid-Flexible: "Flexibility simply refers to the number of different ways any given idea or feeling can be communicated" (p. 16). Close relationships have more flexibility in communication channels than distant ones.

Awkward-Smooth: "As knowledge of the person increases, predictive ability also increases, which leads to greater synchronization of interaction. The comment, 'It was all very awkward,' is most likely directed at an interaction with a stranger, new acquaintance, or a situation experiencing the strain of decay" (p. 17).

Public-Personal: "Initially, our public personality is revealed. Should the relationship move forward we will increasingly uncover more and more of our private or personal selves" (p. 17). This description can be applied to both verbal and nonverbal communication. People in decaying or distant relationships, however, try to shut off valves which may disclose personal information.

Hesitant-Spontaneous: "In close relationships, we find a communicative spontaneity--an informality, an ease of opening up oneself, a comfort in entering areas of the other person, a relationship that flows and changes direction easily" (p. 19). Partners in the new or deteriorating relationship, however, lack freedom and relaxation that may exist in the close relationship because they do not have communicative spontaneity.

Overt Judgement Suspended-Overt Judgement Given: "The closer the relationship, the greater the likelihood of freely giving and receiving positive and negative feedback" (p. 21). For example, first impressions of another person include some covert judgements. They are, however, usually unspoken until the relationship advances more.

The conversation between two people may reveal the stage of their relationship. The measurement of the developmental view of the interpersonal relationship helps us understand a link between exchanged message and interpersonal relationship.

Personal Idioms

One of the factors included in the exchanged message enabling us to determine the interpersonal relationship is background expectations between communicators. This section introduces personal idioms as background expectations from the communication literature explored by Lee (1992).

Garfinkel (1969) investigates "background expectations" in conversations among his students and their significant others. The subjects were asked to recall natural discourses in their intimate relationships, to identify the expressions that relied on shared background knowledge, and to replace the identified expressions with detailed explanations in communicating with significant others. The study suggests that if discourse partners can develop and share "short-hand communication" (messages that rely heavily on mutual background expectations), they are more likely to achieve closeness and intimacy. The idiom is a form of short-hand communication because its conventional meaning is shared by native speakers of English as the background expectation.

The connection between short-hand communication and interpersonal relationship is validated by Hopper, Knapp and Scott's (1981) and Knapp's (1984) studies on personal idioms.

Communication researchers (Hopper, et al.) report that personal idioms, such as certain words, phrases, and gestures, carry unique meanings only in the context of the

intimate relationship. They analyzed personal idioms offered by their subjects according to their function. Couples use eight different types of personal idioms to express partner nicknames, expressions of affection, labels for others outside the relationship, confrontations, requests and routines, sexual references and euphemisms, sexual invitations, and teasing insults.

Knapp (1984) also adds that intimates develop an interpersonal jargon with private symbols and meanings known only to the intimate pair. Stated differently, words and phrases have special meanings for the pair while they are used commonly to others. Personal idioms serve to make the pair a more cohesive unit, that is, to reinforce the identity of the couple as something special or unique. In addition, personal idioms are an effective substitute for more direct and explicit terminology for issues that intimates need to address and they help a couple clarify relationship norms.

According to Hopper, et al., couples perceive the act of developing and using personal idioms as having a positive effect on their relationships. Knapp states: "The expression of ideas in a 'different way'--whether it is through the use of personal idioms or some other way--is perhaps the most evident difference in speech patterns between intimates and non-intimates" (p. 227).

Hopper and his colleagues found that personal idioms usually develop in the early stage of a relationship. They

also found that when relationships sour, the meanings of personal idioms became modified and gradually extinguished. Thus, "personal idioms serve as an indicator of and a change agent for interpersonal relationships" (Lee, 1992, p. 3).

Application of the Measurement of the Developmental View of Interpersonal Relationship and Personal Idioms to the Study

The measurement of the developmental view of interpersonal relationships has been explained in order for us to grasp the link between the interpersonal relationship and the exchanged message. Knapp (1984) only deals with interpersonal relationships among native speakers of English. None of the research in intercultural communication has applied Knapp's measurement. Moreover, no measurement of the developmental view of intercultural relationship has been proposed or established yet. The present study, therefore, uses Knapp's measurements for both interpersonal and intercultural relationships. To be more specific, first, video clips of two native speakers' conversation were produced. Second, native speakers viewed the clips and were asked to identify the perceived relationship of the two native speakers using the measurement of the developmental view of relationship. The measurement was used interpersonally in this case because native speakers evaluated the native speakers' relationship. Third, non-native speakers viewed the clips and were asked to identify the perceived relationship of the two native speakers using

the same measurement. The measurement was used interculturally this time because non-native speakers evaluated the native speakers' relationship.

Personal idioms have been spelled out as a manifestation of background expectations, which are included in the exchanged message, between communicators. They can help determine the interpersonal relationship. There are two things to point out about personal idioms and the present study. First, scholars have dealt with personal idioms only as native speakers use them. This study tries to explore intercultural relationships based upon native and non-native speakers' uses of idioms. Second, there is no research on idioms in general other than Lee's (1992) qualitative exploration of how to explain the meanings of idioms interculturally. The present study opens up a new dimension of idiom research in communication. It looks at a neglected area in intercultural communication: the relationship and use of idioms by native and non-native speakers of English, using a developmental view of interpersonal relationships and personal idioms. It is the first empirical attempt to explore the link between the use of idioms and perceptions of interpersonal relationships via Knapp's dimensions in an intercultural context.

Importance of Idiom Learning to Non-native Speakers

ESL literature discusses non-native speakers' difficulty in getting the hang of idioms and the importance of teaching

idioms to non-native speakers of English. Viteli (1989) states the following:

English is very rich in idiomatic expressions. In fact, it is difficult to speak or write English without using idioms. An English native speaker is not aware that he is using an idiom; perhaps he does not even realise that an idiom which he uses is grammatically or semantically incorrect or for the foreigner hard to understand. A non-native learner has to make the correct use of idiomatic English one of his main aims, and the fact that some idioms are illogical or grammatically incorrect causes him difficulty. (p. 2)

Batt (1988) states that idioms could be substituted for phrases which do not contain them. It takes non-native speakers a long time to acquire and verbalize idioms while they have no problems with English without them. Some non-native speakers never develop the courage to use idioms orally.

Radin (1985) reports that non-native speakers at the high-intermediate or advanced levels often get frustrated because they feel they are not making tangible progress or not learning anything. Their English may be grammatically correct but it is hardly idiomatic.

ESL literature recognizes non-native speakers' problems with idioms as noted above. This motivates English teachers

to teach more idioms to non-native speakers. One of the purposes of teaching idioms, according to Radin, is that idioms make non-native speakers sound more native-like and more part of the cultural milieu. Although these are good points to make, something important is neglected in ESL literature. That is, there is no mention about the link between idioms and the interpersonal relationship. The present study tries to support the importance of idiom learning in light of producing happier and better intercultural relationships by way of exploring idioms' role as an indicator of and a change agent in interpersonal relationships.

Summary and Research Questions

Literature Review I has illustrated how native speakers comprehend idioms through idiomatic processing models and lexicalization. Also, it has spelled out why non-native speakers fail to comprehend idioms based on the inapplicability of idiom processing models and lexicalization to them.

Literature Review II has explained the measurement of a developmental view of interpersonal relationship for a better grip on the link between interpersonal relationship and exchanged message. It introduces personal idioms as one of the elements in the exchanged message. It then provides guidance for the application of the measurement of the developmental view of interpersonal relationship and personal

idioms to the present study. Finally, it reinforces the importance of learning idioms.

Besides trying to apply these points to communication research, this study hopes to facilitate closer and happier intercultural relationships through the use of idioms.

To this end, native speakers of English created an idiomatic script for college students who were both native and non-native speakers of English. In order to compare the idiom comprehension of those who are native and those who are not, native speakers also created formal and natural scripts for the same audience.

Three video clips were presented to college students, both native and non-native speakers of English, to measure their comprehension of the messages and perceived relationship of the communication partners in the scripts. Intercultural experience and use of idioms of the audience was also measured.

This chapter has explained non-native speakers' difficulty with idiom comprehension. It has also pointed out that the ESL literature neglected interpersonal relationships indicated by idioms. In addition, this chapter has taken the position that one of the barriers to building a close intercultural relationship between native and non-native speakers of English may lie in the use of idioms. Therefore, it explores the following research questions:

- RQ1: Will non-native speakers comprehend the conversation less than native speakers regarding each speech style?
- RQ2: Will non-native speakers be able to use each speech style less than native speakers?
- RQ3: Will non-native speakers perceive interpersonal relationships differently from native speakers?
- RQ4: Will non-native speakers identify what age group of people uses each speech style differently from native speakers?
- RQ5: Will non-native speakers feel differently from native speakers in using idioms?

The research design and methods used to investigate these research questions are presented in the following chapter.

CHAPTER II

Methods

Chapter I argued for non-native speakers' difficulty in idiom comprehension. It also argued that relationships indicated by the idiom were neglected in ESL so that non-native speakers might have a different perception regarding the same relationship.

Given the literature reviewed and research questions raised in Chapter I, this project proceeded in two phases: (1) the creation of three video clips of native speakers' dialogues that might be responded to with differing degrees of comprehension and perceived relationship, and (2) a survey to measure the native and non-native speakers' responses to these dialogues in terms of comprehension, perceived relationship, and use of idioms.

The first phase of the project was to create a video clip of a dialogue between two female college students who were native speakers of English. It was produced by native speakers for both native and non-native speakers who were college students. To investigate difference in comprehension, perceived relationship, and the use of idioms, three versions were produced; formal, natural, and idiomatic. Gumperz (1970) has pointed out that the ability to select in terms of the formality of the appropriate style of speaking in the context of a particular interaction is very important. Three speech styles, therefore, were produced. To answer

research questions, a conversational style was used in the scripts. An American couple cooperated to make natural, dialogical scripts. Also, two female graduate students were recruited to act out roles for the video production.

The second phase of this project involved measuring idiom comprehension, perceived relationship, use of idioms, and intercultural experience of college students who were either native or non-native speakers of English through a questionnaire. There are three reasons why college students were targeted in this study. First, a specific speech community was chosen. Gumperz (1970) states that verbal interaction is a social process in which spoken language is selected according to socially recognized norms and expectations. This concept is called "speech community," meaning any human aggregate characterized by regular and frequent interaction by means of a shared body of verbal signs and set off from similar aggregates by significant differences in language use. Individuals, therefore, are accepted as members of the speech community to the extent of their language use. Second, the target was narrowed down to avoid overgeneralization of the result. Third, this study hopes to lead foreign students to a happier campus life in America.

