Perceptions of Non-Native Speakers' Personalities by Native Speakers of Japanese: Effects of Voice Characteristics, Intonation and Use of Japanese Honorifics

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Abstract

This study investigated how three speech components in the speech of non-native speakers (NNSs) of Japanese—voice characteristics, intonation, and language form expressed by honorifics—contribute to the impressions formed by native speakers of Japanese (JNSs) of the NNS's personality. Speech samples produced by six NNSs of Japanese (three males and three females) were used to construct four types of stimuli: (i) NNSs' WHOLE SPEECH, an audio recording of verbal requests to borrow a pen under four situations (MOST FORMAL, FORMAL, CASUAL, and MOST CASUAL); (ii) LANGUAGE, which was a transcription of (i); (iii) INTONATION derived from (i) presented together with the transcription (ii); and (iv) NNSs' VOICE, audio recordings of kana recitations representing individual voice characteristics. One hundred and fifty-four JNSs (77 males and 77 females) living in Japan rated each of the four stimuli on a semantic differential scale that presented personality traits expressed by nine adjectives, which were classified into three personality variables. The results of multiple regression analyses revealed that the contribution of each speech component differed according to situation and the gender of the NNS. Overall, LANGUAGE influenced the impression more than INTONATION in a formal situation, and vice versa in a casual situation. VOICE made contributions to the formal situations more than to the casual situations. A gender difference was found in less formal and less casual (i.e., intermediate) situations. The pattern of effects of speech components was consistent across situations but not across the three personality traits. These results clearly indicate that situation, or the level of formality, was an important factor in the impact of speech components on the impression of a NNS' personality formed from the NNSs' utterance.

Declaration

In accordance with the regulations for presenting dissertations and other work for higher degrees, I hereby declare that this dissertation is entirely my own work and no part of it has been submitted for a degree at any other university. To my knowledge and belief, it does not contain any materials previously published or written by another person where due reference is not made in the text. This dissertation has been formatted in accordance with the 2009 *Publication Manual of the American Psychological Association* (6th Edition).

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Abbreviations for Transcription

AC	agreement/confirmation marker
AUX	auxiliary verb
CAU	causative
DO	direct object marker
IMP	imperative
IO	indirect object marker
NEG	negation
POT	potential
Q	question marker
RES	respectful language
S	subject marker
T	topic marker

Glosses indicate Form and *Keigo* category as:

PLN.PLN	Non-*keigo* in plain form
RES.PLN	Respectful Language in plain form
HUM.PLN	Humble Language in plain form

PLN.POL	Non-*keigo* in polite form
RES.POL	Respectful Language in polite form
HUM.POL	Humble Language in polite form
POL.POL	Polite Language in polite form

Chapter 1.Introduction

The research reported in this thesis investigated how Japanese native speakers (JNSs) judge the personalities of non-native speakers (NNSs) of Japanese through their speech. Extensive research has been conducted in different academic fields, such as social psychology and linguistics, to investigate how people react to others' speech. Previous research can be classified into two broad categories: one focusing on vocal features such as voice, speech rate, and pitch (cf. Addington, 1968; Apple, Streeter, & Krauss, 1979; Brown, Strong, & Rencher, 1973; Kramer, 1964; Peng et al., 1993; Pittam, 1987a; Scherer, 1972; Uchida, 2004), and the other focusing on language forms, including pronunciation (cf. Anderson-Hsieh, Johnson, & Koehler, 1992; Ensz, 1982; Gallois & Callan, 1981; Mulac, Hanley, & Prigge, 1974; Politzer, 1978; Ryan, Carranza, & Moffie, 1977; Schairer, 1992). Research investigating JNSs' judgments of NNSs' personalities based on the latter's speech has also been conducted (cf. Ide, Ogino, Kawasaki, & Ikuta; 1986; Ohtsubo & Yoshida, 1990; Takeoka, 1989; Yamada, Hakoda, Yuda, & Kusuhara, 2000).

Speech production involves voice characteristics, features of speech (such as speed, pitch, and loudness), language form (such as pronunciation and language structure), and content (Laver & Trudgill, 1979). Personality judgments can therefore be influenced by any of the above mentioned aspects of speech production; however, psychological studies have tended to ignore language form, and linguistic studies have tended to ignore individual vocal variables such as voice characteristics and features of speech.

They have instead concentrated on lexical and grammatical aspects of language. Furthermore, the number of cross-cultural studies focusing on vocal variables has been relatively small. The present study attempts to contribute additional knowledge to cross-cultural communication by taking account of both vocal and linguistic aspects of speech produced by NNSs.

1.1. Background

The Japanese language is one of the most popular foreign languages taught in Australia. A recent report of the Centre of International Japanese in Kokusai Kouryuu Kikin (2010a; 2010b) indicates that Australia has the fourth largest number of people learning Japanese in the world with a total of 275,000 learners. This amounts to approximately one in 81 people learning Japanese in the country. The Australian government has committed funding of $64.3 million between 2009 and 2012 to facilitate the learning of the Japanese language and culture through the National Asian Languages and Studies in Schools Program along with other languages of neighbouring countries such as Mandarin, Indonesian, and Korean (Department of Education, Employment & Workplace Relations, 2010). This shows the importance of the Japanese language in Australia.

The aims of teaching/learning foreign languages are various, but no one can deny that one of the main purposes is to enable communication between those whose mother tongues are different. When communicating, people judge the personality of others through their speech (Bradac, 1990; Kleinke, 1975; Laver & Trudgill, 1979; Zebrowitz, 1990) among other things. In other words, speech provides a large amount of the information that people use to form an impression of a speaker. Making a good

impression on an interlocutor is the first step in establishing a good relationship. Hence, it is important to know what kind of speech variables contribute to an interlocutor's impression formation and the extent of the effect of these variables.

In order to investigate how JNSs judge personalities of NNSs through their speech, three components of speech were taken into account in the present study. The first component is voice characteristics, which have been shown to contribute to impressions of English native speakers by English native listeners (Addington, 1968; Pittam, 1987a). The second component is intonation by pitch contour and stress pattern[1] (Kent & Read, 1992) which conveys information about the tone of the communication (such as interrogative) (Beckman & Pierrehumbert, 1986; Ladd, 1996) and the speaker's emotional state (Bänziger & Scherer, 2005; Kleinke, 1975). The third component is an aspect of language form, namely honorifics.

It is well-known that Japanese has an extensive honorific system (Tsujimura, 1977), which is lexico-grammatically dependent. Japanese people are sensitive to the use of honorifics (Bunkacho, 1997) not only by JNSs but also by NNSs (Murayama, 1996; Tateoka, 1989). Inappropriate use of honorifics by NNSs often causes negative reactions by JNSs (Neustupny, 1982; Tada, 1995). Because Japanese has basically two discourse styles, plain and polite, one cannot speak without choosing either to use or not use honorifics for polite style involves the use of honorifics. It is, therefore, important to consider honorifics, which play a crucial role in Japanese discourse. Previous

[1] Intonation in the present study also involves other aspects of speech variables such as speech rate. See Chapter 3 in details.

research, as will be seen in more detail in Chapter Two, has not examined the relative significance of these three variables as a set for investigating the perception of the personality of NNSs by JNSs. Determining how JNSs form an impression of NNSs through their speech can contribute to the development of an aspect of Japanese language teaching that is currently neglected.

1.2. Purpose of the Study and Research Questions

The present study focused on voice characteristics, intonation, and honorifics as a set of speech variables and attempted to identify how these variables in the speech of NNSs contributes to JNSs' impression of NNSs' personality. It is important to investigate the effects of the above-mentioned speech variables on a speaker's perceived personality in order to understand the nature of impression formation through speech, and in order to facilitate better communication between JNSs and NNSs.

The primary question guiding the present research was as follows: how do voice characteristics, intonation, and honorifics influence JNSs' evaluations of NNSs' personalities based on their speech? Specific research questions will be presented in Chapter Three.

To address the research question, the present study consisted of two phases. The purpose of Phase I was to explore factors such as gender and situation, which appear to influence JNSs' impressions of NNSs' personality traits. Phase II was the main phase of the present study, investigating the contribution of each speech component to the perception of NNSs' personality traits in their speech.

1.3. Thesis Overview

The remainder of the thesis includes seven chapters. Following this introductory chapter, Chapter Two provides a review of previous research on: (1) vocal variables and perceived personality; (2) Intonation and listners' perception; (3) NSs' reactions to language variables of NNSs' speech; (4) *Keigo*, or honorifics in the Japanese language; and (5) the effect of deifferent speech variables in the same speech on impression formation by Japanese people. Chapter Three presents the methods used in the present research, including the pilot study conducted to confirm the suitability of the research procedures and instruments. The results of Phase I of the study are presented in Chapter Four while those of Phase II are presented in Chapter Five. Chapter Six discusses the results of the two studies. The final chapter summarises the research and contains suggestions for the direction of future research. In this latter chapter, the thesis is concluded with the pedagogical implications of the findings.

Chapter 2. Literature Review

2.1. Introduction

One makes assumptions about a person's origin, occupation, and personality by the person's body type, face, speech, and dress. Studies of impression formation address the questions of how people form impressions of others' personalities and the variables that contribute to impression formation. Impression formation is influenced both by the perceiver's characteristics, such as expectations, stereotypes, emotional states, gender, and cultural background, and the target person's characteristics, such as verbal and non-verbal behaviour and appearance. This chapter provides the background to the present study and reviews the literature addressing the relationship between vocal variables and perceived personality. This is done first from the point of view of interactions between native and non-native speakers' in general, and then by focusing on speakers of Japanese more specifically.

The sections of the present chapter are organised as follows. Section 2.2 reviews work conducted on vocal variables and perceived personality. Section 2.3 examines studies on native speakers' (NSs') reactions to language variables in non-native speakers' speech (including, but not restricted to, the Japanese language). Section 2.4 addresses the communicative function of intonation. Section 2.5 details the forms and functions of *keigo*, or honorifics, in the Japanese language. Finally, Section 2.6 discusses the effect of speech variables on impression formation specifically by Japanese people.

2.2. Vocal Variables and Perceived Personality

Speech variables can be classified into numerous hierarchical categories. First, they can be divided into *vocal variables* and *language variables* with the former characterising speech production. Laver and Trudgill (1979) classified vocal variables contributing to impression formation into the following three categories: (1) extralinguistic features, (2) paralinguistic features, and (3) phonetic realisations of linguistic units.

Extralinguistic features or voice characteristics can be subdivided into *vocal features* and *voice settings* (Laver & Trudgill, 1979). The former is determined by individual physical characteristics such as bone structure and is thus, not controllable. The latter involves individual ways of vocalising. For example, one can speak with a 'nasal voice' by keeping "the soft palate lowered throughout speech" (p.14), which can be habitual but is controllable. Paralinguistic features of tone of voice convey emotional signals such as anger and involve whisper, rate, pause, pitch, and loudness of speech. Phonetic realisations of linguistic units such as consonants, vowels, and stress are generally the concern of phonology, the area of linguistics dealing with the sound system of a particular language. Phonological variables as a moderator of native speakers' reactions to native and non-native speakers' speech will be reviewed in Section 2.4.

A diagrammatic representation of Laver and Trudgill's (1979) classification scheme is presented in Figure 2.1. The next section describes previous research on the impact of variables within each of these categories on impression formation.

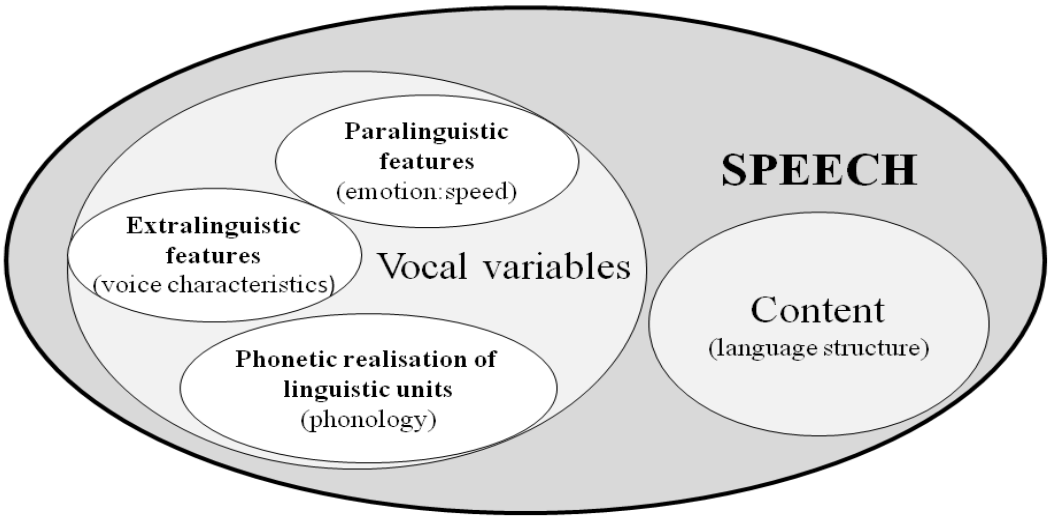

Figure 2.1 *Speech components of impression formation*

2.2.1. Extralinguistic features.

It is known that people share stereotypes about certain types of voice quality (Addington, 1968; Pittam, 1987a; Scherer, 1972; 1979; Yamada, Hakoda, Yuda, & Kusuhara, 2000), which can be defined primarily as an extralinguistic feature. In a study by Scherer (1972), tape-recorded speech samples from American and German speakers were segmented, and these audio segments were then spliced back together in random order for each speaker. As a result, the sample voice became "completely unintelligible and largely free from suprasegmental speech variables" (p.196). American and German participants were then asked to rate the voice samples. The results indicated consistent ratings of specific personality traits despite the masked content of the speech (for

American speakers, extroversion/sociability and for German speakers, assertiveness/dominance). Yamada et al. (2000) investigated how Japanese people related speakers' personality traits and occupational categories to the speakers' voices. Participants were asked to rate 25 tape-recorded male voices on 22 personality traits, such as 'favourable' and 'intelligent', and 11 vocal characteristics, such as 'not stiff' and 'unmuffled'. They were then given a list of 34 occupational categories and asked to select one suitable occupational category for each of the 25 voices. The results showed a significant relationship between ratings of personality traits and voice quality. For example, those who had 'not trembling' and 'not blurred' as voice characteristics were perceived as 'extroverted', 'active', and 'jolly' while those who had 'relaxed' and 'very soft' voice were perceived as 'conscientious', 'kind', and 'safe'. This result was obtained despite the fact that participants' exposure to a stimulus voice lasted only 3 seconds. This implies that people are highly sensitive to voice characteristics, forming impressions of personality based on very limited duration speech samples.

Concerning gender, it has been found that a nasal voice in both males and females was linked to "a wide array of socially undesirable characteristics" (Addington, 1968, p.502). A nasal voice in either gender was evaluated as belonging to those of low status with less ambition, and lower intelligence (Pittam, 1987a). Some voice qualities are also perceived very differently depending on gender. For example, it has been found that when voice tenseness, characterised as involving "higher subglottal air pressure", "slightly raised larynx", and "a tensed velum [soft palate]" (Laver, 1980, p.154), increases, a male person with such a voice may be perceived as older, whereas a female voice with a similar increase may be perceived as belonging to a younger person (Addington, 1968).

2.2.2. Paralinguistic features.

Voice quality is quite a vague term, but it can be described in terms of paralinguistic features. Laver (1980) stated that a tense voice would "sound comparatively louder and higher-pitched" (p.15). Laver's description of voice quality was based on an articulatory point of view. Describing voice quality on an acoustic phonetic basis has been also done (see Pittam, 1987b), for example, by using the long-term average spectrum, which shows "the averaged amplitude or intensity spectrum across a selected frequency range for continuous speech" (p.2). However, when people are asked to evaluate voice characteristics in a broader sense, for instance, by determining vocal attractiveness, subjective parameters such as monotonousness might better explain the nature of voice attractiveness than objective parameters obtained from spectrogram analysis (Zuckerman & Miyake, 1993).

Based on the above, vocal attractiveness includes both extra- and paralinguistic features. The existence of a stereotype of vocal attractiveness, just like the existence of one for facial attractiveness, has also been recognised recently. The results of studies examining vocal attractiveness show that people have a high agreement on whether a presented voice is attractive or not, and those judged to have an attractive voice are perceived to have positive personality traits such as being relaxed and confident (Berry, 1990; Zuckerman, Hodgins, & Miyake, 1990; Zuckerman & Miyake, 1993). Berry (1990) found that as males' voice attractiveness was perceived to increase, ratings of strength, assertiveness, invulnerability, dominance, and warmth of the male speakers increased, whereas ratings of warmth, honesty, and kindness were positively correlated with ratings of female voice attractiveness. Zuckerman et al. (1990) also reported that those

judged to have an attractive voice were not necessarily perceived to be good-natured or flexible. This indicates that a person judged to have an attractive voice will be perceived to have some, but not necessarily all, positive personality traits.

As with other paralinguistic features, pitch and speech rate also significantly affect people's perceptions of a speaker's personality. In a study by Apple, Streeter, and Krauss (1979), a person with a higher pitched voice may be perceived as being less trustworthy and more nervous. In Apple et al.'s study, a non-linear relationship was found between ratings of benevolence and competence on the one hand and pitch and speech rate on the other. Specifically, they found that increasing pitch range led to a speaker being perceived as more benevolent, though this has no impact on perceptions of the speaker's competence. The same speaker was, however, perceived both as less benevolent *and* less competent when speech rate was decreased.

Other studies have shown more direct relationships between speech rate, pitch, and ratings of benevolence/competence. These studies have indicated that speakers will be perceived as more competent and less benevolent when speech rate increases (Brown, Strong, & Rencher, 1973; 1974, Smith, Brown, Strong, & Rencher, 1975). In contrast, a study by Fujihara (1986) showed that a speaker was perceived to be *more* competent when the same speaker's speech rate was decreased in the case of Japanese. This may be evidence of a cultural difference in the relationship between voice and perceived personality. Uchida (2002) investigated the relationship between speech rate and impression of speakers' personality by using a short version of the Big Five scales, of which original was constructed Wada (1996). The scales, which was grounded on the Five Factor Model of human personality being emerged by McCrae and Costa (1987),

were constructed by personality trait words. Uchida's study revealed that speech rate influenced impressions of all five personality traits. When the speech rate increased, ratings for Extroversion and Conscientiousness also rose but after reaching the peak, ratings for those traits declined as speech became faster. Conversary, the rating for Agreeableness rose when the speech rate decreased and after reaching the peak, ratings declined as speech became slower. The rating for Openness was highest when the speech rate was not changed from the original and both increasing and descresing speech rate had adverse effect. Neuroticism showed similar tendency of Extroversion and Conscientiousness when the speech rate increased but the effect was much smaller than the cases of Extroversion and Conscientiousness. In addition, the location of the peaks were varied from trait to trait and the relationship between speech rate and each personality traits can be described by reversed u-shape except for Neuroticism. The result indicated that people formed impressions of each personality trait independently.

Aronovitch (1976) investigated the paralinguistic features of voice that influenced a speaker's perceived personality traits and their effects on a listener's gender in American English. He tested six paralinguistic features of voice: (1) loudness average, (2) loudness variance, (3) speech rate, (4) pitch average, (5) pitch variance, and (6) sound-silence ratio. Fifty-seven voices (32 female voices and 25 male voices) were rated by 100 participants. The participants were asked to rate the sample voices by polar adjective scales of 10 personality traits. The 10 personality traits were as follows; (1) Self-doubting--Self-confident, (2) Extraverted-Introverted, (3) Kind-Cruel, (4) Bold-Cautious, (5) Lazy-Energetic, (6) Sociable-Unsociable, (7) Humorous-Serious, (8) Mature-Immature, (9) Submissive-Dominant, (10) Emotional-Unemotional. The results indicated that there was no gender difference among raters while effects of the tested

vocal variables differed according to the gender of the speakers. For male speakers, loudness variance, speech rate, and pitch variance were all statistically significant. For female speakers, loudness average, speech rate, pitch average, and sound-silence ratio were all statistically significant. Further, there were gender differences for correlations between the vocal variables and the perceived personalities. For example, speech rate was significantly correlated with extroversion/introversion for female speakers, but this variable was not significantly correlated for males. For females, pitch average was significantly correlated with kind/cruel ratings of female speakers, but loudness variance correlated with the same trait for male speakers. Based on his study, Aronovitch (1976) suggested that both females and males shared gender stereotypes. Specifically, he argued that because the raters stereotyped males as more emotionally stable than females, the degree of variability in loudness and pitch was used for rating males' personalities. For females, average loudness and pitch were used, because females' speech was stereotyped as more varied in pitch and less loud than that of males.

A study by Kramer (1977) supported this explanation. Kramer's study investigating stereotypes of female and male speech behaviour in American English, showed that a wide range of pitch was seen as a key characteristic of female speech. The result of her study demonstrated that female and male speech characteristics were stereotyped differently according to genders. For example, men were believed to speak demandingly, bluntly, dominantly, forcefully, aggressively, and more loudly than women. On the other hand, women were believed to speak gently, politely, pleasantly, and in a friendly manner. They were also believed to use more grammatically correct sentences and speak less confidently than men. These are gender stereotypes of manners

in speech and they reflect general stereotypes in personality traits of men and female; agency and dominance for male but cummunality and warmth for female (Rudman & Glick, 2008). Men's streotypes are further prescribed as, for example, dependable, ambitious, and assertive and are sensitive, friendly, and polite for female's stereoptypes (Prentice & Carranza, 2002). Stereotyping in impression formation has been suggested from the perspective of cognitive psycohology that it functions reducing cognitive load (Macrae, Milne, & Bodenhausen, 1994; Sherman & Frost, 2000; Sherman, Bessenoff & Frost, 1998) because stereotyping is a categorical knowledge, consequently, it is farily easily accessed and helping perceivers' judgemental task (Quinn, Macrae & Bodenhausen, 2003). Thus, stereotyping could be activated when the task becomes difficult (Macrae et al, 1994).

Returning to Aronovitch's (1976) and Kramer's (1977) studies, they were conducted in the United States of America, and the authors acknowledge that the stereotypes found in their studies reflect the culture of their county. Other studies have, however, indicated commonalities in perceptions of speakers' personalities in different countries. Scherer (1972) found that speakers' personalities in the United States and Germany were perceived similarly by listeners in the United States and Germany. In his study, the American listners' were asked to judge both American and German speakers and vice versa. The listeners' ratings showed statistically significant agreement with personality traits such as extroversion and sociability for speakers in the United States and assertiveness and dominance for speakers in Germany. Similarly, when the feature 'vocal babyishness', following studies of 'facial babyishness', was investigated by Montepare and Zebrowitz-McArthur (1987), ratings of the speakers' perceived personalities were consistent across raters in the United States and South Korea. This

study involved 16 female and 16 male United States undergraduate students and 32 female and 32 male Korean undergraduate students in South Korea. The participants rated the voices of either 16 female speakers (aged between 19 and 37) or 16 male speakers (aged between 21 and 36). The participants were asked to rate recorded voices reciting the English alphabet by three different measures. The first measure was a set of personality trait scales representing three trait dimensions, that is, social and physical weakness, perceptions of competency, and interpersonal warmth. The second measure comprised scales of voice characteristics, such as deep voice and tight voice. The third measure comprised scales of maturity and gender in which participants were asked to rate the 'childlikeness' and femininity of speakers' voices. The results indicated that voices rated as childlike were perceived to be weaker, less competent, and warmer than voices rated as more mature by participants of both countries.

Although the studies by Scherer (1972) and Montepare and Zebrowitz-McArthur (1987) showed similarities between different cultures, cultural differences were also evident in the study by Scherer (1972). As indicated above, the listeners' ratings showed agreement with respect to personality traits such as extroversion and sociability for United States speakers and with respect to the traits of assertiveness and dominance in German speakers. In his interpretation of these results, Scherer argued that extroversion and sociability were highly valued in the society of the United States, whereas German society was stereotyped as having an emphasis on the dominance-submission dimension. Consequently, the personality traits that reflect either cultural value more saliently would be perceived more finely than other traits.

Peng, Zebrowitz, and Lee's study (1993) took into account not only speakers' perceived personalities by listeners' cultural differences, but the cultural differences among speakers themselves. In their study, speakers and participants were Americans and Koreans. The participants were classified into three groups as follows: (1) 32 American undergraduate students (16 females and 16 males) in the United States; (2) 48 Korean undergraduate students (24 females and 24 males) in South Korea; and (3) 32 Korean graduate students or student spouses (16 females and 16 males) in the United States. Peng et al. hypothesised that Koreans in the United States would rate American speakers in a similar way to Americans, and would rate Korean speakers in a similar way to Koreans in Korea. The experimental task involved participants rating 16 American male voices reciting the English alphabet, and 16 Korean male voices reciting *hangul*, or a Korean character. The rating measures were personality scales focusing on power and competence and voice characteristics, such as loudness, speaking speed, and tightness. Ratings were also obtained of characteristics such as vocal maturity, masculinity, attractiveness, and age. The results showed that as they predicted, both Koreans in the United States and Americans perceived American speakers with louder voices as more powerful and competent. However, Koreans in the United States and Koreans in Korea did not respond identically to Korean speakers. Korean speakers judged to be slower in their speech were perceived as being less competent by Koreans in the United States, but slower speech did not influence rating of competence by Koreans in Korean. Peng et al. argued that, for Koreans living in the United States, exposure to American culture (which highly values "quickness") and living life in an academic setting made them evaluate slower Korean speakers as being less competent. American raters perceived faster Korean speakers as being more competent. Overall, results indicated that louder voices were perceived as more powerful and competent by

all three groups. These results suggest that some stereotypes associated with voice (e.g., speech rate) could be culture-specific, while others (e.g., loudness) could be more universal.

2.3. Intonation and Listener's Perception

How something is said is often more important than what is actually said. When two pieces of information conveyed by content and vocal tone are presented and are contradictory, the message is interpreted on the basis of how it is said (Mehrabian & Wiener, 1967). For example, when a word has a positive meaning and is spoken in a negative tone, the word is perceived as negative. Thus, vocal tone plays an important role and is a type of paralinguistic feature that comes under the scope of intonation.

The components of intonation are prosodic features such as pitch and loudness (Trask, 1996), and intonation is observed as "the occurrence of recurring pitch patterns, each of which is used with a set of relatively consistent meanings, either on sigle words or on groups of words of varying length" (Cruttenden, 1997, p. 7). Intonation has two functions: a grammatical function and an affective function. The former conveys information about the type of sentence such as whether it is declarative or interrogative. The latter conveys the emotion and attitude of a speaker (Bänziger & Scherer, 2005; Kleinke, 1975; Kohri, 1997; Kramer; 1964). Paralinguistic features relate to the latter function. As both functions use the same properties simultaneously, however, it is difficult to distinguish the extent to which prosodic features serve each function. For example, pitch change represents grammatical intonation (Beckman & Pierrehumbert, 1986; Ladd, 1996) as well as emotional intonation (Sugito & Inada, 1977). As intonation provides important information about grammar as well as a speaker's

attitudes towards a listener, intonation carries meaning of a speaker's message and intention heavily particularly in a casual and intimate conversation because in such conversations, there is a tendency that 'language itself is minimally articulated' (Kress & Van Leeuwen, 2006, p. 129) and speaker's failure to use appropriate intonation can cause communication breakdown in general (Clennell, 1997; Sato, 1995; Sugito, 1999).

In Japanese, which is well-know as a pitch language (Cruttenden, 1997), pitch plays a grammatically crucial role at three levels: within the word, between words, and at the sentence level. Pitch at the word level consists of a relative high pitch and a relative low pitch and plays a part in determining the meaning of a word or a phrase. Pitch can, therefore, differentiate the meanings of two otherwise identically sounded words. Pitch is a lexical property of a word in Japanese, and is not affected by the prosodic organisation at the higher level. Japanese intonation is formed by incorporating the accent patterns of words into phrase pitch pattern. For example, the pitch pattern of [ame] 'rain' is high/low (high in [a] and low in [me]), and interrogative intonation involves rising pitch at the end of a sentence. When one says [ame] with an interrogative intonation, the pitch pattern must be high/low with immediately following rising pitch but without making [me] longer. When one says [ame] with an interrogative intonation in low/high, that is, low in [a] and high in [me], it means 'candy?' (See below). Sato (1995) noted that improper prosody, especially pitch, in the speech of NNSs resulted in NSs finding it difficult to interpret NNSs' intentions correctly in some cases.

ame	'rain'	ame	'candy'
| |		| |	
H L		L H	

ame? ‘rain?’ ame? ‘candy?’
| ＼ | |
H LH L H

Learners of Japanese language have also realised that communication breakdowns can be caused by their intonation (Toda, 2009). Sugito (1999) reported that NNSs of Japanese sometimes report that they experience miscommunication with NSs of Japanese because the pitch contour produced by NNSs was inappropriate for the NNSs’ intention. Neustupny (1982) found that in spite of the fact that an objective evaluation indicated that a group of NNSs of Japanese had very high language proficiency, a subjective evaluation by JNSs showed completely the opposite. He pointed out that one of the causes for the negative evaluation of the speech of NNSs by JNSs was non-verbal behaviour such as exaggerated intonation, and such behaviour aroused uneasiness among the evaluators. Uchida (2005) investigated how impressions of Japanese speakers’ personality were influenced by a change of intonation. In his study, Japanese participants were asked to evaluate speaker’s personality based on the speech stimuli of which fundamental frequency (F0) of pitch modulation were transformed to emphasise in two levels, flatten in two levels, reverse, and reverse-flatten in two levels, together with the original speech by using a short version of the Big Five Scales (Wada, 1996). The result showed that the more emphatic the intonation (i.e., wider F0 range), the higher the rating for Extroversion and Openness though the rating for Openness did not increased after the emphasis surpassed the original pitch contour. Similarly, ratings of Conscientiousness and Agreeableness rose until the transformed intonation reaches the same pitch contour of the original but the raitings of these two traits dropped once the emphasis surpassed. The result of the rating for Neuroticism sloped according to the increase of the degree of emphasis. This study indicated that the degree of emphases of

intonation contour had an effect on impression of personality traits.

Despite the fact that it is generally recognised that prosodic features are used for expressing politeness (Brown & Levinson, 1987; Ide et al., 1986; Tsujimura, 1996) and that cultural differences in the reactions to paralinguistic features have been documented in the literature (Gaies & Beebe, 1991; Peng et al., 1993), studies investigating the role of intonation as a politeness device are rare. One notable experimental study conducted by Ofuka, McKeown, Waterman, and Roach (2000) revealed that the duration and the F0 direction, which was rise or fall, of the sentence final vowel affected the Japanese listeners' impression of speaker's politeness. When a sentence's final vowel was short in duration and pronounced in a rising F0 direction, it was rated politer than if the final vowel was long and the F0 direction was falling. However, in this study both speakers and listeners were JNSs. Given that an intonation effect on politeness was reported, the effect of intonation in the speech of NNSs' of Japanese on NNSs' perceived personalities by JNSs needs to be investigated.

2.4. NSs' Reactions to Language Variables of NNSs' Speech

The previous section 2.2 looked through research concerning vocal variables of speech (Laver & Trudgill, 1979). In this section, another variable of speech, namely language variables will be concerned. Language variables can be said as a content of the speech realised by language structures or grammar (Laver & Trudgill, 1979), which is covered by the field of linguistics. Although phonology is classified into vocal variables, it is also a branch of linguistic, research conducted in relation to phonology will be discussed in this section.

There has been extensive research addressing the question of NSs' reactions to NNSs' language variables of speech, and two broad types of studies have been conducted. One type of study has focused exclusively on NSs' evaluation of grammar, pronunciation, and comprehensibility of NNSs' speech. The evaluating criteria for these studies have typically been the correctness, naturalness, and acceptability of the language. The second type has focused on NSs' perceptions of NNSs' personalities from NNSs' language variables in speech.

Studies of the first type have revealed that certain linguistic errors are considered to be more serious than others. For example, sentences in Spanish containing an error of substitution of tense were more often misinterpreted than those containing an error of agreement between verb and subject (Guntermann, 1978). Overall judgments have indicated that grammatical errors are more serious than phonological errors in German (Politzer, 1978) and French (Ensz, 1982). Phonological errors are the errors that concern the sound system of the target language. For example, JNSs consider that [ka] and [ga] are different words but [ka] and [kHa] are the same word, whereas NSs of Chinese consider that [ka] and [kHa] are different words but [ka] and [ga] are the same word, thus, when NSs of Chinese produce [ka] when the targeted Japanese word is [ga], it is a phonological error (Inozuka & Inozuka, 1993). Vowel production such as vowels in stressed or unstressed position and dipthongs was the most important factor influencing the evaluation of comprehensibility in Spanish because vowels carry both lexical and grammatical information in Spanish (Schairer, 1992). In English, prosodic features such as stress and intonation had a stronger effect than phonemes on the scores for pronunciation (Anderson-Hsieh, Johnson, & Koehler, 1992). A study by Sato (1995) supported the finding that prosody is a crucial factor when evaluating the naturalness of

speech of NNSs of Japanese and also revealed that among pitch, loudness, and duration, pitch was the strongest contributor to the perception of naturalness in Japanese speech.

Within the second type of study, many have focused on investigating the perceived personalities of speakers with a foreign accent. The reason why foreign accent is treated as a language variable is that the nature of it can be explained by the phonological difference between the targeted language and the speakers' mother tongue. It has been reported that speakers with a foreign accent tend to be evaluated less favourably than NSs. For example, Ryan, Carranza, and Moffie (1977) found that the stronger the Spanish accent in an English text reading, the less favourable were the ratings of status and solidarity given by NSs of English. Callan, Gallois, and Forbes (1983) also found that NSs of Anglo-Australian English gave lower ratings of status (reflected by ratings of successfulness, intelligence, and ambitiousness) to NNS Greek-accented speech in English than to NSs' speech in a study that considered at home, school, and bus stop settings. Mulac, Hanley, and Prigge (1974) also found that when NSs of English in the United States listened to English speech with foreign accents (produced by NNSs from Norway, Italy, Czechoslovakia, Poland, and Russia), they rated those speakers lower than NSs in social status, intelligence, pleasantness, attractiveness, strength, and activeness.

Other studies have documented gender differences in listeners' perceptions of NNSs' personalities based on their speech. Podberesky, Deluty, and Feldstein (1990) found that male listeners rated speakers with Japanese-accented English, Chinese-accented English, Korean-accented English, and Vietnamese-accented English (regardless of the speakers' gender) higher than female listeners did on a competence scale. Studies have also shown

differences in perceptions of personality based on speakers' genders. For example, Gallois and Callan's (1981) investigated Anstralian English native speakers' evaluation towards Italian, Greek, French, Vietnamise, Australian, and British English. Their study showed that among six different-accented male voices, an Italian-accented male voice was perceived least favourably and was evaluated as unpleasant and unhelpful. In contrast, among six different-accented female voices, an Italian-accented female voice was evaluated as being the third most favourable.

Given that the existence of a correlation between voice quality and perceived personality has been documented, as seen in Section 2.2, the individual voice quality of speakers might have confounded results in previous studies that have investigated the relationship between foreign accents and evaluations of personality traits (Callan, Gallois, & Forbes, 1983; Gallois & Callan, 1981; Mulac, Hanley, & Prigge, 1974; Podberesky et al., 1990; Ryan, Carranza, & Moffie, 1977). Unfortunately, as Gallois and Callan (1981) acknowledged, the extent of such influence is unknown. Also, given significant correlations between speech characteristics (e.g., speech rate) and perceived personality, it could be assumed that these characteristics might also represent a confounding variable in these studies. Despite this, of the studies discussed above, only Podberesky et al.'s (1990) study made any attempt to control for such factors (i.e., by matching speech samples in the speech rate and the frequency electronically without affecting the intensity levels).

To control such variables without manipulating speech samples electronically, the matched-guise technique (Lambert, Hodgson, Gardner, & Fillenbaum, 1960) was designed. This technique involves the evaluation by participants of different speech

samples produced by the same speaker. The samples are carefully presented so as to prevent the participants from noticing the fact that they are evaluating the same speaker, thus, the participants evaluate only the targeted language or code. For example, when the targeted feature is Spanish accent, participants who are NSs of American English are asked to evaluate the personality of an American-accented English speaker and then that of a Spanish-accented English speaker. The two speech samples are produced by a single person (a Spanish-English bilingual speaker) to hold constant other confounding variables such as speech rate and voice quality.

