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## The Big Three as related to receiver apprehension and listening behaviors.

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The Big Three as related to Receiver Apprehension and Listening Behaviors

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Thesis submitted to the Eberly College of Arts and Sciences at West Virginia University  
in partial fulfillment of the requirements for the degree of

Masters of Arts  
in  
Communication Studies

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2002

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## ABSTRACT

### The Big Three as related to Receiver Apprehension and Listening Behaviors

Jamie L. Hayhurst

The current study examined receiver and listening behaviors from a communibiological point of view. Communibiology proposes that particular communication variables are predictable by individual inborn processes. These inborn processes make up our individual temperament. Therefore, the apprehension variables were measured to determine if they were predicted by temperament. Individual temperament was measured using Eysenck's Big Three measurement of extroversion, neuroticism, and psychoticism. The dependent variables were then regressed to determine if they were predictable by all three temperament variables and/or by one of individual variables. College undergraduates (N = 325) voluntarily participated in the study. Results indicate mixed support for the underpinnings of communibiology and suggestions are discussed.

## DEDICATION

This work is dedicated to Kenny and our year together.

## ACKNOWLEDGMENTS

I would like to thank my family for the wonderful support they have given me throughout this year and every other year of my life! I appreciate all of their patience and love and I would not be where I am today without them. Mom, Dad, Justin—thank you and I love you.

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## Chapter 1

### The Big Three as related to Receiver Apprehension and Listening Behaviors

Communiology is a communication research paradigm that has taken root in the communication discipline in the last decade. Communiology is the idea that human communication is biologically based. This came from work done in the fields of neurobiology and psychobiology on the determination of human behavior. Originally, review of literature was thought to be encompassing the field of temperament and the field of psychobiology. However, further investigation revealed many overlaps within these literatures. This led to the updating of research and soon resulted in a new paradigm. Therefore, the term communiology was coined to encompass research on the biology of human communication. Based on research with temperament, communiology is becoming more widely accepted as an explanation for human communication behavior. This is held true by Eysenck's (1985) extroversion, neuroticism, and psychoticism explanation of human temperament that claims that inborn differences in temperament are manifested by views about communication behavior. Communiology has begun to lend studies in the area of communication, but extensive research has yet to occur, especially research in the field of receiver variables. This study seeks to discover if relationships exist between human temperament and receiver variables within the realm of the communiological paradigm.

### Communiology

Throughout most of the study of human communication, the dominant paradigm has been based on the belief that communication behavior is learned. Various models of learning predicted very little information, but researchers continued to believe in the idea



that communication was learned (McCroskey, Heisel, & Richmond, 2001). Within the past decade a new model has emerged that suggests strong genetic components as a basis for human communication. This communibiological paradigm projected a new way of studying communication. Communibiology is the proposition that inborn neurobiological processes drive human communication (Beatty, McCroskey, & Valencic, 2001; McCroskey, Heisel, & Richmond, 2001). The term communibiology was created because “communi” suggests the relevance of communication and “biology” is the source through which communication is studied. Communibiology attempts to predict and understand human communication through individual human biology. The idea behind communibiology is that traits control communication and these traits are regulated by neurobiological functions. Also, the word “inborn” implies genetic inheritance; however, neurobiological functions are also impacted by nutrition, physical trauma, and chemical intervention (Beatty, McCroskey, & Valencic, 2001).

Communibiology is composed of five tenets that represent a significant shift from previous communication research. Psychobiologists and social biologists, who have studied for some time the role of biology in social behaviors, accept these tenets as an explanation of biology in communication. Communication is dependent upon psychological processes, and according to psychobiology and social biology the following tenets frame the communibiological paradigm. According to Beatty & McCroskey (1998) first, all psychological processes (including cognitive, affective, and motor) involved in social interaction depend on brain activity. Thinking, feeling, and human behavior must be consistent with knowledge about the brain and its functions. Second, brain activity occurs before psychological experience. This suggests that all

mental processes are a product of the functions of the brain. The third tenet states, neurobiological structures that are related to temperament traits and individual differences are mainly inherited. This indicates that traits are not inherited but neurobiological structures are. Research conducted on sets of identical twins has strongly supported this tenet. Zuckerman (1994) reported little difference between twins raised together or separately. This suggests the lack of importance of a shared environment. Fourth, environment or situation has little, if any, effect on personal behavior. This idea is that individual reactions to situations or environmental factors are defined by individual temperament. If it is known that a person possesses a particular temperament-related trait, for example communication apprehension, then it can be predicted a person will respond in a particular way. Finally, the fifth tenet states that individual differences in interpersonal behavior are due to differences in neurobiological functions. This idea serves as an explanation as to why individuals behave differently in the same situations (McCroskey, Daly, Martin, & Beatty, 1998). Communibiology proposes that behaviors are limited because they are controlled by the behavioral activation system (BAS), behavioral inhibition system (BIS), and the fight or flight system (FFS) (Gray 1990, 1991).