Phase 1: The Creation of Video Clips

Since the researcher is a non-native speaker of English, she needed assistance from native speakers for the video

production process. There were two stages taken for the process which need to be addressed here. The first stage was scripts production. The second stage was producing and editing video clips.

Scripts Production

A young American couple agreed to create three scripts for this project after being informed of the purpose of this study. In their twenties, just after graduation from university, they were familiar with the way college students talk and can relate to the topics discussed among close friends on campus. The couple was willing to devote one evening for the project with the researcher. The constraints to the scripts were (1) there had to be three versions containing the same information with different speech styles: formal, natural, and idiomatic version; (2) the topic in the conversation had to be typical for contemporary close friends; and (3) each conversation was to be limited to one minute. The couple came up with three scripts that met these constraints after discussion with each other. Each script began with two female students greeting each other in the classroom. They discuss what they want to do after class and decide to go shopping. They have a little quarrel but reconcile soon afterwards. Then they separate. The researcher asked several graduate students in Speech Communication to proofread the scripts. Some suggestions and

comments were taken. Final versions of the scripts were completed after some minor changes were made.

Producing and Editing Video Clips

After a considerable search, two graduate students whose schedules did not conflict with each other were found. Both had just graduated from college and are majoring in Speech Communication. Their willingness and cheerful personalities were perfect for the role. They were assigned to memorize scripts and act out their own parts. They were told to dress as typical American college students. The only instruction for the acting was to be natural according to each speech style.

The two American students, an assistant who was a fellow graduate student, and the researcher got together in an empty classroom one afternoon to shoot the video clips. First, the two actresses were given time to rehearse until they felt comfortable acting in front of a video camera. Second, they acted out the formal version, several times. Then they did the natural version, followed by the idiomatic version several times. The video camera was running the whole time so that everything would be videotaped. The assistant paid attention to the sound and the lines of scripts. After about 45 minutes of this shooting session, the researcher and the actresses reviewed the videotape and agreed that there would be no better acting than had already been videotaped.

Therefore, the researcher has chosen the best ones out of those taped.

After completing the videotaping for the three versions, the researcher edited the shots. The length of each version was approximately 50 seconds. The scripts for the video clips were transcribed in Appendix A.

Phase 2: Presentation of the Video Clips and Survey of Responses

Operationalizing Variables

There were two independent variables (stimulus and status) and five groups of dependent variables (comprehension, ability, perceived relationships from Knapp's measurement, generation identification, and comfortableness in using idioms). The first independent variable, the stimulus was divided into three treatment levels: formal version, natural version, and idiomatic version. The three versions contained the same content (conversation between two female college students). The formal version used polite English which non-native speakers usually learn at school. The natural version used colloquialisms commonly spoken by college students. The idiomatic version consisted of idioms shared by college friends.

The common theme of the three video clips was college students talking about a plan for shopping after class. It was chosen because it is often discussed among female college

friends. In other words, the message was natural and familiar.

The second independent variable, the status, was divided into two treatment levels: native speakers of English and non-native speakers of English. Both treatment levels were restricted to college students because the study needed to be focused on a specific speech community which shares idioms to avoid overgeneralizing the results.

The seventeen dependent variables (comprehension, ability, informality, efficiency, flexibility, smoothness, spontaneity, closeness, female teen-agers, female college students, middle-aged women, female senior citizens, home, church, work, classroom, bar) were measured in terms of a paper and pencil questionnaire, which will be discussed in the questionnaire construction section.

Other related dependent variables and open-ended questions were included in the questionnaire. They were not analyzed due to the fact that they were beyond the scope of this study and for future research.

Questionnaire Construction and Face Validity

Survey research was conducted to elicit responses from college students who are native and non-native speakers of English. A measurement instrument was constructed carefully after consultations with communication scholars and fellow graduate students to insure face validity. Also, 17 natives and 3 non-natives enrolled in a communication class

participated in the pretest and had discussion with the researcher afterwards. The discussion focused on the wording of the items to assure that the questionnaire was comprehensible and natural to the subjects. The discussion with them was very helpful because the researcher was made to realize that some technical terms used in the original questionnaire served to confuse the respondents. Their comments and suggestions were incorporated to revise the questionnaire. Particularly, bipolar adjectives used in Knapp's measurement of the developmental view of interpersonal relationships were paraphrased. For example, "The conversation is stylized," was changed to "The conversation is formal," and "The message exchange is difficult," was changed to "The message exchange is energy consuming." Also, students were confused by the meaning of "speech style." The questionnaire, therefore, begins with a definition of speech style: "speech style means the words and phrases used by the two actresses."

Questionnaire Items

This questionnaire consists of four parts. The first part elicits demographic information about college students who are native and non-native speakers of English. The second part collects data regarding their idiom comprehension. The third part measures their perceived interpersonal relationship. The fourth part explores the

subjects' use of idioms and their intercultural experience (see Appendix B).

Demographics. Native speakers were asked to identify their age, major, and ethnic background. Non-native speakers were asked to identify their age, major, native language, ethnic background, the length of stay in America, and years of studying English. In addition, non-native speakers were asked to describe how they were taught English, and problems they had in communicating with Americans.

Idiom comprehension. The subjects were asked if they understood the conversation. They were also asked to paraphrase idiomatic expressions.

Perceived interpersonal relationship. Knapp's measurement scale was used to elicit native and non-native speakers' perceptions regarding the interpersonal relationship. Due to the nature of video clips designed by the researcher, four irrelevant adjectives (narrow, broad, public, personal) were deleted. Besides paraphrasing originally used adjectives, some statements were added by the researcher herself to measure subjects' perceptions regarding speech styles. Each of the statements was followed by a seven-point Likert-type scale, seeking the subjects' response from "strongly disagree" to "strongly agree." Subjects were also asked to identify who uses the speech style used in the video clip.

Use of idioms. In this segment, subjects were asked to respond about their ability to produce the speech style, their likelihood of using the speech style with friends, and their preference in engaging in the conversation. Each statement was measured by a seven-point Likert-scale ranging from "strongly disagree" to "strongly agree." Subjects were also asked whether or not they felt comfortable in using idiomatic expressions at locations such as home, church, work, classroom, and bar.

Intercultural experience. Items on the questionnaire asked subjects to respond to their intercultural experiences and their choice of the speech style in intercultural situations. Subjects were also asked to describe their intercultural casual friends.

Design

The two independent variables produce a 2 x 3 factorial design. Table 2.1 shows six experimental conditions.

Cell One native x formal	Cell Two native x natural	Cell Three native x idiom
Cell Four non-native x formal	Cell Five non-native x natural	Cell Six non-native x idiom

Table 2.1 Experimental conditions.

Subjects

To measure responses to the three video clips, 206 undergraduate students who were enrolled in communication

classes at San Jose State University were shown the video clips and asked to complete the questionnaire (93 native speakers, 113 non-native speakers). Subjects who did not respond appropriately were eliminated from analyses. Also, non-native speakers who have stayed in the United States for over 15 years were deleted from the data. In total, 168 subjects remained for data analyses, resulting in 28 cases in each condition.

Cell one had 14 males and 14 females. Cell two had 5 males and 23 females. Cell three had 9 males and 19 females. The mean age of native speakers was 25.5. There were 42 (50%) Whites, 9 (10.8%) Asians, 5 (6%) African-Americans, 5 (6%) Hispanics and 23 (27.2%) other ethnic backgrounds among native speakers.

Cell four had 14 males and 14 females. Cell five had 14 males and 14 females. Cell six had 15 males and 13 females. The mean age of non-native speakers was 22.5. There were 63 (75.1%) Asians, 4 (4.8%) Whites, 2 (2.4%) Hispanics and 15 (17.7%) other ethnic backgrounds among non-native speakers. There were 30 (35.8%) Chinese, 25 (29.8%) Vietnamese, 4 (4.8%) Tagalog, 3 (3.6%) Arabic, 3 (3.6%) Burmese, 3 (3.6%) Cambodian, 2 (2.4%) Spanish and 14 (16.8%) other language speaking students. The mean length of their stay in the United States was roughly 7 years. The mean length of their English study was approaching 10 years.

Procedure

The researcher arranged to collect the data during regularly scheduled meetings of the participants. Before the questionnaire survey, the researcher explained that the purpose of the study was to explore the link between the use of idioms and intercultural relationship, provided instructions for responding to the scale items, and distributed the questionnaire. Subjects were assigned to one of the conditions according to their native language. They were exposed to the message by video clips. Each session lasted approximately 30 minutes. At the end of each session, the researcher collected the questionnaires and placed them in separate containers according to their language status and the version of the video clips. The researcher thanked the subjects for their participation.

The statistical analyses of the data are presented in the following chapter.

CHAPTER III

Results

The data were analyzed using an SPSS/PC+ program (version 4.0). First, 2-way analyses of variance were performed to explore the main effects and interaction effects (stimulus by status) on four sets of dependent variables (comprehension, ability, perceived interpersonal relationships, generation identification). Second, one-way analyses of variance and t-tests were further conducted to refine our understanding of interaction effects generated from two-way ANOVA. Then, t-tests were conducted on items related to the use of idioms of both native and non-native speakers of English.

Research Findings

The results of two-way ANOVA, one-way ANOVA, and t-tests are given in Tables 3.1 to 3.3. Results that are boldfaced reach the .05 significance and those underlined reach the .01 significance. The abbreviation of 12 dependent variables is provided in Table 3.1-1.

Two-Way Analyses of Variance

The two independent variables were speaking status (native vs. non-native) and stimulus (formal, natural, and idiomatic versions). Two-way ANOVA (2 x 3) were conducted on 12 dependent variables to obtain main and interaction effects between status and stimulus. Results are summarized in Table 3.1.