Despite its availability, this technique has not always been used in studies designed to investigate the relationship between foreign accents (Gallois & Callan, 1981; Mulac et al., 1974; Podberesky et al., 1990; Ryan et al., 1977) and perceived personality traits. The risk in employing this technique is that speakers may not produce two guises naturally (Callan et al., 1983; Hudson, 1980). It is quite probable that since speakers overstress the differences of two guises, speech becomes artificial. Furthermore, if such an exaggeration causes changes in the speakers' voice characteristics (Callan et al., 1983), justification for the matched-guise technique is disputable. Even if such a technique could be used to investigate the impact of foreign accent on the perceived personality of NNSs, the question would still remain as to whether NSs do not react to the speakers' voice characteristics and speech rate in any sense. When investigating NSs' perceptions of NNSs' personalities on the basis of NNSs' speech, both extralinguistic and paralinguistic features need to be taken into account.

2.5. *Keigo*, or Honorifics in the Japanese Language

When one speak Japanese, he/she has to select one of the two speech styles, plain style or polite style because these styles have diferent sentence ending. The polite style is a kind of *keigo*, or honorifcs in the Japanese language. In this section focuses on *keigo*, however, polite expressions beyond the use of it will be also discussed.

2.5.1. Brown and Levinson's politeness theory and *keigo*

Keigo ('kei' means 'respect' and 'go' means 'word/language', literally), or honorifics in the Japanese language are used to convey one aspect of 'politeness' (Brown & Levinson, 1987) that expresses an addressor's social consideration for establishing or maintaining good communication.

In social interaction, people endeavour to maintain their 'face', or the desirable personalities that people choose to present themselves positively to others depending on the situation (Goffman, 1967). Brown and Levinson (1987) divided face into positive face, or "the desire to be approved" (p.13), and negative face, or "the desire to be unimpeded in one's actions" (p.13). It is inevitable that conflicts between a speaker and an addressee arise in cases where one is confronted with losing one's face or is threatening another's face. Acts that cause such situations are called 'face-threatening acts', or FTA. Politeness is used as a mechanism for maintaining the faces of all parties in exchanges where FTAs occur. Brown and Levinson outlined five politeness strategies when an addresser needs to perform a FTA during communication. The least face threatening action is 'Don't do the FTA'. When one decided to perform FTA, the most face threatening strategy is acting 'on-record, baldly without redress' (e.g., "Open the window!" in request) and the least face threatening strategy is acting 'off-record' (e.g., "Today seems a bit warm"). Within on-record actions, acting with redress by positive

politeness comes the second most threatening strategy, followed by negative politeness.

Positive politeness, which minimises social distance, maintains one's positive face, while negative politeness, which creates social distance, maintains one's negative face. *Keigo* could share characteristics of negative politeness, as *keigo* currently has five main functions—showing respect, creating a distance, keeping one's dignity, showing formality, and beautification of language (Kokuritsu Kokugo Kenkyuusho, 1990b; Takiura, 2005). *Keigo* functions can be used not only when a FTA occurs, but for other purposes, for example, when a speaker simply wishes to express oneself in a refined manner (Bunkacho, 1998; Ide, 2005; Ogino 1997; Tsujimura 1977). Brown and Levinson also noted that negative politeness can be used in general to show politeness where no FTA occurs.

Brown and Levinson (1987) exemplified one of the strategies of negative politeness, "give difference" with Japanese honorifics. Sakamoto and Naotsuka (1982) compared what people thought were polite actions for American and Japanese people. They pointed out that behaving as if each party is equal and as if the parties are close friends, and being relaxed are regarded as polite by Americans. Ide et al.'s (1992) study revealed that the word 'polite' was highly correlated to the word 'friendly' and they fell into the same dimension for American people while for Japanese people, '*teineina*' (an equivalent of 'polite') and '*shitashigena*' (an equivalent of 'friendly') fell into the different dimension. This implies that acting 'friendly' expressing a polite behaviour for American people but it is not interpreted as 'polite' by Japanese people. Indeed, Sakamoto and Naotsuka (1982) found the opposite pattern in the case of Japanese people when they expressed their politeness. Showing that one is inferior or that one's

counterpart is superior, creating distance, and being formal are considered to be polite actions by the Japanese. These actions emphasise differences between the parties, a key principle in the Japanese approach to expressing one's politeness. The use of *keigo* is governed predominantly by this principle.

However, Brown and Levinson's politeness theory has been challenged by scholars in Japanese (Hill et al., 1986; Ide, 1982, 1989, 2005; Matsumoto, 1988). They argue that Brown and Levinson's strategy is employed by the individual 'volition', which prevails in western culture but the choice of politeness expressions is much more restricted by the social rules in Japanese. Ide (1982, 1989) claims that '*wakimae*', meaning "recognising and acknowledging one's place in a group" (Fukada & Asato, 2004, p.2000) or 'discernment' governs the use of *keigo* in Japanese. On the other hand, Fukada and Asato (2004) countered Ide's assertion. They pointed out that an inappropriate use of *keigo*, which violates socially expected norms, by the speaker threatens the hearer's face. Hence using proper *keigo* saves the hearer's face and it could be explained within the Brown and Levinson's politeness framework. Given that realization of positive politeness is also observed in *keigo* (see Pizziconi, 203), although Brown and Levinson's theory has been criticised for statically assigning an honorific for a one particular social meaning despite fluidity of the usage of honorifics in an actual interaction (Cook, 2011; Dunn, 2005; Pizziconi, 2003), Japanese language would not be unexplainable by their theory (Pizziconi, 2003).

2.5.2. The system of *keigo* and selection principles

The way of expressing one's politeness through language cannot be restricted only by using *keigo* (Sugito, 1999) but in the present study, *keigo* is defined as expressions

basically involve a particular language structure that has characteristic morphology and vocabulary in traditional Japanese grammar. *Keigo* can, therefore, be understood to be grammaticalised/lexicalized realisation of politeness.

The extensive system of *keigo* as linguistic forms is well described (Tsujimura, 1977). The system and structure of *keigo* has been studied by many scholars, especially since the beginning of the twentieth century (Ohishi, 1977). Several classifications of *keigo* have been proposed (Hori, 1985), but three types are generally accepted (Bunkacho, 2007; Satake & Nishio, 2005). These three are *sonkei-go* or Respectful Language, *kenjou-go* or Humble Language, and *teinei-go* or Polite Language. *Sonkei-go*, or Respectful Language, is used when the speaker wants to treat the addressee and/or the referent with respect by indicating that the addressee and/or the referent is/are in a higher social position than the speaker. *Kenjou-go*, or Humble Language, is used when the speaker wants to show his/her modesty in order to treat the addressee and/or the referent with respect or acknowledge that the addressee is in a higher position than the speaker. This is an indirect way to be polite. Presenting oneself as being inferior to the addressee implies that the addressee and/or referent occupies a higher position. *Teinei-go*, or Polite Language, is used when the speaker wants to behave in a polite and refined manner. The politeness of *Teinei-go* is directly targeted to the listener and is used to refer the speaker's own actions or those of others. Words that are classified as *bika-go*, or beautification words, are also a part of Polite Language. Beautification words do not need to have an addressee or a referent because they do not make the addressee/referent positioning higher. In this respect, beautification words could not be *keigo*, but they commonly appear when one uses the three types of *keigo* described above. Thus, beautification words are also regarded as a kind of *keigo* and classified under the

category of Polite Language (Bunkacho, 2007).

Table 2.1 shows examples of verbs and a copula in *keigo* form. As Martin (1964) indicated, Japanese speech level has two axes, namely the axis reference and the axis of address (p.408). The axis of reference involves the choice of Respectful Language or Humble Language or *non-keigo* language and the axis of address involves the choice of Polite Language or not. The latter also means the choice of speech style because Japanese discourse has two styles in general: *Jou-tai* or plain style, in which plain forms of verbs, adjectives, and a copula are used and *Kei-tai* or polite style, in which Polite Language is used. Similar to the plain style, the polite style is expressed by polite forms of words. In other words, a polite form of the word is classified as Polite Language and its speech style is the polite style. As Polite Language does not concern referent but addressee, it is also called an addressee honorific and both Respectful and Humble Languages are called referent honorifics (Ide, 1982). It should be noted that the referent honorifics can be used in a combination with the addressee honorific. The Polite Language is regarded as moderately polite (Bunkacho, 1971), and it is widely used in various social contexts (Cook, 2011). According to Hori (1985), Japanese people use Polite Language to an addressee who is not particularly close or neither in the higher nor in the lower status in order not to violate other's psychological personal space. The use of Polite Language is less polite compared to using Respectful or Humble Languages explicitly but using Polite Language or the polite style is regarded as "moderate" politeness.

The general rules of how to make *keigo* words are as follows. Japanese verbs are classified into three groups: regular verbs Group 1, Group 2, and two Irregular verbs:

‘*kuru’* (come) and ‘*suru*’(do). There are two ways in which one can make a respectful form, one of the referent honorifics, out of regular verbs. One way uses a conjunctive form of the verb. The conjunctive form is made by adding /i/ after the stem of the verb, replacing the final vowel /u/ of the dictionary form of the Group 1 verb while the conjunctive form for Group 2 is made by discarding /*ru*/ from the dictionary form of the verb. For example, the stem of the Group 1 verb ‘*yomu*’ (read) is ‘*yom*’ and the conjunctive form of this verb is ‘*yomi*’. In order to make a respectful form, the honorific prefix ‘*o*’ is added before a conjunctive form of the verb, and ‘*ni-naru*’ is added after the verb. Therefore, a respectful form of *yomu* is ‘o + yomi + ni + naru’ = ‘*o-yomininaru*’. Another way of making a respectful form is to add an auxiliary verb ‘*areru*’ after the stem of the verb for Group 1 verbs and ‘*rareru*’ for Group 2 verbs. For example, ‘*yomu*’ → ‘*yom*’ → '*yom + areru*’ = ‘*yomareru*’ (Group 1). The respectful forms of the irregular verbs ‘*kuru*’ (come) and ‘*suru*’ (do) are ‘*irassharu*’ and ‘*nasaru*’ respectively. In order to make a humble form of regular verbs, the honorific prefix ‘*o*’ is added before a verb, which is in a conjunctive form, and then ‘*suru*’ (do) is added after it. For example, ‘*yomu*’ → ‘*o + yom*’ → ‘*o + yom + i*’ → ‘*o + yomi+ suru’* = ‘*oyomisuru*’(Group 1), and ‘*okiru*’ → ‘*o + oki*’ → ‘*oki+rareru*’= ‘*okirareru*’ (Group 2). Note that the irregular verb ‘*suru*’ only has ‘*nasaru*’ as a respectful form, and ‘*itasu*’ as a humble form. The irregular verb ‘*kuru*’ has two possible respectful forms, ‘*irassyaru*’ and ‘*korareru*’, but ‘*o-ki+ni+naru*’ is ungrammatical (‘*ki*’ is the conjunctive form of this verb). In addition, some verbs have their own special suppletive *keigo* words. For example, a respectful form ‘*irassharu*’ and a humble form ‘*mairu*’ are available for ‘*iku*’ (go).

Polite Language (*teinei-go*) or addressee honorific is produced by using polite forms of

verbs and copula. The *masu*-form is used for verbs and *desu*-form is used for the copula *da*[2]. A polite form of a verb is made up of the conjunctive form plus an auxiliary '*masu*'. Using beautification words is another way. Beautification words are a distinct category of vocabulary and are used not only in a polite style, but also in a plain style. Table 2.1 shows relationship between Polite Language and other *keigo* and *non-keigo* word forms and speech styles.

Table 2.1 Interaction of *keigo* honorifics and a word form/speech style illustrated by copula and a verb 'read'.

				Addressee honorifics (Polite Language)
			Plain form/style	Polite form/style
Copula			だ	です
Verb			yomu 読む	yomimasu 読みます
	Referent honorifics	Respectful Language	o yominінaru お読みになる yomareru 読まれる	o yominінarimasu お読みになります yomaremasu 読まれます
		Humble Language	o yomisuru お読みする	o yomishimasu お読みします

For adjectives, the honorific prefix '*o*' is added to their dictionary forms in order to make a respectful form. For example, '*yasashii*' (kind) becomes '*o*yasashii'. Adjectives in a respectful form are limited because those that refer to personal characteristics are the only ones applicable to become a respectful form. The polite form of an adjective is made by adding '*desu*' after the adjective such as '*oyasashii-desu*'. As explained in the

[2] * For copula, a hyper-polite form *gozaimasu*, which could be classified as belonging to a hyper-polite style is also available. This regarded as too polite for daily situations and is more commonly used in formal situations (Kokuritsu Kokugo Kenkyuusho, 1990b).

previous section describing polite forms, '*desu*' is the polite form of the copula '*da*'. There is no humble form for adjectives.

With respect to nouns, there are two ways of making *keigo* as in the case of verbs. One way is by adding a prefix or a suffix and another way is by using a special word. Japanese nouns are classified into three categories: '*wago*' (Japanese word), '*kango*' (Chinese word), and '*shakuyougo*' (loan word). As their names indicate, *wago* is a native Japanese word or a word of Japanese origin, whereas *kango*, a Sino-Japanese word, originated from Chinese. Although there are several exceptions, an honorific prefix '*o*' is added to *wago* such as '*o-hanasi*'(story) and '*go*' is added to *kango* such as '*go-sotsugyou*' (graduation). These prefixes are rarely applied to loan words. For a humble form, a humble prefix such as '*hei*' and '*setsu*' are used. '*Hei*-sha' is a humble form of '*sha*' (company) and '*setsu-bun*' is a humble form of '*bun*' (passage). Nouns do not have a polite form because the polite form needs the auxiliary verb '*masu*' or a copula. However, beautification words such as '*gohan*' for '*meshi*' (steamed rice) and '*onaka*' for '*hara*' (stomach) are used as a polite version of the noun.

Turning now to principles for *keigo* selection. One of the complexities of the use of *keigo* is that the relationship between the speaker, the listener, and the referent in a sentence is not static, that is, their status is relative (Satake & Nishio, 2005). For example, one should use humble forms for oneself or one's family members when one talks to a person who is not one's family member. Also, one uses respectful forms when one talks about the CEO of the company during a conversation with one's boss, but one should use humble forms if one's conversational partner does not belong to one's company.

Minami (1987) classified the criteria for the selection of *keigo* into external conditions and internal conditions. The internal conditions relate to the *keigo* grammar system, and the use of *keigo* in discourse. The external conditions include types of human relationships, topics, and settings that form the context for the discourse (e.g., the level of formality in the situation). Minami further indicated some parameters of human relationship for *keigo* selection as follows:

i) Whether a topic person or a referent mentioned in the sentence belongs to the speaker or is part of her/his '*in-group*' or not.

Japanese people are often said to make a clear distinction between insiders and outsiders (Doi, 1971; Lebra, 1976; Sato, 1992). The Japanese distinguish between *uchi* (inside) and *soto* (outside), or in-group and out-group, and this distinction rules their behaviour including the use of language (Kamei, 2006). When the speaker or someone belonging to her/his in-group is referred to in a sentence, a humble form is more likely to be selected to describe the act/belongings of that person. For example, when a son is talking to a person who does not belong to the son's in-group and the son talks about his mother, the son uses humble forms for referring to his mother's action (see Example 1). In this case, the son is a speaker and his mother is a referent. The referent belongs to the speaker's in-group while the listener belongs to the speaker's out-group.

Example 1.

母	が	参ります。
haha	ga	mairimasu
mother	S	will come-HUM.POL

‘My mother will come.’

If a mother is not the speaker’s mother, he would say:

Example 2.

お母様	が	いらっしゃいます。
okaasama	ga	irassyaimasu.
mother-RES	S	will come-RES.POL

‘(Your) mother will come.’

ii) Gender.

Female speakers tend to use more polite expressions than male speakers (Endo, 1997; Ide et al., 1986; Nakao, Hibiya, & Hattori, 1997; Ogino, 1983). This will be discussed futher in this section later.

iii) Social class.

The social class differences became less dominant after the modernisation of Japan known as the *meiji restoration*, which started in 1868 (Ohishi, 1975), because it abolished the feudal social class system. Differences became even less dominant after World War II. The social restructuring and industrialisation that occurred after the war enabled increasing social mobility and rapid economic growth, which in turn generated a “new middle-mass” formed from the middle- and working-classes (Murakami, 1987). Murakami pointed out that there was a strong barrier between classes, and class differences such as occupation, level of education, language, and clothes were obvious before the war. At present,

however, class differences have become less marked in Japan (Watanabe, 1977).

iv) Hierarchical relation (e.g., age, job-rank, experience, psychological power relation, such as benefactor/benefactee).

Actions/belongings of an older person, a person who has a higher job-rank, or a person who has more experience are referred to with a respectful form and a person who addresses those people uses a humble form for his/her actions/belongings. A leader of a group, customer, teacher/instructor, or medical doctor are also treated with a respectful form by subordinates, shop clerks, students, or patients. Benefactors such as a person who gives/lends money, time, objects, and favours are considered to be in a higher position than benefactees.

v) Solidarity (psychologically or socially).

When one feels close to someone, s/he uses fewer polite forms with that person. Also, a person who is regarded as an in-group member is addressed by fewer polite forms. For example, plain forms are commonly used between friends. They still use polite expressions but respectful forms are used rarely. In contrast, even though the age difference is obvious, an older person would use respectful forms when addressing a young stranger.

Keigo selection is closely related to ideology of *keigo* as it refects Japanese social norms (Gagné, 2010; Ide, 1982, 1989; Okamoto, 1997). Yamashita (2001) pointed out that *keigo* use has been justified by its 'usufulness' (p. 17) in Japanese society for 'harmonious communication' (p. 17). Next subsection will look at Japanese

people's normative consciousness, belief, and attitudes to *keigo* and more broad politeness expressions.

2.5.3. JNSs' view and use of politeness expressions and their reaction to NNSs' politeness errors

A survey by Kokuritsu Kokugo Kenkyuusho (1990a) reported that Japanese people select language carefully according to the situation and the interlocutor. Ide, Ogino, Kawasaki, and Ikuta (1986) conducted a comparative survey of language politeness behaviour between Japan and the USA, which included 525 Japanese university students and 490 American university students. Their survey included three parts. In part one, the participants were asked to rate language expressions used when requesting to borrow a pen on 5-point semantic differential scale. One end was careful, and the other end was uninhibited. These language expressions were written in the participants' mother tongue. In part two, the participants were provided with imaginary interlocutors (20 people for Japanese and 19 people for American[3]) who represented different people and situations such as a clerk in a large department store, a clerk in a post office, and a participant's mother with whom the participant is talking at home. The participants were asked to rate their imaginary interlocutors by the level of formality when they address the interlocutors provided using the same scale in part one. In part three, the participants were asked to choose which language expression(s) presented in part one they would use with each of their imaginary interlocutors in part two. The results showed that

[3] One of the interlocutors was a meaningful other in English and two interlocutors, a best friend and a boy/girlfriend, were selected as Japanese equivalents.

Japanese participants tend to have a consensus about the politeness of different expressions, and about the expressions likely to be associated with different interlocutors. In addition, Japanese participants' responses indicated that they differentiate polite expressions from not-being-considered as polite expressions clearly. Their evaluations were also more stable than those of American participants.

The above research suggests that JNSs strongly share normative use of politeness expressions. This leads them to consider even NNSs' mistakes as seriously offensive. Tada (1995) acknowledged that although she was a Japanese language lecturer herself, she felt upset when a learner of Japanese addressed her using '*anata*', which is a polite second person pronoun but should not be used for people who are to be addressed with respectful forms. Neustupny (1982) had known a Japanese professor who claimed that teaching *keigo* was not necessary for Japanese language learners, but he observed that this same Japanese professor was shocked when he was addressed by a young Australian woman with the word '*anata*'. These two examples illustrate that inappropriate use of *keigo* prompts JNSs to form a highly negative emotion.

Tateoka (1989) investigated how JNSs accepted NNSs' errors with respect to polite expressions. She selected 22 utterances produced by NNSs, which contained errors with polite expressions but no grammatical errors and then transcribed the utterances. Sixty-eight JNSs were asked to judge these utterances using a 5-point rating scale. The results indicated that when NNSs' polite expressions did not show the proper relationship between benefactor and benefactee, these errors were rated the most unfavourably. In other words, even though a NNS may have correctly used *keigo* forms, these were not always accepted by JNSs if the NNS failed to recognise who was the benefactor in their

polite expression. For example, when a learner of Japanese asked a Japanese teacher to check a manuscript in Japanese for her/his presentation, and said to the teacher, '*genkouo misete sasiagemasu*' (I will show you my manuscript), the use of '*sasiagemasu*' (see Example 3) was grammatically correct but it made a very negative impression (Takeoka 1993). '*Sasiagemasu*' is a humble polite form of '*ageru*' and '*ageru*' itself indicates that the person mentioned as the subject of the verb is a benefactor because '*ageru*' means 'give'. Therefore, even though the learner used '*sasiagemasu*', which is the humble form of '*agemasu*', it was not acceptable because it failed to indicate the proper relationship between the learner and the teacher in this situation. An example expression showing this proper relationship is '*genkouo mite kudasai*' ('Please check my manuscript', see Example 4). In this expression, a humble form in polite style of '*kureru*' is used. '*Kureru*' is used when an action of giving is done for the benefit of the receiver, that is, a subject or an agent is a benefactor. Example 4 indicates that the speaker is a benefactee and an addressee is a benefactor.

Example 3.

原稿	を	見せて	さしあげます。
genkou	o	misete	sasiagemasu
manuscript	DO	show.and	give-HUM.POL

'I will show you my manuscript.'

Example 4.

原稿	を	見て	ください。
genkou	o	mite	kudasai
manuscript	DO	look.and	give.me-RES.POL-IMP

'Please check my manuscript.'

A study conducted by Murayama (1996) also indicated Japanese people's sensitivity to

keigo, reflecting a speaker's interpretation of human relationships. In her study, 59 JNSs were asked to evaluate NNSs' utterances, which contained errors with polite expressions by six criteria. Utterances were classified into four types: (1) politeness error, caused by use of inappropriate degree of politeness; (2) selection error, caused by use of inappropriate selection of words and expressions; (3) relationship error, caused by failing to identify the relationship between the addressor and the addressee or the referent; and (4) modesty error, which is caused by lack of the display of humbleness on the speaker's part (see Figure 2.2 for some examples). The six criteria concerned JNSs' emotional reactions and these were as follows: (1) hurtful to the listener (= JNS); (2) reflecting badly on the speaker (that is, the NNS); (3) sounding strange; (4) sounding comical; (5) disrupting communication; and (6) tolerable. The study revealed that the modesty error was more tolerable than the relationship error but that both errors were seriously disruptive of communication. On the other hand, the politeness error and the selection error were not. The results indicated that the failure in expressing the proper relationship between a benefactor and a benefactee was hurtful to the JNSs. It was also deemed to be the most serious and the least tolerable error in communication with JNSs. Further, JNSs evaluated NNSs' errors less severely when the NNSs' proficiency level was low. Relationship type errors, however, were not tolerable even for beginner-level NNSs.

(1) Politeness error (use of inappropriate degree of politeness)

Lack of *keigo* when responding to the question "What does your brother do as his occupancy?" by a NS who uses respectful forms of *keigo*

何	やってる？	彼	は	会社員。
nani	yatteru	kare	wa	kaisyain
what	doing(informal)-PLN.PLN	he	T	office worker-PLN.PLN

‘What does he do? He is an office worker.’

Possible Target Version

何	を	している	か	です	か？
nani	wo	shiteiru	ka	desu	ka
what	DO	doing-PLN.PLN	whether	is-POL.POL	Q

‘Did you ask what he does? ’

彼	は	会社員	です。
kare	wa	kaisyain	desu
he	T	office worker	is-POL.POL

‘He is an office worker.’

(2) Selection error (use of inappropriate selection of words and expressions)

Using a word which indicates one’s desire when asking one’s wish.

あなた	も	写真	が	見たいです	か。
anata	mo	syashin	ga	mitaidesu	ka
you	also	photograph	S	look.want-POL.POL	Q

‘Do you want to look at the photographs, too?’

Possible Target Version

写真	を	見ません	か。
syashin	wo	mimasen	ka
photograph	DO	look-POL.POL-NEG	Q

‘Wouldn’t you look at the photographs?’

(3) Relationship error (failing to identify the relationship between the addressor and the addressee or the referent)

Using not humble forms but respectful forms of *keigo* for one’s superior (in-group) when talking to a person (out-group) about the superior.

社長	は	いらっしゃいません。
syachou	wa	irassyaimasen
president	T	exist-RES.POL-NEG

‘Our president is not in.’

Possible Target Version

社長	は	おりません。
syashin	wa	orimasen
president	T	exist-HUM.POL-NEG

‘Our president is not in.’

(4) Modesty error (lack of the display of humbleness on the speaker’s part)

Not being humble when responding to a NS’s humble comment “I cannot do it as well as you did even though I try very hard”.

そう	でしょう	ね。
soo	desyoo	ne
so	would be-POL.POL	AC

‘You can’t, can you?’

Possible Target Version

いいえ、	そんな	こと	は	ないでしょう。
iie,	son-na	koto	wa	naidesyoo
no,	such	thing	T	would be-POL.POL-NEG

‘No, it is nothing, you could do it easily and would do it better than me.’

Figure 2.2 *Examples of the four error types of NNSs by Murayama’s (1996) study*

Speakers decide which *keigo* to use after the speaker has considered both external (e.g., human relationships) and internal conditions (e.g., grammar); therefore, *keigo* is recognised as an interpretation of the surroundings of a speaker. *Keigo* is also regarded as a reflection of a speaker’s personality and attitude towards a listener because *keigo* shows that the speaker expresses a relationship between him/her and a listener (Kabaya, 1999; Kikuchi, 1989). When the speaker’s utterance does not meet the listener’s expectations, it often provokes negative emotional reactions (Coulmas, 1992; Ohno & Shibata, 1977; Yamagishi, 1995), thus, proper use of *keigo* has been of great concern for both JNSs and NNSs (Bunkacho, 1997; Nihongo Kyouiku Gakkai, 1991; Uno, 1977).

Listeners’ expectations can be known from the findings of surveys that have

investigated how Japanese people think about and use *keigo*. One very extensive survey conducted by Kokuritsu Kokugo Kenkyuusho (1957) showed that generally, people prefer to use and to be addressed with more polite *keigo* and older people thought that younger people should use more polite *keigo* when addressing senior people. In Kokuritsu Kokugo Kenkyuusho (1957), people who have received a higher education are more knowledgeable of *keigo*. Ogino (1983) found that people who have received a higher education use different *keigo* expressions according to the listener. Ogino also found that the older people were, the more polite the *keigo* they used. The same survey by Kokuritsu Kokugo Kenkyuusho (1957) revealed that expressions containing a negation were considered more polite than those that did not. For example, a polite request '*kuremasen-ka*', or 'won't you give me ~?', which contains the negative polite form '*masen*', was considered more polite than '*kuremasu-ka*' or 'will you give me ~?', which is a polite form in the affirmative (see Example 5).

Example 5.

kure*ru*	ka
give.me-PLN.PLN	Q
kure*masu*	ka
give.me-PLN.POL	Q
kure*masen*	ka
give.me-PLN.POL-NEG	Q

Kokuritsu Kokugo Kenkyuusho (1957) also found that an expression containing a negation implies that an addressor already presumes a denial by an addressee; consequently, it is negative politeness. This also indicated that Japanese people consider that negative politeness is more polite than positive politeness. In addition, the longer an utterance was, the more polite it was considered to be. Similar findings have also been

reported for languages such as Indian English (Mehrotra, 1995) and French (Wardhaugh, 2006). In the Japanese language, results of this kind are not surprising because when one makes a sentence more polite, adding honorific morphemes is typical, and the sentence naturally becomes longer. Kokuritsu Kokugo Kenkyuusho (1983) conducted a follow-up survey of the above-mentioned survey. The result showed that no drastic change was found but people became to use more polite expressions in situations required to be polite and to use less polite expressions in situations not required to be polite.

Gender difference in usage and expectation has been reported but the judgment of *keigo* is not influenced by the gender of evaluators. Studies by Ogino (1980; 1986) and Ozaki et al. (1980) found that both closeness of relationship and age influence the use of *keigo* for females, though only age does so for males. These studies also indicated that males used different expressions according to the situation, but females tended to use polite expressions regardless of the situation. In addition, females were expected to use more polite expressions. These gender differences were also reported in later studies (Endo, 1997; Ide et al., 1986; Nakao, Hibiya, & Hattori, 1997; Ogino, 1983). A tendency for females to use more polite language than males in other languages has also been reported in the literature (see Holmes, 1995). Ide (1982) pointed out that females use a higher level of *keigo* such as hyper-polite style and/or formal language more frequently than males, and *keigo* is found in this type of language. This tendency has also been found in other language communities (Labov, 1972, Romaine, 1978, 1984; Trudgill, 1974). It has been pointed out that females use polite and standard forms of language, which are regarded as formal and prestigious, and that they do so more than males (Trudgill, 1975). As Ogino (1997) remarked, honorifics (*keigo*) serves the function of

enhancing a speaker's dignity (Tsujimura, 1977). Mulac and Lundell (1980) found that females' language was perceived as more pleasing and beautiful, and less active and strong, than males' so that females' language was high in 'aesthetic quality': thus, honorifics could be said to be used as a form of aesthetics for females.

The effects of *keigo*, however, are not always positive, since they are brought about by the basic function of *keigo*, which creates a distance between the interlocutors. *Keigo* can be used to avoid involvement in a situation (Kajiwara, 2008), thus, the use of *keigo* sometimes leads to negative impressions, such as the perception of the speaker being pretentious, standoffish, and strained. Kobayashi, Ishida, Takatori, Nakamori, and Yana (2002) explained that some learners of Japanese language complained that they could not establish close relationships with Japanese people because the latter used plain forms with each other that the students themselves could not use well (i.e., they were taught to use the *keigo* or polite forms primarily). Takiura (2005) pointed out that *keigo* and negative politeness imply alienation. In reality, as Kajiwara explained, Japanese people often employ mixed-use of polite and plain forms (which indicate different levels of formality or politeness) in the one series of discourse (Cook, 2011; Dunn, 2005) so that they can show both closeness or positive politeness and distance or negative politeness concurrently (Pizziconi, 2003). In this way, the extensive system of honorifics in Japanese language might be used to adjust subtle distances in social interaction.

2.5.4. Polite speech and prosody

Politeness is expressed not only through language forms, but also through prosody. Takahashi (1999) investigated prosodic features of Japanese female polite expressions.

In polite speech, females raise the overall pitch of their utterances, and their vowels are slightly longer than usual. This is observed in everyday life, for example, during a formal telephone conversation. This type of prosody is often called '*yoso-iki no koe*' and literally means 'voice for going outside'. '*Yoso*' means 'outside'; '*iki*' is a nominalisation of a verb 'iku' (go), and '*koe*' means 'voice'. For Japanese people, 'outside' is a public or a non-private area. Because of this, they behave politely and in a sophisticated manner in accordance with accepted social mores. An analogy in English is the expression 'Sunday clothes' as an equivalent of '*yoso-iki no fuku*' (*fuku* means clothes). The pitch change observed by Takahashi is more prominent amongst females, but is also observed in males. Okuyama (1972) pointed out that people tend to use a higher pitch when they talk to a higher-ranked person. Kunihiro (1997) suggested that higher pitch was perceived as polite. Okuyama also pointed out other speech characteristics used in this type of situation, such as speaking softly, slowing down one's speech rate, increasing hesitations, and a tendency to use more plain words than the words that a higher ranked person would use. These characteristics imply that the speaker presents him/herself as less important than his/her interlocutor, thus, it can be inferred that such a person has a lower status than his/her addressee. This is a kind of humble way of expressing politeness. A study by Loveday (1981) looked into this phenomenon. He compared "the overall pitch level" (p.78) of English polite speech produced by Japanese and English speakers, and Japanese polite speech produced by the same Japanese speakers. The study revealed that the Japanese females used extremely high or "artificial" pitch while the Japanese males used a lower pitch than the Japanese females. Furthermore, the Japanese males consistently used a lower pitch that never surpassed the pitch level of English males. The English males used a higher pitch in their polite speech and whose level was close to that of the English females. The results

indicated that Japanese males transferred their speaking habits (i.e., not using a higher band of the pitch level) when they spoke politely in English. This implies that when an English male speaks Japanese politely, he is likely to use a higher pitch, which is not appropriate in Japanese.

2.6. The Effect of Different Speech Variables in the Same Speech on Impression Formation by JNSs

The previous sections reviewed literature on the subject of vocal variables and perceived personality and of language variables and perceived personality. The central interest of studies focusing on the former relationship was the effect of voice, which is deliberately separated from the domain of linguistics such as content of speech and language structures (e.g., grammar and phonology). On the other hand, studies that focused on the latter relationship ignored extralinguistic and paralinguistic features other than grammatical prosody (e.g., the use of rising pitch at the end of a sentence to indicate that a question is being posed). However, in order to properly understand this aspect of impression formation, it is necessary to take into account both aspects as they are tied to each other in the production of speech.

In this respect, Ohtsubo and Yoshida's (1990) study was one rare attempt to investigate the effect of several variables in speech on impression formation by Japanese people. This study followed Hirokane and Yoshida's (1984) study, which investigated the effect of face, voice, body, and dress on impression formation according to personality variables, the evaluators' gender, and the stimulus person's gender. In Hitokane and Yoshida's study, 'voice' was speech produced by the stimulus person. The stimulus person produced two dialogues about two situations: the first involved asking one's

way, and the second involved leaving a message to an unknown interlocutor. Both dialogues were video recorded. While the voice was presented as the audio-recorded speech produced by the stimulus person, other variables were presented in colour photographs; thus, the former was a dynamic auditory cue and the latter was a static visual cue. The videotaped stimulus person was considered as a whole cue because this included the above-mentioned four cues at the same time. Participants were asked to rate personalities of the same stimulus person on each of four single cues, as well as the videotaped stimulus person as a whole cue. The rating instrument comprised 20 bipolar adjectival pairs on a 9-point semantic differential scale. Factor analysis revealed that the participants perceived the stimulus person's personality through three cognitive dimensions. Hirokane and Yoshida called these three dimensions 親和性[4] (shinwasei) or FRIENDLINESS, 意欲性 (iyokusei) or ACTIVENESS, and 思慮性 (shiryosei) or JUDICIOUSNESS. These labels correspond to the result of a study by Hayashi (1978). Hayashi re-examined the results of previous research investigating dimensions of interpersonal cognitive structure and found that the fundamental dimensions consisted of personal familiarity, activity, and social desirability. The results showed that generally, voice had the most dominant effect and it significantly affected the stimulus person's perceived personality, evaluated through all of the three dimensions (i.e., FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS).

親和性 (shinwasei) or FRIENDLINESS has emotional overtones. A familiar or an amiable person may be frivolous or thoughtless. In the field of chemistry, 親和性 (shinwasei) or

[4]性 (sei) is a suffix which means having a nature or characteristic of the preceding word.

possessing a character of familiarity is usually used to refer to affinity. In a human relationship, 親和 (shinwa) means getting on with each other in a peaceful atmosphere with harmony. FRIENDLINESS relies on a like-dislike type of judgement, which is determined by a personal preference. The six adjectival pairs which had high loadings on the FRIENDLINESS factor were presented in Table 2.2. 意欲性 (iyokusei) or ACTIVENESS is a characteristic of individuals who are proactive, dominant, like social interactions and frequently take part in them, and are spontaneous. 意欲 (iyoku) or volition is one's mental state when doing something willingly. Japanese-English dictionaries give will, desire, and volition for its equivalents. In an adjectival form, it is often translated as enthusiastic, enterprising, and highly or strongly motivated. ACTIVENESS can be likened to extroversion, with which it shares many characteristics. The four adjectival pairs which had high loadings on ACTIVENESS were presented in Table 2.2. 思慮性 (shiryosei) or JUDICIOUSNESS relates to social desirability, and this word denotes a respectable personality. This personality trait is regarded in Japan as a virtue for adults, connoting maturity. JUDICIOUSNESS is characterised by carefulness, reliability, and intelligence, and is an attribute of educated and cultured persons. 思慮 (shiryo) itself means 'thoughtfulness' but it also includes a manner of thinking, that is, to think carefully and deeply; however, a person who shows JUDICIOUSNESS is not necessarily a friendly person. This fact indicates that JUDICIOUSNESS relies more on an intellectual evaluation. The four adjectival pairs which had high factor loadings on JUDICIOUSNESS were presented in Table 2.2. Under this category, 慎重な (shinchouna)— 軽率な (keisotsuna) or prudent-imprudent and 分別のある (hunbetsunoaru)—無分別な (muhunbetsuna) or discreet-indiscreet may need some explanation. 慎重な (shinchouna) or prudent denotes an attitude where one is careful and cautious when taking action. Such a person is circumspect. 軽率な (keisotsuna) or

imprudent is the opposite of this; thus, an imprudent person is a rash and thoughtless person. 分別のある (hunbetsunoaru) or discreet person is a sensible person, and thinks or does things in a reasonable way; thus, a person who is 無分別な (muhunbetsuna) or indiscreet is the opposite to, or shares no characteristics with, a discreet person. 無 (mu) is a prefix meaning 'nothing', equivalent to the English prefix *in-*. The antonym of 無分別な (muhunbetsuna) is 分別のある (hunbetsunoaru) because an adjective without this prefix 無, in other words, 分別な (hunbetuna), does not exist in the Japanese language.