The goal of communibiology is to serve as a scientific theory of communication and to examine the methodological structures of studies in interpreting the meaning of research done in communication. Creation of the communibiological paradigm involved examination of previous research and attempting to overcome past limitations. Communibiology does this by explaining communication behavior as a result of individual temperament.

## Temperament

Debate has ensued over the past decade about the dimensions of human personality. Eysenck (1947, 1991) proposed that extraversion (E), neuroticism (N), and psychoticism (P) cover the range of human behavior. Components of ENP measure the degree to which one is sociable (E), fearful and avoidant (N), or hostile (P). Eysenck's Big Three have become widely accepted as the theoretical framework for research involving temperament.

Extroversion refers to people who enjoy social activities such as entertaining, and who live a varied lifestyle. Extroverted individuals may be described as lively, active, assertive, sensation seeking, carefree, dominant, or venturesome. Introverts are the opposite of extraverts in that they prefer nonstimulating activities, and less social interaction (Eysenck & Eysenck, 1985). Introverts are better able to cope with low stimulus situations whereas extraverts are better able to cope in high stimulus situations.

Eysenck and Eysenck (1985) proposed that neuroticism includes traits such as anxiety, depression, guilt, low self-esteem, tension, shyness, and moodiness and is defined as a lack of emotional stability. Neuroticism is associated with excitedness and emotional responsiveness. High N's react to emotional cues in the environment. Low N's do not. If there is an absence of emotional cues in the environment, then no differences are found between high and low N's with corresponding E levels (Eysenck & Eysenck, 1985).

Finally, Eysenck and Eysenck (1985) defined psychoticism as a lack of impulse control. These individuals may exhibit traits of aggressiveness, impulsiveness, and can be described as creative and antisocial.

Within the context of communication research, some studies have shown strong relationships between Eysenck's Big Three and communication variables (Beatty, McCroskey, & Heisel, 1998; Valencic, Beatty, Rudd, Dobos, & Heisel, 1998; McCroskey, Heisel, & Richmond, 2001; Valencic, McCroskey, & Richmond, 2001.) This research includes verbal aggressive tendencies, shyness, and communication apprehension. Thus far, the examination of ENP in relation to receiver and listening apprehension variables has not been examined within the communibiological paradigm.

### Listening

Listening in itself is a process that involves much more than hearing. Hearing refers to the physiological ability to receive a message. Once the message is heard, the brain begins a series of listening processes including selection, organization, cognizance, explication, and assessment. Listening is a process that involves several subprocesses, any of which can be activated during a communication event (Lundsteen, 1979). Usually a listener attempts to decipher the most important aspects of a message and utilizes the degree of the listening process necessary to do so.

Most important in the realm of communication is effective listening. Lundsteen (1979) proposes that one's incontestable mental perspective will establish the listener's open-mindedness and allow for more listening to occur. Thought processes can also effect listening. One's disposition towards listening will affect his/her thoughts. The thought process can enhance or detract from the quality of one's listening.

Listening has two purposes: receiving information and taking in another's expression (Duker, 1971). In various situations listeners often take on one of two listening types: active and passive listening. Active listening is when an individual

listens with more of his or her total self and has a specific purpose for listening (Smith, 1972). Passive listening entails listening that occurs because one happens to be present while another is communicating. The listener mainly receives sound, with little self-perception or involvement (Gredler, 1997). There exists additional forms of listening, but for the purposes of this communibiological study, the focus is primary on active listening behaviors.

While listening is thought of as an important aspect of the relational communication process, little research has been conducted on this topic (Halone, & Pecchioni, 2001; Rhodes, 1993). Ralph Nichols (1957) proposed some of the earliest ideas regarding the process of listening. He suggested that much of the success individuals experience throughout their lives is dependent upon efficient listening skills. Tests of listening comprehension show that the average person listens at about 25 percent efficiency. However, with training, this number is apt to raise (Nichols, 1957). Active listening is a skill that is not easy to acquire. Practice and a change in attitudes toward listening are normally required before effective active listening can take place. Cheseboro (2002) has extended the idea of active listening to teachers in attempts to understand listening behaviors of their students.