	Comp	Abl	Rel1	Rel2	Rel3	Rel4	Rel5	Rel6	Gen1	Gen2	Gen3	Gen4
Main Effects	<u>.009</u>	<u><.001</u>	<u><.001</u>	<u>.010</u>	<u><.001</u>	<u>.007</u>	<u><.001</u>	<u><.001</u>	<u><.001</u>	<u>.048</u>	<u><.001</u>	<u><.001</u>
Stimulus	.151	<u>.004</u>	<u><.001</u>	<u>.018</u>	<u><.001</u>	<u>.002</u>	<u><.001</u>	<u><.001</u>	<u><.001</u>	<u>.030</u>	<u><.001</u>	<u><.001</u>
Status	<u>.005</u>	<u><.001</u>	.185	<u>.040</u>	.055	.879	<u>.034</u>	<u>.023</u>	.113	.344	<u>.005</u>	<u>.006</u>
Interactions	<u>.005</u>	.129	<u><.001</u>	<u><.001</u>	<u>.006</u>	.089	<u>.044</u>	<u>.036</u>	<u>.032</u>	.101	.148	.011
Explained	<u>.001</u>	<u><.001</u>	<u><.001</u>	<u><.001</u>	<u><.001</u>	<u>.005</u>	<u><.001</u>	<u><.001</u>	<u><.001</u>	<u>.030</u>	<u><.001</u>	<u><.001</u>

Table 3.1 Main and interaction effects between status and stimulus.

Comp	Comprehension
Abl	Ability
Rel1	Informality
Rel2	Efficiency
Rel3	Flexibility
Rel4	Smoothness
Rel5	Spontaneity
Rel6	Closeness
Gen1	Female teen-agers
Gen2	Female college students
Gen3	Middle-aged women
Gen4	Female senior citizens

Table 3.1-1 Dependent variables.

Status ($F(1,160)=8.031$, $p=.005$) rather than stimulus showed significant main effect on comprehension. Two-way interaction effect was also found for comprehension ($F(2,160)=5.559$, $p=.005$). See Table C.1.1 in Appendix C.

A significant interaction for ability was not obtained ($F(2,160)=2.077$, $p=.129$) even though there were significant main effects for both stimulus and status ($p=.004$, $p<.001$) (see Table C.1.2).

In terms of perceived relationships, informality ($F(2,160)=10.287$, $p<.001$), efficiency ($F(2,160)=8.636$, $p<.001$), flexibility ($F(2,160)=5.203$, $p=.006$), and spontaneity ($F(2,161)=3.186$, $p=.044$) reached significant

interaction effects. Both stimulus and status contributed to the result except informality. Informality showed the significance in stimulus ($p < .001$), but not in status ($p = .185$). See Tables C.1.3 to C.1.8.

Regarding generation identifications, female teen-agers ($F(2,161) = 3.517$, $p = .032$) and female senior citizens ($F(2,161) = 4.685$, $p = .011$) obtained significant interaction effects. There was a significance in female teen-agers in stimulus ($p < .001$) but not in status ($p = .113$). Both stimulus and status contributed to female senior citizens ($p < .001$, $p = .006$). See Tables C.1.9 to C.1.12.

One-Way Analyses of Variance

One-way ANOVA were conducted to further explore interaction effects obtained in the preceding two-way ANOVA. Status was held constant in this section. The following results reflect native and non-native speakers' responses across three stimulus conditions respectively. Schematic results are given in Table 3.2.

		Comp	Abl	Rel1	Rel2	Rel3	Rel4	Rel5	Rel6	Gen1	Gen2	Gen3	Gen4
Native	Formal	6.18	6.04	3.71	2.50	2.82	2.57	3.57	4.11	3.57	3.57	3.39	3.11
	Natural	6.07	6.11	6.25	4.57	4.82	4.50	5.54	5.46	5.93	4.96	2.14	1.18
	Idiomatic	6.46	5.64	6.89	4.07	5.32	3.64	5.79	5.50	6.04	4.64	1.89	1.18
	Sig. of F	.493	.442	<.001	<.001	<.001	<.001	<.001	.001	<.001	.004	<.001	<.001
Non-Native	Formal	6.23	5.46	5.11	4.37	3.41	3.48	3.96	3.89	4.07	4.15	3.52	2.93
	Natural	5.82	4.71	5.18	3.79	4.14	3.96	4.54	4.04	5.25	4.43	3.39	2.75
	Idiomatic	4.93	3.93	5.48	4.44	4.00	3.41	4.74	5.37	4.89	3.89	2.59	1.71
	Sig. of F	.003	.002	.764	.319	.216	.486	.306	.010	.055	.543	.083	.023

Table 3.2 Native and non-native speakers' responses across stimuli.

Native speakers

There was no significance in comprehension ($F(2,81)=.714$, $p=.493$) and ability ($F(2,81)=.824$, $p=.442$) for stimulus. Stated differently, native speakers comprehended each conversation equally well. Also, they were able to use each speech style equally well.

All the perceived interpersonal relationships and generation identification of the speech styles reached the significance. Native speakers were able to differentiate perceived interpersonal relationships and who used the speech style in each conversation. Mean scores of efficiency (formal=2.50, natural=4.57, idiomatic=4.07) and smoothness (formal=2.57, natural=4.50, idiomatic=3.64) showed irregularity in the perceived interpersonal relationships (see Tables C.2.1 to C.2.10). Other than that, the mean scores of idiomatic version were the highest and those of formal version were the lowest.

Non-native speakers

There was significance in comprehension and ability for stimulus. Stated differently, non-native speakers comprehended the formal version of the conversation most, the natural version of the conversation next and the idiomatic version of the conversation least. Also, they were not able to use each speech style equally well (see Tables C.3.1 and C.3.2).

Only closeness reached the significance in the perceived interpersonal relationships. Furthermore, the only age group which reached the significance was female senior citizens (see Tables C.3.3 and C.3.4). Non-native speakers were not able to differentiate perceived interpersonal relationships and who used the speech style in each conversation as accurately as native speakers were.

Significance of Mean Differences for Native and Non-native Speakers

T-tests were conducted with native and non-native speakers of English to determine if the means for comprehension, ability, perceived interpersonal relationships and generation identification were significantly different across three speech styles to supplement the findings from two-way ANOVA. Stimulus was held constant in the following analyses. Schematic results are presented in Table 3.3.

		Comp	Abl	Rel1	Rel2	Rel3	Rel4	Rel5	Rel6	Gen1	Gen2	Gen3	Gen4
Formal	Native	6.18	6.04	3.71	2.50	2.82	2.57	3.57	4.10	3.57	3.57	3.39	3.11
	Non-native	6.29	5.54	5.14	4.36	3.36	3.43	3.96	3.78	4.11	4.11	3.50	2.93
	p	.771	.187	.017	<.001	.216	.081	.453	.548	.392	.302	.829	.740
Natural	Native	6.07	6.11	6.25	4.57	4.82	4.50	5.54	5.46	5.93	4.96	2.14	1.18
	Non-native	5.82	4.71	5.18	3.79	4.14	3.96	4.54	4.04	5.25	4.43	3.39	2.75
	p	.549	.001	.021	.099	.096	.261	.029	.002	.056	.205	.002	<.001
Idiom	Native	6.46	5.64	6.89	4.07	5.32	3.64	5.78	5.50	6.03	4.64	1.89	1.18
	Non-native	4.93	3.92	5.50	4.46	4.00	3.35	4.67	5.32	4.89	3.89	2.53	1.71
	p	<.001	<.001	<.001	.386	.004	.566	.014	.670	.002	.079	.059	.066

Table 3.3 Significance of mean differences of dependent variables for native and non-native speakers.

Formal version

There was no significant difference between native and non-native speakers (6.1786 vs. 6.2857, $p=.771$) regarding the comprehension of the formal version of conversation (see Table C.4.1).

There was no significant difference between native and non-native speakers (6.0357 vs. 5.5357, $p=.187$) regarding the ability to use the formal speech style (see Table C.4.2).

In terms of the perceived interpersonal relationship in the formal speech style, informality (3.7143 vs. 5.1429, $p=.017$) and efficiency (2.5000 vs. 4.3571, $p<.001$) showed significant differences between native and non-native speakers (see Tables C.4.3 to C.4.8). Non-native speakers thought the formal speech style more informal than native speakers did. Non-native speakers thought the message was exchanged more efficiently than native speakers did.

There was no significant difference between native and non-native speakers' responses regarding the generation identification of the speech style used in the formal conversation (see Tables C.4.9 to C.4.12).

Natural version

There was no significant difference between native and non-native speakers (6.0714 vs. 5.8214, $p=.549$) over the comprehension of the natural version of the conversation (see Table C.5.1).

In terms of the ability to use the natural speech style, there was a significant difference between native and non-native speakers (6.1071 vs. 4.7143, $p=.001$) (see Table C.5.2). Non-native speakers were less able to use the natural speech style than native speakers were.

Regarding the perceived interpersonal relationships in the natural speech style, informality (6.2500 vs. 5.1786, $p=.021$), spontaneity (5.5357 vs. 4.5357, $p=.029$) and closeness (5.4643 vs. 4.0357, $p=.002$) showed significant differences between native and non-native speakers (see Tables C.5.3 to C.5.8). Native speakers thought the interpersonal relationship was more informal, the message was exchanged more spontaneously and the relationship of the two women was closer than non-native speakers did.

Middle-aged women (2.1429 vs. 3.3929, $p=.002$) and female senior citizens (1.1786 vs. 2.7500, $p<.001$) showed significant differences between native and non-native speakers' responses in the generation identification of the speech style used in the natural conversation (see Tables C.5.9 to C.5.12). Non-native speakers did not identify the generation that used the speech style as accurately as native speakers did.

Idiomatic version

There was a significant difference between native and non-native speakers (6.4643 vs. 4.9286, $p<.001$) regarding the comprehension of the idiomatic version of conversation (see

Table C.6.1). Non-native speakers did not comprehend the idiomatic conversation as well as native speakers did.

There was a significant difference between native and non-native speakers (5.6429 vs. 3.9286, $p < .001$) in terms of the ability of using the idiomatic speech style (see Table C.6.2). Non-native speakers were less able to use the idiomatic speech style than native speakers were.

Regarding the perceived interpersonal relationship in the idiomatic speech style, informality (6.8929 vs. 5.5000, $p < .001$), flexibility (5.3214 vs. 4.000, $p = .004$) and spontaneity (5.7857 vs. 4.6786, $p = .014$) showed significant differences between native and non-native speakers (see Tables C.6.3 to C.6.8). Native speakers thought the interpersonal relationship was more informal, the message was exchanged in more flexible and spontaneous ways than non-native speakers did.