Table 2.2 Three cognitive dimensions for evaluating personality and high-loaded adjectival pairs on them by Hirokane and Yoshida (1984)

親和性 FRIENDLINESS (shinwasei)	意欲性 ACTIVENESS (iyokusei)	思慮性 JUDICIOUSNESS (shiryosei)
· 親しみやすいー親しみにくい (shitashimiyasui - shitashiminikui) familiar - unfamiliar (distant)	· 積極的なー消極的な (sekkyokutekina - syoukyokutekina) positive - negative	· 慎重なー軽率な (shinchouna - keisotsuna) prudent - imprudent
· 感じの良いー感じの悪い (kanjinoyoi - kanjinowarui) pleasant - unpleasant	· 自信のあるー自信の無い (jishinnoaru - jishinnonai) confident - diffident	· 分別のあるー無分別な (hunbetsunoaru - muhunbetsuna) discreet - indiscreet
· 人の良いー人の悪い (hitonoyoi - hitonowarui) good-natured - bad-natured	· 意欲的なー無気力な (iyokutekina - mukiryokuna) eager - unenthusiastic	· 責任感の強いー無責任な (sekininkannoaru - musekininna) responsible - irresponsible
· 人なつっこいー近づきがたい (hitonatukkoi - chikazukigatai) affable - unapproachable	· 社交的なー非社交的な (shakoutekina - hishakoutekina) sociable - unsociable	· 重厚なー軽薄な (jyuukouna - keihakuna) deep - frivolous
· かわいらしいー憎たらしい (kawairashii - nikutarashii) lovely - hateful		
· 親切なーいじわるな (shinsetsuna - ijiwaruna) kind - mean		

Ohtsubo and Yoshida (1990) investigated the effect of visual and auditory cues using the same person on impression formation by improving Hirokane and Yoshida's (1984) study. The visual cues were a videotaped person without sound (dynamic visual) and a photograph of a full-length portrait (static visual) while the auditory cues were the sound track of the videotape ("paralanguage") and the transcription of the speech (content of language). The videotape presented the stimulus persons introducing themselves, and it was treated as a single cue by the evaluators. The other cues were presented independently, and they were called partial cues as each cue was one component of the whole cue. The researchers added a 'paralanguage cue', which was derived from subtracting the effect of the content from speech (which was indicated by correlation coefficient), to their data. The index for each partial cue's dominance was the correlation coefficient between the impression formed by a whole cue and the impressions formed by partial cues. The results of this study supported the finding by Hirokane and Yoshida (1984) that the effect of cues was different depending on evaluators' gender as reported, that is, females were more sensitive to auditory cues than were males. For the female evaluators, the dynamic cue correlated significantly with ACTIVENESS and FRIENDLINESS in both females and males, and on JUDICIOUSNESS in males, while the relationship was not significant for the male evaluators. The paralanguage or non-lexico-grammatical cue correlated significantly with ACTIVENESS in both females and males, with JUDICIOUSNESS in females, and with FRIENDLINESS in males for the female evaluator while only FRIENDLINESS in females was significant for the male evaluators. This could be additional evidence that females are better decoders of non-verbal stimuli than males (Daly, Bench, & Chappell, 1996; Hall, 1984; Hall & Matsumoto, 2004; Katsikitis, Pilowsky, & Innes, 1997;

Montagne, Kessels, Frigerio, de Haan, & Perrett, 2005). Further, Katsikits et al. (1997) and Hall and Matsumoto (2004) reported that female's evaluation showed a wider range of variance than male's one. Female judges used more extremes of the ratings; used higher and lower ends than male judges did. This could be due to female's confidence in their judgement, thus they were less hesitant to select the extreme values in scaling as well as the middle ones (Hall & Matsumoto, 2004).

With respect to an impact by visual and auditory cues, Ohtsubo and Yoshida (1990) also found that the auditory cue generally had a more dominant effect than the visual one on the evaluators' impression, regardless of their gender. This was not surprising because the content cue was a self-introduction and provided a great deal of personal information influencing the participants' impression. Although the auditory cue was found to be dominant, the validity of regarding the transcription of the speech as an auditory cue is questionable. Further, the unique contribution of each speech variable was not clear, since the content cue also included grammar and vocabulary, and the paralanguage cue contained all the vocal variables that Laver and Trudgill (1979) considered in speech.

2.7. Conclusion

In summary, knowing how a listener is likely to react to a speaker's utterance is indispensable for establishing good communication. NNSs should be aware of how their personality is likely to be interpreted by NSs if they are to achieve effective communication. While it is clear that linguistic and voice characteristics are likely to interact in their effects on impression formation, these lines of research have proceeded quite independently. While NSs' reactions to a number of NNSs' linguistic

characteristics have been investigated thoroughly, these studies have not taken into account the possible effects of voices characteristics on their interpretations. A similar statement can be made about studies that have focused on voice characteristics. In addition, research investigating the effect of intonation as a part of the expression of politeness in NNSs' speech on their perceived personalities by NSs has yet to be conducted. Given that intonation and content of message are closely tied together, it is arguable that they should not be separated.

In the Japanese language, *keigo* expressions can also be considered to be part of the content of a message because these can be expected to affect JNSs' evaluations. Further, the gender of both speaker and hearer are important variables because they affect both the form of the utterance and the perception of the speaker's personality. Investigating the relative importance of these three variables in speech, namely, voice characteristics, intonation, and *keigo* expression according to gender in JNSs' impression formation could, therefore, provide useful information and could result in a better understanding of cross-cultural communication between Japanese people and NNSs of Japanese.

Chapter 3. Methodology

3.1. Introduction

The previous chapter reviewed the literature on how people perceive other people's personality based on vocal variables broadly, and more specifically, it examined past research on NSs' reactions to language variables in NNSs' speech and to the communicative function of intonation in this speech. The role of Japanese honorifics, *keigo,* in particular was also discussed.

The present study was designed to investigate how voice, intonation, and use of *keigo* language each influence JNSs' perceptions of the personality of NNSs. In order to know how NNSs' speech impact on Japanese NSs' impression formation, the role of both vocal variables and language variables (Laver & Trudgill,1979) need to be considered. As for the vocal variables, voice was selected as representing an extralinguistic feature and intonation was selected as representing a paralinguistic feature and a phonological realization of linguistic unit. *Keigo* language was selected as representing a language variable. These four speech components were selected because all of them influence perceivers' evaluation of speakers' personality traits (see 2.2, 2.3, 2.4, and 2.5.2). The present study investigated FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS as target personality triats because previous study showed that Japanse people evaluate other's personality in these three dimensions (see 2.6). Both speakers' and raters' gender were also considered because influence of gender has been reported in the literature reviewed in Chaper Two. Further, a speaker chooses *keigo* language according to situation, thus,

effect of situation difference, which was determined by the level of formality because this is influence the speaker's choice of *keigo* language (see 2.5.2), was investigated.

This chapter describes the design of the instruments used in the present study, including those used in a pilot study conducted for finalising these instruments, the research participants, the procedure, and how the data were analysed.

3.2. Experimental Design

The experimental design was structured to address the research question "How do JNSs judge the personality of NNSs in terms of three traits, FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS based on these NNSs' speech?' More specific questions are as follows:

1. Do ratings of the three personality traits (FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS) differ according to whether the NNS speaker is male or female?
2. Are NNSs evaluated differently by JNSs in terms of the three personality traits, depending on the level of formality of the situation (SITUATION)?
3. Do male and female raters give different ratings of the three personality traits?
4. Do the three factors of NNSs' gender, raters' gender, and SITUATION, interact in their impact on ratings of the three personality traits?
5. Do any of the effects identified in Questions 1-4 differ across speech components (WHOLE SPEECH, LANGUAGE, INTONATION, and VOICE)?
6. To what extent do perceptions of the three personality traits in LANGUAGE, INTONATION, and VOICE predict JNSs' perceptions of the same three

personality traits in NNSs' WHOLE SPEECH?

7. Do the predictions in Question 6 differ according to the level of formality in the situation and the gender of the speaker?).

To address these questions, NNSs' verbal speech samples were collected and rated by a sample of JNSs. The study was based on a mixed within-between experimental design. In the initial design, there were four independent variables. Two independent variables were evaluated as between-case variables (JNS's and NNS's gender) and two were investigated as within-case variables (formality and speech component. In subsequent multiple regression analyses, one speech component, WHOLE SPEECH, became a dependent variable). There were three dependent variables, which comprised ratings of the three different personality traits (FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS) based on the experimental conditions above.

3.2.1. Between-case variables: JNS's and NNS's gender.

The sample of 'raters' in the study comprised 154 JNSs. To permit comparisons of ratings given by male and female JNSs, the rater sample included equal numbers of males and females. These are described in further detail within Section 3.6.1. The initial sample of 'speakers' in the study comprised 30 NNSs of Japanese, although the final sample used was based on speech samples from only six of these speakers. To permit comparisons of ratings of male and female NNSs, there was also an equal number of males and females in the final speaker sample (three each). These participants are described in Section 3.3.

3.2.2. Within-case variables: Level of formality and speech components

The speech samples rated by the JNSs are described in more detail within Section 3.6.2. Broadly speaking, however, these comprised samples of speech prepared by participants across situations representing different levels of formality. The process of obtaining these samples is described in detail within Section 3.4.1. The speech components were generated from the raw speech samples provided, using a speech synthesiser. One of the components was transcribed. This process is described in further detail within Section 3.4.2.

3.3. Selecting the Speaker Sample

All recording sessions were held in a soundproof Multimedia recording room at the University of Western Australia using Peak LE digital recording software with a Rode NT2 microphone. The recordings were firstly saved on the hard disk of a computer then recorded on CD-R. The recording equipment was operated by the researcher. The participants and the researcher could see one another, as there was a soundproof window between the recording room and the control room.

Thirty NNSs of Japanese participated voluntarily in providing the speech samples which comprised the stimulus set. These participants' level of Japanese proficiency was above intermediate level so that they could be expected to command some *keigo* expressions. The participants were students and graduates who were studying or studied Japanese at Curtin University, Murdoch University, and the University of Western Australia, and Japanese language lecturers of those universities, and Japanese language teachers at

high-schools in Western Australia. The researcher asked lecturers and teachers to introduce students and graduates who could command some *keigo* expressions, then approached to them if they would be interested in participating in this research.

Initially, each participant provided a voice sample in which they simply read out 10 kana characters consisting either of V (a single vowel) or CV (a consonant plus a vowel) and excluding syllables that included /b/, /d/, /g/, /k/, /p/, /r/, /t/, /u/, /w/, and /y/, which are phonetically problematic for NNSs (Inozuka & Inozuka, 1993). This voice sample was obtained so that each speaker's voice could be rated in terms of its attractiveness before the final stimulus pool was selected.

The extralinguistic features of voice, or voice characteristics, vary across individuals and can be described in various ways (see Chapter 2). Many factors may affect perceptions of personality based on voice. From the initial 30 speaker sample, three male and three female speakers were selected for use in the final stimulus pool based on ratings of their vocal attractiveness from the kana reading. This was done to ensure that the final speaker sample had included speakers perceived to have voices at the highest, medium, and lowest levels of attractiveness. As seen in Chapter 2, voice attractiveness is one of the parameters for evaluating voice characteristics in a broader sense. It is evaluated by listeners and influences a speaker's perceived personality. The reason why attractiveness was chosen for focus here is that perceptions of this characteristic depend on perceptions of many other individual voice characteristics. Attractiveness, thus, arguably represents a summary variable for all of these other variables.

The 10 kana characters were [a], [o], [he], [ma], [mi], [na] [ne], [no], [sa], and [se]. This is an adaptation of the procedure used by Montepare and Zebrowitz-McArthur (1987) in which they used speakers' voices reciting the English alphabet. The aim of this procedure was to obtain extralinguistic features of speakers' voice while minimising linguistic properties. Recitation of the 10 kana characters did not involve a word meaning and pitch accent but involved the speaker's articulation and vowel realisation, which have been identified as salient individual differences in voice.

The researcher showed 10 cards with a single kana character on each to the participants. The cards were from Japanese language teaching material (Quackenbush, 1991) and the size of each card was 21cm x 29.5cm. The order of presentation of the kana was [a], [ne], [se], [mi], [o], [sa], [ma], [no], [he], and [na]. The participant read aloud a presented kana three times to each card presented. The interval between card presentations was approximately 2 seconds.

For each of the three pronunciations of each of the designated 10 kanas, the most 'native-like', as evaluated by the researcher, were selected to be used as stimuli. The selected samples then were edited into a single audio track with an interval of 2 seconds between each kana reading in the above-mentioned order.

Twenty adult JNSs (10 females and 10 males) who had lived in Western Australia for less than three months then rated the voice samples. Since participants in the main study were going to be NSs of Japanese living in Japan, those who had come to Australia recently were asked to evaluate the voices in order to avoid the influence of living overseas as much as possible. The NSs were asked to evaluate the attractiveness of each of the recorded 30 voices (based on the 10 kana character reading samples) on a 7-point

scale: 1= *very unattractive*; 7= *very attractive* (see Appendix A). This is essentially the procedure used in Zuckerman et al.'s study (1990).

The female and male voices evaluated as being most attractive and least attractive were selected on the basis of the results of the attractiveness rating exercise (see Table 3.1 and Table 3.3). Also, two voices, one from a female and one from a male participant, evaluated as being neither attractive nor unattractive, were selected. These two voices were labelled as 'average' voices. The set of stimuli—(I) Kana Reading, (II) Spoken Request, (III) Intonation, and (IV) Transcription—produced by these selected three males and three females were subsequently used in the pilot and the main study.

The result of the evaluation of the female voices is presented in Table 3.1. For female voices, voice F15 had the lowest mean and mode, and its score range was 1 to 4. This meant that voice F15 was evaluated the most unattractive. The voice evaluated as the most attractive was voice F3, which had the highest mean. The mode for voice F3 was also the highest at 7.

Table 3.1 Evaluation for female voices

ID	Mean	Minimum	Maximum	Mode	Std. Dev.
F1	4.80	1	7	2/4/5*	1.54
F2	3.60	1	7	4/5**	1.50
F3	4.95	2	7	7	1.79
F4	3.10	1	6	3	1.80
F5	3.05	1	6	3	1.73
F6	3.70	1	7	3	1.53
F7	4.00	1	7	4	1.84
F8	4.30	1	7	6	1.66
F9	4.90	2	7	6	1.33
F10	4.45	1	7	5	1.54
F11	3.90	2	6	6	1.25
F12	4.15	1	7	4	2.01
F13	4.15	1	7	5	1.66
F14	3.05	1	6	2	1.40
F15	1.90	1	4	1	0.91

* In this cases, there were three modes; point 2, 4, and 5.
** In this cases, there were two modes; point 4 and 5.

As the evaluation score ranged from 1 to 7, the voice whose mean was approximately 3.5 was considered to be average in attractiveness. The means of voice F2 and voice F6 were close to 3.5. The modes of voice F2 were 2, 4, and 5 while the mode for voice 6 was 3; further, the number of evaluators who gave 3 or 4 points for voice F6 was greater than for voice F2 (see Table 3.2). The evaluators' total number was 11 for voice F6, and 8 for voice F2; therefore, voice F6 was selected as an average voice.

Table 3.2 Frequency distribution of rating point for F2 and F6

Point	F2	F6
1	1	2
2	5	1
3	3	7
4	5	4
5	5	4
6	0	1
7	1	1

The result of the evaluation of the male voices is presented in Table 3.3. For male voices, the mean of voice M1 was the lowest and its score range was 1 to 3, which meant that the voice M1 was evaluated as the most unattractive. The voice evaluated as the most attractive was voice M15 as its mean was the highest and its mode was also the highest at 6. Interestingly, the standard deviations showed that the evaluators' agreement about the unattractive voice (voice M1) was stronger than about the attractive voice (voice M15).

The means of voice M3, voice M8, voice M13, and voice M14 were close to 3.5. First, the voice M13 was discarded as its mode was 5, which was considered as more attractive. The voice M14 was also discarded, as its score ranged from 1 to 7 while the range of the other two (voice M3 and voice M8) was narrower; that is, from 1 to 6. Finally, voice M8 was selected because more evaluators gave it 3 or 4 points than gave voice M3 the same number of points. The total number of evaluators who gave 3 or 4 points was 11 for voice M8 and 9 for voice M3. In addition, the standard deviation of voice M8 was the smallest among the other possible averaged voices.

Table 3.3 Evaluation for male voices

ID	Mean	Minimum	Maximum	Mode	Std. Dev.
M1	2.05	1	3	2/3*	0.83
M2	2.85	1	5	3	1.27
M3	3.35	1	6	4	1.50
M4	3.85	1	7	5	1.60
M5	4.80	2	7	4/5**	1.20
M6	4.75	2	7	5/6***	1.49
M7	2.90	1	7	3	1.45
M8	3.75	1	6	4	1.41
M9	3.15	1	7	2	1.75
M10	2.85	1	5	3	1.19
M11	4.30	1	7	4	1.42
M12	3.00	1	7	2	2.03
M13	3.60	1	7	5	1.90
M14	3.75	1	7	4	1.52
M15	5.20	2	7	6	1.54

* In this cases, there were two modes; point 2 and 3.
** In this cases, there were two modes; point 4 and 5.
*** In this cases, there were two modes; point 5 and 6.

3.4. Stimulus Materials for the Pilot and the Main Study

The speech samples from which the stimuli were produced were audio recordings of the six NNSs (selected as explained above in Section 3.3) making the same simple request under different situations ((II) Spoken Request). Request is a FTA because a speaker imposes one's desire upon the interlocutor; thus, use of *keigo* was expected. The request involved asking to borrow a pen from a person when the pen was nearby and visible both to the participant and to an imaginary interlocutor, for example, in an interlocutor's shirt pocket, following the method used by Ide et al. (1986).

3.4.1. Varying the formality of the situation.

The situations were described in writing on a piece of paper. In order to elicit different degrees of politeness, the imaginary interlocutors were specified as four 'kinds' of people, establishing four different situations. The four situations provided were as

follows: (A) a supervisor/boss at work with whom the participant has a formal relationship; (B) a middle-aged, well-dressed stranger standing behind the participant in a queue at the post office; (C) a person who works with the participant at her/his regular/part-time job and holds the same position as the participant and with whom the participant has a fairly neutral relationship; (D) a very close friend in the participant's room.

The interlocutors in (A) and (B) both needed to be treated carefully with respect and those in (C) and (D) could be addressed in a more casual fashion. Because JNSs use politer *keigo* to (A) and (B), and they think that they should do this, on the other hand, JNSs use less *keigo* or casual language to (C) and (D), and they think that they can do this, following the categories in Ide et al.'s (1986) study and the report of the Kokuritsu Kokugo Kenkyuusho (1990a). The four situations represented differences in the level of formality, and as such, these situations were labelled as follows: (A) MOST FORMAL; (B) FORMAL; (C) CASUAL; (D) MOST CASUAL.

Participants were given a written description of those situations to read. They were given enough time to create and rehearse their utterances in order to avoid grammatical errors. When the participant made a grammatical error, the researcher pointed out the error and asked the participant to correct the utterance. A few of the participants made a note to help them construct a request but they did not read their note aloud during the rehearsal.

During the recording session, each participant was asked to produce each utterance as if the interlocutor was in front of him/her without looking at any notes. This condition (i.e., acting as if they were in the real situation) was stressed to the participants because

‘reading aloud’ a sentence is not the same as one’s spontaneous speech. The participant repeated the utterance three times for each of the four situations in the order presented above to reflect situations (A) MOST FORMAL to (D) MOST CASUAL following a cue from the researcher. The cue was made by showing a small card (13cm x 15cm) where marked “A”, “B”, “C”, or “D”. The interval between each utterance was approximately 2 seconds.

3.4.2. Obtaining separate speech components.

Five stimuli were constructed from the selected three male voices and three female voice samples: (A) WHOLE SPEECH, (B) VOICE, (C) INTONATION, (D) INTONATION WITH TRANSCRIPTION, and (E) LANGUAGE.

(A) WHOLE SPEECH

This holistic stimulus was an audio recording of speech and constructed in order to obtain JNSs’ overall impressions of NNSs’ utterances collected in the form of Section 3.4.1, (II) Spoken Request.

(B) VOICE

This stimulus was produced from the NNSs’ utterances in the kana reading and was made in order to obtain the JNSs’ particular impressions of the voice characteristics in the NNSs’ utterances. As described above, in the present study, voice attractiveness was used as a summary variable for individual voice characteristics.

(C) INTONATION

This stimulus was made in order to obtain the JNSs' particular impressions focusing on the intonation in the NNSs' utterance. Utterances recorded for (A) WHOLE SPEECH were processed by the speech synthesiser/analyser PRAAT software (Boersma & Weenink, 2004) in order to suppress the non-prosodic properties of the utterance. As a consequence, the content of speech was 'masked'; however, the simple hum transformation in PRAAT did not give a natural effect, especially where non-sonorant segments were involved, though it otherwise retains the pitch contour of the utterance. Because the utterance was Japanese, using a Japanese vowel produced by a JNS to mask the content of an utterance was expected to create a more natural intonation stimulus.

Firstly, a male and a female JNS were asked to produce the Japanese vowel [a] for approximately four seconds by keeping their pitch and intensity the same, as much as they could, and both were recorded. The duration of the vowel sound [a] produced by the male speaker and the female speaker were 3.84 seconds and 4.30 seconds respectively. The part of these [a] vowels produced by the male and female JNS that showed the least variation in pitch and intensity (evaluated using the PRAAT software) was selected in order to minimise interference of the pitch and intensity when it was replaced on an original sample. The selected part was extracted and duration of both vowel samples was 0.1 second. The duration of the NNS's utterances, or original samples, was varied. Therefore, the duration of the JNS's vowel sound needed to be changed according to the duration of each original sample. It was then used to mask the original samples.

For the male [a] sample, the mean pitch during vocalising was 123.60 Hz with a standard deviation of 0.0021, and the mean intensity was 72.31 dB with a standard deviation of 0.0005. For the female [a] sample, the mean pitch was 230.26 Hz with a standard deviation of 0.0005, and the mean intensity was 69.00 dB with a standard deviation of 0, which meant that the level of intensity did not change within the duration at all in the sample from female [a]. As these standard deviations showed, the variation in pitch and intensity of the selected vowel samples was very small. It could reasonably be expected, on the basis of these control procedures, that such characteristics would not have a significant effect on the original samples when duration was extended.

Secondly, a pitch contour of the NNS's utterance was extracted using PRAAT and transformed into a 'hum sound', using the standard function in the software. An intensity contour was then extracted from this hum sound.

Thirdly, the JNS's vowel sound [a] was extended to match the duration of the NNS's original utterance. This extension was made by the *Pitch Synchronous Overlap Add* method in PRAAT. The extended NSs' vowel [a] was then combined with the extracted pitch contour from the NNS's utterance, and finally, the intensity contour was superimposed on this sample. Male [a] and female [a] were used to match the gender of the speaker of each utterance.

This masking procedure was not completely neutral in its effects on the samples since it imposed formant values, which were characterized as the VOICE stimuli in the present study, on the samples; however, it did not weaken the validity of the stimulus because its effect enveloped all the samples. As mentioned above, all samples had their formant

value replaced by the NSs' formant value according to gender. As a result, the effect of formant value was constant across genders.

(C') INTONATION WITH TRANSCRIPTION

Before conducting a pilot study, intonation samples (=C) were presented to some JNSs who were asked whether they could evaluate the samples. Although they could do it, it was not an easy task and some preferred having guidance, for example, being provided with information about what the sample actually said. Therefore, a new stimulus, which was this intonation stimulus with a transcription described below, was added, and done after the transcription was made.

(D) LANGUAGE

A written language component was also constructed in order to obtain the JNSs' impressions of NNSs' personalities based solely on their linguistic expressions of politeness (i.e., without involving any vocal variables in the speech). The stimuli within the language component were prepared from the (A) WHOLE SPEECH, and were transcriptions of the (II) Spoken Request. These transcriptions were presented in the Japanese writing system and they are labled as LANGUAGE. Figure 3.1 to Figure 3.4 show the language transcriptions used in constructing the language samples.

Female attractive voice:

その	ペン	を	貸して	くださいませんか。
sono	pen	o	kashite	kudasaimasen ka.
that	pen	DO	lend.and	give.me-IMP-RES.POL-NEG Q

'Would you be so kind as to pass me that pen?'

Female average voice:

すみません、	ペン	を	お借りできます	か。
sumimasen,	pen	o	okaridekimasu	ka.
excuse.me,	pen	DO	borrow-POT-HUM.POL	Q

‘Excuse me, could I borrow a pen?’

Female unattractive voice:

すみません、	ペン	を	使わせて	くださいません	か。
sumimasen,	pen	o	tsukawasete	kudasaimasen	ka.
excuse.me,	pen	DO	use-CAU.and	give.me-IMP-RES.POL-NEG	Q

‘Excuse me, may I use a pen?’

Male attractive voice:

ペン	を	貸して	ください。
pen	o	kashite	kudasai.
pen	DO	lend.and	give.me-IMP-RES.POL

‘Please lend me a pen.’

Male average voice:

ペン	を	貸して	いただけません	か。
pen	o	kashite	itadakemasen	ka.
pen	DO	lend.and	take-POT-POLh-POL-NEG	Q

‘Wouldn’t you please lend me a pen?’

Male unattractive voice:

ちょっと	失礼です	が、	その	ペン	を	貸して		
chotto	shitsureidesu	ga,	sono	pen	o	kashite		
a little	impolite-PLN.POL	but,	that	pen	DO	lend.and		
	ください	ません	か。					
	kudasaisamen		ka.					
	give.me-IMP-RES.POL-NEG		Q					

‘Excuse me a moment but wouldn’t you please lend me that pen?’

Figure 3.1 *Language transcriptions for “To a workplace supervisor/boss”*

Female attractive voice:

その	ペン	を	貸して	くれません	か。
sono	pen	o	kashite	kuremasen	ka.
that	pen	DO	lend.and	give.me-PLN.POL-NEG	Q

‘Would you lend me a pen?’

Female average voice:

すみません、	ペン	を	お借りできます	か。
sumimasen,	pen	o	okaridekimasu	ka.
excuse.me,	pen	DO	borrow-POT-HUM.POL	Q

‘Excuse me, could I borrow a pen?’

Female unattractive voice:

すみません、	ペン	を	使わせて	くださいません	か。
sumimasen,	pen	o	tsukawasete	kudasaimasen	ka.
excuse.me,	pen	DO	use-CAU.and	give.me-IMP-RES.POL-NEG	Q

‘Excuse me, may I use a pen?’

Male attractive voice:

ペン	を	貸して	ください。
pen	o	kashite	kudasai.
pen	DO	lend.and	give.me-IMP-RES.POL

‘Please lend me a pen.’

Male average voice:

すいません、ペン	を	貸して	いただけませんでしょう		か。
suimasen,	pen	o	kashite	itadakemasendeshoo	ka.
excuse.me,	pen	DO	lend.and	take-POT-HUM.POL-NEG-AUX-POL.POL	Q

‘Excuse me, would you mind lending me a pen?’
(‘suimasen’ is an alternative pronunciation of ‘sumimasen’.)

Male unattractive voice:

すみません、	ちょっと	ペン	を	借りて	いいです	か。
sumimasen,	chotto	pen	o	karite	iidesu	ka.
excuse.me,	a little	pen	DO	borrow.and	all.right-POL.POL	Q

‘Excuse me, can I borrow a pen for a moment?’

Figure 3.2 *Language transcriptions for “To a middle-aged, well-dressed stranger”*

Female attractive voice:

その	ペン	を	貸して	くれない？
sono	pen	o	kashite	kurenai?
that	pen	DO	lend.and	give.me-PLN.PLN-NEG

'Won't you lend me a pen?'

Female average voice:

ペン	を	貸して	ください。
pen	o	kashite	kudasai.
pen	DO	lend.and	give.me-IMP-RES.POL

'Please lend me a pen.'

Female unattractive voice:

すみません、	ペン	を	使って	も	いいです	か。
sumimasen,	pen	o	tsukatte	mo	iidesu	ka.
excuse.me,	pen	DO	use.and	also	all.right-POL.POL	Q

'Excuse me, can I use a pen?'

Male attractive voice:

ペン	を	貸して。	
pen	o	kashite.	
pen	DO	lend.and	

'Pass me that pen, will you?'

Male average voice:

ペン	を	貸して	ください。
pen	o	kashite	kudasai.
pen	DO	lend.and	give.me-IMP-RES.POL

'Please lend me a pen.'

Male unattractive voice:

その	ペン	を	貸して	ください。	
sono	pen	o	kashite	kudasai.	
that	pen	DO	lend.and	give.me-IMP-RES.POL	

'Please lend me the pen.'

Figure 3.3 *Language transcriptions for "To a person who works with an informant at her/his regular/part-time job"*

Female attractive voice:

その	ペン	を	貸して	くれる？
sono	pen	o	kashite	kureru?
that	pen	DO	lend.and	give.me-PLN.PLN

‘Will you lend me a pen?’

Female average voice:

ペン	を	お願いします。
pen	o	onegaishimasu.
pen	DO	ask.a.favour-POL.POL

‘Can I have a pen?’

Female unattractive voice:

ペン	を	ください。
pen	o	kudasai.
pen	DO	give.me-IMP-RES.POL

‘Please give me a pen.’

Male attractive voice:

ペン、	いい？
pen,	ii?
pen,	all.right-PLN.PLN

‘Can you pass me that pen?’

Male average voice:

ペン	ちょうだい。
pen	choodai.
pen	reception-HUM.PLN

‘Gimme a pen.’

Male unattractive voice:

その	ペン、	貸して。
sono	pen,	kashite.
that	pen,	lend.and

‘Lend me that pen.’

Figure 3.4 *Language transcriptions for “To a very close friend”*

3.5. Pilot Study

A pilot study was conducted in order to uncover any ambiguities and weaknesses in the instruments. Another purpose was to investigate whether there was any justification for using only one of the two intonation stimuli (with or without transcription).). To achieve this goal, it was necessary to find out whether the language component (i.e. the transcription) impacted on the intonation component of the stimuli, and as a result, participants were presented with three different stimuli: language only, intonation only and intonation with language. Descriptions of participants and procedures are detailed below.

3.5.1. Pilot study participants.

Thirty-four JNSs (17 females and 17 males) in Western Australia, who were not involved in the development of the VOICE stimulus, participated in this session. Given the goals of the pilot study, the length of time during which participants had lived in Australia was not considered to be crucial. First, identifying ambiguities and weaknesses in the instruments requires only that the participant be a JNS. Second, although the absolute impressions formed of NNS's personalities based on the stimuli would be affected by cultural factors (thus making time within the country relevant), in the pilot study, the only goal was to determine whether the two intonation stimuli (with or without transcription) led to different impressions. As these comparisons were done within participant, it was only their relative, not their absolute, impressions that were important.

3.5.2. Pilot study instruments.

All vocal and written stimuli as well as the participants' tasks and instructions for the pilot study were presented by means of a booklet and CD produced by the researcher. The vocal stimuli used were (A) WHOLE SPEECH, (B) VOICE, (C) INTONATION, and (C') INTONATION WITH TRANSCRIPTION while the written stimuli represented the LANGUAGE component.

Written instructions and a rating scale were also included in the booklet. The booklet included five tasks: (1) rating LANGUAGE, or written transcriptions of the utterances, (2) rating INTONATION, or audio presentation of the intonation abstracted from the utterances, (3) rating INTONATION WITH TRANSCRIPTION, or the intonation audio together with the transcriptions of the utterances, (4) rating VOICE, or voices based on the kana reading, and (5) rating WHOLE SPEECH, or audio presentations of the whole spoken utterances.

The presenting order of the samples was randomised within each task; however, interlocutors or SITUATIONs were regarded as independent stimuli. Randomisation was, therefore, needed to follow each interlocutor. The order of the situations was the same in all tasks. The administration order was determined by applying a rotation method (Mori, Yoshida, Oka, ishida, & Kiriki, 1990) in order to reduce the influence of preceding stimuli on succeeding stimuli (see Table 3.4).

Table 3.4 Presenting speakers' order in the listening tasks

Task	Presenting Order					
Task 2	Speaker 1 →	Speaker 2 →	Speaker 6 →	Speaker 3 →	Speaker 5 →	Speaker 4
Task 3	Speaker 2 →	Speaker 3 →	Speaker 1 →	Speaker 4 →	Speaker 6 →	Speaker 5
Task 4	Speaker 3 →	Speaker 4 →	Speaker 2 →	Speaker 5 →	Speaker 1 →	Speaker 6
Task 5	Speaker 4 →	Speaker 5 →	Speaker 3 →	Speaker 6 →	Speaker 2 →	Speaker 1

Each of the six speakers' samples was rated using a rating instrument based on a series of semantic differential scales. These scales presented personality traits expressed by adjectives. This method has been widely used in studies of impression formation (Zebrowitz, 1990). The specific instrument used in the study was constructed by the researcher but drew upon methods which had already been validated or used extensively in previous studies.

The instrument presented nine bipolar Japanese adjectival pairs as used by Ohtsubo and Yoshida (1990) because as seen in 2.6, their study investigated how Japanese people make impressions and in this respect, the present study had a purpose in common. The adjectival pairs comprised two descriptors that represented opposites in terms of nine individual personality characteristics. These characteristics were, in turn, clustered into three broader personality dimensions, based on the three factors identified by Hirokane and Yoshida (1984): FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS. The specific nine paired words selected for use in the present study as well as the study in Ohtsubo and Yoshida (1990) had high loadings on each of the three factors identified in the original Hirokane and Yoshida's (1984) study. In the instrument, the bipolar Japanese adjective pairs were presented, and participants gave ratings for each pair using an 8-point semantic differential scale. The even number was chosen in order to avoid a central tendency (Uchida, 2002; Yoshioka, 2003) that Japanese people are more likely show (Yoshioka, 2003). Approximate translations of the nine Japanese pairs of terms are presented in Table 3.5. These three categories (i.e., FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS) will be referred to henceforth as the NNSs' personality traits.

Table 3.5 Scale items for evaluation

親和性 FRIENDLINESS	意欲性 ACTIVENESS	思慮性 JUDICIOUSNESS
1 親しみやすいー親しみにくい familiar – unfamiliar (distant)	1 積極的なー消極的な positive - negative	1 慎重なー軽率な prudent - imprudent
2 感じの良いー感じの悪い pleasant - unpleasant	2 自信のあるー自信の無い confident - diffident	2 分別のあるー無分別な discreet - indiscreet
3 人の良いー人の悪い good-natured - bad-natured	3 意欲的なー無気力な eager - enervating	3 責任感の強いー無責任な responsible - irresponsible

3.5.3. Pilot study administrative procedure.

The pilot study instrument (i.e., the booklet and the CD) were handed over in person or sent by mail to participants. Participants were first asked to read the transcription and rate it (Task 1). Next, they were asked to complete Tasks 2 to 5, listening to the CD and rating the sample presented according to the rating sheet in the same manner. The situations were described (as detailed above) in Tasks 1, 2, 3, and 5. Two seconds intervals between tasks were included in the CD and the participants were allowed to have a break at will in order to minimise fatigue for the participants. The participants were also able to stop or repeat to listen to the CD if they want.

The participants were also asked to give comments on the session when they returned all of the materials so that modifications could be made if necessary to the final instruments and the main study. Written consent to participate in this study was obtained from the participants prior to the administration of the tests. Most of the participants completed the tasks individually, and some participants did them in small groups. In a group session, they were asked neither discussing about the tasks nor talking to the other participants during the tasks in order to avoid being influenced by other's opinion. The venues for the administration of the test were mainly at home while

others did this in a classroom or in a meeting room, either alone or with other participants. Approximately it was required 30 minutes to complete the tasks.

3.5.4. Pilot study results

One of the key questions addressed in the pilot study was whether there was any justification for using only one of the two intonation stimuli in order to reduce participants' workloads in the main study. A major analysis in the pilot phase, therefore, focused on testing for differences in ratings of intonation, with and without transcription.