Past research on listening has focused primarily on how to test a person's ability to listen (Vinson & Roberts, 1996; Halone, Wolvin, & Coakley, 1997; Coakley & Wolvin, 1997). According to Richmond and Hickson (2002) listening involves an individual's selectivity. Individuals need to constantly monitor their listening, be open to the speaker's ideas, and listen as if there will be a quiz on the information. This helps improve the nature of active and relational listening, however, it does not take into

consideration an individual's willingness to listen in a given setting. One's willingness to listen may be related to the idea that some people are apprehensive about listening.

Vinson and Roberts (1996) found that an individual's willingness to listen had a positive relationship with communication skills and is negatively correlated with receiver apprehension, sender based communication apprehension, and dogmatism. These findings indicate that the less willing an individual is to listen, the more likely she/he exhibits one or all of these apprehensions about listening to communication.

Suggestions to improve listening include modification of habits and strategies used to employ new listening behaviors. No research suggests the possibility of a predisposition toward active willingness to listening behaviors.

#### Receiver apprehension

Wheless (1975) originated the construct of receiver apprehension. He observed that some individuals experience anxiety when listening and responding to messages. Therefore, receiver apprehension came to be defined as "the fear of misinterpreting, inadequately processing, and/or not being able to adjust psychologically to messages sent by others" (Wheless, 1975, 263).

Bock and Bock (1984) suggest that receiver apprehension appears to vary within an individual's function as a receiver. This includes the formality or informality of the situation. Wheless (1975) concluded that individual communication roles function in affect-arousing contexts. This is dependent upon if the role one plays is that of the source or of the receiver. Fear of being the source of a message is positively associated with social approval, whereas playing the role of the receiver is positively associated with information processing (Wheless, Preiss, & Gayle, 1997).

Taking a close look at communication research portrays that often researchers emphasize the source and tend to view the receiver as a passive observer (Wheless, Preiss, & Gayle, 1997). However, both source and receiver play vital roles in the communication process. Both provide perspectives that either result in successful or unsuccessful communication outcomes. Five categories of potential outcomes have been determined as the major effects of receiver based apprehension owing to the communicative role that an individual is playing. The categories include listening effectiveness, processing anxiety, information-processing effectiveness, processing complexity, and education level (Preiss, Wheless, & Allen, 1990). Each of these categories examines the experiences of individuals who are apprehensive about receiving information.

Receiver apprehension has been linked to processing anxiety, listening effectiveness, and information processing effectiveness. These findings have led to several explanations for receiver apprehension. Primary anxiety involves specific fear-causing situations. Secondary anxiety involves is a trait-like responsiveness to all messages. Information processing involves cognitive patterns of responses to an environment in which the information is received. Social evaluation involves demand, motivation, and evaluation of processing. Research on receiver apprehension has found that apprehensive individuals tend to fall in one of these parameters of explanation (Wheless, Preiss, & Gayle, 1997).

Wheless (1975) concluded that some people are generally apprehensive about receiving information, but particularly, receiver apprehension refers to how individuals feel within a particular setting. The majority of research has examined situational, or

state, receiver apprehension (Scott & Wheelless, 1977; Bock & Bock, 1984; Cheseboro & McCroskey, 2001). However, Wheelless (1975) did propose the idea that trait receiver apprehension did exist in some people. Trait receiver apprehension has been studied in relation to individual cognitive processes (Beatty & Payne, 1981; Beatty, 1981).

#### Rationale

According to Wheelless, Preiss, and Gayle (1997) a portion of the attention on receiver apprehension involves listening comprehension. This was supported through their findings of a negative relationship between an individual's willingness to listen and receiver apprehension. Within the realm of the communibiological paradigm, communication apprehension has been the only apprehension variable studied. Owing to the idea that receiver apprehension exists in a trait-like form and is correlated with an individual's willingness listen, the idea of biologically based receiver apprehension and listening variables is possible. Therefore, the following research question was formulated:

RQ: Are orientations toward receiver communication variables related to or predictable by temperament?



## Chapter 2

### Method

#### Participants

Participants included 325 students from a large Eastern university. Students were given class time to complete surveys and participation was completely voluntary.

Students were ensured complete anonymity. Each student completed a set of materials that consisted of measures of extraversion, neuroticism, and psychoticism and receiver variables.