Female teen-agers (6.0357 vs. 4.8929, $p = .002$) showed a significant difference between native and non-native speakers' responses in the generation identification of the speech style (see Tables C.6.9 to C.6.12). Non-native speakers were not able to discriminate the generation that used the idiomatic speech style as well as native speakers were.

Mean Differences for Native and Non-native Speakers' Idiom Use

To explore Research Question 5, t-tests were conducted with native and non-native speakers of English to determine if there were significant differences in using idioms comfortably in the selected locations: at home, in church, at work, in the classroom, in the bar (see Table 3.4).

	Home	Church	Work	Classroom	Bar
Native	5.81	3.20	4.11	4.49	5.54
Non-native	5.51	4.94	5.30	4.88	5.15
<i>p</i>	.267	.001	<.001	.129	.185

Table 3.4 Results of t-tests for comfortableness in using idioms in selected locations.

Significant differences were observed between native and non-native speakers' comfortableness in using idioms in church (3.2035 vs. 4.9375, $p=.001$), and at work (4.1084 vs. 5.3043, $p<.001$) (see Tables C.7.1 and C.7.2). Non-native speakers were not able to use idioms in some locations. Native speakers' mean scores varied according to each location. Non-native speakers' mean scores, however, stayed near 5.000 in every location.

Research Questions posed in Chapter I and implications of this study will be discussed in Chapter IV.

CHAPTER IV

Discussion

This study first explained non-native speakers' difficulty with idiom comprehension from a psycholinguistic perspective. Then it pointed out the neglect of the interpersonal relationship indicated by idioms in the ESL literature. It also took the position that one of the barriers to building a close intercultural relationship between native and non-native speakers of English might lie in the use of idioms. Thus, three video clips were created and shown to both native and non-native college students to explore the link between the use of idioms and the intercultural relationship. Specifically, it attempted to answer research questions posed at the end of Chapter I.

Research Question 1: Comprehension

Research Question 1 asked if non-native speakers comprehended the conversation less than native speakers regarding each speech style. This research question was confirmed as predicted from the literature review. Findings in Chapter III demonstrated that native speakers had no trouble understanding each conversation. Because of their status as native speakers, the result was no surprise. Non-native speakers comprehended the formal version very well as native speakers did. They had minor trouble understanding the natural version compared to native speakers' level. Non-native speakers comprehended the idiomatic version very

poorly. This was explained through the status and the interaction between status and stimulus together. The largest difference in native and non-native speakers' comprehension was observed in the idiomatic condition. This evidences the potential for communication breakdowns between native and non-native speakers over the use of idioms. Non-native speakers' relative lack of idiom comprehension potentially excludes the prospect of close intercultural relationships. Non-native speakers need to familiarize themselves with idiomatic speech style.

Research Question 2: Ability

Research Question 2 asked if non-native speakers were able to use each speech style less than native speakers. This research question was confirmed as predicted. The findings in the Chapter III demonstrated that native speakers were able to use each speech style equally well. It is understandable because of their status. Non-native speakers' ability to use each speech style varied. They were able to use the formal speech style best, the natural one next, and the idiom one the least. Non-native speakers reached native speakers' level only in formal speech style use. Comparing native and non-native speakers' ability to use the speech styles, there was a big difference in the natural version. There was an even greater difference in the ability to use idiomatic speech style. As with the results of Research Question 1, inability to use idiomatic speech style might

block conversations between native and non-native speakers of English. In addition, these differences were greater than those seen in comprehension. It suggests ESL teaching needs to put more effort on improving non-native speakers' ability to use natural and idiomatic speech styles to reduce communication breakdown with native speakers.

Research Question 3: Perceived Interpersonal Relationship

Research Question 3 asked if non-native speakers perceived interpersonal relationships differently from native speakers. This research question was also confirmed partially. T-tests indicated that non-native speakers perceived interpersonal relationships differently in some areas from Knapp's measurement items. In the formal version, mean score of efficiency (2.5000 vs. 4.3571, $p < .001$) showed a significant difference. Stated differently, even though non-native speakers comprehend and use formal speech style as well as native speakers, their perception regarding interpersonal relationships is not the same as that of native speakers. In terms of the natural version, non-native speakers had different perceptions on informality, spontaneity, and closeness. Regarding the idiomatic version, informality, efficiency, and spontaneity showed significant differences in native and non-native speakers' perceptions. These are areas in which non-native speakers need to be aware of the difference and try to minimize the discrepancy between their perceptions and those commonly shared by native

speakers. Two-way ANOVA found significant interaction effects produced by stimulus and status, especially on efficiency, flexibility, and spontaneity. Status accounted for differences in these areas. The findings suggest that as non-native speakers and native speakers begin to share relational understandings, their communicative competence will grow.

The findings from ANOVA demonstrated that native speakers could differentiate perceived relationships of each speech style. The standard deviation was small on each version. In other words, they had reached the consensus regarding perceived relationships in each version. Mean scores of efficiency (formal=3.71, natural=4.50, idiomatic=4.07) and smoothness (formal=2.57, natural=4.50, idiomatic=3.64) did not follow the predicted trend that idiomatic version would score highest, natural one second, and formal one lowest. This fact suggests that idiom use does not automatically mean a close relationship. Native speakers considered the two actresses' nonverbal cues and the content even though they were instructed to concentrate on the speech style. This finding, however, is interesting. It suggests that idioms indicate closeness but that there is no right or wrong interpretation of interpersonal relationships indicated by the use of idioms. Nonverbal cues and the content of the conversation may influence the perception. One thing, however, seems to be certain; that is, native

speakers share similar perception regarding each interpersonal relationship.

The ANOVA showed that non-native speakers were not able to discriminate perceived relationships in each speech style. They were able to distinguish relationships only on the degree of closeness. Given the fact that they failed to differentiate other areas and their failure to comprehend the idiomatic version, they might have reacted to nonverbal cues, including the tone of voice, on closeness. The standard deviation was large and their responses did not have the same trend as native speakers. Stated differently, non-native speakers sporadically share the relational interpretation with native speakers. In areas that are not shared (8 out of 18), relational misperception and action discoordination may occur. If non-native speakers are aware of relational differences indicated by speech styles and can cultivate similar perceptions shared by native speakers, they will be more likely to improve their communicative competence in intercultural settings.

Research Question 4: Generation Identification

Research Question 4 asked if non-native speakers identified what age group of people uses each speech style differently from native speakers. The results of t-tests on natural version showed significant difference in middle-aged women and female senior citizens. Though shy of significance ($p=.056$), female teen-agers category's result suggested

difference in the perception. In terms of the idiomatic version, female teen-agers reached significance ($p=.002$). Female college students, middle-aged women, and female senior citizens did not reach significance but results were in the predicted direction. Two-way ANOVA showed stimulus and status interactions in female senior citizens. Also, status contributed tremendously to the generation identification of middle-aged women. What these findings mean is that non-native speakers are not as good as native speakers in identifying and differentiating the speech styles used by people in different age groups. Non-native speakers might have very limited contacts with people in different age groups. Although they have learned formal English at school and they can talk with American college students on campus, it might be rare for non-native speakers to converse with middle-aged people or senior citizens, which suggests that they are not able to notice the different speech style according to the age group. Non-native speakers, therefore, will be able to increase their intercultural communicative competence regarding relational differences by being more sensitive to who uses the particular speech style.

Native speakers were able to distinguish each speech style clearly according to each age group based on ANOVA results. They reached consensus among themselves in terms of generation identification.

The results from the ANOVA demonstrated that non-native speakers were able to identify only female senior citizens distinctly regarding each speech style ($p=.023$). They had trouble identifying and differentiating the female college students group according to their speech style ($p=.543$). The mean score of the formal version (4.15) was higher than that of the idiomatic version (3.89) in this age group. This shows a different trend from that of the native speakers. There are some explanations for this finding. First, non-native speakers have rare or limited contacts with age groups other than college students in daily encounters. Therefore, they may not be aware of the difference in speech styles according to age groups. Second, they learned about polite and impolite speech styles and male and female speech styles at school, but age differences in speech styles were not emphasized. It will be helpful for non-native speakers to equip themselves with different age groups' speech styles to bridge the gap of relational understanding.

Research Question 5: Use of Idioms

Research Question 5 asked if non-native speakers felt differently from native speakers in using idioms. The findings from t-tests demonstrated that there were significant differences in how comfortable native and non-native speakers felt using idioms in church and at work. Native speakers' mean scores vary according to locations while non-native speakers' scores fall around 5.000 in each

location. This suggests that non-native speakers violate the social norm shared by native speakers unconsciously by using idioms where native speakers feel uncomfortable using them. ESL teachers need to teach idioms to non-native speakers along with where and with whom they can use those idioms.

Summary

Several important findings emerged from this study. First, non-native speakers need to learn more idioms because they showed significantly lower comprehension than native speakers in this area. In addition, they are not able to use both idiomatic and natural speech styles as well as native speakers. The difference in ability to use natural and idiomatic speech styles was greater than that of comprehension of conversations between native and non-native speakers. It suggests that ESL teaching needs to devote more efforts to improving non-native speakers' ability to use natural and idiomatic speech styles in order to minimize communication breakdown with native speakers.

Second, non-native speakers need to be reminded that the idiom use does not necessarily mean a close interpersonal relationship. Native speakers consider the content of a conversation and nonverbal cues used as well as idioms when determining relationships. This study did not explore these additional factors. Future research needs to address the link between the relational perception and thematic content and/or nonverbal cues.

Third, native and non-native speakers need to bridge the gap in their relational understanding. Native speakers share more or less the same perception of an interpersonal relationship while non-native speakers do not. Non-native speakers had different relational understandings regarding two out of six items in Knapp's measurement scale even in the formal version. Non-native speakers should start working on areas in Knapp's measurement items wherever they provide different relational perceptions from native speakers. Native speakers, on the other hand, need to be sensitive to non-native speakers' problems in identifying interpersonal relations. By doing so, both parties will be able to improve their communicative competence dialogically in intercultural encounters.

Fourth, now that ESL teaching has succeeded well its job in teaching the formal speech style, it is time to move on to focusing on natural and idiomatic speech styles. ESL teachers need to emphasize idiom teaching more, including where and with whom to use idioms. Even though non-native speakers who responded to the idiom use at locations such as home, church, work, classroom, and bar, their degree of feeling comfortable using them were different from that of native speakers'. In other words, they are not familiar with native speakers' norms regarding the use of idioms. In addition, they are not able to discriminate speech styles as clearly as native speakers.