Obtaining JNSs' impressions based on intonation alone was a complex task, particularly in terms of designing the appropriate stimuli to use.

The ultimate goal was to isolate the impact of intonation on JNSs' impressions of NNSs' speech (i.e., the impact of this component in the absence of all other speech components). The most obvious choice, therefore, would be an 'intonation without transcription' condition.

On the other hand, intonation without any accompanying language content is an inherently 'unnatural' stimulus. In other words, it was anticipated that presenting intonations without accompanying transcriptions would make it very difficult for participants to evaluate the speaker's personality. Normally, intonations are accompanied with some language content.

In other words, while it was considered more natural, and thus ideal, to use an 'intonation with transcription' condition which better emulated a 'natural' stimulus, it

was important to evaluate the extent to which the language component confounded the intonation component within such a condition.

To address this question, participants were asked to evaluate the three personality traits listed above (i.e., FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS) based on three different types of stimuli: (1) LANGUAGE only; (2) INTONATION only; and (3) INTONATION with LANGUAGE. Ratings within the latter condition were then correlated with those in the two former conditions to determine which of the two components (i.e., LANGUAGE or INTONATION) was most influential in determining impressions formed in the INTONATION with LANGUAGE condition. If it was found that LANGUAGE was the stronger correlate, this would call into question the validity of evaluating the impact of intonation through an INTONATION with LANGUAGE condition. If, on the other hand, INTONATION was clearly the most influential factor within the latter condition, this would offer support for the use of the INTONATION with LANGUAGE condition.

Pearson product-moment correlations were then performed to compare the relationship between the INTONATION only with the INTONATION with LANGUAGE ratings, and the relation between the LANGUAGE only and the INTONATION with LANGUAGE ratings. These analyses indicated that although on average, there was a significant positive correlation between the 'LANGUAGE' and 'INTONATION with LANGUAGE' ratings (average r = .60), the correlation between 'INTONATION' and 'INTONATION with LANGUAGE' ratings was higher (average r = .80). These results demonstrate that intonation was a more significant influence than language on the INTONATION with LANGUAGE ratings; however, there was clearly also an effect of language on the latter ratings.

Two alternative approaches were considered initially. First, the impact of intonation could have been explored by having the same excerpts of language spoken with a variety of different intonations. Given the number of permutations this would create, this approach was deemed unfeasible. Second, in the main study, instead of analysing the scores obtained for the INTONATION with LANGUAGE condition per se, residual scores could have been created by 'partialing out' or removing the influence of, the LANGUAGE scores from INTONATION with LANGUAGE scores. The reasoning behind such an approach would be that any variability which remained could be ascribed entirely to the effect of intonation. That said, such an approach would necessarily ignore any possible interactive effects that the two variables might have; that is, it would be a very strict interpretation of the impact of INTONATION alone.

Further to the above, participants in the pilot study spontaneously commented that they found it very strange and not natural to evaluate personality traits based on intonation alone. In light of these comments, it was likely that the ratings in the INTONATION condition would not reflect the kinds of natural impressions that would be formed in authentic situations. Given this, a decision was made to use the INTONATION with LANGUAGE condition, and to then take into account the confounding effect of LANGUAGE within the interpretation.

3.6. Main Study

3.6.1. Main study participants.

One hundred and fifty-four JNSs (77 females and 77 males) currently living in Japan and aged from 18 to 70 years or over participated in the main study. Table 3.6 shows a

distribution of the participants' ages. As indicated in the table, more than half of the participants were in their 30s and 40s. The biggest age group was participants in their 40s, followed by participants in their 20s. The rest of the participants comprised teens and over 50s, and their ratios were 10.4% and 12.3%, respectively.

Table 3.6 Age distribution of participants

Age	Number of participants	Percent
10s	16 (Female:13, Male:3)	10.4
20s	32 (Female:15, Male:17)	20.8
30s	25 (Female:12, Male:13)	16.2
40s	62 (Female:33, Male:29)	40.3
50s and over	19 (Female:4, Male:15)	12.3

The participants lived in different regions; mainly Hokkaido (Northern island of Japan), Tokyo (Eastern part of the main island and the capital of Japan), Osaka (Western part of the main island), and Kyusyu (South-western island of Japan), which covers three of the four main islands of Japan.

3.6.2. Main study instruments.

Following the results of the pilot study, a final booklet and CD were produced. The CD included all of the phonetic stimuli outlined above (i.e., (A) WHOLE SPEECH; (B) VOICE; and (C') INTONATION (with LANGUAGE)). The stimuli for the LANGUAGE component were included in the booklet, which also included all written instructions and rating scales for the four tasks (i.e., (1) rating LANGUAGE, (2) rating INTONATION, (3) rating VOICE, and (4) rating WHOLE SPEECH). The contents of the instruments were the same as in the pilot study (see Section 3.5.2) except for some modifications to the wording of the instructions, made on the basis of the pilot study participants' feedback.

3.6.3. Main study procedure.

Research data were collected from October 2005 to May 2006. The consent form, booklet, and CD were handed over in person or sent by mail to participants. The participants were asked to complete the task according to the instructions in the booklet (shown in Appendix B), and they were also asked to return all of the materials except a letter of request for research participation and a participant's copy of the consent form. Participants completed the tasks individually either with other participants' present or alone, depending on logistical considerations. The venues for the administration of the test also varied, for example, some participants completed the tasks at home, while others did this in a classroom or in a meeting room, either alone or with other participants. In the group settings, the researcher attended all sessions. Approximately it was required 25 minutes to complete the tasks.

3.6.4. Main study analyses.

The data were transferred into SPSS (Version 17.0) and descriptive and inferential statistics were obtained. Strictly speaking, the ratings given on the semantic differential scales were ordinal in nature, which would suggest that the analyses should rely heavily on non-parametric procedures; however, given the large number of possible values for each ratings (i.e., 1-8) and the fact that three ratings were averaged to obtain the overall rating for each of the three personality traits, such scores are typically treated as interval-level within data analyses (Pittam, 1994).

Once a single rating from each rater was obtained for each personality trait for each individual speaker, the ratings for the three male speakers (representing different levels

of voice attractiveness) were averaged. This was done to ensure that the rating obtained reflected all three levels of attractiveness (attractive, average, and unattractive). The same was done for the female speakers. The data analyses were then undertaken in two major phases. The first phase, which relied on multivariate analyses of variance (MANOVAs), was designed to address Research Questions 1-5. The second phase relied on multiple regression analyses (MRAs) and was designed to address Research Questions 6 and 7. All other details on the data analysis procedures are presented in Chapters 4 and 5.

3.7. Limitaion of the Study

In the presentstudy, three limitations should be acknowledged. The first limitation concerned the size and background of the participants of JNSs or raters. The number of them might not be said as large and because thery were not chosen by the method of random sampling, the result could have some bias. This also related to the background of the participants. For example, the raters' educational background was not considered in this study but it could influence their evaluation. The second limitation concerns differences in raters' cognitive style and their personality, which are not controlled. For example, it could have an effect on their evaluation by whether the rater is filed-dependent or filed-independent and/or optimistic or pessimistic (Rayner & Cools, 2011; Wapner & Denick, 1991). The third limitation involved the construction of the stimuli. The present study used each of three female and male speakers in order to control voice attractiveness by averaging their attractiveness, however, it would be ideal to use more speakers in each category of attractiveness, namely, more speakers rated as having

attractive voice/unattractive voice/neither attractive nor unattractive voice. Taken together, the findings should be interpreted carefully.

Chapter 4.Phase I: Differences in Perceived Personality Traits by NNS's Gender, Rater's Gender, and Situation

4.1. Introduction

This chapter presents the results of analyses performed to explore factors that appear to influence JNSs' impressions of NNSs' personality traits based on their speech characteristics. In the study, impressions based on four aspects of speech were assessed: WHOLE SPEECH, and three individual speech components (LANGUAGE, INTONATION, and VOICE). Within the broad research aim, five specific research questions were addressed. All related to the way in which the JNSs (the raters) rated three personality traits (FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS) based on the NNSs' speech. Specific questions addressed were as follows:

1) Do ratings of the three personality traits differ according to whether the NNS is male or female?
2) Do ratings of the three personality traits differ according to the level of formality in the situation?
3) Do male and female raters give different ratings of the three personality traits?
4) Do the three factors of NNS's gender, rater's gender, and level of situation formality interact in their impact on ratings of the three personality traits?
5) Do any of the effects above differ across LANGUAGE, INTONATION, VOICE or WHOLE SPEECH?

To address research questions 1-5, a series of multivariate analyses of variance (MANOVAs) was performed. Separate analyses were performed for the WHOLE SPEECH, LANGUAGE, INTONATION, and VOICE measures. The three dependent measures in each case were ratings of FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS. In each model, there were three independent variables. Two were repeated measures or within-case variables: situation (MOST FORMAL vs. FORMAL vs. CASUAL vs. MOST CASUAL) and NNS's gender (male vs. female). There was also one between-case variable: rater's gender (male vs. female). As described in Chapter 3, to partial out the effects of voice attractiveness in all of these analyses, the scores were averaged across the three attractiveness levels measured.

4.2. WHOLE SPEECH

Descriptive statistics for ratings of the three personality traits of FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS based on the WHOLE SPEECH measure are shown in Table 4.1 to Table 4.3. The evaluation of FRIENDLINESS of male speakers in the MOST CASUAL situation, by the male raters, had the highest variance. The evaluation of ACTIVENESS of male speakers in the MOST FORMAL situation, by the female raters, demonstrated the lowest variance. The mean for JUDICIOUSNESS in female speakers in the MOST FORMAL situation, rated by females, was the largest, and its standard deviation was relatively high. This indicated that the evaluation varied considerably across the female raters.

Table 4.1 Descriptive statistics for FRIENDLINESS in WHOLE SPEECH

Situation	NNS's Gender	Rater's Gender	*M*	*SD*	*N*
MOST FORMAL	Female	Female	16.47	3.14	77
		Male	15.76	2.64	77
		Total	16.12	2.91	154
	Male	Female	14.89	3.51	77
		Male	14.11	2.68	77
		Total	14.50	3.13	154
FORMAL	Female	Female	16.04	3.09	77
		Male	15.21	2.72	77
		Total	15.63	2.93	154
	Male	Female	15.72	3.30	77
		Male	14.95	2.81	77
		Total	15.33	3.08	154
CASUAL	Female	Female	14.41	3.21	77
		Male	13.97	2.62	77
		Total	14.19	2.93	154
	Male	Female	12.59	3.21	77
		Male	12.55	2.67	77
		Total	12.57	2.94	154
MOST CASUAL	Female	Female	15.20	3.26	77
		Male	14.46	2.67	77
		Total	14.83	2.99	154
	Male	Female	14.89	3.38	77
		Male	14.29	4.15	77
		Total	14.59	3.78	154

Table 4.2 Descriptive statistics for ACTIVENESS in WHOLE SPEECH

Situation	NNS's Gender	Rater's Gender	*M*	*SD*	*N*
MOST FORMAL	Female	Female	15.24	3.45	77
		Male	14.97	2.33	77
		Total	15.10	2.94	154
	Male	Female	15.21	3.25	77
		Male	14.93	2.89	77
		Total	15.07	3.07	154
FORMAL	Female	Female	14.87	3.21	77
		Male	14.79	2.73	77
		Total	14.83	2.97	154
	Male	Female	15.43	3.37	77
		Male	15.17	2.67	77
		Total	15.30	3.03	154
CASUAL	Female	Female	15.33	3.11	77
		Male	14.62	2.36	77
		Total	14.98	2.78	154
	Male	Female	15.48	3.03	77
		Male	14.93	2.69	77
		Total	15.21	2.87	154
MOST CASUAL	Female	Female	15.52	3.15	77
		Male	15.18	2.61	77
		Total	15.35	2.89	154
	Male	Female	16.31	3.43	77
		Male	15.52	3.39	77
		Total	15.92	3.42	154

Table 4.3 Descriptive statistics for JUDICIOUSNESS in WHOLE SPEECH

Situation	NNS's Gender	Rater's Gender	*M*	*SD*	*N*
MOST FORMAL	Female	Female	17.59	3.36	77
		Male	16.54	2.86	77
		Total	17.06	3.15	154
	Male	Female	16.09	3.19	77
		Male	15.20	2.54	77
		Total	15.65	2.91	154
FORMAL	Female	Female	16.94	3.10	77
		Male	15.65	2.60	77
		Total	16.29	2.92	154
	Male	Female	16.07	3.03	77
		Male	15.14	2.66	77
		Total	15.61	2.88	154
CASUAL	Female	Female	14.78	3.10	77
		Male	14.00	2.49	77
		Total	14.39	2.83	154
	Male	Female	12.89	2.90	77
		Male	12.53	2.40	77
		Total	12.71	2.66	154
MOST CASUAL	Female	Female	15.36	3.19	77
		Male	14.33	2.39	77
		Total	14.85	2.86	154
	Male	Female	12.44	3.57	77
		Male	12.39	3.15	77
		Total	12.42	3.35	154

The MANOVA to test for differences in ratings of the three traits (FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS) based on WHOLE SPEECH indicated no significant main effects for rater's gender, or for the rater's gender by NNS's gender interaction, $V = .04$, $F(3,150) = 2.25$, $p = .09$; and $V = .03$, $F(3,150) = 1.66$, $p = .18$, respectively. The multivariate *F*s were also non-significant for the rater's gender by situation interaction, and for the three-way interaction between rater's gender, NNS's gender, and situation, $V = .07$, $F(9,144) < 1$, $p = .25$; and $V = .04$, $F(9,144) < 1$, $p = .74$, respectively.

The MANOVA did indicate significant main effects both for NNS's gender and situation, $V = .54$, $F(3,150) = 59.47$, $p < .001$ and $V = .68$, $F(9,144) = 34.65$, $p < .001$,

respectively. These main effects were qualified, however, by a significant NNS's gender by situation interaction effect: $V = .38$, $F(9,144) = 9.72$, $p < .001$. Results from univariate ANOVAs, conducted to further investigate the source/s of these multivariate effects (i.e., on each of the dependent variables separately), are shown in the following sections. All outcomes from the univariate ANOVAs were evaluated for significance at the 0.05 level.

4.2.1. FRIENDLINESS.

Univariate ANOVAs for the variable of FRIENDLINESS are shown in Table 4.4. The ANOVAs indicated a significant main effect for NNS's gender and situation on FRIENDLINESS. There was also a significant NNS's gender by situation interaction effect, which indicated that the size, but not the pattern, of main effects for one of the independent variables differed with the level of the other; thus, the two main effects were still interpretable alongside the interaction.

Table 4.4 Univariate ANOVAs for FRIENDLINESS in WHOLE SPEECH

Source	*Df*	*MS*	*F*	Sig.	Partial η^2
NNS's Gender	1	273.99	44.63	<.001	.23
Error	152	6.14			
Situation	3	279.45	46.17	<.001	.23
Error	456	6.05			
NNS's Gender by Situation	3	47.08	14.37	<.001	.86
Error	456	3.28			

Figure 4.1 shows means corresponding to the main effect of NNS's gender on FRIENDLINESS based on WHOLE SPEECH. From these means, the significant main effect indicated that female speakers were rated higher than males overall.

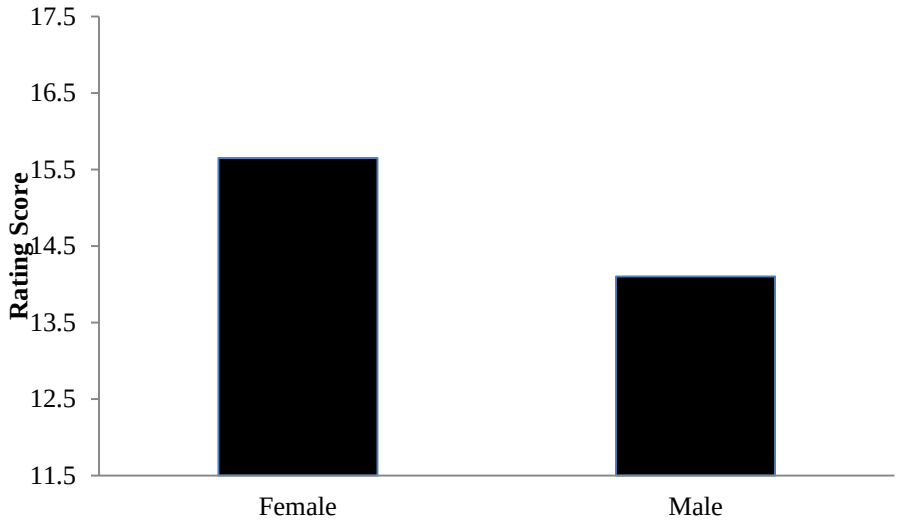

Figure 4.1 *Ratings of FRIENDLINESS in WHOLE SPEECH by NNS's gender*

Figure 4.2 shows means corresponding to the main effect of situation on FRIENDLINESS based on WHOLE SPEECH. From these means, ratings were clearly lower overall in the CASUAL situation followed by the MOST CASUAL situation. The ratings were higher in both the FORMAL and MOST FORMAL situations.

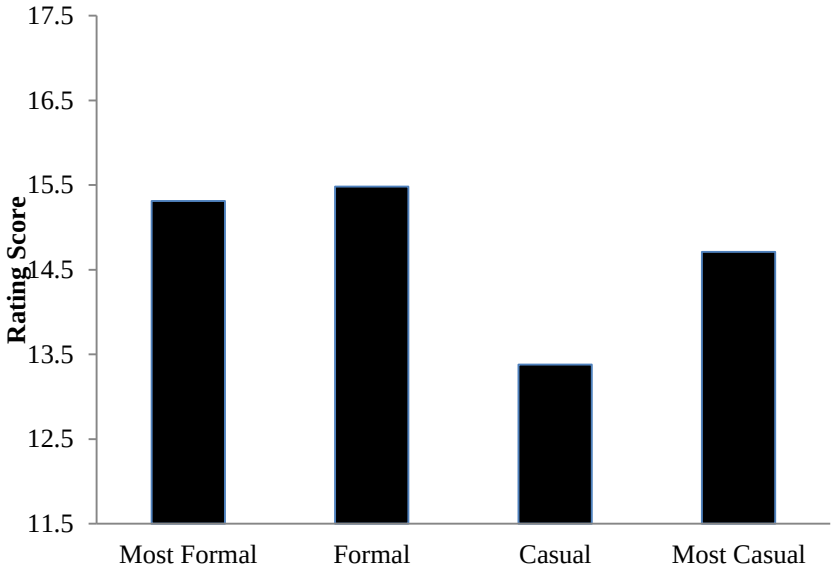

Figure 4.2 *Ratings of FRIENDLINESS in WHOLE SPEECH by situation*

Means corresponding to the NNS's gender by situation interaction effect on ratings of FRIENDLINESS are shown in Figure 4.3. From these means, the interaction effect indicates that although female speakers were rated higher than males overall, the difference was quite small in the FORMAL and MOST CASUAL situations, and larger in the MOST FORMAL and CASUAL situations. The size of the difference between the females and the males was the same (1.62 points) in these latter two situations.

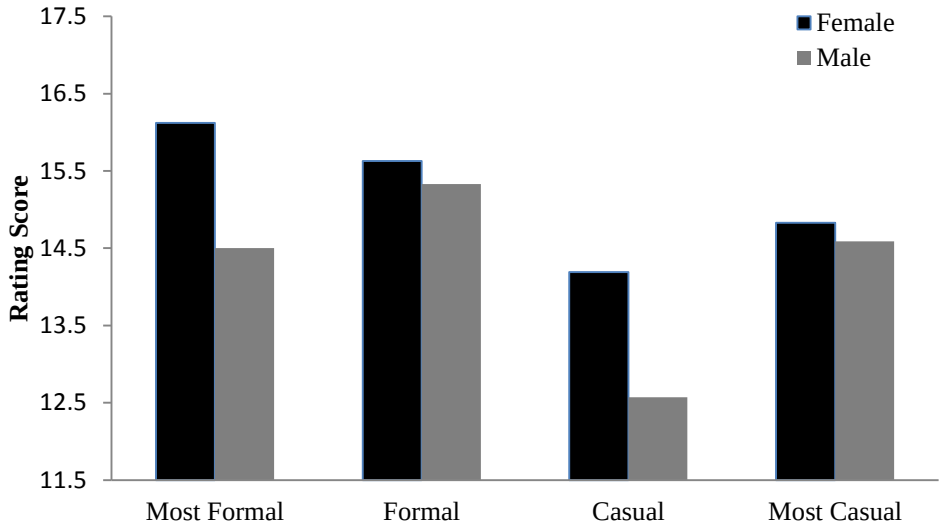

Figure 4.3 *Ratings of FRIENDLINESS in WHOLE SPEECH by NNS's gender and situation*

4.2.2. ACTIVENESS.

Univariate ANOVAs for the variable of ACTIVENESS are shown in Table 4.5. These indicated significant main effects both for NNS's gender and for situation. There was no significant NNS's gender by situation interaction effect.

Table 4.5 Univariate ANOVAs for ACTIVENESS in WHOLE SPEECH

Source	*Df*	*MS*	*F*	Sig.	Partial η^2
NNS's gender	1	29.41	4.55	.034	.03
Error	152	6.46			
Situation	3	23.59	4.73	.003	.03
Error	456	4.99			
NNS's gender by Situation	3	5.57	1.88	.132	.01
Error	456	2.97			

The means associated with the two main effects are shown in Figure 4.4 and Figure 4.5. The main effect for NNS's gender on ACTIVENESS indicated that male speakers were given somewhat higher ratings than were females. The main effect for situation on

ACTIVENESS indicated that higher ratings were given in the MOST CASUAL situation.

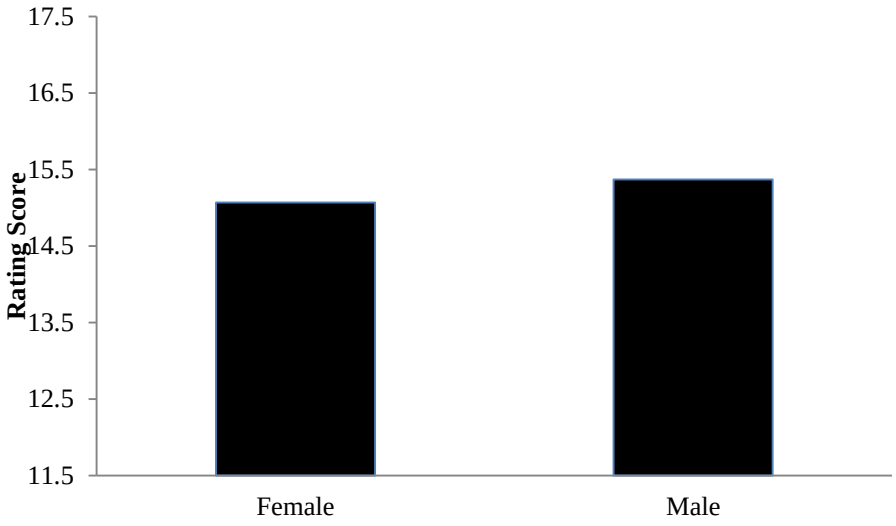

Figure 4.4 *Ratings of ACTIVENESS in WHOLE SPEECH by NNS's gender*

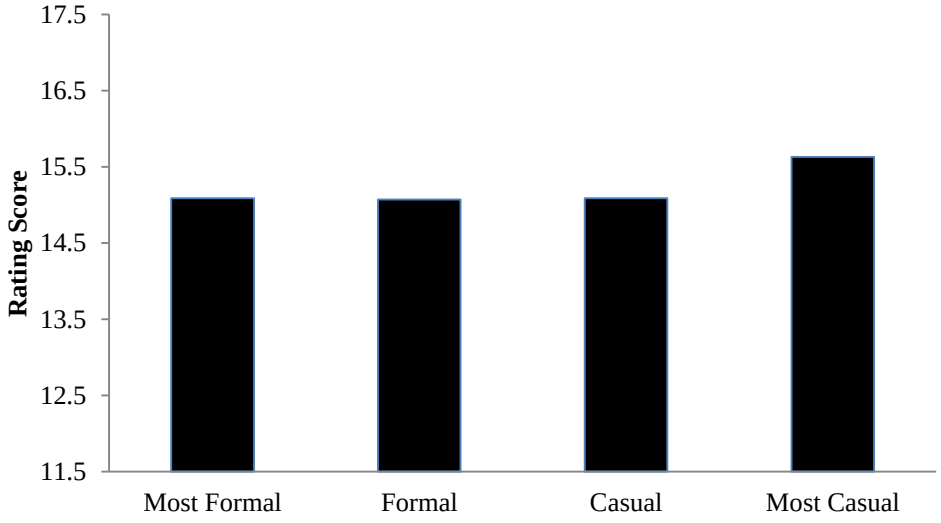

Figure 4.5 *Ratings of ACTIVENESS in WHOLE SPEECH by situation*

4.2.3. JUDICIOUSNESS.

Univariate ANOVAs for JUDICIOUSNESS are shown in Table 4.6. The ANOVAs indicated a similar pattern for JUDICIOUSNESS as was found for FRIENDLINESS. That is, there were significant main effects both for NNS's gender and situation, but also, a significant NNS's gender by situation interaction effect. The latter effect again indicated that the size, but not the pattern, of main effects for one of the independent variables differed with the level of the other; thus, the main effects remained interpretable.

Table 4.6 Univariate ANOVAs for JUDICIOUSNESS in WHOLE SPEECH

Source	*Df*	*MS*	*F*	Sig.	Partial η^2
NNS's gender	1	744.42	155.12	<.001	.51
Error	152	4.80			
Situation	3	682.79	119.13	<.001	.44
Error	456	5.73			
NNS's gender by Situation	3	40.08	17.65	<.001	.10
Error	456	2.27			

Based on Figure 4.6, the main effect for gender indicated that female speakers were rated higher than male speakers overall.

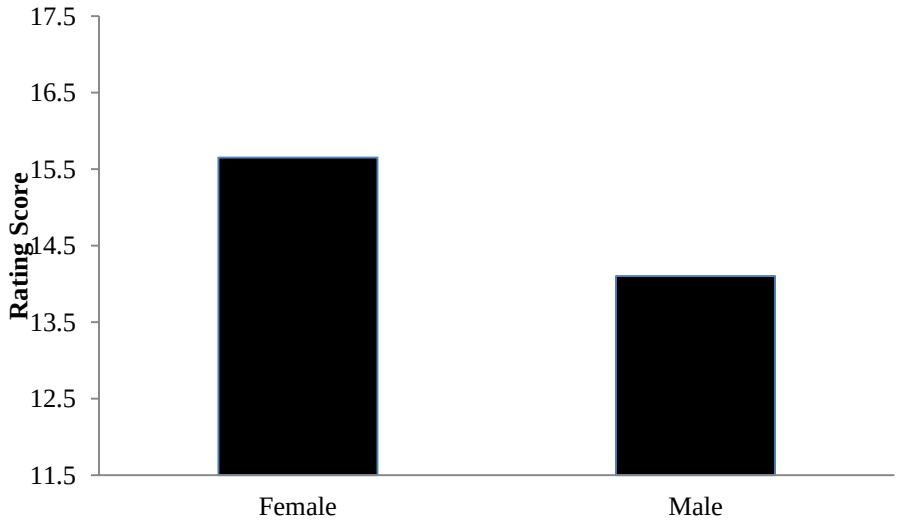

Figure 4.6 *Ratings of JUDICIOUSNESS in WHOLE SPEECH by NNSs' gender*

From Figure 4.7, means corresponding to the main effect of situation on JUDICIOUSNESS showed that ratings were clearly different between the two formal situations and the two casual situations. The ratings were higher in both the FORMAL and MOST FORMAL situations, and lower in both the CASUAL and the MOST CASUAL situations.

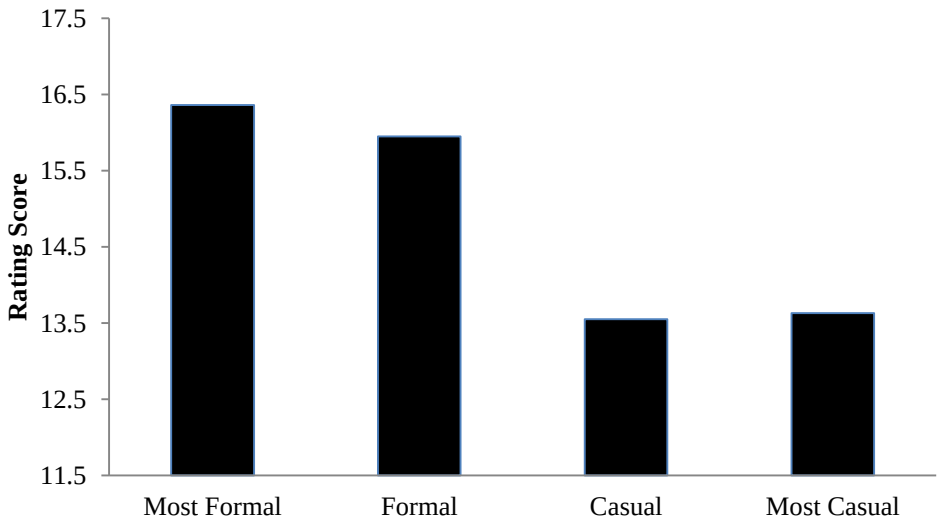

Figure 4.7 *Ratings of JUDICIOUSNESS in WHOLE SPEECH by situation*

The means corresponding to the gender by situation interaction effect on JUDICIOUSNESS are shown in Figure 4.8. As indicated, the difference in mean scores between the two formal and the two casual situations was larger than the difference in mean scores between the MOST FORMAL and the FORMAL situations, and the CASUAL and the MOST CASUAL situations. This tendency was more pronounced in the case of

male speakers. Female speakers obtained the highest score in the MOST FORMAL situation followed by the FORMAL, MOST CASUAL, and CASUAL situations with score differences between the situations as follows: 0.78, 1.90, 0.46, respectively. The male speakers obtained the highest score in the MOST FORMAL situation, followed by the FORMAL, CASUAL, and MOST CASUAL situations, though the score differences between the first and the last two were quite small at 0.04 and 0.26, respectively. The score difference between the MOST FORMAL and the CASUAL situations, conversely, was large (2.90 points).

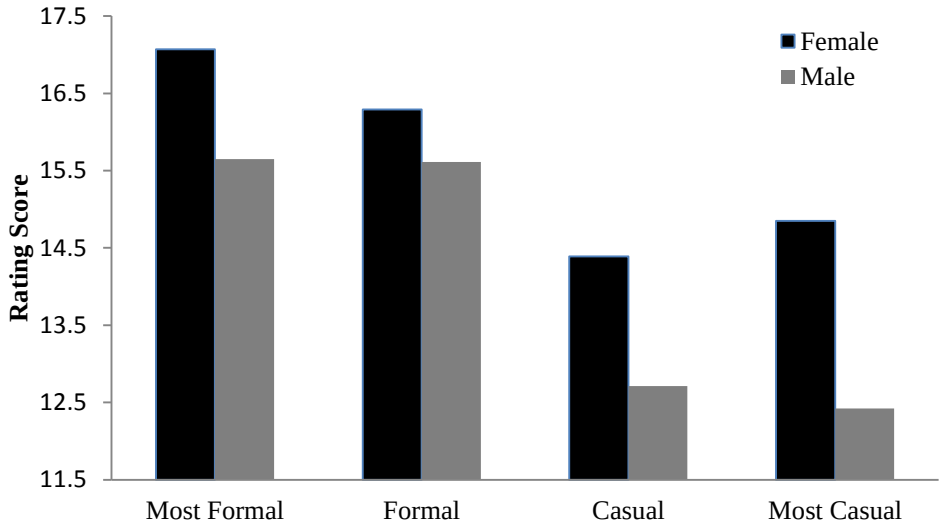

Figure 4.8 *Ratings of JUDICIOUSNESS in WHOLE SPEECH by NNS's gender and situation*

4.3. LANGUAGE

Descriptive statistics for LANGUAGE are shown in Table 4.7 to Table 4.9. As indicated, the evaluations were somewhat higher for female speakers than for males in terms of

FRIENDLINESS, except in the MOST CASUAL situation. In ACTIVENESS, males conversely were rated somewhat higher in all four situations. In JUDICIOUSNESS, females' scores were substantially higher on average across all four situations.

Table 4.7 Descriptive statistics for LANGUAGE in FRIENDLINESS

Situation	NNS's gender	Rater's Gender	*M*	*SD*	*N*
MOST FORMAL	Female	Female	17.01	2.99	77
		Male	15.77	2.92	77
		Total	16.39	3.01	154
	Male	Female	15.05	3.18	77
		Male	14.43	3.02	77
		Total	14.74	3.11	154
FORMAL	Female	Female	15.72	3.14	77
		Male	14.80	2.52	77
		Total	15.26	2.87	154
	Male	Female	15.05	2.97	77
		Male	13.97	2.77	77
		Total	14.51	2.91	154
CASUAL	Female	Female	14.95	3.54	77
		Male	14.17	2.72	77
		Total	14.56	3.17	154
	Male	Female	13.17	3.73	77
		Male	12.48	3.37	77
		Total	12.83	3.56	154
MOST CASUAL	Female	Female	14.56	3.43	77
		Male	14.23	3.40	77
		Total	14.39	3.41	154
	Male	Female	16.94	3.30	77
		Male	16.25	4.02	77
		Total	16.59	3.68	154

Table 4.8 Descriptive statistics for LANGUAGE in ACTIVENESS

Situation	NNS's gender	Rater's Gender	*M*	*SD*	*N*
MOST FORMAL	Female	Female	14.68	3.35	77
		Male	14.68	2.88	77
		Total	14.68	3.11	154
	Male	Female	15.41	2.76	77
		Male	14.95	2.71	77
		Total	15.18	2.73	154
FORMAL	Female	Female	15.24	3.16	77
		Male	14.93	2.47	77
		Total	15.09	2.83	154
	Male	Female	16.23	2.94	77
		Male	15.58	2.83	77
		Total	15.90	2.90	154
CASUAL	Female	Female	15.97	2.86	77
		Male	15.05	2.65	77
		Total	15.51	2.79	154
	Male	Female	15.81	3.50	77
		Male	15.37	3.47	77
		Total	15.59	3.48	154
MOST CASUAL	Female	Female	15.22	3.27	77
		Male	15.57	2.99	77
		Total	15.40	3.13	154
	Male	Female	18.21	3.41	77
		Male	17.32	3.77	77
		Total	17.77	3.61	154

Table 4.9 Descriptive statistics for LANGUAGE in JUDICIOUSNESS

Situation	NNS's gender	Rater's Gender	*M*	*SD*	*N*
MOST FORMAL	Female	Female	17.00	3.24	77
		Male	15.70	3.04	77
		Total	16.35	3.20	154
	Male	Female	15.05	3.00	77
		Male	14.58	2.87	77
		Total	14.81	2.94	154
FORMAL	Female	Female	15.52	2.88	77
		Male	14.43	2.48	77
		Total	14.98	2.74	154
	Male	Female	14.33	2.68	77
		Male	13.60	2.67	77
		Total	13.97	2.69	154
CASUAL	Female	Female	13.87	3.22	77
		Male	13.65	2.41	77
		Total	13.76	2.84	154
	Male	Female	12.74	3.15	77
		Male	11.93	2.81	77
		Total	12.34	3.00	154
MOST CASUAL	Female	Female	15.13	2.91	77
		Male	13.98	3.03	77
		Total	14.56	3.01	154
	Male	Female	12.10	3.70	77
		Male	12.21	3.48	77
		Total	12.16	3.58	154

The MANOVA on LANGUAGE indicated no significant main effects for rater's gender, $V = .03$, $F(3,150) = 1.75$, $p = .16$, for the rater's gender by NNS's gender interaction, $V = .04$, $F(3,150) = 2.05$, $p = .11$, or for the rater's gender by situation interaction, $V = .03$, $F(9,144) = 0.49$, $p = .88$. These results were the same as the results for WHOLE SPEECH, but for LANGUAGE, the rater's gender by NNS's gender by situation interaction was significant, $V = .17$, $F(9,144) = 3.29$, $p = .001$. The MANOVA also indicated significant main effects for NNS's gender and situation, $V = .62$, $F(3,150) = 80.18$, $p < .001$; and $V = .64$, $F(9,144) = 28.06$, $p < .001$, respectively. These main effects were qualified by a NNS's gender by situation interaction, $V = .64$, $F(9,144) = 27.84$, $p < .001$, and the

three-way interaction of rater's gender by NNS's gender by situation, as mentioned. The following sections will consider effects on each of the dependent variables in the MANOVA individually.