#### Measurement

Extroversion. Individual extroversion (E) was measured using the ten-item instrument developed by Eysenck and Eysenck (1985). Participants respond to questions by indicating the degree to which the item applies to them (3 = Strongly agree, 2 = Neutral, 1 = Strongly disagree). This scale has been widely used and its validity and reliability are established. Cronbach alpha has been found to range from .80 to .82. For the current study the reliability was .75. All measures are reported in Appendix B.

Neuroticism. Individual neuroticism (N) was measured using the ten-item measure developed by Eysenck and Eysenck (1985). This measure uses the same three-point response format as the E measure and has also demonstrated good reliability and validity. Cronbach's alpha has been found to range between .81 and .86. For the current study the reliability was .81.

Psychoticism. Individual psychoticism was measured using eleven items from the twelve-item revised measure of the psychoticism scale (Eysenck, Eysenck, & Barret, 1985). One item, related to drug use, was omitted at the request of the IRB. This scale

uses the three-point format of E and N. This revised scale has shown acceptable reliability and validity. Cronbach alpha normally range from .68 to .76. For the current study the reliability was .59.

Receiver Apprehension. Receiver Apprehension was measured using Wheelless's (1975) 20-item Receiver Apprehension Test (RAT). This Likert-type instrument measures responses from strongly agree (5) to strongly disagree (1). People are asked to self-report how they feel when receiving communication. The RAT has demonstrated good validity and reliability. The reliability ranges from .81 to .91. The reliability for the current study was .88.

Receiver apprehension was also measured using Wheelless's (1997) Informational Reception Apprehension Test (IRAT). This scale measures the degree to which anxiety affects reception, perception and processing of information. The IRAT is broken into two dimensions. First, the 13- item IRAT-Listening (L) was used to determine apprehension about listening to information. The seven-item IRAT-Intellectual Flexibility (IF) was used to measure the willingness to accept abstract ideas. These Likert-type scales measured apprehension on a self-report scale ranging from (5) strongly agree to (1) strongly disagree. Previous reliability for the IRAT-L has been reported at .86 and .76 for the IRAT-IF. For the current study the reliabilities were .90 and .83 respectfully.

Willingness to Listen. Individual listening skills were measured using Vinson and Robert's (1989) Willingness to Listen measure. This scale consists of three basic factors including, the familiarity with the speaker, the importance of content, and environment in which it is taking place. This scale measures the percentage of time an individual spends

listening in various contexts ranging from 0% to 100%. The reliability of this Willing to Listen scale has been reported at .88. Reliability for the current study was .95.

An additional measure of Willingness to Listen was included in this study. Richmond's (2002) Willingness to Listen construct is a Likert-type scale ranging from (1) Strongly agree to (5) Strongly disagree. This is a new measure and is being used for the first time therefore, no previous reliability has been found. The reliability for the current study was .79.

## Chapter 3

### Results

The research question for this study was explored using both simple and multiple correlation analyses. In order to explore how the three supertraits of E, N, and P jointly predict receiver communication variables a multiple correlation analysis was utilized. In order to explore how each individual supertrait predicts receiver communication variables a simple correlation analysis was utilized. Only statistically significant simple correlations of .30 or better are reported below. For a complete listing of simple correlations see the specified table.

Also, a listing of correlations between listening measures and receiver measures is included. These can be found in Table 1 (Appendix A).

In regards to the combination of E, N, and P predicting receiver apprehension (RAT), a significant multiple correlation of  $R = .58$  was obtained [ $F(3, 318) = 53.57, p < .05$ ]. Simple correlation analyses for E, N, and P individually predicting receiver apprehension revealed significant positive correlations with RAT and E ( $r = .33, p < .0001$ ), RAT and P ( $r = .31, p < .0001$ ), and a significant negative correlation between RAT and N ( $r = -.49, p < .0001$ ). For a complete listing of how Eysenck's model predicts receiver apprehension (RAT) see Table 6.

In regards to the combination of E, N, and P predicting receiver apprehension (IRAT-L), a significant multiple correlation of  $R = .46$  was obtained [ $F(3, 318) = 29.62, p < .05$ ]. Simple correlation analyses for E, N, and P individually predicting receiver apprehension revealed significant positive correlations with IRAT-L and N ( $r = .44, p < .0001$ ). For a complete listing of simple correlations between the IRAT-L and E, N, and

P individually, see Table 2. For a complete listing of how Eysenck's model predicts receiver apprehension (IRAT-L) see Table 7.