Recommendations to ESL

There are four specific recommendations to ESL in terms of teaching idioms. First, we should teach formal English to non-native speakers. Then we should expose them to idiomatic expressions so that they lose some of the stiffness of formal communication so that they can better fit in the culture. This method will give non-native speakers a natural transition from a formal to an idiomatic speech style.

Second, whenever teachers use idioms in class, they should repeat the expressions and paraphrase them in a formal manner. In this way, teachers can speak naturally by using idioms and make sure non-native speakers understand their meanings properly.

Third, we can make updated conversation videos with idioms for students. There is a time lag between writing a textbook and using it in two aspects. First, it generates outdated idioms in the textbook. Second, due to their generation gap, a textbook writer is familiar with certain idioms while a teacher is not. Keeping videos updated, therefore, is helpful for supplementing these problems.

Fourth, we can encourage non-native speakers to ask questions whenever they encounter unfamiliar idioms. They tend to hesitate to stop conversations and ask questions. As suggested by Lee (1992), setting up a ground rule which encourages non-native speakers to ask questions freely and

requests native speakers to provide explanations will be effective for teaching and learning idioms.

Implication to Communication Research

Three implications to intercultural communication research will conclude this study. First, problems with idiom comprehension may be applied to native speakers, too. Generation gaps among native speakers generate potential communication breakdowns with idiom comprehension. The study of idioms can be a way of approaching communication with people from different age groups.

Second, African-American, Latino, and other minority students experience similar problems as non-native speakers face regarding their language use. They often do not fit in the language norm privileged in academic settings, and face more barriers to academic success. We can look at their difficulties at school from the viewpoint of intercultural communication. We may investigate ways in which smooth transitions may be created to bridge the gap between language use at home and that privileged at school.

Finally, the results would be more dramatic if the study examined non-native speakers who had never been to the United States. The researcher hopes that her research will contribute to opening up new doors for non-native speakers who are in the United States as well as overseas to have closer and happier intercultural relationships with native speakers of English through the use of and understanding of

idioms. The use of idioms will give spice and liveliness to conversations and bring fun relationships between them.

REFERENCES

REFERENCES

- Abkarian,G.G., Jones,A., & West,G. (1990). Enhancing children's communication skills: Idioms 'fill the bill'. Child Language Teaching and Therapy, 6, 246-254.
- Alexander,R.J. (1984). Fixed expressions in English: reference books and the teacher. ELT Journal, 38, 127-134.
- Alexander,R.J. (1985). Phraseological and pragmatic deficits in advanced learners of English: Problems of vocabulary learning? Die Neueren Sprachen, 84, 613-621.
- Austin,P., & Kuiper,K. (1998). Constraints on coordinated idioms. Te Reo, 31, 3-17.
- Batt,K. (1988). ESL curriculum guide: Materials and methods for teaching English as a second language to adults. Free Library of Philadelphia: Philadelphia.
- Bobrow,S., & Bell,S. (1973). On catching on to idiomatic expressions. Memory and Cognition, 1, 343-346.
- Cacciari,C., & Levorato,M.C. (1989). How children understand idioms in discourse. Journal of Child Language, 16, 387-405.
- Cacciari,C., & Tabossi,P. (1988). The comprehension of idioms. Journal of Memory and Language, 27, 668-683.
- Celona,J.M. (1983). What does "wicked good" really mean?: Students talk about their ESL problems. MEXTESOL Journal, 7, 42-55.
- Cohen,G.L. (1973-1974). Substitution as a source of idiomaticity. Missouri Academy of Science, 7-8, 228-234.
- Coleman,D.W. (1984). Idiomaticity and the autonomy of syntax in stratificational grammar. Southwest Journal of Linguistics, 7, 26-46.
- Coulmas,F. (1979). Idiomaticity as a problem of pragmatics. In H.Parret, M.Ibisa, & J.Verschueren(Eds.), Possibilities and limitations of pragmatics (pp.139-151). Amsterdam: Benjamins.

- Cutler, A. (1982). Idioms: The colder the older. Linguistic Inquiry, 13, 317-320.
- Dascal, M. (1987). Defending literal meaning. Cognitive Science, 11, 259-281.
- Dascal, M. (1989). On the role of context and literal meaning in understanding. Cognitive Science, 13, 253-257.
- Drysdale, P. (1981). The idiocy of idioms: A problem in lexicography. CJL RCL, 26, 113-117.
- Fussell, S.R., & Kraus, R.M. (1989). Understanding friends and strangers: The effects of audience design on message comprehension. European Journal of Social Psychology, 19, 509-525.
- Garfinkel, H. (1969). Remarks on ethnomethodology. In J. Gumperz & D. Hymes (Eds.), Directions in sociolinguistics. New York: Holt, Rinehart and Winston.
- Gibbs, Jr. R.W. (1980). Spilling the beans on understanding and memory for idioms in conversation. Memory & Cognition, 8, 149-156.
- Gibbs, Jr. R.W. (1984). Literal meaning and psychological theory. Cognitive Science, 8, 275-304.
- Gibbs, Jr. R.W. (1985). On the process of understanding idioms. Journal of Psycholinguistic Research, 14, 465-472.
- Gibbs, Jr. R.W. (1986). Skating on thin ice: Literal meaning and understanding idioms in conversation. Discourse Processes, 9, 17-30.
- Gibbs, Jr. R.W. (1987). Linguistic factors in children's understanding of idioms. Journal of Child Language, 14, 569-586.
- Gibbs, Jr. R.W. (1989). Understanding and literal meaning. Cognitive Science, 13, 243-251.
- Gibbs, Jr. R.W., & Gonzales, G.P. (1985). Syntactic frozenness in processing and remembering idioms. Cognition, 20, 243-259.
- Gibbs, Jr. R.W., & Nagaoka, A. (1985). Getting the hang of American slang: Studying of understanding and

- remembering slang metaphors. Language and Speech, 17, 177-194.
- Gibbs, Jr. R.W., & Nayak, N.P. (1989). Psycholinguistic studies on the syntactic behavior of idioms. Cognitive Psychology, 21, 100-138.
- Gibbs, Jr. R.W., Nayak, N.P., Bolton, J., & Keppel, M.E. (1989). Speakers' assumptions about the lexical flexibility of idioms. Memory & Cognition, 17, 58-68.
- Gibbs, Jr. R.W., Nayak, N.P., & Cutting, C. (1989). How to kick the bucket and not decompose: Analyzability and idiom processing. Journal of Memory and Language, 28, 576-593.
- Gibbs, Jr. R.W., & O'Brien. (1990). Idioms and mental imagery: The metaphorical motivation for idiomatic meaning. Cognition, 36, 35-68.
- Glaser, R. (1988). The grading of idiomaticity as a presupposition for a taxonomy of idioms. In W. Hüllen, & R. Schulze (Eds.), Understanding the lexicon: Meaning, sense and world knowledge in lexical semantics (pp. 264-279). Tübingen: Niemeyer.
- Glass, A.L. (1983). The comprehension of idioms. Journal of Psycholinguistic Research, 12, 429-442.
- Gumperz, J.J. (1971). Language in social groups. Stanford, California: Stanford University Press.
- Hietsch, O. (1980). The mirthless world of the bilingual dictionary: A critical look at two German-English examples, and a glossary. Linguistica, 20, 183-218.
- Hopper, R., Knapp, M.L., & Scott, L. (1981). Couple's personal idioms: Exploring intimate talk. Journal of Communication, 31, 23-33.
- Irujo, S. (1984). The effects of transfer on acquisition of idioms in a second language. (Doctoral dissertation, Boston University, 1984). Dissertation Abstracts International, 45, 833A.
- Irujo, S. (1986). Don't put your leg in your mouth: Transfer in the acquisition of idioms in a second language. TESOL Quarterly, 20, 287-304.

- Kemper, S. (1989). Priming the comprehension of metaphors. Metaphor and Symbolic Activity, 4, 1-17.
- Klopf, D.W. (1991). Intercultural encounters (2nd Ed.). Englewood, Colorado: Morton.
- Knapp, M.L. (1984). Interpersonal communication and human relationships. Massachusetts: Allyn and Bacon, Inc.
- Kumaravadivelu, B. (1988). Communications strategies and psychological processes underlying lexical simplification. IRAL, 26, 309-319.
- Lee, W.S. (1992). Missing the boat: The centrality of idioms in intercultural communication. Manuscript submitted for publication.
- Lynch, A.J. (1988). Speaking up or talking down: Foreign learners' reactions to teacher talk. ELT Journal, 42, 109-116.
- Machonis, P. (1985). Transformations of verb phrase idioms: Passivization, particle movement, dative shift. American Speech, 60, 291-308.
- McDonald, J.L., & Carpenter, P.A. (1981). Simultaneous translation: Idiom interpretation and parsing heuristics. Journal of Verbal Learning and Verbal Behavior, 20, 231-247.
- Mueller, R.A.G., & Gibbs, Jr. R.W. (1987). Processing idioms with multiple meanings. Journal of Psycholinguistic Research, 16, 63-81.
- Nippold, M.A., & Martin, S.T. (1989). Idiom interpretation in isolation versus context: A developmental study with adolescents. Journal of Speech and Hearing Research, 32, 59-66.
- Popiel, S.J., & McRae, K. (1988). The figurative and literal senses of idioms, or all idioms are not used equally. Journal of Psycholinguistic Research, 17, 475-487.
- Prinz, P.M. (1983). The development of idiomatic meaning in children. Language and Speech, 26, 263-271.
- Radin, B. (Ed.). (1985). Dramatic techniques in ESL instruction. New York: City University of New York Hostos Community College.