4.3.1. FRIENDLINESS.

The univariate ANOVA for FRIENDLINESS indicated significant main effects for NNS's gender and situation as well as the NNS's gender by situation interaction effect (see Table 4.10). This interaction effect eclipsed the two main effects, that is, it indicated that not only the magnitude, but also the pattern, of differences in one independent variable depended on the level of the other. As such, neither main effect was retained for interpretation.

Table 4.10 Univariate ANOVAs for FRIENDLINESS in LANGUAGE

Source	*Df*	*MS*	*F*	Sig.	Partial η^2
NNS's gender	1	72.24	16.09	<.001	.10
Error	152	4.49			
Situation	3	230.67	24.57	<.001	.14
Error	456	9.39			
NNS's gender by Situation	3	261.16	73.35	<.001	.33
Error	456	3.56			

In FRIENDLINESS, female speakers were rated higher than were male speakers except in the MOST CASUAL situation (see Figure 4.9). The scores decreased in accordance with decreasing formality for females. For males, the same tendency was found until the CASUAL situation was reached. Male speakers, indeed, gained the highest score in the MOST CASUAL situation. The score difference between the females and the males was also greatest in the MOST CASUAL situation (2.20 points). For the males, the size of the score difference was highest between the CASUAL and the MOST CASUAL situations

(3.66 points). The male speakers showed a very different pattern in the MOST CASUAL situation from other situations and from the pattern found for females.

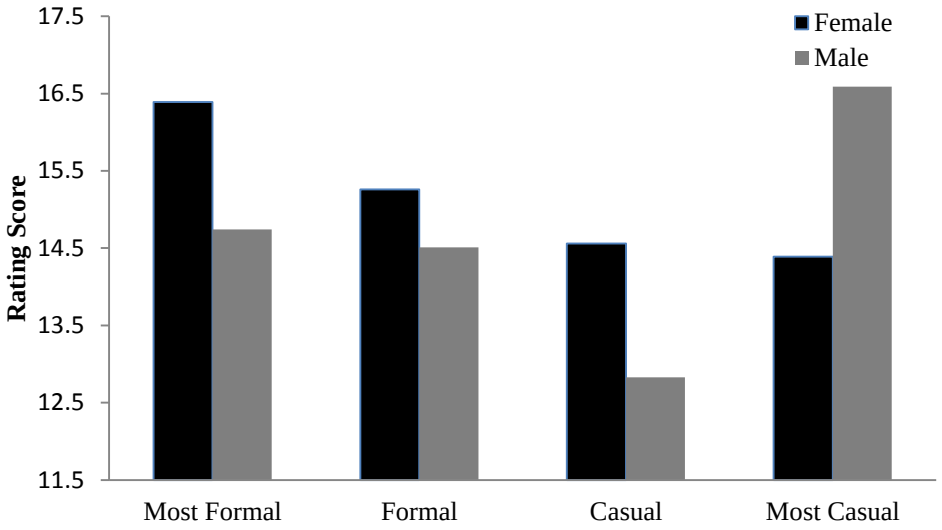

Figure 4.9 *Ratings of FRIENDLINESS in LANGUAGE by NNS's gender by situation*

4.3.2. ACTIVENESS.

The univariate ANOVA for ACTIVENESS indicated again, significant differences in scores for NNS's gender, situation, and the NNS's gender by situation interaction effect (see Table 4.11). Scores also differed significantly with a rater's gender by NNS's gender by situation. Again, the interaction effect eclipsed the main effects observed, that is, it indicated that not only the magnitude, but the pattern of differences in one independent variable depended on the level of the other. As such, the main effects were not retained for interpretation.

Table 4.11 Univariate ANOVAs for ACTIVENESS in LANGUAGE

Source	*Df*	*MS*	*F*	Sig.	Partial η^2
NNS's gender	1	272.43	53.19	<.001	.26
Error	152	5.12			
Situation	3	145.41	19.78	<.001	.12
Error	456	7.34			
NNS's gender by Situation	3	76.95	27.93	<.001	.16
Error	456	2.76			
NNS's gender by Situation by Situation	3	9.61	3.49	.02	.02
Error	152	40.70			

For ACTIVENESS, both the female and the male raters evaluated the male speakers similarly across the situations, but the female raters discriminated the scores according to the NNS's gender. The score differences between the female and the male speakers were greater in the cases of the female raters than the male raters (see Figure 4.10 and Figure 4.11). Both male and female raters gave higher scores for the male speakers than for the female speakers in all situations except the CASUAL situation. In the latter situation, the female raters gave higher scores for the female speakers than for the male speakers, although the score difference was very small. Interestingly, the female raters' scores for female speakers in the CASUAL situation were the highest among the four situations (15.97 points, see Figure 4.10); higher than the score which was given to the female speakers by female raters in the MOST CASUAL situation. For male raters, conversely, the highest score given to male speakers was for the MOST CASUAL situation (15.57 points, see Figure 4.11).

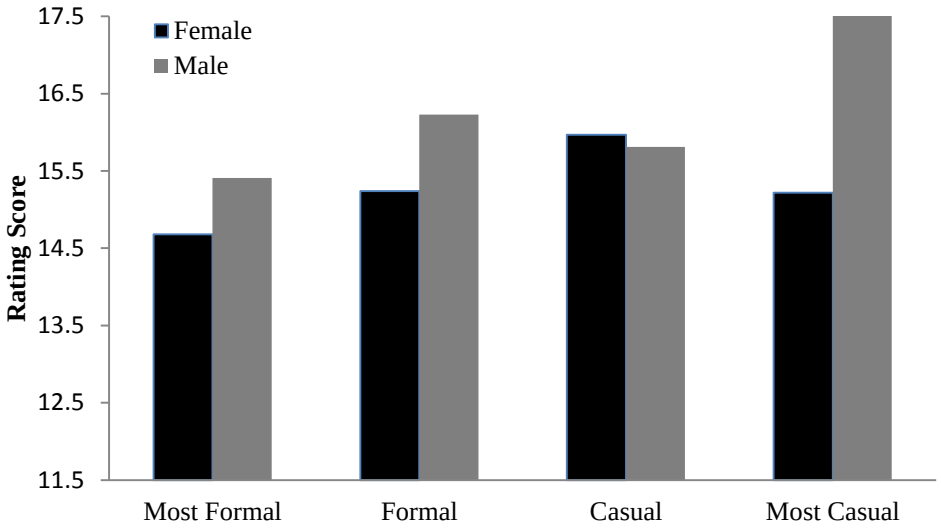

Figure 4.10 *Ratings of ACTIVENESS in LANGUAGE by NNS's gender and situation for female raters*

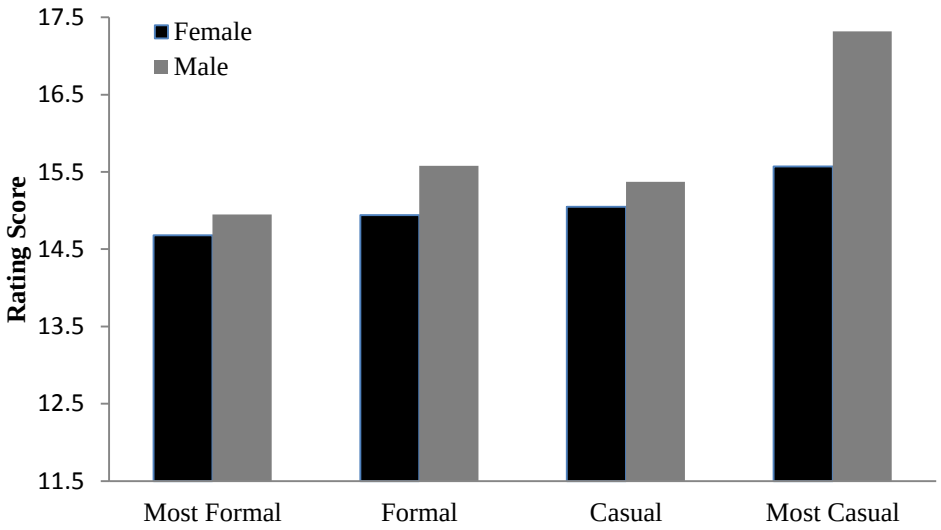

Figure 4.11 *Ratings of ACTIVENESS in LANGUAGE by NNS's gender and situation for male raters*

4.3.3. JUDICIOUSNESS.

The univariate ANOVA for JUDICIOUSNESS again indicated significant differences in scores across NNS's gender, situation, and the NNS's gender by situation interaction (see Table 4.12). As found for ACTIVENESS, there were also significant differences in scores according to the rater's gender by NNS's gender by situation interaction. Associated with the latter effect, the size, but not the pattern, of main effects for one of the independent variables differed with the level of the other; thus, the main effects remained interpretable.

Table 4.12 Univariate ANOVAs for JUDICIOUSNESS in LANGUAGE

Source	*Df*	*MS*	*F*	Sig.	Partial η^2
NNS's gender	1	781.67	53.19	<.001	.26
Error	152	5.12			
Situation	3	408.35	47.01	<.001	.24
Error	456	8.69			
NNS's gender by Situation	3	26.08	11.17	<.001	.07
Error	456	2.33			
NNS's gender by Situation by Situation	3	11.99	5.14	.002	.03
Error	152	34.74			

Figure 4.12 shows means corresponding to the main effect of NNS's gender on JUDICIOUSNESS based on LANGUAGE. From these means, the significant main effects indicated that female speakers were rated higher than males overall. This was the same pattern found in JUDICIOUSNESS on WHOLE SPEECH.

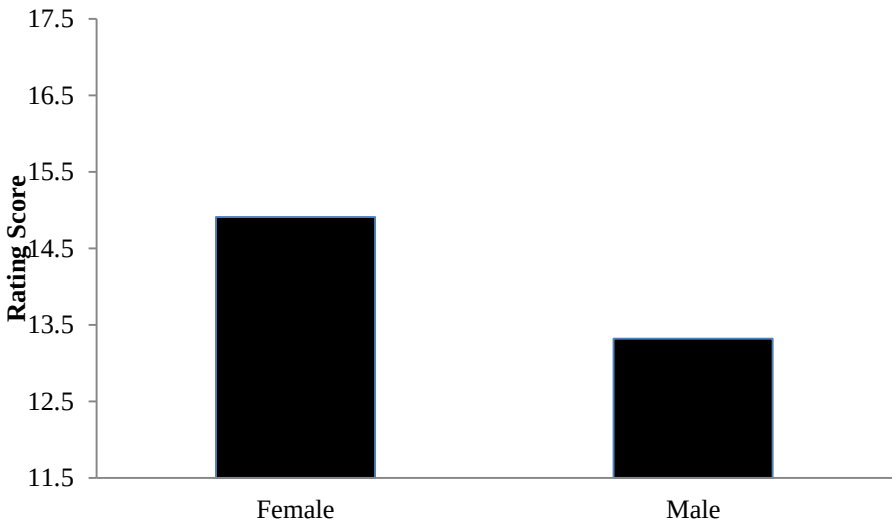

Figure 4.12 *Ratings of JUDICIOUSNESS in LANGUAGE by NNS's gender*

Again, as seen in JUDICIOUSNESS on WHOLE SPEECH, means corresponding to the main effect of situation showed that ratings were clearly different between the two formal situations and the two casual situations (see Figure 4.13). The ratings were higher in both the FORMAL and MOST FORMAL situations than in the CASUAL and the MOST CASUAL situations.

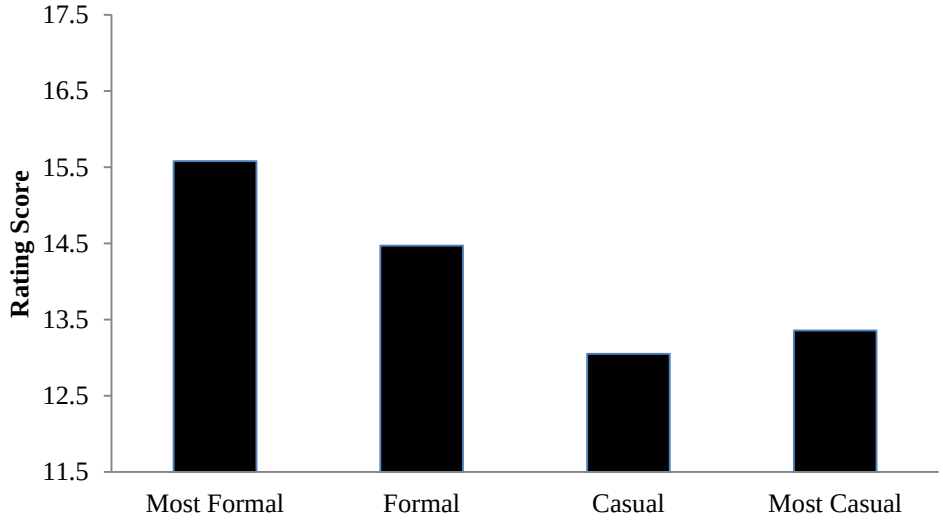

Figure 4.13 *Ratings of JUDICIOUSNESS in LANGUAGE by situation*

The means corresponding to the rater's gender by NNS's gender by situation interaction effect on JUDICIOUSNESS are shown in Figure 4.14 and Figure 4.15. The male speakers obtained higher scores in the CASUAL situation than in the MOST CASUAL situation by the female raters while the male raters gave lower scores for the male speakers in the CASUAL situation than in the MOST CASUAL situation. Both the female raters and the male raters gave scores to the female speakers similarly across the situations, but they evaluated male speakers differently according to situation. The female raters used a wider range of scores than the male raters. Both the female raters and the male raters gave higher scores for the female speakers in the MOST CASUAL situation than for female speakers in the CASUAL situation, but the difference between the scores given by the female raters were greater than by the male raters. The female raters gave the female speakers 1.26 points more in the MOST CASUAL situation than the female speakers in the CASUAL situation. In contrast, the score difference was only 0.33 points with the male raters. This may indicate that the female raters were more

sensitive, or could distinguish more subtle differences between the speakers across situations.

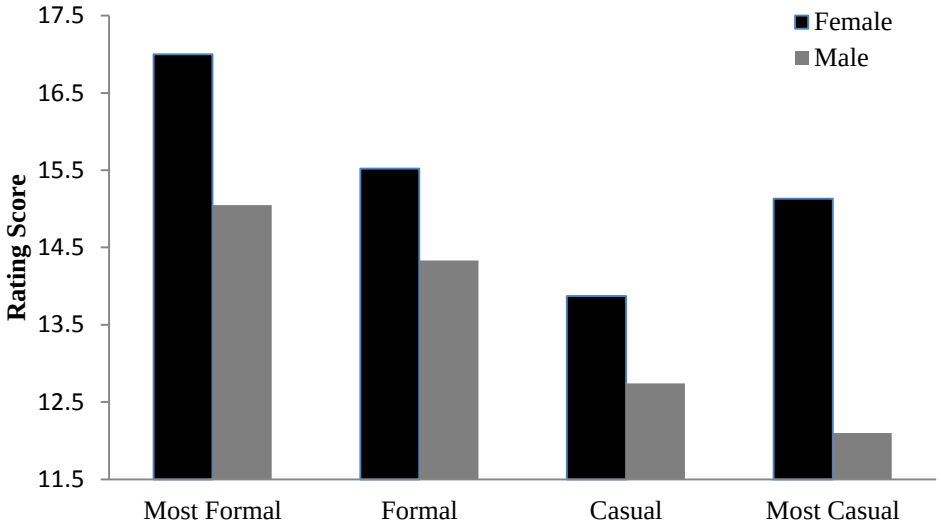

Figure 4.14 *Ratings of JUDICIOUSNESS in LANGUAGE by NNS's gender and situation for female raters*

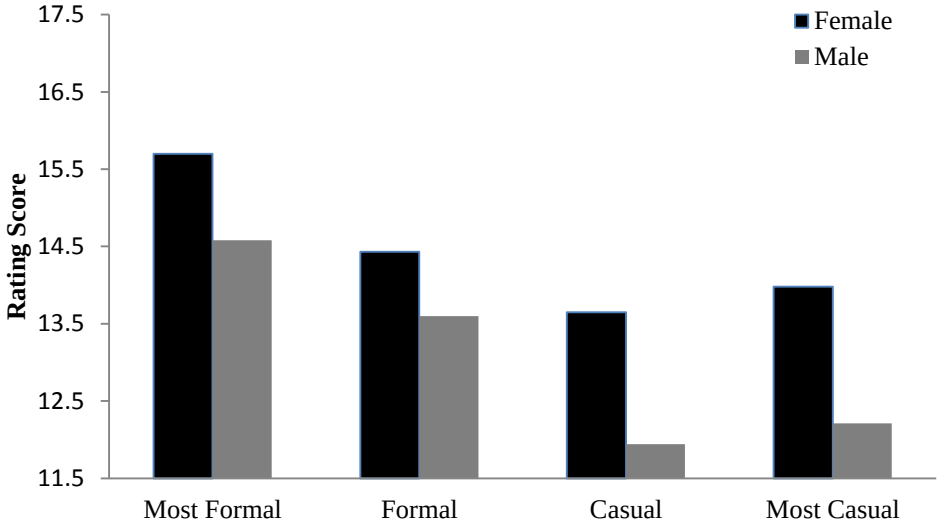

Figure 4.15 *Ratings of JUDICIOUSNESS in LANGUAGE by NNS's gender and situation for male raters*

4.4. INTONATION

Descriptive statistics for INTONATION are shown in Table 4.13 to Table 4.15. Overall, both female and male speakers gained lower scores on this variable than on any other speech components as well as on WHOLE SPEECH. This was possibly due to the relative difficulty of rating the INTONATION of the speaker.

Table 4.13 Descriptive statistics for INTONATION in FRIENDLINESS

Situation	NNS's gender	Rater's Gender	*M*	*SD*	*N*
MOST FORMAL	Female	Female	13.69	3.46	77
		Male	13.32	3.46	77
		Total	13.50	3.46	154
	Male	Female	13.13	3.40	77
		Male	12.58	3.47	77
		Total	12.86	3.43	154
FORMAL	Female	Female	14.23	3.52	77
		Male	13.68	3.15	77
		Total	13.96	3.34	154
	Male	Female	12.58	3.88	77
		Male	12.89	3.80	77
		Total	12.73	3.83	154
CASUAL	Female	Female	13.82	3.45	77
		Male	13.78	3.28	77
		Total	13.80	3.36	154
	Male	Female	11.39	3.78	77
		Male	12.10	3.69	77
		Total	11.74	3.74	154
MOST CASUAL	Female	Female	13.63	3.21	77
		Male	14.06	3.12	77
		Total	13.84	3.16	154
	Male	Female	15.36	3.44	77
		Male	15.19	3.51	77
		Total	15.28	3.46	154

Table 4.14 Descriptive statistics for INTONATION in ACTIVENESS

Situation	NNS's gender	Rater's Gender	*M*	*SD*	*N*
MOST FORMAL	Female	Female	13.23	3.16	77
		Male	13.25	3.40	77
		Total	13.23	3.27	154
	Male	Female	13.26	3.00	77
		Male	13.43	3.34	77
		Total	13.34	3.16	154
FORMAL	Female	Female	13.85	3.17	77
		Male	13.49	3.27	77
		Total	13.67	3.22	154
	Male	Female	13.25	3.70	77
		Male	13.64	3.53	77
		Total	13.44	3.61	154
CASUAL	Female	Female	14.18	3.31	77
		Male	14.44	3.30	77
		Total	14.31	3.30	154
	Male	Female	13.04	3.74	77
		Male	13.68	3.87	77
		Total	13.36	3.81	154
MOST CASUAL	Female	Female	13.17	3.14	77
		Male	14.01	2.98	77
		Total	13.59	3.08	154
	Male	Female	15.73	3.54	77
		Male	15.59	3.69	77
		Total	15.66	3.60	154

Table 4.15 Descriptive statistics for INTONATION in JUDICIOUSNESS

Situation	NNS's gender	Rater's Gender	*M*	*SD*	*N*
MOST FORMAL	Female	Female	14.03	3.65	77
		Male	13.11	3.43	77
		Total	13.57	3.56	154
	Male	Female	14.08	3.35	77
		Male	12.90	3.30	77
		Total	13.49	3.37	154
FORMAL	Female	Female	14.37	3.59	77
		Male	13.70	3.25	77
		Total	14.03	3.43	154
	Male	Female	13.42	4.04	77
		Male	13.32	3.51	77
		Total	13.37	3.77	154
CASUAL	Female	Female	13.60	3.45	77
		Male	13.32	2.84	77
		Total	13.46	3.15	154
	Male	Female	11.52	3.66	77
		Male	11.76	3.08	77
		Total	11.64	3.37	154
MOST CASUAL	Female	Female	13.51	3.71	77
		Male	13.17	3.05	77
		Total	13.34	3.39	154
	Male	Female	12.18	3.48	77
		Male	12.74	3.28	77
		Total	12.46	3.38	154

The MANOVA indicated no significant main effects for rater's gender or for the rater's gender by NNS's gender interaction, $V = .04$, $F(3,150) = 1.82$, $p = .15$; and $V = .02$, $F(3,150) = 1.04$, $p = .38$, respectively. The rater's gender by situation interaction and the rater's gender by NNS's gender by situation interaction were also non-signficant, $V = .07$, $F(9,144) = 1.20$, $p = .30$; and $V = .09$, $F(9,144) = 1.61$, $p = .12$, respectively. Conversely, the MANOVA indicated significant main effects for NNS's gender and situation, $V = .34$, $F(3,150) = 25.48$, $p < .001$; and $V = .54$, $F(9,144) = 18.83$, $p < .001$, respectively. These main effects were qualified by the NNS's gender by situation

interaction, $V = .55$, $F(9,144) = 19.68$, $p < .001$, because the interaction indicated a difference in patterns for one independent variable depending on the level of the other. This pattern was similar to that found for WHOLE SPEECH.

In the following section, effects on each of the dependent variables in the MANOVA will be considered individually.

4.4.1. FRIENDLINESS.

Univariate ANOVAs for the variable of FRIENDLINESS are shown in Table 4.16. The ANOVAs indicated significant differences in scores with situation and the NNS's gender by situation interaction. There were also significant differences in scores with NNS's gender.

Table 4.16 Univariate ANOVAs for FRIENDLINESS in INTONATION

Source	*Df*	*MS*	*F*	Sig.	Partial η^2
NNS's gender	1	119.27	19.17	<.001	.11
Error	152	6.22			
Situation	3	182.03	27.91	<.001	.16
Error	456	6.52			
NNS's gender by Situation	3	170.69	57.64	<.001	.28
Error	456	3.56			

In FRIENDLINESS, the female speakers were rated higher than the male speakers, except in the MOST CASUAL situation (see Figure 4.16). The highest score obtained for the female speakers was in the FORMAL situation. For female speakers, the CASUAL and the MOST CASUAL situations obtained almost the same score, with the scores in the MOST FORMAL situation being the lowest. For male speakers, the MOST CASUAL situation obtained the highest score followed by the MOST FORMAL, FORMAL, and CASUAL

situations. The range of the mean scores among the situations in the male speakers was greater than in the case of female speakers (11.74 in the CASUAL situation to 15.28 in the MOST CASUAL situation, 13.50 in the MOST FORMAL situation to 13.96 in the FORMAL situation, respectively).

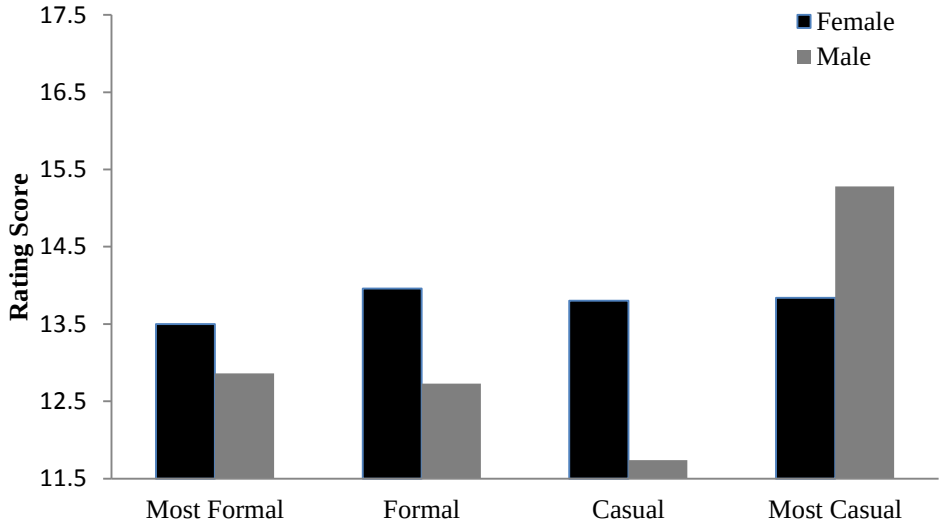

Figure 4.16 *Ratings of FRIENDLINESS in INTONATION by NNS's gender and situation*

4.4.2. ACTIVENESS.

The univariate ANOVA for ACTIVENESS again indicated significant differences in scores across situation and according to the NNS's gender by situation interaction (see Table 4.17). There was no significant main effect for NNS's gender, although the effect approached significance at the .05 level.

Table 4.17 Univariate ANOVAs for ACTIVENESS in INTONATION

Source	*Df*	*MS*	*F*	Sig.	Partial η^2
NNS's gender	1	19.25	3.13	.08	.02
Error	152	6.15			
Situation	3	103.13	17.57	<.001	.10
Error	456	5.87			
NNS's gender by Situation	3	128.29	44.68	<.001	.23
Error	456	2.87			

In ACTIVENESS, the score differences between the female and the male speakers were not obvious in the two formal situations as compared with the two casual situations (see Figure 4.17). Across the two casual situations, the pattern of ratings for female and the male speakers was the same as the pattern found for FRIENDLINESS. That is, in the CASUAL situation, females were rated higher than males, whereas in the MOST CASUAL situation, males were rated higher. Also, for male speakers, the highest ratings were given in the MOST CASUAL situation, whereas for female speakers, the highest scores were given in the CASUAL situation. This also was similar in pattern to the result for FRIENDLINESS. However, for female speakers, the size of score differences among the situations were greater than in FRIENDLINESS; for male speakers, the score differences were lower than in FRIENDLINESS.

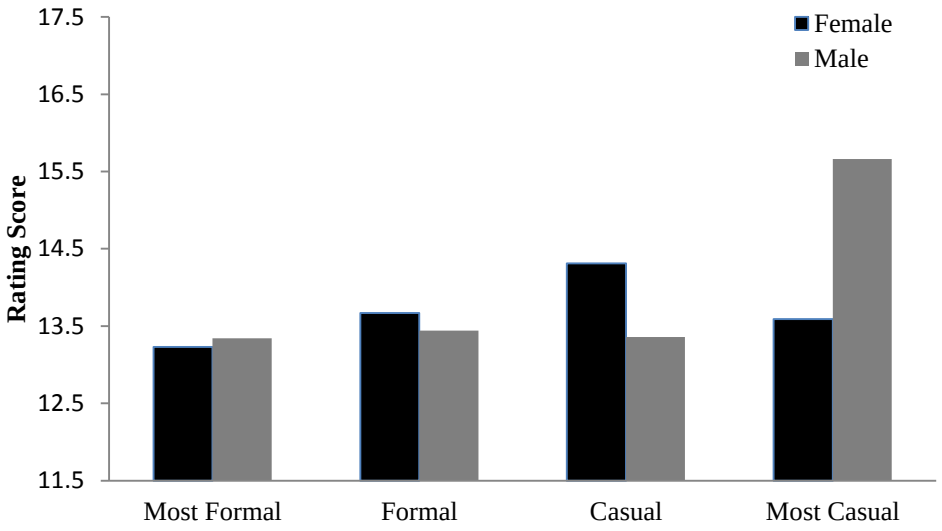

Figure 4.17 *Ratings of ACTIVENESS in INTONATION by NNS's gender and situation*

4.4.3. JUDICIOUSNESS.

Univariate ANOVAs for JUDICIOUSNESS are shown in Table 4.18. The ANOVAs indicated a similar pattern for JUDICIOUSNESS as was found for FRIENDLINESS. That is, there were differences in scores across situations and according to the NNS's gender by situation interaction. In this case, there was also a significant difference in scores across NNS's gender.

Table 4.18 Univariate ANOVAs for JUDICIOUSNESS in INTONATION

Source	*Df*	*MS*	*F*	Sig.	Partial η^2
NNS's gender	1	72.24	16.09	<.001	.10
Error	152	4.49			
Situation	3	230.67	24.57	<.001	.14
Error	456	9.39			
NNS's gender by Situation	3	261.16	73.35	<.001	.33
Error	456	3.56			

The result of JUDICIOUSNESS was different from the results obtained for the other two measures with respect to the MOST CASUAL situation; female speakers were rated higher than male speakers (see Figure 4.18). Male speakers were given higher scores in the two formal situations than in the two casual situations. Female speakers, on the other hand, were given the highest score in the FORMAL situation, but similar scores in the other three situations.

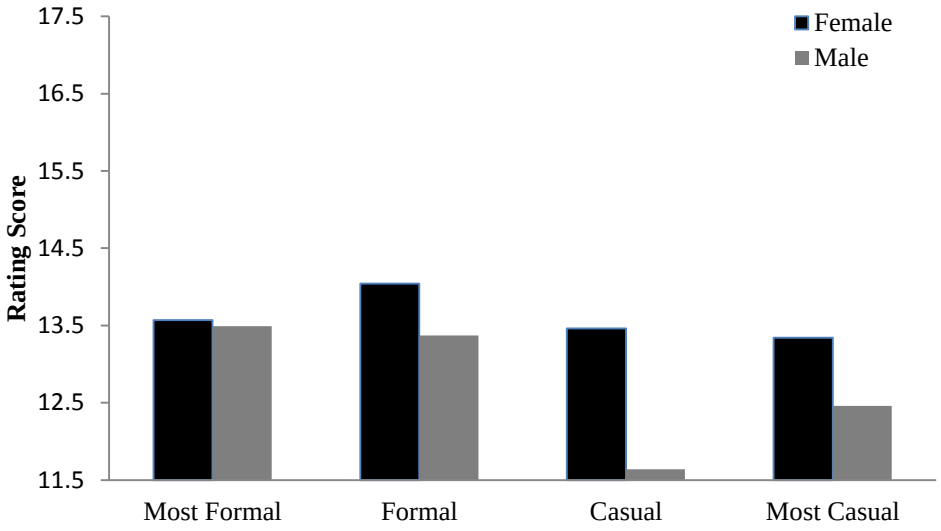

Figure 4.18 *Ratings of JUDICIOUSNESS in INTONATION by NNS's gender and situation*

4.5. VOICE

In the case of VOICE, situation was not entered as an independent variable because VOICE was not varied according to situation in the study. Descriptive statistics for VOICE are shown in Table 4.19. As indicated, male speakers received somewhat higher scores than did female speakers on all three dependent variables.

Table 4.19 Descriptive statistics for VOICE

Measure	NNS's gender	Rater's Gender	*M*	*SD*	*N*
FRIENDLINESS	Female	Female	13.42	3.30	77
		Male	13.13	2.73	77
		Total	13.28	3.02	154
	Male	Female	14.07	3.66	77
		Male	13.30	2.97	77
		Total	13.68	3.35	154
ACTIVENESS	Female	Female	11.98	3.20	77
		Male	12.14	2.87	77
		Total	12.06	3.03	154
	Male	Female	13.36	3.34	77
		Male	12.79	3.02	77
		Total	13.08	3.19	154
JUDICIOUSNESS	Female	Female	14.15	3.41	77
		Male	14.05	2.62	77
		Total	14.10	3.03	154
	Male	Female	14.58	3.29	77
		Male	13.88	2.66	77
		Total	14.23	3.00	154

The MANOVA indicated no significant main effect for rater's gender and no significant rater's gender by NNS's gender interaction, $V = .01$, $F(3,150) = .58$, $p = .63$, $V = .04$, $F(3,150) = 1.89$, $p = .13$. There was, however, a significant main effect for NNS's gender, $V = .18$, $F(3,150) = 10.90$, $p < .001$.

Univariate ANOVAs indicated significant differences in scores across NNS's gender for two of the three measures: FRIENDLINESS and ACTIVENESS. The tests for the main effect of NNS's gender and the interaction effect of the rater's gender by NNS's gender across the three measures are shown in Table 4.20.

Table 4.20 Univariate ANOVAs for VOICE

Source	Measure	*Df*	*MS*	*F*	Sig.	Partial η^2
Speaker's gender	FRIENDLINESS	1	12.62	5.47	.02	.04
	ACTIVENESS	1	79.35	30.74	<.001	.17
	JUDICIOUSNESS	1	1.39	0.76	.39	.01
Error	FRIENDLINESS	152	2.31			
	ACTIVENESS	152	2.58			
	JUDICIOUSNESS	152	1.84			

As shown in Figure 4.19, the male speakers achieved higher scores than the female speakers did overall, but the score difference was very small in JUDICIOUSNESS, for which the difference was not significant. In ACTIVENESS, the mean score difference between the female speakers and the male speakers was greater than for the other two measures.

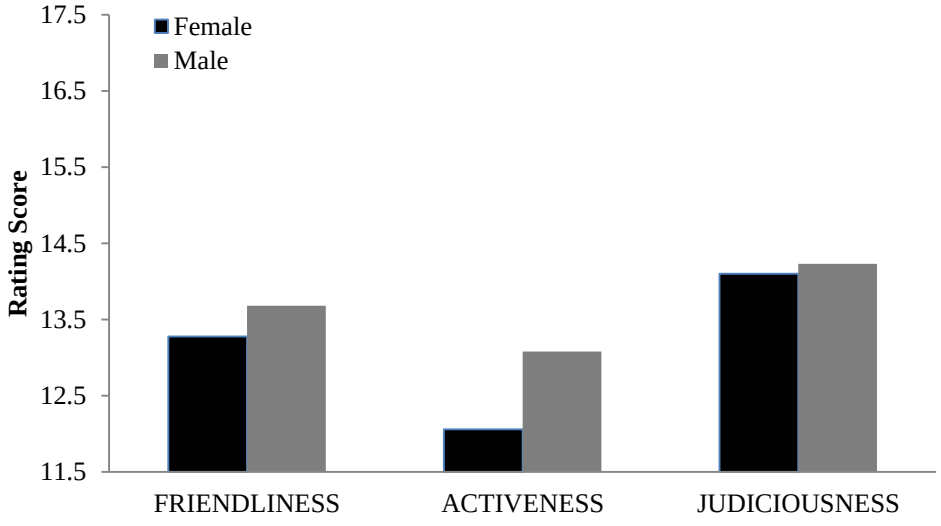

Figure 4.19 *Ratings in VOICE by NNS's gender and the three personality traits*

4.6. Summary

The results of this study indicated no significant main effects for rater's gender on impressions of the three personality traits based on the WHOLE SPEECH, LANGUAGE,

INTONATION, and VOICE components. Rater's gender did contribute to a few significant interaction effects, however. NNS's gender and situation, conversely, produce consistent significant differences in ratings. Table 4.21 shows a summary of the tested main effects and the interactions.

Table 4.21 Summary of the tested main effects and the interactions

Speech Variables	Measure	Rater's gender	NNS's gender	Situation	Rater's gender by NNS's gender	Rater's gender by Situation	NNS's gender by Situation	Rater's gender by NNS's gender by Situation
WHOLE SPEECH	FRIENDLINESS	n.s.	✓	✓	n.s.	n.s.	✓	n.s.
	ACTIVENESS	n.s.	✓	✓	n.s.	n.s.	n.s.	n.s.
	JUDICIOUSNESS	n.s.	✓	✓	n.s.	n.s.	✓	n.s.
LANGUAGE	FRIENDLINESS	n.s.	✓	✓	n.s.	n.s.	✓	n.s.
	ACTIVENESS	n.s.	✓	✓	n.s.	n.s.	✓	✓
	JUDICIOUSNESS	n.s.	✓	✓	n.s.	n.s.	✓	✓
INTONATION	FRIENDLINESS	n.s.	✓	✓	n.s.	n.s.	✓	n.s.
	ACTIVENESS	n.s.	✓	✓	n.s.	n.s.	✓	n.s.
	JUDICIOUSNESS	n.s.	✓	✓	n.s.	n.s.	✓	n.s.
VOICE	FRIENDLINESS	n.s.	✓	N/A	n.s.	N/A	N/A	N/A
	ACTIVENESS	n.s.	✓	N/A	n.s.	N/A	N/A	N/A
	JUDICIOUSNESS	n.s.	n.s.	N/A	n.s.	N/A	N/A	N/A

4.6.1. WHOLE SPEECH

The MANOVA results showed very mixed results of the impact of NNS's gender and situation in impression formed on the basis of WHOLE SPEECH. Specifically, in terms of ACTIVENESS, there were two main effects: one for NNS's gender and one for situation. These effects indicated that the male speakers were interpreted to have higher levels of ACTIVENESS than the female speakers overall and that ACTIVENESS levels were perceived to be highest in the MOST CASUAL situation.