In regards to the combination of E, N, and P predicting receiver apprehension (IRAT-IF), a significant multiple correlation of  $R = .19$  was obtained [ $F(3, 318) = 3.92, p < .05$ ]. For a listing of simple correlations between the IRAT-IF and E, N, and P individually, see table 3. For a complete listing of how Eysenck's model predicts receiver apprehension (IRAT-IF) see Table 8.

In regards to the combination of E, N, and P predicting willingness to listen, a significant multiple correlation of  $R = .22$  was obtained [ $F(3, 318) = 5.71, p < .05$ ]. For a listing of simple correlations between willingness to listen and E, N, and P individually, see Table 4. For a complete listing of how Eysenck's model predicts listening see Table 9.

In regards to the combination of E, N, and P predicting willingness to listen from the new listening measure, significant multiple correlation of  $R = .16$  was obtained [ $F(3, 318) = 2.86, p < .05$ ]. For a listing of simple correlations between willingness to listen and E, N, and P individually see Table 5. For a complete listing of how Eysenck's model predicts listening (from the new measure) see Table 10.

Extroversion, neuroticism, and psychoticism were employed as surrogate measures for brain activity. However, each of these measures are not perfect estimates of these supertraits. The scores given are modest and underscore the minimal potential predictive power of the communibiological model. The scores must be corrected for attenuation to rule out error that is associated with a measurement of this nature. Tables 6 through 9 also report all of the disattenuated correlation coefficients for the variables.

## Chapter 4

### Discussion

The purpose of this research was to determine if receiver variables were related to individual temperament. This study used Eysenck's Big Three measure of temperament and various measurements of reception apprehension and willingness to listen. The research question in this study sought to discover if such relationships exist or if predictions can be made about individuals' information reception and listening behaviors in regards to individual temperament.

The research question asked if receiver variables could be predicted by individual temperament. Results indicate that receiver apprehension can be predicted by temperament. Both measurements for receiver apprehension indicate a correlation between receiver apprehension and temperament, particularly neuroticism. There were mixed findings for psychoticism between the two scales. For the original receiver apprehension test psychoticism was significantly correlated with apprehension, whereas for the updated information reception apprehension test, psychoticism was not significant in either of its two dimensions. Findings concerning information reception in listening were much stronger than those concerning information reception in information flexibility. However, overall, correlations between temperament and receiver apprehension are solid and are consistent with past research (McCroskey, Heisel, and Richmond, 2001).

Another point regarding the IRAT is the matter concerning the direction of the scoring. Variables for the IRAT-L are directed in a negative direction whereas the IRAT-

IF is scored in a positive direction. This raises the question of whether or not findings are based on content or based on the direction. Future research should examine this issue.

In regards to listening variables and temperament, findings between the two scales differed dramatically. There was a significant correlation between listening and E, N, and P Robert's willingness to listen scale. However, for the new measurement, both extroversion and psychoticism were not significant. There was a significant correlation between a combination of the temperament variables and listening for both scales. Items on the new willingness to listen measure are designed in manner to discover predispositions toward listening to a speaker. Robert's scale examines willingness to listen to strangers, friends, and acquaintances. Items may need to be added or left out of the new measurement to produce higher reliability.

Overall results regarding the two listening scales indicate that Robert's measure is negatively correlated with apprehension variables, whereas, the new scale only negatively correlates with the RAT. The two measurements also have a negative correlation with each other indicating that the two measure different aspects of listening. This could be an indication that individuals are more willing to listen to a general speaker due to the idea that listening to a speaker may entail a later requirement to remember specific information, whereas listening to friends, acquaintances, and strangers does not require usually require memory. Therefore, regardless of an individuals disposition toward listening, the source may have a significant influence on how willing one is to listen.

These findings show mixed support for the idea that receiving functions are biologically based. Receiver apprehension appears to be able to be predicted by an

individual's temperament. However, listening behavior is questionable. Although results show it may be predicted, the strength of the relationships is very low.

Limitations to this study include the questionable results found from the new willingness to listen measure. This scale needs to be further developed to ensure its content validity. By comparison to Robert's measurement, this scale's findings could be inaccurate. Also, listening is thought to be an innate, predisposition in humans. According to these findings, listening is not highly predetermined, at least not by the brain systems associated with the Big Three. Future research may use alternate listening measures and retest these measures to determine if listening is biological or if it is learned. Also, use of other predictors that are associated with other brain systems is needed to check the generalizability of the present results.

Another limitation includes the use of Eysenck's Big Three as a surrogate measure for temperament. This has been an acceptable measure of temperament, but it is not a determinant of all physiological structures.