- Reagan, R.T. (1987). The syntax of English idioms: Can the dog be put on? Journal of Psycholinguistic Research, 16, 417-441.
- Ross, J.R. (1981). Idioms and contrastive stress. Studies in Language, 5, 273-277.
- Schraw, G., Trathen, W., Reynolds, R.E., & Lapan, R.T. (1988). Preferences for idioms: Restrictions due to lexicalization and familiarity. Journal of Psycholinguistic Research, 17, 413-424.
- Schweigert, W.A., & Moates, D.R. (1988). Familiar idiom comprehension. Journal of Psycholinguistic Research, 17, 281-296.
- Silc, K.F. (1990). A cross-cultural training manual. Fairfax County Schools: Virginia.
- Smith, M.A., Schloss, P.J., & Israelite, N.K. (1986). Evaluation of a simile recognition treatment program for hearing-impaired students. Journal of Speech and Hearing Disorders, 51, 134-139.
- Sornig, K. (1988). Idioms in language teaching. In W. Hüllen, & R. Schulze (Eds.), Understanding the lexicon: Meaning, sense and world knowledge in lexical semantics (pp. 280-290). Tübingen: Niemeyer.
- Stock, O. (1989). Parsing with flexibility, dynamic strategies, and idioms in mind. Computational Linguistics, 15, 1-18.
- Swinney, D.A., & Cutler, A. (1979). The access and processing of idiomatic expressions. Journal of Learning and Verbal Behavior, 18, 523-534.
- Van Lanker, D.R., & Kempler, D. (1987). Comprehension of familiar phrases by left-but not by right hemisphere damaged patients. Brain and Language, 32, 265-277.
- Viteli, J. (1989, September). Learning styles and individual differences in learning English idioms via computer assisted language learning in English as a second language. Paper presented at the annual meeting of the European association of research on learning and instruction, Madrid, Spain.

Vosniadou, S. (1989). Context and the development of metaphor comprehension. Metaphor and Symbolic Activity, 4, 159-171.

Wilson, D. (1990). Idiom discovery procedure. Notes on Linguistics, 49, 4-6.

APPENDIXES

APPENDIX A

Three Scripts for the Video Clips

Formal Version

Elizabeth: Hello, Margaret. How are you doing?

Margaret : Hi, I'm fine, thank you. And how are you,
Elizabeth?

Elizabeth: I'm fine, thanks. Please sit down.

Margaret : Thanks.

Elizabeth: What do you want to do this afternoon?

Margaret : Well, would you like to go shopping at Valley
Fair?

Elizabeth: That sounds wonderful. Shall I drive?

Margaret : Yes. Would you like to go into every shop?

Elizabeth: No. I have psychology class this afternoon.

Margaret : Which stores would you like to go into?

Elizabeth: We could go to the Gap or Nordstrom's, or Macy's,
and perhaps Emporium Capwell. But that is at the
other end of the shopping center.

Margaret : Why don't you decide? I'd like to go now.

Elizabeth: You are pressuring me. Would you please stop
pushing me?

Margaret : I apologize. I'm really worried about this
midterm exam tomorrow. I really must study.

Elizabeth: Please forgive me for being angry.
Do you want to meet at noon?

Margaret : That's a good idea.

Elizabeth: Alright. I'll see you at noon.

Natural Version

Beth : Hi, Maggie. How's it going?

Maggie : OK. How about you, Beth?

Beth : I'm OK. Have a seat.

Maggie : Thanks.

Beth : What do you wanna do after class?

Maggie : Hmm. How about going to the mall?

Beth : Great. Shall I drive?

Maggie : Yeah. Wanna go in every shop?

Beth : Nah. I can't miss psych class.

Maggie : Which stores, then?

Beth : Well, how about Gap or Nordstrom's, or Macy's, or
even Emporium?

But that's way at the end of the mall.

Maggie : Make up your mind, will you?

I'm anxious to go.

Beth : Stop bugging me.

Maggie : I'm sorry. I'm worried about my midterm tomorrow.

I've really gotta study.

Beth : I'm sorry, too.

Wanna meet at noon?

Maggie : OK.

Beth : Alright. See you then.

Idiom Version

Libby : Hey, Mags. Whass up?

Mags : Nothin'. What's up with you, Libby?

Libby : Eah, not much. Take a load off.

Mags : Thanks.

Libby : Wanna kill some time after poli sci?

Mags : Yeah. Let's hit the mall.

Libby : Excellent. I've got wheels today.

Mags : Right. You wanna cover the whole place?

Libby : We don't wanna bite off more than we can chew.
And I can't cut psych.

Mags : Well, where?

Libby : How 'bout the Gap and Nordies, and Macy's, or even
Emporium? That's a mile away.

Mags : Get your act together. I'm on pins and needles.

Libby : Buzz off! Don't have a cow.

Mags : Well, excuse me. I'm stressed out about this
midterm. I gotta hit the books.

Libby : I'm sorry. I jumped the gun.
Wanna meet at noon?

Mags : I'll be there with bells on.

Libby : Later.

APPENDIX B

Questionnaires for Native and Non-native Speakers of English

Questionnaire

You may like or dislike the content and the acting of the two actresses in the video clip, but please answer the following questions by concentrating on their speech style. Here, in this questionnaire, speech style means the words and phrases used by the two actresses.

You may agree or disagree with the statements provided below. Please circle the number that best describes what you are feeling to each statement.

PLEASE DO NOT CHANGE THE QUESTIONS!

Strongly Disagree
Moderately Disagree
Not Sure
Somewhat Disagree
Somewhat Agree
Moderately Agree
Strongly Agree

- 1. I understood the conversation very well. 1 2 3 4 5 6 7
- 2. I can talk in the words and phrases similar to those used by two actresses. 1 2 3 4 5 6 7
- 3. I would talk in their speech style. 1 2 3 4 5 6 7
- 4. I am likely to use their speech style with my friends. 1 2 3 4 5 6 7
- 5. Due to their speech style, I feel comfortable joining their conversation as a friend. 1 2 3 4 5 6 7
- 6. Generally speaking, people think I am a casual, informal and laid-back person. 1 2 3 4 5 6 7

7. Please describe what kind of people use the two women's speech style as specifically as you can.

()

Questionnaire

8. The conversation is formal/informal. formal 1 2 3 4 5 6 7 informal
9. As the speakers, the message exchange is energy 1 2 3 4 5 6 7
energy consuming/effortless. consuming
10. The way speakers convey ideas and feelings is rigid 1 2 3 4 5 6 7
rigid/flexible. flexible
11. Regarding the speakers, their flow of the awkward 1 2 3 4 5 6 7
conversation is awkward/smooth. smooth
12. The message is exchanged cautiously/spontaneously. cautiously 1 2 3 4 5 6 7
spontaneously
13. The relationship between the two women is distant 1 2 3 4 5 6 7
distant/close. close
14. Their speech style is used by female teen-agers. 1 2 3 4 5 6 7
15. Their speech style is used by female college students. 1 2 3 4 5 6 7
16. Their speech style is used by middle-aged women. 1 2 3 4 5 6 7
17. Their speech style is used by female senior citizens. 1 2 3 4 5 6 7

Strongly Disagree
Moderately Disagree
Not sure
Somewhat Disagree
Somewhat Agree
Moderately Agree
Strongly Agree

Questionnaire

18. I have casual friends who are nonnative speakers of English.
1. [] Yes ---> Answer 19, 20, 21, 23
 2. [] No ---> Answer 22, 23

19. Please describe your casual friends who are nonnative speakers as specifically as you can. (number, sex, age, relationship, etc.)

()

Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
Koderately Disagree								Koderately Agree
Somewhat Disagree								Somewhat Agree
Not Sure								

20. I am likely to use the two women's speech style with my casual friends who are nonnative speakers of English.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

21. My casual friends who are nonnative speakers of English are likely to use the two women's speech style when they talk to me.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

22. I want to use the two women's speech style with my casual friends who are nonnative speakers of English.

23. Please explain why you would/would not want to use the two women's speech style when you talk to your casual friends who are nonnative speakers of English.

()

Questionnaire

1. [] Male [] Female 2. age _____ 3. major _____

4. ethnic background _____

5. In each location below, do you feel uncomfortable/comfortable in using idiomatic expressions?

Home.....	uncomfortable	1	2	3	4	5	6	7	comfortable
Church.....	uncomfortable	1	2	3	4	5	6	7	comfortable
Work.....	uncomfortable	1	2	3	4	5	6	7	comfortable
Classroom.....	uncomfortable	1	2	3	4	5	6	7	comfortable
Bar.....	uncomfortable	1	2	3	4	5	6	7	comfortable

6. Here is a list of idiomatic expressions (1-12).

Please answer the following three questions (a,b,c) related to each idiomatic expression.

- a. **Paraphrase** these expressions. If you do not know the expression, PLEASE GUESS!
- b. **Describe** what kind of people use this expression.
- c. **Check** (1-5) to indicate how often you use this expression in your daily life.

1. What's up with you?

- a. ()
- b. ()
- c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always

2. Take a load off.

- a. ()
- b. ()
- c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always

Questionnaire

3. Let's hit the mall.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
4. I've got wheels.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
5. We don't wanna bite off more than we can chew.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
6. Tubular, dude.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
7. I'm on pins and needles.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always

Questionnaire

Native, page 6.
Idiom Comprehension 3/3

8. Don't have a cow.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
9. I gotta hit the books.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
10. Go fly a kite.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
11. What's cooking?
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
12. Chew the fat
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always

Questionnaire

You may like or dislike the content and the acting of the two actresses in the video clip, but please answer the following questions by concentrating on their speech style. Here, in this questionnaire, speech style means the words and phrases used by the two actresses.

You may agree or disagree with the statements provided below. Please circle the number that best describes what you are feeling to each statement.

PLEASE DO NOT CHANGE THE QUESTIONS!

Strongly Disagree
Somewhat Disagree
Not Sure
Somewhat Agree
Moderately Agree
Strongly Agree

1. I understood the conversation very well. 1 2 3 4 5 6 7
2. I can talk in the words and phrases similar to those used by two actresses. 1 2 3 4 5 6 7
3. I would talk in their speech style. 1 2 3 4 5 6 7
4. I am likely to use their speech style with my friends. 1 2 3 4 5 6 7
5. Due to their speech style, I feel comfortable joining their conversation as a friend. 1 2 3 4 5 6 7
6. Generally speaking, people think I am a casual, informal and laid-back person. 1 2 3 4 5 6 7

7. Please describe what kind of people use the two women's speech style as specifically as you can.

()

Questionnaire

8. The conversation is formal/informal. formal 1 2 3 4 5 6 7 informal
9. As the speakers, the message exchange is energy consuming/effortless. 1 2 3 4 5 6 7
10. The way speakers convey ideas and feelings is rigid flexible 1 2 3 4 5 6 7
11. Regarding the speakers, their flow of the awkward smooth conversation is awkward/smooth. 1 2 3 4 5 6 7
12. The message is exchanged cautiously/spontaneously. cautiously spontaneously close 1 2 3 4 5 6 7
13. The relationship between the two women is distant close distant/close. 1 2 3 4 5 6 7
14. Their speech style is used by female teen-agers. 1 2 3 4 5 6 7
15. Their speech style is used by female college students. 1 2 3 4 5 6 7
16. Their speech style is used by middle-aged women. 1 2 3 4 5 6 7
17. Their speech style is used by female senior citizens. 1 2 3 4 5 6 7

Strongly Disagree
Somewhat Disagree
Not Sure
Somewhat Agree
Strongly Agree

Questionnaire

Nonnative, page 3

18. I have casual American friends who are native speakers of English.
1. [] Yes ---> Answer 19, 20, 21, 23
2. [] No ---> Answer 22, 23

19. Please describe your casual American friends who are native speakers as specifically as you can. (number, sex, age, relationship, etc.)