In terms of FRIENDLINESS, the same two main effects registered as statistically significant. There was also a significant NNS's gender by situation interaction effect observed. In this case, the female speakers received higher ratings in all situations, and ACTIVENESS levels were perceived to be lowest in the CASUAL situation.

In terms of JUDICIOUSNESS, there were two main effects and an interaction effect for NNS's gender and situation. In this case, all effects were interpretable. Overall, the female speakers consistently received higher ratings than the male speakers, regardless of situation. Further, higher ratings were given to the two formal situations than to the two casual situations. The difference between the ratings given to the female and male speakers was greatest in the two casual situations (i.e., were far higher in these conditions and still higher but less so in the two formal situations).

4.6.2. LANGUAGE.

In LANGUAGE, there was again a mixed pattern of results across the three personality traits. Starting with FRIENDLINESS, the results indicated that there were two main effects and a NNS's gender by situation interaction. Inspection of the cell means,

however, made clear that neither of the main effects could be interpreted, owing to the interaction of the two independent variables. This interaction indicated that female speakers received higher ratings than male speakers, except in the MOST CASUAL situation.

In terms of ACTIVENESS, there was a three-way interaction effect between rater's gender, NNS's gender, and situation, which, on inspection of the cell means, made it clear that none of the main effects could be interpreted. Specifically, for the female raters, while the male speakers received higher ratings than the female speakers in the MOST FORMAL, FORMAL, and MOST CASUAL situations, there was minimal difference between the two in the CASUAL situation. For the male raters, the pattern was more consistent, indicating higher ratings assigned to the male speakers than to the female speakers across all four situations. It was, however, notably more pronounced in the MOST CASUAL situation.

In terms of JUDICIOUSNESS, there was also a significant three-way interaction effect. In this case, unlike in the case of ACTIVENESS, the cell means indicated that both the female raters and the male raters gave scores to the female speakers similarly across the situations with one exception: female raters gave much lower scores to male speakers than to female speakers in the MOST CASUAL situation. With these differences aside, the overall patterns were similar. These results indicated that across all situations, female speakers were given higher ratings than were the male speakers. For the female raters, the difference was most pronounced in the MOST CASUAL situation, whereas for the male raters, the difference was most pronounced in the CASUAL situation.

4.6.3. INTONATION.

In INTONATION, the results again indicated two significant main effects with a significant two-way interaction between NNS's gender and situation (with no contribution from rater's gender) for FRIENDLINESS. In this case, inspection of the cell means indicated that only the interaction should be interpreted (i.e., that the main effects should not be retained for interpretation). The interact effect indicated that in three of the situations (MOST FORMAL, FORMAL, and CASUAL), the female speakers received higher ratings than the male speakers, but the opposite pattern emerged for the MOST CASUAL situation.

In terms of ACTIVENESS, there was again a two-way NNS's gender by situation interaction, which eclipsed the main effects associated with these variables (with no contribution made by rater's gender). In this case, the female and male speakers received similar ratings in the two formal situations, but opposite patterns emerged in the two casual situations. Specifically, in the CASUAL situation, the female speakers received higher ratings; in the MOST CASUAL situation, the male speakers received higher ratings.

In terms of JUDICIOUSNESS, there was again a significant NNS's gender by situation interaction effect, which eclipsed both main effects associated with these variables. This effect indicated similar ratings for the female and male speakers in the MOST FORMAL situation, but higher ratings for the female speakers in the FORMAL, CASUAL, and MOST CASUAL situations. The magnitude of the differences varied somewhat across the latter three situations, being highest in the CASUAL situation.

4.6.4. VOICE

Finally, in VOICE, there was a mixed pattern which varied across three dependent measures (i.e., FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS). Specifically, the male speakers received higher ratings for ACTIVENESS and FRIENDLINESS, though the difference observed for the latter variable was less salient. There was no significant difference between the female and male speakers on JUDICIOUSNESS.

4.6.5. Conclusion

Overall, the results indicated significant NNS's gender by situation interactions in all speech variables, namely, WHOLE SPEECH, LANGUAGE, and INTONATION. These interactions were not significant, however, in ratings of ACTIVENESS based on WHOLE SPEECH. Overall, the female speakers were rated higher than the male speakers in FRIENDLINESS and JUDICIOUSNESS. On the other hand, the male speakers were rated higher in ACTIVENESS in most cases; they were also given higher scores in the MOST CASUAL situation. In VOICE, NNS's gender produced significant main effects on both ACTIVENESS and FRIENDLINESS but not on JUDICIOUSNESS. Owing to the minimal contribution made by rater's gender to any main or interaction effects observed (i.e., this variable was only found to be significant for ratings of ACTIVENESS and JUDICIOUSNESS based on LANGUAGE, and even in these cases, produced differences in magnitude but not overall pattern) the rater's gender was not considered as a potential moderator in any further analyses conducted.

Chapter 5. Phase II: Contributions of LANGUAGE, INTONATION, and VOICE Components to Perceptions of Personality Traits in WHOLE SPEECH

5.1. Rationale

Following the results of Chapter 4, the perceptions of personality traits in different speech components (LANGUAGE, INTONATION, VOICE) as well as in the WHOLE SPEECH varied primarily with the NNS's gender and with situation. The rater's gender had only a few modest effects in these analyses. As noted in Chapter 2, NSs make their impression of NNSs personality based on the NNSs' speech and NNSs are very much concerned with polite language expressions or *keigo,* which is situation dependent. NNSs should, therefore, be aware of how their speech influences their perceived personality by JNSs if they are to achieve effective communication. The present research attempted to provide such information.

The overarching goal of this phase of the research was to investigate the extent to which perceptions of personality traits (i.e., FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS) in the three speech components of LANGUAGE, INTONATION, and VOICE, predicted perceptions of the same personality traits in the WHOLE SPEECH. To address the key goals stated above, a series of stepwise multiple regression analyses (MRAs) was performed. The stepwise approach was used because this does not rely on the specification of an a priori model of the relationships between predictor and outcome variables. In this approach, all predictor variables are initially entered

simultaneously into the model. The order of entry in the final model is then determined by the strength of the relationship between each variable and the outcome variable; thus, the strongest predictor is entered first, followed by the next strongest, and so on. Any variables that do not contribute significantly to predicting the outcome variable after taking into account the predictors already entered in each model are excluded. Consequently, the results of these analyses permit a comparison of the strength of relationships between each of the predictor variables and the outcome variable, and identify the strongest predictors for each outcome variable.

Given also that the results of Phase I indicated robust differences in perceptions of personality traits based on situation and NNS's gender, the specific goal of the study was to compare the predictive relationships obtained across these background factors. As a result, eight separate stepwise regressions were performed: one for male and for female speakers within each of the four situations (i.e., MOST FORMAL, such as a request to a workplace supervisor/boss; FORMAL, such as a request to a middle-aged, well-dressed stranger; CASUAL, such as a request to a person who works with an informant at her/his regular/part-time job; and MOST CASUAL, such as a request to a very close friend). This analysis permitted an assessment of differences in predictive relationships according to the two background factors mentioned above. Separate analyses were performed for outcomes within each of the four situations (e.g., perceived FRIENDLINESS of the WHOLE SPEECH in the FORMAL situation), and all of the measures relating to the individual speech components (LANGUAGE, INTONATION, and VOICE) within each of the four situations were entered as predictors in each analysis.

5.2. Analysis Method

SPSS Version 17.0 was again used to conduct the analyses within Phase II. Initial tests for conformity to underlying MRA assumptions produced satisfactory results. These analyses indicated no significant multivariate or univariate outliers at a conservative level of $\alpha = .001$. Examinations of distributions of distributions within each of the score subsets also indicated no notable deviations from normality, although there was a modest level of skew on a few variables. Given that *F* is robust to violations due to skew (though not as much as to violations associated with kurtosis), these modest deviations would not affect the analysis outcomes. There was also no evidence of multicollinearity within the predictor variables as a set.

5.3. Results

Descriptive statistics and bivariate correlations for each of the three personality trait scores, averaged over JNS raters for the eight subsample groups, are presented in Table 5.1 to Table 5.6. Given the conceptual relationships between the WHOLE SPEECH and the individual speech components as a set, positive correlations were expected among ratings of the same personality traits across the WHOLE SPEECH and the individual speech components; however, these relationships were not obtained at a significance level of .05 in all cases. For example, in the female speaker group, correlations between ratings of FRIENDLINESS in VOICE and LANGUAGE in the MOST CASUAL situation, and INTONATION in the FORMAL situation and LANGUAGE in the MOST FORMAL situation were not significant. The former could be explained by the fact that VOICE and LANGUAGE do not share components. The latter could be explained by the situation involved because the tables show the correction matrix among all speech variables and it is reasonable that no significant relationship was found between different situations because situation is the independent variable. In general, the patterns of results indicated

significant and positive correlations between the WHOLE SPEECH and individual speech components, as well as amongst the individual speech components within the same situation.

Table 5.1 Descriptive statistics and bivariate correlations for female speakers (FRIENDLINESS)

Variables	*M*	*SD*	*N*	1	2	3	4	5	6	7	8	9	10	11	12	13
1. WHOLE SPEECH 1	15.68	3.41	154	--	.54**	.43**	.37**	.73**	.58**	.48**	.62**	.35**	.50**	.50**	.19*	.37**
2. LANGUAGE 1	16.02	3.23	154		--	.38**	.22**	.50**	.69**	.39**	.50**	.54**	.38**	.38**	.24**	.19*
3. INTONATION 1	13.41	3.43	154			--	.45**	.36**	.44**	.64**	.42**	.40**	.59**	.38**	.22**	.49**
4. VOICE	13.75	3.49	154				--	.43**	.23**	.47**	.47**	.19*	.43**	.31**	.04	.52**
5. WHOLE SPEECH 2	15.88	3.19	154					--	.52**	.45**	.61**	.34**	.49**	.43**	.19*	.41**
6. LANGUAGE 2	15.39	3.07	154						--	.39**	.47**	.51**	.27**	.50**	.32**	.26**
7.INTONATION 2	13.40	3.78	154							--	.55**	.35**	.70**	.22**	.07	.39**
8. WHOLE SPEECH 3	13.50	3.33	154								--	.50**	.70**	.53**	.16	.39**
9. LANGUAGE 3	14.06	3.73	154									--	.36**	.49**	.27**	.24**
10. INTONATION 3	12.61	3.81	154										--	.31**	.03	.45**
11. WHOLE SPEECH 4	15.05	3.31	154											--	.39**	.47**
12. LANGUAGE 4	15.75	3.56	154												--	.43**
13. INTONATION 4	14.49	3.43	154													--

**Significant at α = .01; *Significant at α = .05 (two-tailed).

Number after the variables indicates a situation (e.g., WHOLE SPEECH 1 means WHOLE SPEECH in the MOST FORMAL situation and INTONATION 4 means INTONATION in the MOST CASUAL situation).

Table 5.2 Descriptive statistics and bivariate correlations for female speakers (ACTIVENESS)

Variables	*M*	*SD*	*N*	1	2	3	4	5	6	7	8	9	10	11	12	13
1. WHOLE SPEECH 1	15.22	3.34	154	--	.44**	.24**	.45**	.72**	.34**	.35**	.60**	.22**	.36**	.57**	.19*	.30**
2. LANGUAGE 1	15.05	3.08	154		--	.21*	.14	.43**	.68**	.17*	.43**	.41**	.20*	.43**	.41**	.22**
3. INTONATION 1	13.24	3.07	154			--	.53**	.27**	.27**	.66**	.18*	.20*	.55**	.09	.08	.38**
4. VOICE	12.67	3.33	154				--	.32**	.09	.46**	.29**	.05	.39**	.19*	.08	.45**
5. WHOLE SPEECH 2	15.15	3.29	154					--	.39**	.37**	.57**	.26**	.33**	.46**	.16	.34**
6. LANGUAGE 2	15.74	3.08	154						--	.35**	.45**	.55**	.36**	.46**	.42**	.37**
7. INTONATION 2	13.55	3.44	154							--	.34**	.29**	.70**	.19*	.05	.45**
8. WHOLE SPEECH 3	15.41	3.06	154								--	.42**	.45**	.60**	.25**	.40**
9. LANGUAGE 3	15.89	3.19	154									--	.34**	.36**	.40**	.33**
10. INTONATION 3	13.61	3.57	154										--	.27**	.08	.52**
11. WHOLE SPEECH 4	15.92	3.30	154											--	.38**	.43**
12. LANGUAGE 4	16.72	3.65	154												--	.50**
13. INTONATION 4	14.45	3.57	154													--

**Significant at α = .01; *Significant at α = .05 (two-tailed).

Number after the variables indicates a situation (e.g., WHOLE SPEECH 1 means WHOLE SPEECH in the MOST FORMAL situation and INTONATION 4 means INTONATION in the MOST CASUAL situation).

Table 5.3 Descriptive statistics and bivariate correlations for female speakers (JUDICIOUSNESS)

Variables	*M*	*SD*	*N*	1	2	3	4	5	6	7	8	9	10	11	12	13
1. WHOLE SPEECH 1	16.84	3.35	154	--	.54**	.26**	.43**	.74**	.53**	.38**	.58**	.31**	.37**	.60**	.24**	.35**
2. LANGUAGE 1	16.02	3.26	154		--	.30**	.17*	.52**	.76**	.27**	.45**	.52**	.27**	.56**	.40**	.24**
3. INTONATION 1	14.06	3.49	154			--	.57**	.32**	.38**	.74**	.27**	.31**	.54**	.29**	.16*	.48**
4. VOICE	14.37	3.35	154				--	.44**	.22**	.59**	.39**	.24**	.51**	.38**	.05	.48**
5. WHOLE SPEECH 2	16.51	3.08	154					--	.52**	.39**	.57**	.28**	.34**	.46**	.19*	.31**
6. LANGUAGE 2	14.93	2.84	154						--	.39**	.45**	.51**	.33**	.52**	.34**	.32**
7. INTONATION 2	13.89	3.84	154							--	.43**	.38**	.73**	.35**	.24**	.59**
8. WHOLE SPEECH 3	13.84	3.14	154								--	.54**	.60**	.71**	.42**	.54**
9. LANGUAGE 3	13.31	3.23	154									--	.49**	.55**	.42**	.44**
10. INTONATION 3	12.56	3.69	154										--	.57**	.40**	.70**
11. WHOLE SPEECH 4	13.90	3.68	154											--	.49**	.60**
12. LANGUAGE 4	13.62	3.65	154												--	.45**
13. INTONATION 4	12.84	3.65	154													--

**Significant at α = .01; *Significant at α = .05 (two-tailed)

Number after the variables indicates a situation (e.g., WHOLE SPEECH 1 means WHOLE SPEECH in the MOST FORMAL situation, and INTONATION 4 means INTONATION in the MOST CASUAL situation).

Table 5.4 Descriptive statistics and bivariate correlations for male speakers (FRIENDLINESS)

Variables	*M*	*SD*	*N*	1	2	3	4	5	6	7	8	9	10	11	12	13
1. WHOLE SPEECH 1	14.94	2.78	154	--	.32**	.28**	.31**	.58**	.38**	.35**	.46**	.39**	.44**	.35**	.07	.20*
2. LANGUAGE 1	15.10	3.04	154		--	.08	.18*	.13	.28**	.04	.26**	.36**	.14	.05	.05	.05
3. INTONATION 1	12.95	3.47	154			--	.45**	.31**	.51**	.75**	.45**	.41**	.59**	.34**	.20*	.55**
4. VOICE	13.22	2.84	154				--	.27**	.49**	.43**	.48**	.40**	.41**	.29**	.32**	.42**
5. WHOLE SPEECH 2	15.08	2.76	154					--	.28**	.31**	.40**	.29**	.32**	.45**	.13	.28**
6. LANGUAGE 2	14.38	2.67	154						--	.52**	.47**	.50**	.49**	.28**	.30**	.44**
7. INTONATION 2	13.29	3.50	154							--	.42**	.35**	.66**	.27**	.23**	.59**
8. WHOLE SPEECH 3	13.26	2.73	154								--	.58**	.57**	.47**	.19*	.46**
9. LANGUAGE 3	13.33	3.17	154									--	.54**	.30**	.10	.38**
10. INTONATION 3	12.94	3.58	154										--	.37**	.11	.58**
11. WHOLE SPEECH 4	14.38	3.48	154											--	.40**	.45**
12. LANGUAGE 4	15.24	3.85	154												--	.49**
13. INTONATION 4	14.63	3.35	154													--

**Significant at α = .01; *Significant at α = .05 (two-tailed)

Number after the variables indicates a situation (e.g., WHOLE SPEECH 1 means WHOLE SPEECH in the MOST FORMAL situation, and INTONATION 4 means INTONATION in the MOST CASUAL situation).

Table 5.5 Descriptive statistics and bivariate correlations for male speakers (ACTIVENESS)

Variables	*M*	*SD*	*N*	1	2	3	4	5	6	7	8	9	10	11	12	13
1. WHOLE SPEECH 1	14.95	2.62	154	--	.27**	.25**	.34**	.65**	.32**	.34**	.50**	.31**	.30**	.44**	.21**	.34**
2. LANGUAGE 1	14.82	2.79	154		--	.16*	.18*	.13	.59**	.13	.22**	.36**	.16*	.15	.26**	.18*
3. INTONATION 1	13.34	3.36	154			--	.39**	.25**	.48**	.74**	.39**	.46**	.61**	.41**	.33**	.56**
4. VOICE	12.47	2.95	154				--	.28**	.32**	.35**	.29**	.33**	.22**	.10	.27**	.32**
5. WHOLE SPEECH 2	14.98	2.70	154					--	.35**	.31**	.52**	.33**	.33**	.47**	.21**	.34**
6. LANGUAGE 2	15.26	2.67	154						--	.42**	.44**	.57**	.46**	.34**	.46**	.49**
7. INTONATION 2	13.56	3.39	154							--	.38**	.40**	.68**	.33**	.37**	.61**
8. WHOLE SPEECH 3	14.77	2.53	154								--	.58**	.54**	.56**	.37**	.56**
9. LANGUAGE 3	15.21	3.08	154									--	.52**	.43**	.58**	.46**
10. INTONATION 3	14.06	3.60	154										--	.43**	.33**	.67**
11. WHOLE SPEECH 4	15.35	3.02	154											--	.45**	.53**
12. LANGUAGE 4	16.45	3.50	154												--	.51**
13. INTONATION 4	14.80	3.43	154													--

**Significant at α = .01; *Significant at α = .05 (two-tailed).

Number after the variables indicates a situation (e.g., WHOLE SPEECH 1 means WHOLE SPEECH in the MOST FORMAL situation, and INTONATION 4 means INTONATION in the MOST CASUAL situation).

Table 5.6 Descriptive statistics and bivariate correlations for male speakers (JUDICIOUSNESS)

Variables	*M*	*SD*	*N*	1	2	3	4	5	6	7	8	9	10	11	12	13
1. WHOLE SPEECH 1	15.87	2.78	154	--	.29**	.27**	.42**	.66**	.22**	.35**	.46**	.27**	.31**	.35**	.10	.15
2. LANGUAGE 1	15.14	3.00	154		--	.13	.23**	.14	.24**	.09	.30**	.35**	.17*	.11	.30**	.14
3. INTONATION 1	13.01	3.35	154			--	.41**	.39**	.49**	.74**	.47**	.34**	.63**	.34**	.25**	.57**
4. VOICE	13.97	2.63	154				--	.48**	.40**	.40**	.55**	.46**	.38**	.35**	.25**	.42**
5. WHOLE SPEECH 2	15.39	2.63	154					--	.32**	.41**	.51**	.28**	.37**	.37**	.20*	.23**
6. LANGUAGE 2	14.02	2.60	154						--	.46**	.46**	.50**	.56**	.28**	.40**	.49**
7. INTONATION 2	13.51	3.38	154							--	.41**	.30**	.63**	.28**	.24**	.49**
8. WHOLE SPEECH 3	13.27	2.55	154								--	.60**	.62**	.57**	.45**	.53**
9. LANGUAGE 3	12.79	2.75	154									--	.51**	.43**	.36**	.41**
10. INTONATION 3	12.54	3.05	154										--	.42**	.33**	.64**
11. WHOLE SPEECH 4	13.36	2.95	154											--	.52**	.52**
12. LANGUAGE 4	13.10	3.37	154												--	.53**
13. INTONATION 4	12.95	3.17	154													--

**Significant at α = .01; *Significant at α = .05 (two-tailed).

Number after the variables indicates a situation (e.g., WHOLE SPEECH 1 means WHOLE SPEECH in the MOST FORMAL situation, and INTONATION 4 means INTONATION in the MOST CASUAL situation).

5.3.1. Predictors of perceived FRIENDLINESS in WHOLE SPEECH

Table 5.7 presents the results of the four stepwise MRAs performed for female speakers (one for each of the situations). Except in the MOST CASUAL situation, perceived FRIENDLINESS in VOICE and LANGUAGE were the two strongest predictors of the same trait in the WHOLE SPEECH. In two of these three situations, VOICE was the stronger of the two while in the MOST FORMAL situation, LANGUAGE was stronger. The cumulative adjusted R^2s for the two variables together fell between .25 and .49, indicating a strong relationship between these as predictors and the WHOLE SPEECH outcome. The pattern was quite different in the two casual situations (i.e., the CASUAL and MOST CASUAL situations). INTONATION was found to be a significant predictor in both of the two casual situations despite not being significant in either of the two formal situations. Although it was the last predictor in the CASUAL situation, INTONATION was the strongest predictor followed by LANGUAGE in the MOST CASUAL situation. The highest prediction was obtained in the CASUAL situation, where the adjusted R^2 was .54.

Table 5.7 Multiple regression outcomes for FRIENDLINESS by female speakers

Speaker Gender	Situation	Independent Variable	Model Statistics					Change Statistics			
			β	R	R^2	$R^2_{ADJ.}$	SE	*Df*1	*Df*2	$R^2_{CH.}$	$F_{CH.}$
Female Speakers	Most Formal	LANGUAGE	.43	.51	.26	.26	2.51	1	152	.26	53.45**
		VOICE	.32	.60	.36	.35	2.35	1	151	.10	23.05**
	Formal	VOICE	.32	.43	.19	.18	2.65	1	152	.19	35.25**
		LANGUAGE	.29	.64	.26	.25	2.54	1	151	.07	13.96**
	Casual	VOICE	.40	.61	.37	.36	2.33	1	152	.37	87.56**
		LANGUAGE	.30	.71	.50	.49	2.08	1	151	.14	40.94**
		INTONATION	.26	.74	.54	.54	1.99	1	150	.05	14.96**
	Most Casual	INTONATION	.40	.54	.29	.28	2.53	1	152	.29	60.90**
		LANGUAGE	.29	.59	.35	.34	2.42	1	151	.07	15.34**

**Significant at α = .01

Table 5.8 presents the results of the four stepwise MRAs performed for male speakers (one for each of the situations). In all situations, perceived FRIENDLINESS in INTONATION and LANGUAGE were the two strongest predictors of the same trait in the WHOLE SPEECH. In three of the four situations, INTONATION was the stronger of the two, although in the FORMAL situation, LANGUAGE was stronger. The cumulative adjusted R^2s for the two variables together fell between .21 and .47, indicating a strong relationship between these as predictors and the WHOLE SPEECH outcome. For males, VOICE did contribute to prediction in one instance as the last entered variable (in the CASUAL situation). The highest prediction was obtained in the CASUAL situation as well as a case for females, whose adjusted R^2 was .49.

Table 5.8 Multiple regression outcomes for FRIENDLINESS by male speakers

Speaker Gender	Situation	Independent Variable	Model Statistics					Change Statistics			
			β	R	R^2	$R^2_{ADJ.}$	SE	*Df*1	*Df*2	$R^2_{CH.}$	$F_{CH.}$
Male Speakers	Most Formal	INTONATION	.34	.39	.15	.15	2.89	1	152	.15	27.54**
		LANGUAGE	.26	.47	.22	.21	2.79	1	151	.06	12.05*
	Formal	LANGUAGE	.34	.44	.19	.19	2.78	1	152	.19	75.48**
		INTONATION	.24	.49	.24	.23	2.70	1	151	.05	25.14*
	Casual	INTONATION	.49	.64	.41	.41	2.27	1	152	.41	105.80**
		LANGUAGE	.23	.69	.48	.47	2.13	1	151	.07	20.65**
		VOICE	.14	.71	.50	.49	2.11	1	150	.02	4.56*
	Most Casual	INTONATION	.33	.44	.19	.19	3.41	1	152	.19	35.76**
		LANGUAGE	.27	.50	.25	.24	3.29	1	151	.06	12.29*

**Significant at α = .01; *Significant at α = .05

5.3.2. Predictors for ACTIVENESS.

The results of the four stepwise MRAs (one for each of the situations) performed for female speakers indicated that perceived ACTIVENESS in VOICE and LANGUAGE were the two strongest predictors of the same trait in the WHOLE SPEECH, except in the MOST CASUAL situation (see Table 5.9). In two of these three situations, VOICE was the stronger of the two. This result was similar to that obtained for FRIENDLINESS, however, in that LANGUAGE was stronger in the CASUAL situation for ACTIVENESS, where it was found in the MOST FORMAL situation for FRIENDLINESS. A pattern of contribution of INTONATION was similar to FRIENDLINESS. That is, INTONATION was the last predictor in the CASUAL situation and the first predictor in the MOST CASUAL situation. The cumulative adjusted R^2s fell between .16 and .29, indicating a relatively weak relationship among these as predictors and the WHOLE SPEECH outcome.

Table 5.9 Multiple regression outcomes for ACTIVENESS by female speakers

Speaker Gender	Situation	Independent Variable	Model Statistics					Change Statistics			
			β	R	R^2	$R^2_{ADJ.}$	SE	*Df*1	*Df*2	$R^2_{CH.}$	$F_{CH.}$
Female Speakers	Most Formal	VOICE	.36	.41	.17	.16	2.69	1	152	.17	30.70**
		LANGUAGE	.36	.54	.29	.28	2.46	1	151	.12	26.46**
	Formal	VOICE	.34	.39	.15	.15	2.75	1	152	.15	27.03**
		LANGUAGE	.28	.48	.23	.22	2.63	1	151	.08	15.37**
	Casual	LANGUAGE	.33	.45	.21	.20	2.48	1	152	.21	39.13**
		VOICE	.21	.52	.57	.26	2.39	1	151	.07	13.69**
		INTONATION	.20	.55	.30	.29	2.34	1	150	.03	6.32*
	Most Casual	INTONATION	.27	.37	.13	.13	2.70	1	152	.13	23.51**
		LANGUAGE	.22	.42	.18	.16	2.64	1	151	.04	7.47*

**Significant at α = .01; *Significant at α = .05

The results of the four stepwise MRAs (one for each of the situations) performed for male speakers indicated a clear pattern of results (see Table 5.10). That is, perceived ACTIVENESS in INTONATION and LANGUAGE were the two strongest predictors of the same trait in the WHOLE SPEECH. In three of the four situations, INTONATION was the stronger of the two. The cumulative adjusted R^2s for the two variables together fell between .22 and .41, indicating a strong relationship between these as predictors and the WHOLE SPEECH. The only exception was found in the MOST CASUAL situation in which VOICE and LANGUAGE were the two strongest predictors. This was the same result for females.

Table 5.10 Multiple regression outcomes for ACTIVENESS by male speakers

Speaker Gender	Situation	Independent Variable	Model Statistics					Change Statistics			
			β	R	R^2	$R^2_{ADJ.}$	SE	$Df1$	$Df2$	$R^2_{CH.}$	$F_{CH.}$
Male Speakers	Most Formal	VOICE	.37	.41	.17	.16	2.81	1	152	.17	30.84**
		LANGUAGE	.27	.49	.24	.23	2.69	1	151	.07	14.08**
	Formal	INTONATION	.30	.41	.17	.16	2.78	1	152	.17	30.75**
		LANGUAGE	.26	.48	.23	.22	2.69	1	151	.06	11.33*
	Casual	INTONATION	.41	.56	.32	.31	2.38	1	152	.32	69.99**
		LANGUAGE	.35	.65	.42	.41	2.21	1	151	.10	26.00**
	Most Casual	INTONATION	.41	.54	.29	.28	2.89	1	152	.28	61.51**
		LANGUAGE	.27	.59	.35	.34	2.78	1	151	.06	13.15**

**Significant at α = .01; *Significant at α = .05

5.3.3. Predictors for JUDICIOUSNESS.

Table 5.11 presents the results of the four stepwise MRAs performed for female speakers (one for each of the situations). The results were similar to FRIENDLINESS except in the CASUAL situation, in which the result was similar to ACTIVENESS. Perceived JUDICIOUSNESS in LANGUAGE and VOICE were the two strongest predictors of the same trait in the WHOLE SPEECH except in the MOST CASUAL situation. In two of these three situations, LANGUAGE was the stronger of the two, although VOICE was stronger in the FORMAL situation. The cumulative adjusted R^2s for the two variables together fell between .34 and .51, indicating a strong relationship between these as predictors and the WHOLE SPEECH outcome. A contribution of INTONATION was again indicated in the two casual situations. Similar to the results of two other personality traits, INTONATION was the strongest predictor followed by LANGUAGE in the MOST CASUAL situation, although it was the last predictor in the CASUAL situation. The

highest prediction was again obtained in the CASUAL situation, and the adjusted R^2 yielded .51.

Table 5.11 Multiple regression outcomes for JUDICIOUSNESS by female speakers

Speaker Gender	Situation	Independent Variable	Model Statistics					Change Statistics			
			β	R	R^2	$R^2_{ADJ.}$	SE	*Df*1	*Df*2	$R^2_{CH.}$	$F_{CH.}$
Female Speakers	Most Formal	LANGUAGE	.39	.47	.22	.21	2.80	1	152	.22	42.27**
		VOICE	.39	.60	.37	.36	2.53	1	151	.15	35.11**
	Formal	VOICE	.38	.48	.24	.23	2.56	1	152	.24	46.59**
		LANGUAGE	.35	.59	.34	.34	2.38	1	151	.11	25.19**
	Casual	LANGUAGE	.37	.58	.33	.33	2.32	1	152	.33	74.91**
		VOICE	.34	.70	.49	.48	2.04	1	151	.16	45.82**
		INTONATION	.22	.72	.52	.51	1.99	1	150	.03	9.60*
	Most Casual	INTONATION	.27	.37	.13	.13	2.70	1	152	.13	23.51**
		LANGUAGE	.22	.42	.18	.16	2.64	1	151	.04	7.47*

**Significant at α = .01; *Significant at α = .05

The results of the four stepwise MRAs (one for each of the situations) performed for male speakers are shown in Table 5.12. As indicated, the results in the two formal situations were different from the results of other two personality traits. VOICE was the predictor for both situations. Perceived JUDICIOUSNESS in VOICE and LANGUAGE were the two strongest predictors of the same trait in the WHOLE SPEECH, although VOICE was the strongest predictor in the MOST FORMAL situation, and LANGUAGE was the strongest predictor in the FORMAL situation. On the other hand, the results of the two casual situations again showed the same pattern as the other two personality traits with INTONATION followed by LANGUAGE being the two strongest predictors of the same trait in the WHOLE SPEECH. The cumulative adjusted R^2s fell between .23 and .41 in all situations, showing a similar tendency to the results obtained for the other two

traits. The adjusted R^2s in the casual situations were higher than the formal situations, with the highest prediction being obtained in the CASUAL situation ($R^2_{ADJ.}$ = .41).

Table 5.12 Multiple regression outcomes for JUDICIOUSNESS by male speakers

Speaker Gender	Situation	Independent Variable	Model Statistics					Change Statistics			
			β	R	R^2	$R^2_{ADJ.}$	SE	*Df*1	*Df*2	$R^2_{CH.}$	$F_{CH.}$
Male Speakers	Most Formal	VOICE	.37	.43	.18	.18	2.64	1	152	.18	34.05**
		LANGUAGE	.25	.49	.24	.23	2.55	1	151	.06	12.05*
	Formal	LANGUAGE	.31	.41	.17	.16	2.63	1	152	.17	30.68**
		VOICE	.31	.51	.26	.25	2.50	1	151	.09	17.66**
	Casual	INTONATION	.46	.59	.35	.34	2.15	1	152	.35	80.95**
		LANGUAGE	.29	.65	.42	.41	2.04	1	151	.07	17.67**
	Most Casual	INTONATION	.41	.54	.29	.28	2.89	1	152	.29	61.51**
		LANGUAGE	.27	.59	.35	.34	2.78	1	151	.06	13.15**

**Significant at α = .01; *Significant at α = .05

5.4. Summary

Two overall results stand out. Firstly, perceived personalities of females were better predicted than males. Secondly, the speech components were better predictors in the CASUAL situation than in the other situations for both females and males.

In relation to situation and the three personality traits, the speech components contributed to the prediction of FRIENDLINESS in the CASUAL situation the best for both females and males. Across the three personality traits, the speech components were consistent predictors in the CASUAL situation for males while females did not show such a clear pattern due to their lower prediction in ACTIVENESS. For females, ACTIVENESS was relatively difficult to predict when compared to other personality

traits. There were no particular patterns of prediction for each of the three personality trait across situations.

Considering predictors by situation, in the formal situations (the MOST FORMAL and FORMAL situations taken together), VOICE and LANGUAGE were overall greater contributors. For males, the contribution of VOICE was less dominant than for females. Instead, INTONATION contributed in a few cases. In the casual situations (the MOST CASUAL and CASUAL situations taken together), INTONATION contributed more than LANGUAGE for both genders except for females in the CASUAL situation. For females in the CASUAL situation, LANGUAGE and VOICE were greater contributors than INTONATION. However, INTONATION still made a significant contribution unlike in the formal situations. Overall, LANGUAGE was a greater contributor than INTONATION in the formal situations, and conversely, INTONATION made a more important contribution in the casual situations.

Chapter 6. Discussion

6.1. Introduction

This chapter discusses the results of the study. The research was conducted in two phases. The central aim of Phase I was to identify factors that moderate JNSs' perceptions of NNSs' personalities based on their speech. Three main moderating factors were considered: NNS's gender, rater's gender, and situation (i.e., level of formality). The impact of these factors was examined in terms of four dependent speech variables: LANGUAGE, INTONATION, VOICE and WHOLE SPEECH. The central aim of Phase II was to investigate the extent to which perceptions of the three personality traits, namely, FRIENDLINESS (familiar ‑ unfamiliar (distant), pleasant - unpleasant, good-natured - bad-natured), ACTIVENESS (positive - negative, confident - diffident, eager – enervating), and JUDICIOUSNESS (prudent - imprudent, discreet - indiscreet, responsible - irresponsible) in the three speech components of LANGUAGE, INTONATION, and VOICE, predicted perceptions of the same personality traits in the WHOLE SPEECH. This was examined across the four situations investigated in Phase I, together with NNS's gender. Rater's gender was not investigated in Phase II because this did not emerge as a significant moderator in Phase I. This chapter discusses the outcomes obtained in turn.

6.2. Effects of NNSs' and JNSs' (rater's) Gender

This section deals with the five research questions investigated in Phase I of the study. As described in Chapter 4, the analysis in this phase relied on a series of MANOVAs. Separate MANOVAs were performed for the WHOLE SPEECH, LANGUAGE,

INTONATION, and VOICE measures. The three dependent measures in each case were ratings of FRIENDLINESS (familiar-unfamiliar/distant, pleasant-unpleasant, good-natured-bad-natured), ACTIVENESS (positive-negative, confident-diffident, eagar-enervating), and JUDICIOUSNESS (prudent-imprudent, discreet-indiscreet, responsible-irresponsible). In each model, there were three independent variables. Two were repeated measures or within-case variables: situation (MOST FORMAL vs. FORMAL vs. CASUAL vs. MOST CASUAL) and NNS's gender (male vs. female). There was also one between-case variable: rater's gender (male vs. female). A detailed summary of the outcomes of these analyses is presented in Table 6.1 (in the table, the ">" sign indicates the relative magnitude of the ratings given). Overall conclusions against each of these five questions posed in Phase I were as follows:

- *Research Question 1: Do ratings of the three personality traits differ according to whether the NNS is male or female?* The results indicated on all but one speech variable, that females were evaluated differently from males.
- *Research Question 2: Do ratings of the three personality traits differ according to the formality of the situation (i.e., MOST FORMAL, FORMAL, CASUAL, and MOST CASUAL)?* The results also indicated that situation was a significant and robust moderator of personality ratings.
- *Research Question 3: Do male and female raters give different ratings of the three personality traits?* The results indicated that ratings of personality did not depend on the rater's gender.
- *Research Question 4: Do the three factors of NNS's gender, rater's (JNS's) gender, and level of situation formality interact in their impact on ratings of the three personality traits?* The results indicated that while the three variables of

JNS's gender, NNS's gender, and situation typically did not interact in their effects, there was an interaction between NNS's gender and situation on all variables apart from ACTIVENESS in WHOLE SPEECH.