These results show mixed support for the idea that communication reception is biologically based. Future research is needed regarding receiver variables to help determine the source of individuals' receiving behaviors, especially in those related to listening.



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## Appendix A

### Tables

Table 1.  
Simple correlation coefficients between listening and receiver measures.

	RAT	IRAT-L	IRAT-IF	WTL	WTL (new)
RAT	r = 1.00000 p = 0.0	r = -.62 p = .0001	r = -.37 p = .0001	r = .28 p = .0001	r = -.35 p = .0001
IRAT-L	r = -.62 p = .0001	r = 1.00000 p = 0.0	r = .54 p = .0001	r = -.25 p = .0001	r = .40 p = .0001
IRAT-IF	r = .37 p = .0001	r = .55 p = .0001	r = 1.00000 p = 0.0	r = -.24 p = .0001	r = .30 p = .0001
WTL	r = -.35 p = .0001	r = -.25 p = .0001	r = -.24 p = .0001	r = 1.00000 p = 0.0	r = -.33 p = .0001
WTL (new)	r = -.35 p = .0001	r = .40 p = .0001	r = .30 p = .0001	r = -.33 p = .0001	r = 1.00000 p = 0.0

Table 2.  
Simple correlation coefficients between E, N, P, and the IRAT-L.

	Extraversion	Neuroticism	Psychoticism
IRAT-L	$r = -.27$	$r = .44$	$r = .07$
	$p = .0001$	$P = .0001$	$p = .2397$

Table 3.  
Simple correlation coefficients between E, N, P, and the IRAT-IF.

	Extraversion	Neuroticism	Psychoticism
IRAT-IF	$r = -.16$	$r = .14$	$r = .01$
	$p = .0036$	$p = .0075$	$p = .8008$

Table 4.  
Simple correlation coefficients between E, N, P, and willingness to listen.

	Extraversion	Neuroticism	Psychoticism
WTL	$r = .22$ $p = .0001$	$r = -.04$ $p = .4758$	$r = .03$ $p = .5659$



Table 5.  
Simple correlation coefficients between E, N, P, and willingness to listen (new measure).

	Extraversion	Neuroticism	Psychoticism
WTL	$r = -.06$ $p = .3002$	$r = .18$ $p = .0012$	$r = -.01$ $p = .8693$

Table 6.  
Multiple correlation coefficients between the receiver apprehension test (RAT) and Eysenck's Model of Temperament.

<b>IV</b>	<b>DV</b>	<b>R</b>	<b>[R]</b>	<b>F</b>	<b>P</b>
E, N, P	RAT	.58	.73	53.57	.0001
E	RAT	.33	.41	39	.0001
N	RAT	.49	.58	103.25	.0001
P	RAT	.31	.42	33.52	.0001

Table 7.  
 Multiple correlation coefficients between the information reception apprehension test (IRAT-L) and Eysenck's Model of Temperament.

<b>IV</b>	<b>DV</b>	<b>R</b>	<b>[R]</b>	<b>F</b>	<b>P</b>
E, N, P	IRAT-L	.47	.58	29.62	.0001
E	IRAT-L	.27	.33	24.80	.0001
N	IRAT-L	.44	.52	76.40	.0001
P	IRAT-L	.07	.10	1.39	.2397

Table 8.  
 Multiple correlation coefficients between the information reception test (IRAT-IF)  
 measure and Eysenck's Model of Temperament.

<b>IV</b>	<b>DV</b>	<b>R</b>	<b>[R]</b>	<b>F</b>	<b>P</b>
E, N, P	IRAT-IF	.19	.24	3.92	.0091
E	IRAT-IF	.16	.20	8.63	.0036
N	IRAT-IF	.02	.03	7.23	.0075
P	IRAT-IF	.01	.02	.06	.8008

Table 9.  
 Multiple correlation coefficients between Robert's willingness to listen measure and Eysenck's Model of Temperament.

<b>IV</b>	<b>DV</b>	<b>R</b>	<b>[R]</b>	<b>F</b>	<b>P</b>
E, N, P	WTL	.23	.28	5.71	.0008
E	WTL	.18	.21	10.94	.0010
N	WTL	.13	.15	5.59	.0186
P	WTL	.11	.15	4.05	.0450

Table 10.

Multiple correlation coefficients between the new Willingness to Listen measure and Eysenck's Model of Temperament.