Strongly Disagree 1 2 3 4 5 6 7
Moderately Disagree
Not Sure
Somewhat Agree
Moderately Agree
Strongly Agree

20. I am likely to use the two women's speech style with my casual American friends who are native speakers of English.

1 2 3 4 5 6 7

21. My casual American friends who are native speakers of English are likely to use the two women's speech style when they talk to me.

1 2 3 4 5 6 7

22. I want to use the two women's speech style with my casual American friends who are native speakers of English.

1 2 3 4 5 6 7

23. Please explain why you would/would not want to use the two women's speech style when you talk to your casual friends who are nonnative speakers of English.

Questionnaire

3. Let's hit the mall.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
4. I've got wheels.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
5. We don't wanna bite off more than we can chew.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
6. Tubular, dude.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
7. I'm on pins and needles.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always

Questionnaire

Nonnative, page 6:
Idiom Comprehension 3/4

8. Don't have a cow.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
9. I gotta hit the books.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
10. Go fly a kite.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
11. What's cooking?
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always
12. Chew the fat.
a. ()
b. ()
c. Do you use this expression? 1. [] Never 2. [] Seldom 3. [] Sometimes 4. [] Often 5. [] Always

Questionnaire

10. Please explain how you were taught English in your country.

11. Do you have any problems in communicating with Americans?
If yes, please describe your problems.

APPENDIX C

Tables

C.1: Two-Way ANOVA

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	21.305	3	7.102	4.008	.009
Speech Style	6.775	2	3.387	1.912	.151
Non/Native	14.231	1	14.231	8.031	.005
2-way interactions by Speech Style & Non/Native	19.699	2	9.849	5.559	.005
Explained	41.004	5	8.201	4.628	.001
Residual	283.508	160	1.772		
Total	324.512	165	1.967		

Table C.1.1. Comprehension.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	90.154	3	30.051	13.206	<.001
Speech Style	25.771	2	12.886	5.662	.004
Non/Native	63.296	1	63.296	27.814	<.001
2-way interactions By Speech Style & Non/Native	9.452	2	4.726	2.077	.129
Explained	99.606	5	19.921	8.754	<.001
Residual	364.104	160	2.276		
Total	463.711	165	2.810		

Table C.1.2. Ability.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	101.037	3	33.679	10.710	<.001
Speech Style	95.571	2	47.786	15.195	<.001
Non/Native	5.568	1	5.568	1.771	.185
2-way interactions By Speech Style & Non/Native	64.703	2	32.351	10.287	<.001
Explained	165.740	5	33.148	10.541	<.001
Residual	503.157	160	3.145		
Total	668.898	165	4.054		

Table C.1.3. Informality.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	33.066	3	11.022	3.872	.010
Speech Style	23.472	2	11.736	4.123	.018
Non/Native	9.484	1	9.484	3.332	.070
2-way interactions By Speech Style & Non/Native	49.157	2	24.579	8.636	<.001
Explained	82.223	5	16.445	5.778	<.001
Residual	455.392	160	2.846		
Total	537.614	165	3.258		

Table C.1.4. Efficiency.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	89.475	3	29.825	11.982	<.001
Speech Style	80.396	2	40.198	16.149	<.001
Non/Native	9.267	1	9.267	3.723	.055
2-way interactions By Speech Style & Non/Native	25.901	2	12.950	5.203	.006
Explained	115.376	5	23.075	9.270	<.001
Residual	398.269	160	2.489		
Total	513.645	165	3.113		

Table C.1.5. Flexibility.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	41.361	3	13.787	4.206	.007
Speech Style	41.255	2	20.627	6.292	.002
Non/Native	.076	1	.076	.023	.879
2-way interactions By Speech Style & Non/Native	16.088	2	8.044	2.454	.089
Explained	57.449	5	11.490	3.505	.005
Residual	524.509	160	3.278		
Total	581.958	165	3.527		

Table C.1.6. Smoothness.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	84.276	3	28.092	9.257	<.001
Speech Style	70.869	2	35.434	11.677	<.001
Non/Native	13.934	1	13.934	4.592	.034
2-way interactions By Speech Style & Non/Native	19.334	2	9.667	3.186	.044
Explained	103.610	5	20.722	6.829	<.001
Residual	488.570	161	3.035		
Total	592.180	166	3.567		

Table C.1.7. Spontaneity.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	70.852	3	23.617	7.982	<.001
Speech Style	55.716	2	27.858	9.415	<.001
Non/Native	15.577	1	15.577	5.264	.023
2-way interactions By Speech Style & Non/Native	14.096	2	7.048	2.382	.096
Explained	84.948	5	16.990	5.742	<.001
Residual	476.381	161	2.959		
Total	561.329	166	3.382		

Table C.1.8. Closeness.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	114.527	3	38.176	12.797	<.001
Speech Style	106.751	2	53.375	17.893	<.001
Non/Native	7.559	1	7.559	2.534	.113
2-way interactions By Speech Style & Non/Native	20.984	2	10.492	3.517	.032
Explained	135.511	5	27.102	9.085	<.001
Residual	480.274	161	2.983		
Total	615.784	166	3.710		

Table C.1.9. Female teen-agers.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	23.145	3	7.715	2.698	.048
Speech Style	20.572	2	10.286	3.597	.030
Non/Native	2.573	1	2.573	.900	.344
2-way interactions By Speech Style & Non/Native	13.277	2	6.638	2.321	.101
Explained	36.422	5	7.284	2.547	.030
Residual	460.452	161	2.860		
Total	496.874	166	2.993		

Table C.1.10. Female college students.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	60.481	3	20.160	8.520	<.001
Speech Style	40.461	2	20.231	8.549	<.001
Non/Native	19.619	1	19.619	8.291	.005
2-way interactions By Speech Style & Non/Native	9.147	2	4.573	1.933	.148
Explained	69.628	5	13.926	5.885	<.001
Residual	380.983	161	2.366		
Total	450.611	166	2.715		

Table C.1.11. Middle-aged women.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	88.469	3	29.490	12.791	<.001
Speech Style	70.255	2	35.128	15.237	<.001
Non/Native	17.758	1	17.758	7.703	.006
2-way interactions By Speech Style & Non/Native	21.604	2	10.802	4.685	.011
Explained	110.072	5	22.014	9.549	<.001
Residual	371.185	161	2.305		
Total	481.257	166	2.899		

Table C.1.12. Female senior citizens.

C.2: One-Way ANOVA: Native Speakers

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	158.167	2	79.083	32.742	<.001
Speech Style	158.167	2	79.083	32.742	<.001
Explained	158.167	2	79.083	32.742	<.001
Residual	195.643	81	2.415		
Total	353.810	83	4.263		

Table C.2.1. Perceived interpersonal relationship: Informality by speech style.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	65.429	2	32.714	12.636	<.001
Speech Style	65.429	2	32.714	12.636	<.001
Explained	65.429	2	32.714	12.636	<.001
Residual	209.714	81	2.589		
Total	275.143	83	3.315		

Table C.2.2. Perceived interpersonal relationship: Efficiency by speech style.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	98<.001	2	49<.001	21.076	<.001
Speech Style	98<.001	2	49<.001	21.076	<.001
Explained	98<.001	2	49<.001	21.076	<.001
Residual	188.321	81	2.325		
Total	286.321	83	3.450		

Table C.2.3. Perceived interpersonal relationship: Flexibility by speech style.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	52.286	2	26.143	8.461	<.001
Speech Style	52.286	2	26.143	8.461	<.001
Explained	52.286	2	26.143	8.461	<.001
Residual	250.286	81	3.090		
Total	302.571	83	3.645		

Table C.2.4. Perceived interpersonal relationship: Smoothness by speech style.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	82.357	2	41.179	16.971	<.001
Speech Style	82.357	2	41.179	16.971	<.001
Explained	82.357	2	41.179	16.971	<.001
Residual	196.536	81	2.426		
Total	278.893	83	3.360		

Table C.2.5. Perceived interpersonal relationship: Spontaneity by speech style.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	35.310	2	17.655	7.830	.001
Speech Style	35.310	2	17.655	7.830	.001
Explained	35.310	2	17.655	7.830	.001
Residual	182.643	81	2.255		
Total	217.952	83	2.626		

Table C.2.6. Perceived interpersonal relationship: Closeness by speech style.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	108.643	2	54.321	20.029	<.001
Speech Style	108.643	2	54.321	20.029	<.001
Explained	108.643	2	54.321	20.029	<.001
Residual	219.679	81	2.712		
Total	328.321	83	3.956		

Table C.2.7. Generation identification: Female teen-agers by speech style.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	29.786	2	14.893	5.965	.004
Speech Style	29.786	2	14.893	5.965	.004
Explained	29.786	2	14.893	5.965	.004
Residual	202.250	81	2.497		
Total	232.036	83	2.796		

Table C.2.8. Generation identification: Female college students by speech style.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	36.167	2	18.083	8.577	<.001
Speech Style	36.167	2	18.083	8.577	<.001
Explained	36.167	2	18.083	8.577	<.001
Residual	170.786	81	2.108		
Total	206.952	83	2.493		

Table C.2.9. Generation identification: Middle-aged women by speech style.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	69.429	2	34.714	22.514	<.001
Speech Style	69.429	2	34.714	22.514	<.001
Explained	69.429	2	34.714	22.514	<.001
Residual	124.893	81	1.542		
Total	194.321	83	2.341		

Table C.2.10. Generation identification: Female senior citizens by speech style.