- *Research Question 5: Do any of the effects identified in Questions 1-4 differ across speech components (WHOLE SPEECH, LANGUAGE, INTONATION, and VOICE)?* The results indicated that a NNS's gender by rater's gender by situation interaction was found only in the two cases in LANGUAGE, and a NNS's gender by situation interaction was found except for ACTIVENESS in WHOLE SPEECH.

The results of the present study indicated that evaluation of perceived personality of NNSs was influenced by the NNS's gender and situation but the influence of rater's gender was very limited. The present study supports gender differences found in previous research (Labov 1973, Romaine 1978; 1984, Trudgill 1974). Females were more sensitive to the standard linguistic variants and the prestige norm than males. Female speakers in the present study also used more formal language than males, which is regarded as more polite. This will be discussed later in the following Section 6.2.1.1.

With respect to gender differences of raters, some previous research found that rater's gender made a difference while other research did not. The results of the present study confirms the latter findings (Aronovitch 1976, Kokuritsu Kokugo Kenkyusyo 1957) in a limited fashion as they showed that rater's gender did not influence the evaluation because a rater's gender only had an influence in LANGUAGE for ACTIVENESS and JUDICIOUSNESS. It should be noted that the evaluation method of the present study was different from the previous research. For example, Aronovitch (1976) investigated

speakers' paralinguistic features by presenting speakers' utterances as a whole (see Chapter 2.2); therefore, the stimulus was equivalent not to LANGUAGE but to WHOLE SPEECH in the present study. Moreover, the characteristics of the stimuli used by Aronovitch could be said to be rather similar to the combination of INTONATION and VOICE in the present study because paralinguistic features involve production of INTONATION. Also, the survey of Kokuritsu Kokugo Kenkyusyo (1957) investigated the use of *keigo*, which is realised in the lexico-grammatical aspect of language form, and it did not aim at evaluating the personality of those who used the *keigo*. However, the survey in fact reported that females were more sensitive to the use of *keigo*. Female raters in the present study used a wider range of ratings than male raters between NNSs' gender and the situations. It might imply female's confidence in evaluation (Hall & Matsumoto, 2004; Katsikitis, Pilowsky, & Innes, 1997). It could be interpreted as follows. Females used more higher-end and lower-end ratings together with the middle of the rating with less hesitation than males did because females might have been more confident than males in their evaluation due to their sensitivity to *keigo*. On the other hand, as already mentioned, other studies (e.g., Hall 1984, Ohtsubo & Yoshida 1990) have indicated that females were more sensitive to non-lexico-grammatical aspect of speech stimuli than males, but this was not supported by the present study because there were no differences according to raters' gender in VOICE and INTONATION. Hall (1984) argued that females decoded non-verbal cues better than males. It should be noted that the present study did not test raters' accuracy of judgement in relation to what personality trait a speaker intended to give. Therefore, the present study rather demonstrated listeners' consensus of rating of perceived personality in non-lexico-grammatical aspect of speech stimuli. Ohtsubo & Yoshida (1990) investigated which cues had more impact for raters' judgement between verbal and non-verbal stimuli

including visual stimuli, but the present research was only concerned with speech, and no visual effect was involved. Thus, the result of the present study again partially supports the study of Aronovitch (1976), which reported that both female and male raters tended to evaluate voice similarly.

Table 6.1 Summary of the main effects and the interactions

Speech Variables	**Measure**	**NNS's gender**	**Situation (Most Formal=1, Formal=2, Casual=3, Most Casual=4)**	**NNS's gender by Situation**	**Rater's gender by NNS's gender by Situation**
WHOLE SPEECH	FRIENDLINESS	Female>Male	2>1>4>3	Female 1>2>4>3 Male 2>4>1>3	n.s.
	ACTIVENESS	Male>Female	4>3>1>2	n.s.	n.s.
	JUDICIOUSNESS	Female>Male	1>2>4>3	Female 1>2>4>3 Male 1>2>3>4	n.s.
LANGUAGE	FRIENDLINESS	Effect eclipsed by interaction	Effect eclipsed by interaction	Female 1>2>3>4 Male 4>1>2>3	n.s.
	ACTIVENESS	Effect eclipsed by interaction	Effect eclipsed by interaction	Female 3>4>2>1 Male 4>2>3>1	*Female Rater* Female Speaker 3>2>4>1 Male Speaker 4>2>3>1 *Male Rater* Female Speaker 4>3>2>1 Male Speaker 4>2>3>1
	JUDICIOUSNESS	Female>Male	1>2>4>3	Female 1>2>4>3 Male 1>2>3>4	*Female Rater* Female Speaker 1>2>4>3 Male Speaker 1>2>3>4 *Male Rater* Female Speaker 1>2>4>3 Male Speaker 1>2>4>3
INTONATION	FRIENDLINESS	Effect eclipsed by interaction	Effect eclipsed by interaction	Female 2>4>3>1 Male 4>1>2>3	n.s.
	ACTIVENESS	Effect eclipsed by interaction	Effect eclipsed by interaction	Female 3>2>4>1 Male 4>2>3>1	n.s.
	JUDICIOUSNESS	Effect eclipsed by interaction	Effect eclipsed by interaction	Female 2>1>3>4 Male 1>2>4>3	n.s.
VOICE	FRIENDLINESS	Male>Female	N/A	N/A	N/A
	ACTIVENESS	Male>Female	N/A	N/A	N/A
	JUDICIOUSNESS	n.s.	N/A	N/A	N/A

6.2.1. Three personality traits and speech components.

This subsection presents the results of the analyses relating to raters' perceptions of NNSs' personalities based on their speech. Results relating to the four Phase I research questions (i.e., the impact of speaker's gender, rater's gender, and situation formality on perceptions of speaker's personalities) are discussed in turn for each of the three personality traits (FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS) with speech components (WHOLE SPEECH, LANGUAGE, INTONATION, and VOICE), relating to the research question five. Because speakers' gender was a main effect and also showed interaction effects but raters' gender showed limited interaction effects, this subsection focuses more on speakers than raters.

6.2.1.1 FRIENDLINESS.

In FRIENDLINESS, the female speakers received higher ratings than the males overall. This supports the findings of previous research which indicated that one of the stereotypes of female speech is that it tends to be friendlier in manner than male speech (Kramer, 1977). Males were actually rated higher than females in VOICE, but the general finding is still valid because VOICE, which was presented as the recitation of kana characters, does not represent the full range of speech. VOICE was selected by its attractiveness in the present study and voice attractiveness was averaged. Sample voices retained their original pitch and loudness. It was possible that the pitch and loudness of the VOICE stimuli influenced raters' impression of FRIENDLINESS because pitch and loudness contribute to speakers' perceived personalities (Aronovitch, 1976; Apple et al., 1979; Peng et al., 1993). Previous research did not measure FRIENDLINESS, however, kindness (Aronovitch, 1976) has been categorised within FRIENDLINESS (Hirokane &

Yoshida, 1984), and benevolence (Apple et al., 1979) shares characteristics of kindness. In the present study, pitch and/or loudness of the males' VOICEs may have been perceived as being friendlier than pitch and/or loudness of the females' VOICEs.

There were two other cases where males received higher ratings than females: LANGUAGE and INTONATION in the MOST CASUAL situation. This could be attributed to differences in the choice of language forms and intonation patterns between females and males. To check if the language forms could be responsible for these differences, their level of politeness was examined based on the selection of *keigo* forms. In order to determine the level of politeness of the language forms, the results of Ide et al.'s (1986) study (see Section 2.5 in Chapter 2) was used (Figure 6.1). Their study (p. 88) showed how Japanese and American university students rated the level of politeness of the expressions spoken in their native language. The participants asked to borrow a pen with the request being made to different interlocutors who needed to be addressed with a different level of politeness or formality similar to the setting used in the present study (see Chapter 3). An expression placed near 5 was regarded as the most polite in Ide et al.'s (1986) study. Unfortunately, some of the language forms that were used by the NNSs in the present study are not found in their study; however, these expressions in the present study were mostly variations of those used by the participants in their study. It was possible to estimate where these alternative expressions used by NNSs in the present study could be inserted in Figure 6.1. To decide where the alternatives could be inserted, four JNSs were consulted. They were shown Figure 6.1 and were asked to insert each alternative in the figure. The seven alternative expressions are presented in Figure 6.2. Although using a hedge is one of the strategies to express negative politeness (Brown & Levinson, 1987), Ide et al. (1986) found that 'chotto (for a moment)' did not contribute to the degree of politeness in the case of Japanese so that

this was ignored when the speaker in the present study used it. On the other hand, when other hedges such as ‘sumimasen’ and ‘sitsureidesuga’ or ‘excuse me’ were used, the degree of politeness became higher; thus, these expressions were retained, even though such hedges were not included in Ide et al.’s study. The word ‘pen’, which is not appeared in Ide et al.’s study except in one expression, which is the second bottom one in Figure 6.1, was omitted from consideration because all the LANGUAGE stimuli in the present study included the word. Since longer sentences were perceived as more polite (Kokuritsu Kokugo Kenkyuusho, 1957), omitting words such as ‘chotto’ and ‘pen’ could influence the degree of politeness; however, precise investigation of the degree of politeness of language forms used in the present study is not a goal here; therefore, some simplification was made in order to obtain a reasonable classification of degrees of politeness in the present study by using Ide et al.s’ study.

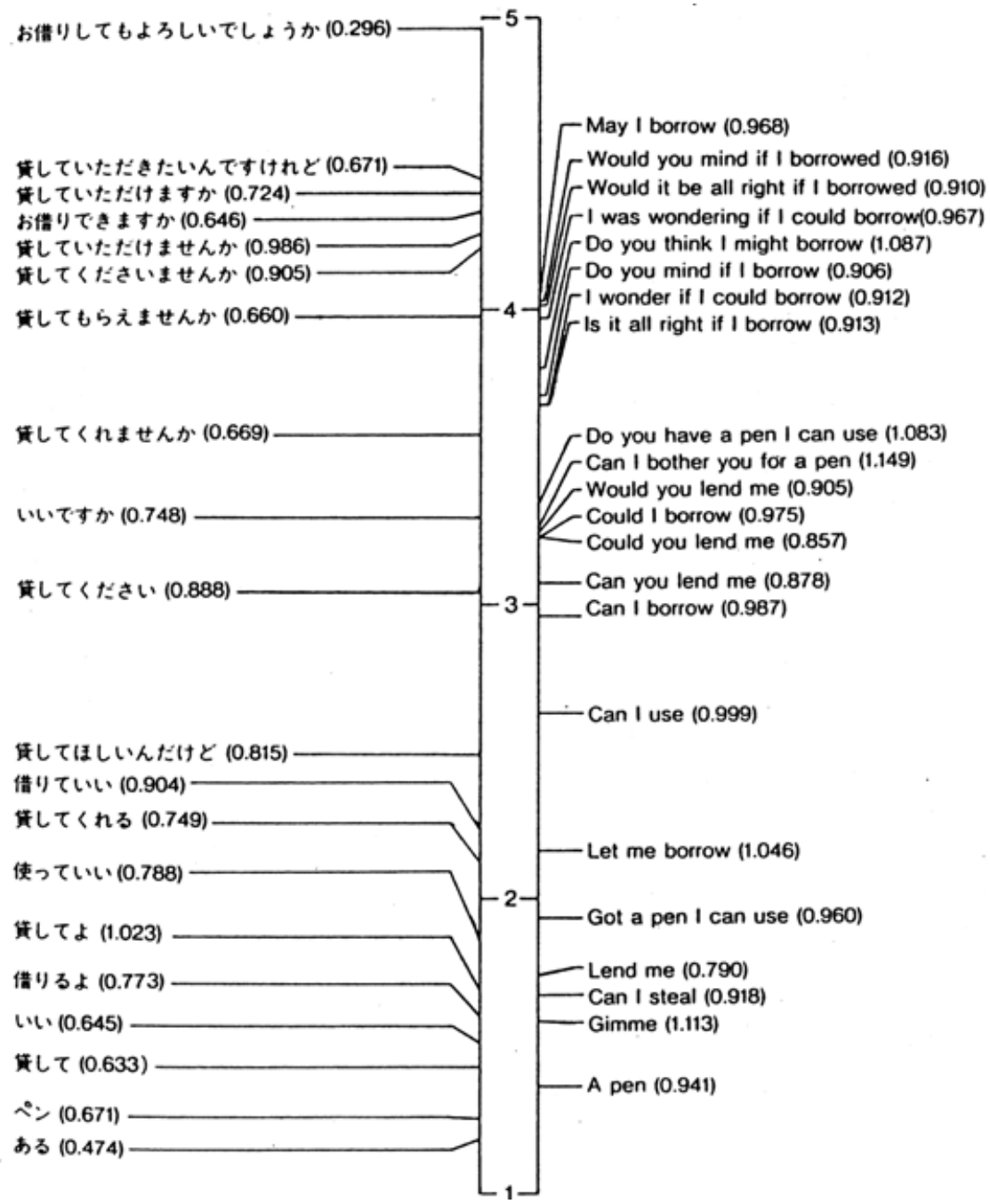

Figure 6.1 *The means and standard deviations of the level of politeness expressions (figures in a parenthesis after each expression indicate standard deviation)* (Ide et al. 1986: figure 5, 88)

1. 貸して いただけませんでしょうか。
   kashite itadakemasendesyooka
   'Would you mind lending me a pen?'
2. すみません、使わせて ください ませんか。
   sumimasen, tsukawasete kudasaimasenka
   'Excuse me, may I use a pen?'
3. すみません、使っても いいですか。
   sumimasen, tsukattemo iidesuka
   'Excuse me, can I use a pen?'
4. すみません、借りて いいですか。
   sumimasen, karate iidesuka
   'Excuse me, can I borrow a pen?'
5. お願いします。
   onegaishimasu
   'Can I have a pen?'
6. ください。
   kudasai
   'Please give me a pen.'
7. ちょうだい。
   choodai
   'Gimme a pen.'

Figure 6.2. *The alternative expressions used in the present study*

The method used here was as follows. After the alternatives in Figure 6.2 were inserted into Figure 6.1, the expressions not used by the speakers in the present study were removed. Also, the hedge such as "sumimasen (excuse me)" was removed solely for presentation purpose as Ide et al's (1986) study did not include it. Figure 6.3 shows the subsequent ranking of the politeness of LANGUAGE stimuli used in the present study. The underlined expressions are the alternatives. In addition, Figure 6.4 presents a ranking according to the language forms found in four situations in the present study. The gender of the speaker is indicated.

1 お借りしてもよろしいでしょうか (Would it be all right if I borrow a pen?)
okari-shitemo yoroshiide-syooka
2 貸していただけませんでしょうか (Would you mind lending me a pen?)
kashite-itadake-masende-syooka
3 貸していただきたいんですけれど (I'd like you to lend me a pen.)
kashite-itadakitai n desukeredo
4 貸していただけますか (Could you lend me a pen?)
kashite-itadake-masuka
5 お借りできますか (Could I borrow a pen?)
okari-deki-masuka
6 使わせてくださいませんか (May I use a pen?)
tsukawasete-kudasai-masenka
7 貸していただけませんか (Wouldn't you please lend me a pen?)
kashite-itadake-masenka
8 貸してくださいませんか (Would you be so kind as to pass me that pen?)
kashite-kudasai-masenka
9 貸してもらえませんか (Could I trouble you to lend me a pen?)
kashite-morae-masenka
10 貸してくれませんか (Would you lend me a pen?)
kashite-kure-masenka
11 借りてもいいですか (Can I borrow a pen?)
karitemo ii-desuka
12 使ってもいいですか (Can I use a pen?)
tsukattemo ii-desuka
13 借りていいですか (Can I borrow a pen?)
karite ii-desuka
14 お願いします (Can I have a pen?)
onegai-shimasu
15 貸してください (Please lend me a pen.)
kashite-kudasai
16 ください (Please give me a pen.)
kudasai
17 貸してほしいんだけど (I need a pen.)
kashite-hoshii n dakedo
18 借りていい (May I?)
karite-ii
19 貸してくれない (Won't you lend me a pen?)
kashite-kurenai
20 貸してくれる (Will you lend me a pen?)
kashite-kureru
21 いい (Can you pass me that pen?)
ii
22 貸して (Pass me that pen, will you?)
kashite
23 ちょうだい (Gimme a pen.)
choodai
24 ペン(A pen.)
pen
25 ある (Got a pen?)
aru

Figure 6.3. *Politeness ranking of the NNSs' language expressions*

MOST FORMAL situation

1 お借りできますか Could I borrow a pen? (female)
okari-deki-masuka
2 使わせてくださいませんか May I use a pen? (female)
tsukawasete-kudasai-masenka
3 貸していただけませんか Wouldn't you please lend me a pen? (male)
kashite-itadake-masenka
4 貸してくださいませんか Would you be so kind as to pass me that pen?
kashite-kudasai-masenka (female/male)
5 貸してください Please lend me a pen. (male)
kashite-kudasai

FORMAL situation

1 貸していただけませんでしょうか Would you mind lending me a pen? (male)
kashite-itadake-masende-syooka
2 お借りできますか Could I borrow a pen? (female)
okari-deki-masuka
3 使わせてくださいませんか May I use a pen? (female)
tsukawasete-kudasai-masenka
4 貸してくれませんか Would you lend me a pen? (female)
kashite-kure-masenka
5 借りていいですか Can I borrow a pen? (male)
karite ii-desuka
6 貸してください Please lend me a pen. (male)
kashite-kudasai

CASUAL situation

1 使ってもいいですか Can I use a pen? (female)
tsukattemo ii-desuka
2 貸してください Please lend me a pen. (female/2 males)
kashite-kudasai
3 貸してくれない Won't you lend me a pen? (female)
kashite-kurenai
4 貸して Pass me that pen, will you? (male)
kashite

MOST CASUAL situation

1 お願いします Can I have a pen? (female)
onegai-shimasu

2 ください Please give me a pen. (female)
kudasai
3 貸してくれる Will you lend me a pen? (female)
kashite-kureru
4 いい Can you pass me that pen? (male)
ii
5 貸して Lend me that pen. (male)
kashite
6 ちょうだい Gimme a pen. (male)
choodai

Figure 6.4 *Politeness ranking of the NNSs' language expressions by situation*

According to Figure 6.4, female NNSs tended to use more polite expressions than male NNSs. It has been reported that females use more polite language than males (Holmes, 1995) including Japanese females (Ide, 1982; Ogino, 1980; Ozaki et al., 1980). Females are more sensitive to the standard linguistic variants and the prestige norm than males (Labov 1973, Romaine 1978, Trudgill 1974). The standard variants of any language, such as Standard Australian English, are closely associated with formality; thus, formal language is often regarded as polite language. The present study showed that this tendency is consistent when NNSs speak Japanese. One of the speaker gender differences in the present study can be interpreted as a difference of language, more specifically, a difference in the level of politeness of language between genders. In relation to the level of politeness, it could be said that Japanese raters overall considered that more polite expressions showed more FRIENDLINESS than less polite expressions in the formal situations (MOST FORMAL and FORMAL). It is interesting because when one employs more polite *keigo*, it usually increases negative politeness. Consequently, it increases a distance or can be perceived as standoffish sometimes; however, it should be noted that FRIENDLINESS does not merely mean the same as its English translation as it includes other connotations such as "good-natured" and "pleasant" as explained in Chapter 2. This finding supports the evidence reported in a previous study (Kokuritsu

Kokugo Kenkyosho, 1957), in which Japanese people preferred more polite language than less polite language in general or at least, Japanese people preferred to listen to polite language used by NNSs. A famous Japanese proverb says “親しき仲にも礼儀あり(shitashiki naka nimo reigi ari)” or “There should be courtesy even between close friends”. The Japanese proverb is not limited to between friends; it can be applied to every relationship. Another proverb says“思う仲には垣をせよ (omou naka niwa kakiwo seyo” or “A hedge between keeps friendship green”. In English, there is also the old saying that “Familiarity breeds contempt”. These proverbs reflect the importance of being polite and the danger of being too familiar.

The result in the MOST CASUAL situation differed from the others. Males received higher ratings than females but males’ LANGUAGE was less polite than females’. This indicated that the JNSs rated less polite language expressions favourably; that is, less polite language expressions were considered to express FRIENDLINESS in the MOST CASUAL situation. In addition, female speakers were rated lower in the casual situations (i.e., CASUAL and MOST CASUAL) than in the formal situations for WHOLE SPEECH and LANGUAGE. This could be caused by females’ politer language expressions. Their language expressions might be judged as too polite and not expressing closeness in the casual situations. This can be explained by a general relationship between the situation and function of *keigo*. In a casual situation, intimacy is important to convey that someone is friendly. The basic function of *keigo* is to show respect by signalling a distance between a speaker and the referent (who is addressed with *keigo* in a sentence), and when one does not use *keigo*, the impression is that the referent is considered as an equal (Brown & Levinson, 1987; Sakamoto & Naotsuka, 1982). The speaker, therefore, conveys a feeling of intimacy or closeness. From this, it could be said that less polite

language expressions were evaluated more highly in FRIENDLINESS in CASUAL situation. In fact, male speakers were rated the lowest in the CASUAL situation for WHOLE SPEECH and LANGUAGE. In this situation, male speakers used more polite language than female speakers and were evaluated less favourably. In this regard, a negative effect of using the polite style in a casual situation emerges and this causes some Japanese language learners' to experience estrangement when they cannot use the plain style well (Kobayashi et al., 2002).

Another case in which males received higher ratings than females was INTONATION in the MOST CASUAL situation. In this case, the male speakers obtained the highest score. This was also found in LANGUAGE, as noted above. Such results could mean that the male speakers used appropriate language expressions with an appropriate intonation especially in the MOST CASUAL situation. Because the raters were provided with the description of a situation and a transcription of the speech used along with an intonation pattern, they could imagine some intonation patterns associated with the language. It is possible to form an impression solely on INTONATION as the pilot study showed; however, when the INTONATION presented did not match the raters' expectation or their imaginary INTONATION, their rating would not be as high. Also, utterances used by male speakers were shorter than those used by female speakers. The numbers of syllables[5] in the males' utterances were between three and six; on the other hand, the

[5] A significant unit of sound in Japanese language is called "*haku*" (mora) or beat, which is different from syllables. For example, 'ペン' /peN/ (pen) constitutes one syllable but contains two *morae*, one associate with the /pe/ and another with the /N/. Each Japanese character contains one mora. However, it is not clear that utterance length is better measured in morae than in syllables because NNSs' difficulty of timing Japanese morae has been reported (Toda, 2003).

number of syllables in females' utterances was between six and eleven (see Chapter 3, (E) LANGUAGE in Section 3.2.4). Males may have been able to use more appropriate INTONATION than females due to this shorter length of utterances in the MOST CASUAL situation because there is less chance of deviating from the expected intonation as the possibility increases with the length of utterances. As being pointed out by Neustupny (1982), JNSs' negatively evaluate NNSs' utterances when NNSs' intonation was perceived as unnatural. The present study did not examine the appropriateness of NNSs' utterances, however, it would be a plausible explanation that the notion of appropriateness could play the role because politeness expressions are stipulated by social norms, as discussed in Section 2.5 in Chapter2, which demand a speaker's recognition and acknowledement of proper interpretation of the situation.

In sum, more polite *keigo* expressions in the formal situations and less polite *keigo* expressions in the casual situations lead to impressions of FRIENDLINESS.

6.2.1.2 ACTIVENESS.

In ACTIVENESS, both the NNS's gender and situation were indicated as a main effect for WHOLE SPEECH. The male speakers were rated higher than the female speakers, and the highest ratings were given in the MOST CASUAL situation. The former result could be explained by the result of the LANGUAGE variable because males were rated higher for this than females overall. This result supports the findings of other studies that males' language was rated higher than females' language on the ACTIVENESS dimension (Mulac & Lundell, 1980). The only exception in the present study was the CASUAL situation, in which the female raters gave higher scores to the female speakers than to the male speakers; however, the score difference between females and males was very small.

As seen in the previous section on FRIENDLINESS, males' language expressions were less polite than females'. Again, one of the functions of using polite language expressions is to express a distance from the addressee (Brown & Levinson, 1987; Sakamoto & Naotsuka, 1982, Takiura, 2005). When one creates a distance with an addressee, this is usually interpreted as a reserved attitude, which is often interpreted as negative or passive. Such an attitude is opposite to that characterising ACTIVENESS (See Chapter 2.6). Because the male speakers used less polite language expressions, they could make an opposite impression to that resulting from use of more polite language. In other words, impression of ACTIVENESS was attributed to less polite language.

The above explanation can also be applied to the findings relating to the situations. The highest ratings were given in the MOST CASUAL situation for males by both female and male raters, and the score was notably higher than for other situations. The interlocutor in the MOST CASUAL situation was specified as a close friend; thus, the speakers assumed that they needed to show solidarity. In fact, the male speakers used the least polite expressions or the most uninhibited speech in their repertoires (see Figure 6.4 and Figure 3.4 in Chapter 3) expressing positive politeness. For example, none of them used a polite form and two of them dropped a particle indicating an object (i.e., を-o- is missing after ペン'pen') as the original expressions were "ペン、いい (pen, ii)" and "ペンちょうだい (pen choudai)" (see Figure 3.4). These two are incomplete sentences that are missing a prescriptively indispensable grammatical component, the particle used to mark an object. Such expressions are used in very casual situations, and they were perfectly suitable in the MOST CASUAL situation. As mentioned in 6.2, interaction of speaker's gender by rater's gender by situation was found for LANGUAGE. The rating pattern of the female and male raters differed only in the CASUAL situation. Although

the male raters also rated the female speakers highest in the MOST CASUAL situation, the female raters rated the female speakers highest in the CASUAL situation, not in the MOST CASUAL situation. It is interesting because as formality decreased, rating of ACTIVENESS increased for female speakers, but the rating dropped among female raters when it reached the MOST CASUAL situation. This could be caused by female speakers' use of polite language and be interpreted as follows: female speakers' expressions were very polite and the female raters, who were more sensitive than males to *keigo*, may have evaluated them as too polite and indirect, creating too much distance between speaker and hearer. As a result, the ratings of female speakers decreased in the MOST CASUAL situation. Another noticeable pattern was that the male speakers were consistently given higher ratings than the female speakers. Although the female raters gave higher ratings to the female speakers only in the CASUAL situation, the score difference between the female and the male speakers was small (0.16 points); therefore, the result of the tested main effect of situation on WHOLE SPEECH, which indicated that the greatest score was shown in the MOST CASUAL situation, could be attributed to the high rating given to the male speakers.

Similar to the pattern described above, in INTONATION, females received higher ratings than males in the FORMAL and CASUAL situations; however, the score difference in the former was minimal. Males received a far higher rating than did females in the MOST CASUAL situation. Consequently, it could be said that INTONATION contributed to the higher rating for males in WHOLE SPEECH as well as the highest score given in the MOST CASUAL situation.

VOICE could also have contributed to the dominance of ACTIVENESS in WHOLE SPEECH for males. This result was not consistent in INTONATION, but males received

relatively higher ratings for ACTIVENESS than for other personality traits. It can be said that males were perceived as expressing more or better ACTIVENESS than females did. Also, as seen for FRIENDLINESS, pitch and loudness may have caused higher ratings in VOICE among males because pitch and loudness influence evaluations of confidence, dominance, extroversion (Aronovitch, 1976), and competence (Peng et al,, 1993). These personality characteristics fall within ACTIVENESS; however, it is also possible to assume that this was caused by the rater bias, for example, a view that males are more positive and assertive than females. Male speech is generally believed to be louder, more dominant, and more aggressive (Kramer, 1977). These gender stereotypes could also have played a role in the ratings given the present study because although people can form impressions on speakers' personalities based on voice, it might not be an easy and straightforward task and under such condition, stereotyping could be cognitively processed automatically (Macrae et al, 1994).

6.2.1.3 JUDICIOUSNESS.

In JUDICIOUSNESS, females received higher ratings than males in all cases except in VOICE, for which males were rated higher than females; however, the difference was not statistically significant. Because JUDICIOUSNESS relates to the intellectual dimension, this result could be explained in the following way. As explained earlier, females overall used more polite language expressions than did males. A more educated person has more knowledge of *keigo* (Kokuritsu Kokugo Kenkyosho, 1957; Ogino, 1983) because the proper use of *keigo* must be learned consciously even for JNSs; therefore, a person who has a good command of *keigo* is regarded as educated, intelligent, and mature. In fact, the results of LANGUAGE showed that females were rated higher than were males in this respect. Interestingly, the female speakers in the MOST CASUAL situation obtained higher ratings than they did in the CASUAL situation

of LANGUAGE. In this case, females' language expressions were overall very polite. For example, two of three used a polite form in the MOST CASUAL situation. As a result, they conveyed the impression of being very careful thinkers. As for situation, the above explanation could also apply. The use of polite *keigo* language in the casual situation seems to cause a negative effect on FRIENDLINESS but not on JUDICIOUSNESS. This indicates that the raters in fact distinguished FRIENDLINESS and JUDICIOUSNESS when they evaluated the speakers on each scale. The results were consistent and it was clear that speakers of both genders were rated higher higher for JUDICIOUSNESS in the formal situations, in which the speakers of both genders used more polite *keigo* expressions, than in the casual situations; therefore, it could be said that ratings on JUDICIOUSNESS decreased when a speaker used less polite *keigo*. This could also explain why females obtained higher ratings than males because female speakers used more polite *keigo* expressions than males overall.

Turning now to differences between raters, as seen in 6.2, a three-way interaction (situation by NNS's gender by rater's gender) was found in LANGUAGE but the pattern was similar between female raters and male raters. Overall, the female raters gave higher ratings to the speakers than did the male raters. In addition, females used a greater range of scores than did males. Previous research indicated mixed results regarding gender differences in judgements. Kokuristu Kokugo Kenkyusho (1957) reported no gender influence on the judgement of *keigo.* On the other hand, Ide et al. (1986) showed that females considered impolite language less polite than did males, and It has been reported that female raters used a wider range of ratings than did male raters (Hall & Matsumoto, 2004; Katsikitis, Pilowsky, & Innes, 1997; Kramer, 1977). Since the present purpose and criteria were different from the previous research, a direct comparison cannot be made; however, the present study seems to provide additional

evidence for the findings of previous research indicating that females are more sensitive to form differences in language.

In sum, the female speakers in the present study were perceived more favourably (i.e., received higher ratings in FRIENDLINESS) and as more intellectual (i.e., received higher ratings in JUDICIOUSNESS) than the male speakers, but the male speakers were perceived as being more active (i.e., received higher ratings in ACTIVENESS) than the female speakers. Overall, more polite language expressions seemed to induce an impression of JUDICIOUSNESS whereas less polite language seemed to induce an impression of ACTIVENESS. The impression of FRIENDLINESS, on the other hand, was elicited by the degree of politeness of the language, depending on whether the situation was formal or not. A positive effect came about when more polite language expressions were used in the formal situations and when less polite language expressions were used in the casual situations. In the MOST CASUAL situation, males received higher ratings than did females in INTONATION for FRIENDLINESS and ACTIVENESS overall, but this was not the case in JUDICIOUSNESS. None of the speech components, including WHOLE SPEECH of the male speakers were rated higher than the female speakers. There was a striking contrast between the result in FRIENDLINESS and JUDICIOUSNESS for males. This result indicated that FRIENDLINESS and JUDICIOUSNESS were clearly distinguished by the raters and it was confirmed as they are in different dimensions of interpersonal cognition (Hayashi, 1978; Hirokane & Yoshida, 1984; Ohtsubo & Yoshida, 1990).

6.3. The Predictors for the Three Personality Traits

This section discusses the Phase II study. Phase II investigated the main research questions of the present study. The research questions and the results are repeated below.

- *Research Question 6: To what extent do the three personality traits perceived in three individual speech components (LANGUAGE, INTONATION, and VOICE) predict JNSs' perceptions of the same three personality traits in NNSs' WHOLE SPEECH?*

- *Research Question 7: Do these contributions differ according to the level of formality in the situation and the gender of the speaker?*

As described in Chapter 5, the analysis in this phase relied on a series of MRAs. Eight separate stepwise regressions were performed for male and for female speakers, within each of the four situations (i.e., MOST FORMAL, FORMAL, CASUAL, and MOST CASUAL). Table 6.2 presents a summary of the results.

Table 6.2 Summary of the predictors for the three personality traits by situation

Situation of WHOLE SPEECH	Gender	Impression (Three personality traits) FRIENDLINESS	ACTIVENESS	JUDICIOUSNESS
Most Formal	Female	1 LANGUAGE (.26)	1 VOICE (.16)	1 LANGUAGE (.21)
		2 VOICE (.35)	2 LANGUAGE (.28)	2 VOICE (.36)
	Male	1 INTONATION (.15)	1 VOICE (.16)	1 VOICE (.18)
		2 LANGUAGE (.21)	2 LANGUAGE (.23)	2 LANGUAGE (.23)
Formal	Female	1 VOICE (.18)	1 VOICE (.15)	1 VOICE (.23)
		2 LANGUAGE (.25)	2 LANGUAGE (.22)	2 LANGUAGE (.25)
	Male	1 LANGUAGE (.19)	1 INTONATION (.16)	1 LANGUAGE (.16)
		2 INTONATION (.23)	2 LANGUAGE (.22)	2 VOICE (.25)
Casual	Female	1 VOICE (.36)	1 LANGUAGE (.20)	1 LANGUAGE (.33)
		2 LANGUAGE (.49)	2 VOICE (.26)	2 VOICE (.48)
		3 INTONATION (.54)	3 INTONATION (.29)	3 INTONATION (.51)
	Male	1 INTONATION (.41)	1 INTONATION (.31)	1 INTONATION (.34)
		2 LANGUAGE (.47)	2 LANGUAGE (.41)	2 LANGUAGE (.41)
		3 VOICE (.49)		
Most Casual	Female	1 INTONATION (.28)	1 INTONATION (.28)	1 INTONATION (.13)
		2 LANGUAGE (.34)	2 LANGUAGE (.34)	2 LANGUAGE (.16)
	Male	1 INTONATION (.19)	1 INTONATION (.28)	1 INTONATION (.28)
		2 LANGUAGE (.24)	2 LANGUAGE (.32)	2 LANGUAGE (.34)

Figure in the parenthesis indicates cumulative adjusted R^2

With respect to research question 7, the results indicated that contributions of each speech component were different according to the situation. Further, the adjusted coefficients of determinations in females were overall larger than males. In other words, the perceived personalities in the WHOLE SPEECH were better predicted by the tested three speech components for females than for males; however, there was also a similarity. The largest adjusted coefficient of determination was obtained for FRIENDLINESS in the CASUAL situation for both female and male speakers. These

findings with the results relating to research question 6 will be considered in the following section.

6.3.1. NNSs' gender and three personality traits

Consider now raters' or JNSs' impression formation of NNSs' three personality traits and the effect of NNSs' gender. As mentioned in 6.3, females' impressions of the three perceived personalities were better predicted by the three speech componetns than males. This result supports the previous research reporting that female speakers obtained higher correlations between their perceived personalities in holistic stimulus and partial stimuli than males (Ohtsubo & Yoshida, 1990). The results of the present study indicate that raters made more consistent impressions on female speakers' personalities across the speech components than on male speakers. In other words, the raters formed their impression of males based on three speech components in a different manner to the way they formed their impression based on the WHOLE SPEECH. The result might imply that influence of other speech components and interactions between other speech components also need to be taken into account. For example, a pitch contour, speech rate, and pauses were presented in INTONATION but a pitch variance and loudness were not presented as an independent variable in the present study. Because variances in loudness and pitch influence males' perceived personalities (Aronovitch, 1976), these aspects of speech might play more important roles for males than the speech components tested in the present study. More research investigating how relationships between speech components play a role in the process leading to impression formation is needed to clarify such issues further.