<b>IV</b>	<b>DV</b>	<b>R</b>	<b>[R]</b>	<b>F</b>	<b>P</b>
E, N, P	WTL	.16	.21	2.86	.0369
E	WTL	.07	.09	1.75	.1866
N	WTL	.16	.20	8.70	.0034
P	WTL	.01	.02	.03	.8739

## Appendix B

### Measures

#### Extroversion

Directions: Please answer all of the following questions about yourself. Use the following scale to respond to each of the statements: Strongly agree = 3, Neutral = 2, Strongly disagree = 1. If you have any questions about your answers, ask your instructor. The survey is completely anonymous and you will not be identified in any way.

- \_\_\_ 1. Are you rather lively?
- \_\_\_ 2. Do you enjoy meeting new people?
- \_\_\_ 3. Do you like going out a lot?
- \_\_\_ 4. Would you call yourself happy-go-lucky?
- \_\_\_ 5. Are you mostly quiet when you are with other people?
- \_\_\_ 6. Do you like mixing with people?
- \_\_\_ 7. Do you often make decisions on the spur of the moment?
- \_\_\_ 8. Do you like plenty of bustle and excitement around you?
- \_\_\_ 9. Do you nearly always have a ready answer when people talk to you?
- \_\_\_ 10. Can you easily adapt to new and unusual situations?

## Neuroticism

Directions: Please answer all of the following questions about yourself. Use the following scale to respond to each of the statements: Strongly agree = 3, Neutral = 2, Strongly disagree = 1. If you have any questions about your answers, ask your instructor. The survey is completely anonymous and you will not be identified in any way.

- \_\_\_ 1. Does your mood often go up and down?
- \_\_\_ 2. Do you ever feel just miserable for now reason?
- \_\_\_ 3. Are you an irritable person?
- \_\_\_ 4. Do you often feel fed up?
- \_\_\_ 5. Are you often troubled about feelings of guilt?
- \_\_\_ 6. Would you call yourself a nervous person?
- \_\_\_ 7. Would you call yourself high strung?
- \_\_\_ 8. Do you often feel life is dull?
- \_\_\_ 9. Do you often feel lonely?
- \_\_\_ 10. Are you easily hurt when people find fault with you or your work?



## Psychoticism

Directions: Please answer all of the following questions about yourself. Use the following scale to respond to each of the statements: Strongly agree = 3, Neutral = 2, Strongly disagree = 1. If you have any questions about your answers, ask your instructor. The survey is completely anonymous and you will not be identified in any way.

- \_\_\_ 1. Is it better to follow society's rules than go your own way?
- \_\_\_ 2. Do you try not to be rude to other people?
- \_\_\_ 3. Do you prefer to go your own way rather than act by the rules?
- \_\_\_ 4. Does it worry you if you know that there are mistakes in your work?
- \_\_\_ 5. Do you think marriage is old-fashioned and should be done away with?
- \_\_\_ 6. Do you enjoy cooperating with others?
- \_\_\_ 7. Do good manners and cleanliness matter much to you?
- \_\_\_ 8. Do you think people spend too much time safeguarding their future with savings and insurances?
- \_\_\_ 9. Would being in debt worry you?
- \_\_\_ 10. Would you like other people to be afraid of you?
- \_\_\_ 11. Do you take much notice of what other people think?

## Receiver Apprehension Test

Instructions: The following statements apply to how various people feel about receiving communication. Indicate if these statements apply to how you feel noting whether you (5) strongly agree, (4) agree, (3) are undecided, (2) disagree, (1) strongly disagree.

- 1. I feel comfortable when listening to other on the phone.
- 2. It is often difficult for me to concentrate on what others are saying.
- 3. When listening to members of the opposite sex I find it easy to concentrate on what is being said.
- 4. I have no fear of being a listener as a member of an audience.
- 5. I feel relaxed when listening to new ideas.
- 6. I would rather not have to listen to other people at all.
- 7. I am generally overexcited and rattled when others are speaking to me.
- 8. I often feel uncomfortable when listening to others.
- 9. My thoughts become confused and jumbled when reading important information.
- 10. I often have difficulty concentrating on what others are saying.
- 11. Receiving new information makes me feel restless.
- 12. Watching television makes me nervous.
- 13. When on a date I find myself tense and self-conscious when listening to my date.
- 14. I enjoy being a good listener.
- 15. I generally find it easy to concentrate on what is being said.
- 16. I seek out the opportunity to listen to new ideas.
- 17. I have difficulty concentrating on instructions others give me.
- 18. It is hard to listen or concentrate on what other people are saying unless I know them well.
- 19. I feel tense when listening as a member of a social gathering.
- 20. Television programs that attempt to change my mind about something make me nervous.