C.3 One-Way ANOVA: Non-native Speakers

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	24.164	2	12.082	6.256	.003
Speech Style	24.164	2	12.082	6.256	.003
Explained	24.164	2	12.082	6.256	.003
Residual	152.580	79	1.931		
Total	176.744	81	2.182		

Table C.3.1. Comprehension by speech style.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	31.723	2	15.862	6.525	.002
Speech Style	31.723	2	15.862	6.525	.002
Explained	31.723	2	15.862	6.525	.002
Residual	192.033	79	2.431		
Total	223.756	81	2.762		

Table C.3.2. Ability by speech style.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	36.134	2	18.067	4.889	.010
Speech Style	36.134	2	18.067	4.889	.010
Explained	36.134	2	18.067	4.889	.010
Residual	291.927	79	3.695		
Total	328.061	81	4.050		

Table C.3.3. Perceived interpersonal relationship: Closeness by speech style.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main Effects	24.071	2	12.036	3.950	.023
Speech Style	24.071	2	12.036	3.950	.023
Explained	24.071	2	12.036	3.950	.023
Residual	246.821	81	3.047		
Total	270.893	83	3.264		

Table C.3.4. Generation identification: Female senior citizens by speech style.

C.4 T-tests: Formal Version

	Number of Cases	Comprehension Mean	SD	t-value	df	2-tail prob.
Native	28	6.1786	1.492			
Non-native	28	6.2857	1.243	-.29	54	.771

Table C.4.1. Comprehension.

	Number of Cases	Ability Mean	SD	t-value	df	2-tail prob.
Native	28	6.0357	1.427			
Non-native	28	5.5357	1.374	1.34	54	.187

Table C.4.2. Ability.

	Number of Cases	Informality Mean	SD	t-value	df	2-tail prob.
Native	28	3.7143	2.158			
Non-native	28	5.1429	2.172	-2.47	54	.017

Table C.4.3. Perceived interpersonal relationship (Informality).

	Number of Cases	Efficiency Mean	SD	t-value	df	2-tail prob.
Native	28	2.5000	1.291			
Non-native	28	4.3571	1.850	-4.36	54	<.001

Table C.4.4. Perceived interpersonal relationship (Efficiency).

	Number of Cases	Flexibility Mean	SD	t-value	df	2-tail prob.
Native	28	2.8214	1.588			
Non-native	28	3.3571	1.615	-1.25	54	.216

Table C.4.5. Perceived interpersonal relationship (Flexibility).

	Number of Cases	Smoothness Mean	SD	t-value	df	2-tail prob.
Native	28	2.5714	1.752	-1.78	54	.081
Non-native	28	3.4286	1.854			

Table C.4.6. Perceived interpersonal relationship (Smoothness).

	Number of Cases	Spontaneity Mean	SD	t-value	df	2-tail prob.
Native	28	3.5714	1.854	-.76	53	.453
Non-native	27	3.9630	1.990			

Table C.4.7. Perceived interpersonal relationship (Spontaneity).

	Number of Cases	Closeness Mean	SD	t-value	df	2-tail prob.
Native	28	4.1071	1.950	.61	54	.548
Non-native	28	3.7857	2.025			

Table C.4.8. Perceived interpersonal relationship (Closeness).

	Number of Cases	Teen-agers Mean	SD	t-value	df	2-tail prob.
Native	28	3.5714	2.441	-.86	54	.392
Non-native	28	4.1071	2.200			

Table C.4.9. Generation identification (Female teen-agers).

	Number of Cases	College Mean	SD	t-value	df	2-tail prob.
Native	28	3.5714	1.913	-1.04	54	.302
Non-native	28	4.1071	1.931			

Table C.4.10. Generation identification (Female college students).

	Number of Cases	Mid-Aged Mean	SD	t-value	df	2-tail prob.
Native	28	3.3929	1.873	-.22	54	.829
Non-native	28	3.5000	1.816			

Table C.4.11. Generation identification (Middle-aged women).

	Number of Cases	Senior Mean	SD	t-value	df	2-tail prob.
Native	28	3.107	2.006	.33	54	.740
Non-native	28	2.9286	1.999			

Table C.4.12. Generation identification (Female senior citizens).

C.5 T-tests: Natural Version

	Number of Cases	Comprehension Mean	SD	t-value	df	2-tail prob.
Native	28	6.0714	1.464	.60	54	.549
Non-native	28	5.8214	1.634			

Table C.5.1. Comprehension.

	Number of Cases	Ability Mean	SD	t-value	df	2-tail prob.
Native	28	6.1071	1.571	3.64	54	.001
Non-native	28	4.7143	1.272			

Table C.5.2. Ability.

	Number of Cases	Informality Mean	SD	t-value	df	2-tail prob.
Native	28	6.2500	1.578	2.38	54	.021
Non-native	28	5.1786	1.786			

Table C.5.3. Perceived interpersonal relationship (Informality).

	Number of Cases	Efficiency Mean	SD	t-value	df	2-tail prob.
Native	28	4.5714	1.834	1.68	54	.099
Non-native	28	3.7857	1.663			

Table C.5.4. Perceived interpersonal relationship (Efficiency).

	Number of Cases	Flexibility Mean	SD	t-value	df	2-tail prob.
Native	28	4.8214	1.442	1.69	54	.096
Non-native	28	4.1429	1.557			

Table C.5.5. Perceived interpersonal relationship (Flexibility).

	Number of Cases	Smoothness Mean	SD	t-value	df	2-tail prob.
Native	28	4.5000	1.732	1.14	54	.261
Non-native	28	3.9643	1.795			

Table C.5.6. Perceived interpersonal relationship (Smoothness).

	Number of Cases	Spontaneity Mean	SD	t-value	df	2-tail prob.
Native	28	5.5357	1.261	2.25	54	.029
Non-native	28	4.5357	1.990			

Table C.5.7. Perceived interpersonal relationship (Spontaneity).

	Number of Cases	Closeness Mean	SD	t-value	df	2-tail prob.
Native	28	5.4643	1.138	3.32	54	.002
Non-native	28	4.0357	1.972			

Table C.5.8. Perceived interpersonal relationship (Closeness).

	Number of Cases	Teen-Agers Mean	SD	t-value	df	2-tail prob.
Native	28	5.9286	1.152	1.95	54	.056
Non-native	28	5.2500	1.430			

Table C.5.9. Generation identification (Female teen-agers).

	Number of Cases	College Mean	SD	t-value	df	2-tail prob.
Native	28	4.9643	1.478	1.28	54	.205
Non-native	28	4.4286	1.643			

Table C.5.10. Generation identification (Female college students).

	Number of Cases	Mid-Aged Mean	SD	t-value	df	2-tail prob.
Native	28	2.1429	1.325			
Non-native	28	3.3929	1.595	-3.19	54	.002

Table C.5.11. Generation identification (Middle-aged women).

	Number of Cases	Senior Mean	SD	t-value	df	2-tail prob.
Native	28	1.1786	.476			
Non-native	28	2.7500	1.798	-4.47	54	<.001

Table C.5.12. Generation identification (Female senior citizens).

C.6 T-tests: Idiomatic Version

	Number of Cases	Comprehension Mean	SD	t-value	df	2-tail prob.
Native	28	6.4643	.693	5.81	54	<.001
Non-native	28	4.9286	1.215			

Table C.6.1. Comprehension.

	Number of Cases	Ability Mean	SD	t-value	df	2-tail prob.
Native	28	5.6429	1.367	3.84	54	<.001
Non-native	28	3.9286	1.923			

Table C.6.2. Ability.

	Number of Cases	Informality Mean	SD	t-value	df	2-tail prob.
Native	28	6.8929	.315	3.87	54	<.001
Non-native	28	5.5000	1.876			

Table C.6.3. Perceived interpersonal relationship (Informality).

	Number of Cases	Efficiency Mean	SD	t-value	df	2-tail prob.
Native	28	4.0714	1.654	-.87	54	.386
Non-native	28	4.4643	1.710			

Table C.6.4. Perceived interpersonal relationship (Efficiency).

	Number of Cases	Flexibility Mean	SD	t-value	df	2-tail prob.
Native	28	5.3214	1.541	3.01	54	.004
Non-native	28	4.4643	1.710			

Table C.6.5. Perceived interpersonal relationship (Flexibility).

	Number of Cases	Smoothness Mean	SD	t-value	df	2-tail prob.
Native	28	3.6429	1.789	.58	54	.566
Non-native	28	3.3571	1.909			

Table C.6.6. Perceived interpersonal relationship (Smoothness).

	Number of Cases	Spontaneity Mean	SD	t-value	df	2-tail prob.
Native	28	5.7857	1.500	2.55	54	.014
Non-native	28	4.6786	1.744			

Table C.6.7. Perceived interpersonal relationship (Spontaneity).

	Number of Cases	Closeness Mean	SD	t-value	df	2-tail prob.
Native	28	5.5000	1.291	.43	54	.670
Non-native	28	5.3214	1.786			

Table C.6.8. Perceived interpersonal relationship (Closeness).

	Number of Cases	Teen-Agers Mean	SD	t-value	df	2-tail prob.
Native	28	6.0357	.922	3.18	54	.002
Non-native	28	4.8929	1.663			

Table C.6.9. Generation identification (Female teen-agers).

	Number of Cases	College Mean	SD	t-value	df	2-tail prob.
Native	28	4.6429	1.283	1.79	53	.079
Non-native	27	3.8889	1.805			

Table C.6.10. Generation identification (Female college students).

	Number of Cases	Mid-Aged Mean	SD	t-value	df	2-tail prob.
Native	28	1.8929	1.031	-1.93	54	.059
Non-native	28	2.5357	1.427			

Table C.6.11. Generation identification (Middle-aged women).

	Number of Cases	Senior Mean	SD	t-value	df	2-tail prob.
Native	28	1.1786	.612	-1.87	54	.066
Non-native	28	1.7143	1.384			

Table C.6.12. Generation identification (Female senior citizens).

C.7 T-tests: Comfortableness in Using Idioms

	Number of Cases	Church Mean	SD	t-value	df	2-tail prob.
Native	79	3.2025	1.842	-3.34	93	.001
Non-native	16	4.9375	2.144			

Table C.7.1 In church.

	Number of Cases	Work Mean	SD	t-value	df	2-tail prob.
Native	83	4.1084	1.732	-3.88	127	<.001
Non-native	46	5.3043	1.576			

Table C.7.2 At work.