ACTIVENESS was relatively difficult to predict for females compared to other personality traits. This could be because females showed ACTIVENESS less than males

as discussed in Section 6.2.1.2; however, further research will be needed since males did not show higher predictions for ACTIVENESS than for other personality traits. Ohtsubo and Yoshida (1990) found that the positive correlations between speakers' perceived personalities in their holistic stimulus and partial auditory stimuli in ACTIVENESS were higher than FRIENDLINESS. The present study did not show this. The difference in results could be due to the difference in stimuli between Ohtsubo and Yoshida's study and the present study. Ohtsubo and Yoshida used a video movie as the holistic stimulus and auditory stimuli, including a transcription of speech as partial stimuli, whereas the present study used a CD-recorded speech (WHOLE SPEECH) as the holistic stimulus and the three speech components including LANGUAGE as partial stimuli. The transcription of speech in Ohtsubo and Yoshida's study corresponded to LANGUAGE in the present study but their other auditory stimulus corresponded to WHOLE SPEECH in the present study. However, unlike the present study, the content of Ohtsubo and Yoshida's study was self-introduction, which disclosed personal information such as the speaker's character and hobby. One of the dependent variables and the independent variables were not identical; hence, the effect of speech components on speech presented aurally could be different from the effect of visual and auditory stimuli in the form of a speaking person.

6.3.2. Situation and speech components

The results indicated that no single general pattern of the contribution of speech components to the three personality traits in WHOLE SPEECH was found. Rather, there are different patterns according to situation and gender. For situation, LANGUAGE is always a predictor; however, VOICE tends to be a co-predictor towards the more formal end of the range while INTONATION tends to be a co-predictor towards the casual end.

For females, a change of overall patterns of the contributions of the speech components was shown for the CASUAL situation. That is, LANGUAGE and VOICE were contributors in the formal situations and in the CASUAL situation, but INTONATION, which did not make a contribution in the formal situations, contributed in the CASUAL situation and was, in fact, the strongest contributor in the MOST CASUAL situations. For males, on the other hand, overall patterns of the contributions of the speech components depended on whether the situation was formal or casual. That is, all cases in the casual situations showed that INTONATION was the strongest contributor followed by LANGUAGE. The results for females did not show a "clear cut" difference between formal and casual situations as they did for males. For females, the CASUAL situation seemed a "transitional" level of formality, that is, the CASUAL situation could be regarded as in between formal and casual situations.

In the MOST FORMAL situation, LANGUAGE and VOICE contributed to predictions of the three personality traits for females, and for males except for FRIENDLINESS. These were the same in the FORMAL situation for females. For males, VOICE only contributed for JUDICIOUSNESS, and INTONATION made contributions to predictions for the other two personality traits. INTONATION was also predictive of FRIENDLINESS in the MOST FORMAL situation. In the CASUAL situation, VOICE again contributed for females but it only contributed to the prediction of FRIENDLINESS for males. This gender difference in the present study partially supports Ohtsubo and Yoshida's (1990) study, which found that the effects of a speaker's photograph and a transcription of the speaker's speech on impressions of the speaker's personality based on a video movie of the same person differed according to the NNS's gender. In that study, it was interaction of NNS's gender by personality traits; however, it was also found that NNS's gender was a main effect when the authors investigated which of the two clues, visual or auditory, was

dominant on impression formation. The present study provides additional evidence for the effect of speaker gender on impression formation.

Even though a gender difference was found, the present study also revealed commonalities between genders. LANGUAGE had a dominant effect in the formal situations, whereas INTONATION had a dominant effect in the casual situations. As seen in the Section 6.2.1.1, the less formal the situation became, the shorter the language expression. It could be possible that the raters considered that language form was more important in the formal situations because they thought that formality should be well expressed using *keigo* expressions (Kajiwara, 2008; Kikuchi, 1989). Also, it is plausible to assume that when a language expression was relatively longer, the rater would pay more attention to the language. The language forms focused on in the present study were *keigo* expressions, and as the literature on this topic has shown, JNSs are sensitive to *keigo*; therefore the raters in the present study may have reacted more to LANGUAGE in the formal situations in which more *keigo* expressions were involved. On the other hand, *keigo* expressions decreased in the casual situations, and then, the raters' focus might have shifted from language to intonation. Intonation conveys emotion (Bänziger & Scherer, 2005; Kleinke, 1975; Kori, 1997; Kramer; 1964) and the importance of language decreases due to a tendency of reduction of language articulation in casual and close relathionships whereas intonation increases relatively intention (Kress & Van Leeuwen, 2006) because a speaker resorts to intonation to convey his/her intention. Thus, the raters might rely on their evaluation more on INTONATION in the casual situations, which usually did not require formality and where interpersonal intimacy was considered more important. Therefore, the raters' focus may have shifted from LANGUAGE to INTONATION when the situation became more casual. It is well-documented that intonation is important in communication (Kunihiro, 1997; Neustupny,

1982; Sugito, 1999) and the present study revealed that the importance increased in the casual situations. With respect to VOICE, unfortunately the researcher could not find literature mentioning how voice characteristics influence a speaker's perceived personality according to different situations; however, it might be explained as follows. As seen above, the length of utterances was shorter in the casual situations than in the formal situations. This means that the raters could listen to the speakers' voice for longer in the former situations than in the latter situations. The longer exposure to voice (i.e., in the formal situations) might have provided more material to the raters for forming impressions while a shorter exposure to voice in the casual situations may not have provided them with such an opportunity. In the CASUAL situation, there was a contribution to FRIENDLINESS in one case for males. For females, whose utterances were longer than males in this situation, VOICE contributed to all three personality traits. There was no VOICE contribution in the MOST CASUAL situations in which utterances produced by both females and males were short; thus, more exposure to VOICE could have caused the results.

6.4. Summary

The present study showed that females and males were rated differently in the three personality traits, and predictions for the three personality traits differed between the two genders. In addition, these ratings and predictions were different according to the level of formality of situation. The contribution of each speech component was also different according to the situation. A speaker of Japanese language must firstly choose one of the two speech styles, namely, the plain style or the polite style, of which determines the word form of the ending of the sentence, then the speaker needs to decide whether he/she uses further *keigo* or not. Because this choice is influenced by the

situation, consequently, the listener perceives the choice as the speaker's interpretation of a given situation (Kokuritsu Kokugo Kenkyuusho, 1990b). Thus, situation and gender must both be taken into account in order to investigate how the personalities of NNSs of Japanese are perceived by JNSs.

Chapter 7. Conclusions and Implications

7.1. Introduction

The final chapter presents the major findings of the present study and suggests directions for further research. The pedagogical implications of the present study are also considered.

7.2. Important Findings of the Present Study

The present study attempted to investigate how JNSs perceive NNSs' personalities on the basis of NNSs' utterance in terms of NNSs' LANGUAGE, INTONATION, and VOICE. Since the Japanese language involves extensive use of *keigo*, or honorifics, the effect of the level of formality of situations, which is one of the important factors for selecting *keigo* was also investigated, together with speakers' gender, because these can influence NNS' utterances.

The results revealed that the contribution of each of three speech components, namely LANGUAGE, INTONATION, and VOICE, on the NNSs' perceived personality traits of FRIENDLINESS, ACTIVENESS, and JUDICIOUSNESS differed according to the situation and the gender of the NNS (although in some cases the both genders had similar results). As for raters' or JNSs' gender, the present study indicated its effect only on ACTIVENESS in LANGUAGE as three-way interaction of rater's gender by NNS's gender by situation, thus, raters' gender impacted minimal effect. However, female raters used a wider range of ratings than male raters between NNSs' gender and the situations. This rating tendency has been reported in the field of social psychology particularly in the

study of decoding facial expressions (Hall & Matsumoto, 2004; Katsikitis et al., 1997; Montagne et al., B., 2005). Therefore, this might imply a tendency of female's evaluating behavior.

With respect to the relationship between the speech componetns and the situation, when the situation was formal, LANGUAGE influenced the impression more than INTONATION, and vice versa in a casual situation. VOICE made contributions to the formal situations more than to the casual situations. The gender difference in the effect of the speech components was found in less formal and less casual situations (i.e., in the intermediate situations). VOICE made a greater contribution for females but INTONATION made greater contributions for males.

These results clearly indicate that situation, or the level of formality, was an important factor in the impact of speech components on the impression of NNS' personalities perceived through their utterances. The pattern of effects of the speech components was common across situations but not common across the three personality traits. In other words, no specific speech component has greater impact than other components on any of the three personality traits in WHOLE SPEECH. The significant finding was that there was an opposite effect of LANGUAGE and INTONATION in different situations, and it was best demonstrated when comparing the most formal and the least formal situations.

7.3. Further Research Suggestions

The present study also aimed to investigate the effect of VOICE, which had tended to be overlooked in previous studies investigating NSs' evaluation of NNSs' linguistic characteristics. As mentioned above, the results indicated that VOICE was an important factor for impression formation of NNSs' personality. NNSs' VOICE in the present

study was characterised by JNSs' subjective evaluation of attractiveness, and the scores were averaged in order to control for the effect of a difference in voice attractiveness; hence, taking into account different degrees of voice attractiveness as an independent variable is recommended in further research in order to clarify the effect of voice attractiveness. It is also recommended to investigate why voice had a greater influence in formal situations than in casual situations. This could be due to the length of the WHOLE SPEECH in the present study because utterances (i.e, WHOLE SPEECH) were longer in formal situations than in casual situations; therefore it is important to clarify whether the influence of voice was caused by the degree of formality or not as well as whether a length of exposure plays a part. This will add knowledge to our understanding of the role of voice in human interaction.

INTONATION in the present study was represented by the pitch contour artificially imposed on a speech segment; however, it contained other aspects such as speech rate and pauses as well. Research investigating effects of these aspects according to the level of formality of the situation will provide further knowledge of the roles played by different speech components. Also, since the effect of INTONATION was greater for males than for females, it is recommended to investigate the difference in INTONATION between genders. Further, defferences between NNSs' INTONATION and JNSs' INTONATION would be worth investigating because naturalness and appropriateness of INTONATION could influence NNSs' rating. Moreover, since Uchida's (2005) study indicated that ratings on speakers' personalities changed when F0 of the speech was manipulated by a speech synthesiser, using this technique could identify the effect of INTONATION more precisely.

In addition, the present study used the NNSs' own choices of *keigo* expressions without control, in order to obtain a natural reaction from the raters by providing natural stimuli. When *keigo* expressions are controlled, for example, presenting the same expression in different situations, other interesting findings could be found and it could determine the effect of *keigo* expressions on impression formation more directly. Also, discourse analysis of the NNSs' utterances was not done because it was not the purpose in the present study, but it would provide further information on the effect of *keigo*. For example, only one *keigo* expression was commonly used by both genders (see Figure 3.1 to Figure 3.4 in Chapter 3). Discourse analysis would reveal what aspects of differences of *keigo* expressions between genders could have caused gender differences in the results of the present study. Further, together with JNSs' evaluation, the analysis could indicate 'appropriateness' of *keigo* expressions in given situation and it could tell whether appropriateness truly impacts on impressions. Finally, relating to the use of *keigo*, research investigating why language and intonation operate in opposite ways in formal and casual situations would be useful. The present study suggested two possible explanations:

(i) It was apparent that the number of words used by the speakers was greater in the formal situations than in the casual situations. Raters may be sensitive to the choice of language but they may not be so to the same extent when the number of words is small, in other words, when there is less information contributed by language.

(ii) In casual situations, raters may take interpersonal relationship more seriously. Because intonation conveys emotion, raters may consider that intonation represents personal affection better than language.

Further research could clarify whether the importance of intonation is related to the number of words in an utterance and to the casual nature of the situation.

7.4. Pedagogical Implications

As described in the Section 7.2, *keigo* expressions, or language form, contributed to NNSs' perceived personalities more in formal situations. In contrast, intonation contributed more in casual situations. This indicated that intonation was more important in casual situations than in formal situations. Although the importance of intonation in Japanese has been pointed out (Kunihiro, 1997; Neustupny, 1982; Sugito, 1999), the teaching of intonation seems far from sufficient. Teachers tend to overlook accuracy and appropriateness of learners' intonation because they are more concerned about language forms and spend more time teaching them (Sadanobu 2004; Toda, 2009). Because intonation influences JNSs' impressions of NNSs' personalities, it should not be neglected. Both teachers and learners should be conscious of it in order to give a favourable impression to a JNS interlocutor. Practicing intonation especially in casual settings is recommended. Firstly, using a visual aid such as 'prosody graph' developed by Kushida, Jōo, Tsukiji, Matsuzaki, & Liu (1995) is one of the ways of practice (Kushida et al, 1995; Matsuzaki & Kohno, 1997; Matsuzaki, 2009). The prosody graph is created by extracting JNS's pitch contour by a speech systhesiser and the graph includes information of pause, prominence, and speech rate. Visual presentation of intonation pattern can rise learners' consciousness and can enhance recognition, thus can improve leaners production of intonation. Secondly, practicing intonation in actual interaction. Role play would be useful because different levels of formality, interlocutors, and speech act (Searle, 1969) are needed.

With respect to *keigo* expressions, female speakers used polite expressions even in the casual situations. Unlike females, males used very casual expressions in the MOST CASUAL situations, in that they obtained higher ratings than females for FRIENDLINESS and ACTIVENESS. In this situation, ratings of the female speakers were low. This implies that an excess of politeness is perceived as less positive. In this respect, it seems that some learners had reason to complain about the difficulty that they experienced in making close relationships with JNSs as they had a poor ability to use casual expressions (Kobayashi et al., 2002); however, it should be noted that casual expressions had a negative effect on JUDICIOUSNESS. In addition, females using more polite expressions were rated higher in the formal situations for FRIENDLINESS and JUDICIOUSNESS; moreover, they obtained higher ratings in LANGUAGE than males in total. The expressions used by the female speakers may be too polite; however, this did not evoke a severe negative reaction from the JNSs. Although overly polite expressions can be interpreted as standoffish, the Japanese word 丁寧な(teineina) or 'polite', is regarded as a desirable attribute because it does not have any associated negative attitudes. Also, the manner in which the expression of politeness differs between cultures (Sakamoto & Naotsuka, 1982; Wierzbicka, 2003) and the way in which Japanese politeness is expressed need to be explained to learners.

In fact, polite forms of verbs are generally introduced first to beginners in Japanese language learning. There are two main reasons for this; one is that the conjugation is simpler than for a plain form of verb and another is that it is generally safer to use polite language than less polite language. Some learners try to use more casual speech in order to show friendliness, and it often happens that at some point they fail to use a polite form when it should be used, because selecting the proper registers is difficult for NNSs

(Kokuritsu Kokugo Kenkyuusho, 1990b; Neustupny, 1982). To make a good impression on the interlocutor is the first step in establishing a good relationship; therefore, instruction on the effect on JNSs' impression of NNSs use of *keigo* in different situations should be clearly provided to learners in order to avoid unintentionally being perceived as offensive.

A survey conducted by the Japan Foundation (2009) indicated that learning about Japanese culture and communication in Japanese were two of the major purposes for learners studying Japanese in Australia. Future employment was another major reason given by tertiary and non-academic students, while understanding another culture was also a major reason given by primary and secondary institutions. *Keigo* use is inevitable when trying to fulfil all the above purposes. Proper use of *keigo* is not easy even for JNSs. Japanese people themselves have to learn it in order to establish and maintain good human relationships in Japanese society. NNSs need encouragement to learn it, because *keigo* is acquired only through effort and training. The present study suggested that the use of an inappropriate level of politeness in language caused less favourable evaluation but polite language could give the impression that a person is prudent, discreet, and responsible regardless of the situation. Also, awareness of the importance of language in formal situations could change learners' view when they have a negative attitude towards *keigo* in practice. Providing such information would be useful for NNSs when they choose a specific language expression. It would be a good practice to present various situations and asking learners to identify what language expression is appropriate under given situations. Then, similar to intonation, role play would be beneficial to practice polite expressions in an actual interaction.

7.5. Concluding Remarks

The present study investigated JNSs' impression formation based on NNSs' speech in different situations with respect to levels of formality, which require different levels of politeness. The result showed that the role and importance of speech variables were relative depending on required levels of politeness and, thus, provided additional knowledge in the field of impression formation. How to express politeness differs across cultures, and every social interaction involves some level of politeness, even in the absence of overt expressions of politeness in the message. One's expression of politeness reflects one's interpretation of a situation and the world, therefore, revealing aspects of one's personality. Further study of impression formation based on various ways in which politeness is expressed can, thus, be expected to bring a better understanding of the social and cognitive process involved in human interaction.

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Appendices

Appendix A. Selecting the Final Speaker Sample: Voice Attractiveness Questionnaire

これから聞いていただくそれぞれの声が魅力的かどうかお答えください。

例えばNo.1の声が　　非常に魅力的だと思った場合は　　１ ２ ３ ４ ５ ６ ⑦
全然魅力的ではないと思った場合は　　① ２ ３ ４ ５ ６ ７

というように、回答欄の１から7までのうち最も当てはまる番号に〇をつけてください。

	回答欄 全然魅力的でない ← 非常に魅力的だ →
No. 1:	１ ２ ３ ４ ５ ６ ７
No. 2:	１ ２ ３ ４ ５ ６ ７
No. 3:	１ ２ ３ ４ ５ ６ ７
No. 4:	１ ２ ３ ４ ５ ６ ７
No. 5:	１ ２ ３ ４ ５ ６ ７
No. 6:	１ ２ ３ ４ ５ ６ ７
No. 7:	１ ２ ３ ４ ５ ６ ７
No. 8:	１ ２ ３ ４ ５ ６ ７
No. 9:	１ ２ ３ ４ ５ ６ ７
No. 10:	１ ２ ３ ４ ５ ６ ７

	回答欄 全然魅力的でない ← 非常に魅力的だ →
No. 11:	１ ２ ３ ４ ５ ６ ７
No. 12:	１ ２ ３ ４ ５ ６ ７
No. 13:	１ ２ ３ ４ ５ ６ ７
No. 14:	１ ２ ３ ４ ５ ６ ７
No. 15:	１ ２ ３ ４ ５ ６ ７
No. 16:	１ ２ ３ ４ ５ ６ ７
No. 17:	１ ２ ３ ４ ５ ６ ７
No. 18:	１ ２ ３ ４ ５ ６ ７
No. 19:	１ ２ ３ ４ ５ ６ ７
No. 20:	１ ２ ３ ４ ５ ６ ７

	回答欄 全然魅力的でない ← 非常に魅力的だ →
No. 21:	１ ２ ３ ４ ５ ６ ７
No. 22:	１ ２ ３ ４ ５ ６ ７
No. 23:	１ ２ ３ ４ ５ ６ ７
No. 24:	１ ２ ３ ４ ５ ６ ７
No. 25:	１ ２ ３ ４ ５ ６ ７
No. 26:	１ ２ ３ ４ ５ ６ ７
No. 27:	１ ２ ３ ４ ５ ６ ７
No. 28:	１ ２ ３ ４ ５ ６ ７
No. 29:	１ ２ ３ ４ ５ ６ ７
No. 30:	１ ２ ３ ４ ５ ６ ７

※ご意見やご感想などありましたらお聞かせください。

最後にご自身についてうかがいます。 あてはまる（　）にチェックしてください。

・性別　　男（　）　　女（　）
・年齢　　18～19歳 （　）　　20～24歳 （　）　25～29歳 （　）　　30～34歳 （　）　35～39歳 （　）　　40～44歳 （　）
　　45～49歳 （　）　　50～54歳 （　）　55～59歳 （　）　　60～64歳 （　）　65～69歳 （　）　　70歳以上 （　）

ご協力誠にありがとうございました。

Appendix B. Main Study Questionnaire

この回答用紙は4つの部分（Q1～Q4）に分かれています。1は文章を読んで、また2から4は添付のCD を聞いて、それを言った外国人の印象を答えていただきます。

1つの文章、またはトラック番号に対して、それを言った外国人を**9つの項目**（親しみやすい・親しみにくい、自信のある・自信の無い、慎重な・軽率な、積極的な・消極的な、感じの良い・感じの悪い、責任感の強い・無責任な、意欲的な・無気力な、分別のある・分別の無い、人の良い・人の悪い）**それぞれについてどう感じたか**お答えください。

例えば、「親しみやすい・親しみにくい」という項目に対して、Q1の A で1）の人に
「非常に親しみ**やすい**という印象を受けた」場合

回答欄
←親しみにくい　親しみやすい→ 1　2　3　4　5　6　7　⑧

「非常に親しみ**にくい**という印象を受けた」場合

回答欄
←親しみにくい　親しみやすい→ ①　2　3　4　5　6　7　8

というように、回答欄の1から8までのうち、最も当てはまる番号に〇をつけてください。恐れ入りますが、9つ全ての項目にお答えくださいますようお願い申し上げます。

CD プレーヤーをご準備の上、**作業は必ずこの回答用紙通りの順番でお進めください**。

Q1. 次の A から D の状況で外国人がペンを借りようとしています。それぞれの文章についての印象をお答えください。（　）内はそれを言った人の性別です。

A.仕事中、職場の上司に対して

1）すみません、ペンを使わせてくださいませんか。（女性）

←親しみにくい　親しみやすい→ 1　2　3　4　5　6　7　8	←自信の無い　自信のある→ 1　2　3　4　5　6　7　8	←軽率な　慎重な→ 1　2　3　4　5　6　7　8
←消極的な　積極的な→ 1　2　3　4　5　6　7　8	←感じの悪い　感じの良い→ 1　2　3　4　5　6　7　8	←無責任な　責任感の強い→ 1　2　3　4　5　6　7　8
←無気力な　意欲的な→ 1　2　3　4　5　6　7　8	←分別の無い　分別のある→ 1　2　3　4　5　6　7　8	←人の悪い　人の良い→ 1　2　3　4　5　6　7　8

2）ペンを貸してください。（男性）

←親しみにくい　親しみやすい→ 1　2　3　4　5　6　7　8	←自信の無い　自信のある→ 1　2　3　4　5　6　7　8	←軽率な　慎重な→ 1　2　3　4　5　6　7　8
←消極的な　積極的な→ 1　2　3　4　5　6　7　8	←感じの悪い　感じの良い→ 1　2　3　4　5　6　7　8	←無責任な　責任感の強い→ 1　2　3　4　5　6　7　8
←無気力な　意欲的な→ 1　2　3　4　5　6　7　8	←分別の無い　分別のある→ 1　2　3　4　5　6　7　8	←人の悪い　人の良い→ 1　2　3　4　5　6　7　8

3）ペンを貸していただけませんか。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

4）すみません、ペンをお借りできますか。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

5）そのペンを貸してくださいませんか。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

6）ちょっと失礼ですが、そのペンを貸してくださいませんか。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

B.郵便局で並んでいるきちんとした服装の見知らぬ中年男性に対して

1）そのペンを貸してくれませんか。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

2）すいません、ペンを貸していただけませんでしょうか。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

3）すみません、ちょっとペンを借りていいですか。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

4）すみません、ペンを使わせてくださいませんか。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

5）すみません、ペンをお借りできますか。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

6）ペンを貸してください。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

C.職場（アルバイト先含む）で特に親しくも疎遠でもない関係の同僚に対して

1）そのペンを貸してください。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

2）そのペンを貸してくれない？（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

3）ペンを貸してください。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

4）ペンを貸してください。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

5）ペンを貸して。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

6）すみません、ペンを使ってもいいですか。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

D.大変親しい友人に対して、その人の部屋で

1）ペン、いい？（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

2）ペンをお願いします。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

3）ペンを下さい。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

4）そのペン、貸して。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

5）ペンちょうだい。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

6）そのペンを貸してくれる？（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

ここからは添付の CD を聞いてお答えください。

Q2. 次の A から D の状況で外国人がペンを借りようとしています。言葉そのものは聞こえませんが、声の調子からそれぞれについての印象をお答えください。

A.仕事中、職場の上司に対して

トラック 1）ペンを貸していただけませんか。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 2）すみません、ペンを使わせてくださいませんか。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック　3）そのペンを貸してくださいませんか。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック　4）ペンを貸してください。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック　5）ちょっと失礼ですが、そのペンを貸してくださいませんか。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 6）すみません、ペンをお借りできますか。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

B.郵便局で並んでいるきちんとした服装の見知らぬ中年男性に対して

トラック 7）そのペンを貸してくれませんか。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 8）すいません、ペンを貸していただけませんでしょうか。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 9）すみません、ちょっとペンを借りていいですか。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 10）すみません、ペンを使わせてくださいませんか。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 11）すみません、ペンをお借りできますか。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 12）ペンを貸してください。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

C.職場（アルバイト先含む）で特に親しくも疎遠でもない関係の同僚に対して

トラック 13）ペンを貸してください。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 14）そのペンを貸してください。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 15）ペンを貸して。（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 16）そのペンを貸してくれない？（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 17）すみません、ペンを使ってもいいですか。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 18）ペンを貸してください。（男性）

←親しみにくい　親しみやすい→	←自信の無い　自信のある→	←軽率な　慎重な→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
←消極的な　積極的な→	←感じの悪い　感じの良い→	←無責任な　責任感の強い→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
←無気力な　意欲的な→	←分別の無い　分別のある→	←人の悪い　人の良い→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8

D.大変親しい友人に対して、その人の部屋で
トラック 19）そのペン、貸して。（男性）

←親しみにくい　親しみやすい→	←自信の無い　自信のある→	←軽率な　慎重な→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
←消極的な　積極的な→	←感じの悪い　感じの良い→	←無責任な　責任感の強い→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
←無気力な　意欲的な→	←分別の無い　分別のある→	←人の悪い　人の良い→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8

トラック 20）そのペンを貸してくれる？（女性）

←親しみにくい　親しみやすい→	←自信の無い　自信のある→	←軽率な　慎重な→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
←消極的な　積極的な→	←感じの悪い　感じの良い→	←無責任な　責任感の強い→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
←無気力な　意欲的な→	←分別の無い　分別のある→	←人の悪い　人の良い→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8

トラック 21）ペンをお願いします。（女性）

←親しみにくい　親しみやすい→	←自信の無い　自信のある→	←軽率な　慎重な→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
←消極的な　積極的な→	←感じの悪い　感じの良い→	←無責任な　責任感の強い→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
←無気力な　意欲的な→	←分別の無い　分別のある→	←人の悪い　人の良い→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8

トラック 22）ペンちょうだい。（男性）

←親しみにくい　親しみやすい→	←自信の無い　自信のある→	←軽率な　慎重な→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
←消極的な　積極的な→	←感じの悪い　感じの良い→	←無責任な　責任感の強い→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
←無気力な　意欲的な→	←分別の無い　分別のある→	←人の悪い　人の良い→
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8

トラック 23）ペン、いい？（男性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 24）ペンを下さい。（女性）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

Q3. 次に聞いていただく「あ・ね・せ・み・お・さ・ま・の・へ・な」と言っているそれぞれの声についての印象をお答えください。（内容に意味はありません）

トラック 25）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 26）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 27）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック　28）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック　29）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック　30）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

Q4. 次の A から D の状況で外国人がペンを借りようとしています。それぞれについての印象をお答えください。

A.仕事中、職場の上司に対して

トラック　31）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック　32）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 33）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 34）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 35）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 36）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

B.郵便局で並んでいるきちんとした服装の見知らぬ中年男性に対して

トラック 37）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 38）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 39）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 40）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 41）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 42）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

C.職場（アルバイト先含む）で特に親しくも疎遠でもない関係の同僚に対して

トラック 43）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 44）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 45）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 46）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 47）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

トラック 48）

←親しみにくい　親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い　自信のある→ 1 2 3 4 5 6 7 8	←軽率な　慎重な→ 1 2 3 4 5 6 7 8
←消極的な　積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い　感じの良い→ 1 2 3 4 5 6 7 8	←無責任な　責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な　意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い　分別のある→ 1 2 3 4 5 6 7 8	←人の悪い　人の良い→ 1 2 3 4 5 6 7 8

D.大変親しい友人に対して、その人の部屋で

トラック 49）

←親しみにくい 親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い 自信のある→ 1 2 3 4 5 6 7 8	←軽率な 慎重な→ 1 2 3 4 5 6 7 8
←消極的な 積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い 感じの良い→ 1 2 3 4 5 6 7 8	←無責任な 責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な 意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い 分別のある→ 1 2 3 4 5 6 7 8	←人の悪い 人の良い→ 1 2 3 4 5 6 7 8

トラック 50）

←親しみにくい 親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い 自信のある→ 1 2 3 4 5 6 7 8	←軽率な 慎重な→ 1 2 3 4 5 6 7 8
←消極的な 積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い 感じの良い→ 1 2 3 4 5 6 7 8	←無責任な 責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な 意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い 分別のある→ 1 2 3 4 5 6 7 8	←人の悪い 人の良い→ 1 2 3 4 5 6 7 8

トラック 51）

←親しみにくい 親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い 自信のある→ 1 2 3 4 5 6 7 8	←軽率な 慎重な→ 1 2 3 4 5 6 7 8
←消極的な 積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い 感じの良い→ 1 2 3 4 5 6 7 8	←無責任な 責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な 意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い 分別のある→ 1 2 3 4 5 6 7 8	←人の悪い 人の良い→ 1 2 3 4 5 6 7 8

トラック 52）

←親しみにくい 親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い 自信のある→ 1 2 3 4 5 6 7 8	←軽率な 慎重な→ 1 2 3 4 5 6 7 8
←消極的な 積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い 感じの良い→ 1 2 3 4 5 6 7 8	←無責任な 責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な 意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い 分別のある→ 1 2 3 4 5 6 7 8	←人の悪い 人の良い→ 1 2 3 4 5 6 7 8

トラック 53）

←親しみにくい 親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い 自信のある→ 1 2 3 4 5 6 7 8	←軽率な 慎重な→ 1 2 3 4 5 6 7 8
←消極的な 積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い 感じの良い→ 1 2 3 4 5 6 7 8	←無責任な 責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な 意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い 分別のある→ 1 2 3 4 5 6 7 8	←人の悪い 人の良い→ 1 2 3 4 5 6 7 8

トラック 54）

←親しみにくい 親しみやすい→ 1 2 3 4 5 6 7 8	←自信の無い 自信のある→ 1 2 3 4 5 6 7 8	←軽率な 慎重な→ 1 2 3 4 5 6 7 8
←消極的な 積極的な→ 1 2 3 4 5 6 7 8	←感じの悪い 感じの良い→ 1 2 3 4 5 6 7 8	←無責任な 責任感の強い→ 1 2 3 4 5 6 7 8
←無気力な 意欲的な→ 1 2 3 4 5 6 7 8	←分別の無い 分別のある→ 1 2 3 4 5 6 7 8	←人の悪い 人の良い→ 1 2 3 4 5 6 7 8

作業は以上です。お疲れさまでした。ご意見、ご感想などありましたらお聞かせください。

最後にご自身についてうかがいます。当てはまる(　)にチェックしてください。

・性別　男(　) 女(　)
・年齢　18～19 歳( ) 20～29 歳( ) 30～39 歳( ) 40～49 歳( )
　　50～59 歳( ) 60～69 歳( ) 70 歳以上( )

ご協力誠にありがとうございました。

Appendix C. Pilot Study: Descriptive Statistics and Bivariate Correlations for INTONATION, LANGUAGE, and INTONATION with LANGUAGE (FRIENDLINESS)

Variables	*M*	*SD*	*N*	1	2	3	4	5	6	7	8	9	10	11	12
1. LANGUAGE 1	14.69	2.66	34	--	.41*	.55**	.79**	.44**	.56**	.69**	.46**	.44**	.57**	.33	.42*
2. INTONATION 1	11.94	3.38	34		--	.82**	.52**	.84**	.68**	.69**	.85**	.71**	.30	.73**	.63**
3. INTONATION with LANGUAGE 1	12.75	3.24	34			--	.68**	.82**	.86**	.75**	.79**	.84**	.39*	.76**	.77**
4. LANGUAGE 2	13.93	3.13	34				--	.51**	.69**	.71**	.52**	.58**	.64**	.52**	.60**
5. INTONATION 2	12.19	3.19	34					--	.75**	.70**	.86**	.85**	.43*	.79**	.75**
6. INTONATION with LANGUAGE 2	13.02	3.18	34						--	.72**	.66**	.83**	.50**	.61**	.80**
7. LANGUAGE 3	13.25	3.15	34							--	.73**	.74**	.68**	.63**	.71**
8. INTONATION 3	11.62	3.45	34								--	.83**	.35*	.86**	.70**
9. INTONATION with LANGUAGE 3	12.34	3.37	34									--	.51**	.81**	.85**
10. LANGUAGE 4	14.14	3.39	34										--	.36*	.59**
11. INTONATION 4	12.68	3.71	34											--	.74**
12. INTONATION with LANGUAGE 4	13.26	3.60	34												--

**Significant at α = .01; *Significant at α = .05 (two-tailed).

Number after the variables indicates a situation (e.g., WHOLE SPEECH 1 means WHOLE SPEECH in the MOST FORMAL situation, and INTONATION 4 means INTONATION in the MOST CASUAL situation).

Appendix D. Pilot Study: Descriptive Statistics and Bivariate Correlations for INTONATION, LANGUAGE, and INTONATION with LANGUAGE (ACTIVENESS)

Variables	*M*	*SD*	*N*	1	2	3	4	5	6	7	8	9	10	11	12
1. LANGUAGE 1	15.01	3.02	34	--	.39*	.60**	.69**	.39*	.63**	.69**	.22	.46**	.62**	.28	.51**
2. INTONATION 1	12.23	3.33	34		--	.84**	.37*	.81**	.77**	.43*	.81**	.81**	.30	.80**	.75**
3. INTONATION with LANGUAGE 1	13.05	3.30	34			--	.52**	.76**	.91**	.56**	.69**	.86**	.38*	.76**	.77**
4. LANGUAGE 2	13.94	3.45	34				--	.36*	.52**	.74**	.22	.41*	.69**	.33	.45**
5. INTONATION 2	12.60	3.42	34					--	.75**	.40*	.85**	.83**	.24	.79**	.72**
6. INTONATION with LANGUAGE 2	13.25	3.40	34						--	.56**	.60**	.79**	.38*	.61**	.72**
7. LANGUAGE 3	12.88	3.60	34							--	.26	.47**	.75**	.33	.53**
8. INTONATION 3	11.62	3.60	34								--	.82**	.11	.91**	.65**
9. INTONATION with LANGUAGE 3	12.06	3.65	34									--	.43*	.84**	.90**
10. LANGUAGE 4	12.89	3.77	34										--	.22	.56**
11. INTONATION 4	11.57	3.71	34											--	.69**
12. INTONATION with LANGUAGE 4	12.12	3.73	34												--

**Significant at α = .01; *Significant at α = .05 (two-tailed).

Number after the variables indicates a situation (e.g., WHOLE SPEECH 1 means WHOLE SPEECH in the MOST FORMAL situation, and INTONATION 4 means INTONATION in the MOST CASUAL situation).

Appendix E. Pilot Study: Descriptive Statistics and Bivariate Correlations for INTONATION, LANGUAGE, and INTONATION with LANGUAGE (JUDICIOUSNESS)

Variables	*M*	*SD*	*N*	1	2	3	4	5	6	7	8	9	10	11	12
1. LANGUAGE 1	15.01	3.02	34	--	.41*	.50**	.70**	.33	.36*	.65**	.50**	.64**	.66**	.54**	.63**
2. INTONATION 1	12.23	3.33	34		--	.80**	.54**	.75**	.75**	.73**	.83**	.70**	.43	.71**	.66**
3. INTONATION with LANGUAGE 1	13.05	3.30	34			--	.67**	.79**	.89**	.68**	.70**	.79**	.51**	.70**	.73**
4. LANGUAGE 2	13.94	3.45	34				--	.58**	.62**	.73**	.52**	.62**	.66**	.55**	.63**
5. INTONATION 2	12.60	3.42	34					--	.79**	.67**	.84**	.83**	.56**	.84**	.76**
6. INTONATION with LANGUAGE 2	13.25	3.40	34						--	.63**	.65**	.81**	.54**	.66**	.71**
7. LANGUAGE 3	12.88	3.60	34							--	.69**	.63**	.73**	.62**	.65**
8. INTONATION 3	11.62	3.60	34								--	.82**	.50**	.91**	.76**
9. INTONATION with LANGUAGE 3	12.06	3.65	34									--	.63**	.87**	.91**
10. LANGUAGE 4	12.89	3.77	34										--	.57**	.72**
11. INTONATION 4	11.57	3.71	34											--	.83**
12. INTONATION with LANGUAGE 4	12.12	3.73	34												--

**Significant at α = .01; *Significant at α = .05 (two-tailed).

Number after the variables indicates a situation (e.g., WHOLE SPEECH 1 means WHOLE SPEECH in the MOST FORMAL situation, and INTONATION 4 means INTONATION in the MOST CASUAL situation).