## Informational Reception Apprehension Test-Listening

Directions: This questionnaire is composed of statements concerning your feelings about listening to others. Indicate if these statements apply to how you feel noting whether you (5) strongly agree, (4) agree, (3) are undecided, (2) disagree, (1) strongly disagree.

- \_\_\_ 1. While listening, I get nervous when a lot of information is given at once.
- \_\_\_ 2. I get impatient and anxious when listening to someone discuss theoretical, intellectual issues.
- \_\_\_ 3. I have avoided listening to abstract ideas because I was afraid I could not make sense of what was said.
- \_\_\_ 4. Many classes are annoying and uncomfortable because the teacher floods you with detailed information in the lectures.
- \_\_\_ 5. I feel agitated or uneasy when someone tells me there is not necessarily a clear, concrete way to deal with an important problem.
- \_\_\_ 6. While listening, I feel tense when I have to analyze details carefully.
- \_\_\_ 7. It is frustrating to listen to people discuss practical problems in philosophical and abstract ways.
- \_\_\_ 8. When I hear abstract material, I am afraid I will be unable to remember it very well.
- \_\_\_ 9. I experience anxiety when listening to complex ideas others tell me.
- \_\_\_ 10. When I listen to complicated information, I often fear that I will misinterpret it.
- \_\_\_ 11. I feel relaxed and confident while listening, even when a lot of information is given at once.
- \_\_\_ 12. Listening to complex ideas is a pleasant, enjoyable experience for me.
- \_\_\_ 13. When listening, I feel relaxed and confident that I can remember abstract ideas that are being explained.

## Informational Reception Apprehension-Intellectual Flexibility

- \_\_\_ 14. I enjoy listening to people discuss intellectual problems.
- \_\_\_ 15. I enjoy listening to abstract topics like politics, philosophy or religion where there are not clear, correct answers.
- \_\_\_ 16. I believe there are at least two sides to every argument and I enjoy listening to all sides.
- \_\_\_ 17. When I listen to theoretical or hypothetical material, I like to consider the issues and think about the ideas.
- \_\_\_ 18. It is fun and relaxing to seek out the opportunity to listen to new and different ideas.
- \_\_\_ 19. I get curious and actually enjoy listening to someone with a foreign accent.
- \_\_\_ 20. When others are talking, I enjoy “tuning in” to interpret the motives and emotions behind what is being said.

## Willingness to Listen (new)

Directions: The following twenty-four statements refer to the willingness to listen. Indicate in the space at the left of each item the degree to which the statement applies to you. 1=strong agree, 2=agree, 3=undecided, 4=disagree, 5=strongly disagree.

- \_\_\_ 1. I dislike listening to boring speakers.
- \_\_\_ 2. Generally, I can listen to a boring speaker.
- \_\_\_ 3. I am bored and tired while listening to a boring speaker.
- \_\_\_ 4. I will listen when the content of a speech is boring.
- \_\_\_ 5. Listening to boring speakers about boring content makes me tired, sleepy, and bored.
- \_\_\_ 6. I am willing to listen to boring speakers about boring content.
- \_\_\_ 7. Generally, I am unwilling to listen when there is noise during a speaker's presentation.
- \_\_\_ 8. Usually I am willing when there is noise during a speaker's presentation.
- \_\_\_ 9. I am accepting and willing to listen to speakers who do not adapt to me.
- \_\_\_ 10. I am willing to listen to speakers who do not do some adaptation to me.
- \_\_\_ 11. Being preoccupied with other things makes me less willing to listen to a speaker.
- \_\_\_ 12. I am willing to listen to a speaker even if I have other things on my mind.
- \_\_\_ 13. While being occupied with other things on my mind, I am unwilling to listen to a speaker.
- \_\_\_ 14. I have a willingness to listen to a speaker, even if other important things are on my mind.
- \_\_\_ 15. Generally, I will not listen to a speaker who is disorganized.
- \_\_\_ 16. Generally, I will try to listen to a speaker who is disorganized.
- \_\_\_ 17. While listening to a nonimmediate, nonresponsive speaker, I feel relaxed with the speaker.
- \_\_\_ 18. While listening to a nonimmediate, nonresponsive speaker, I feel distant and cold toward that speaker.
- \_\_\_ 19. I can listen to a nonimmediate, nonresponsive speaker.
- \_\_\_ 20. I am unwilling to listen to a nonimmediate, nonresponsive speaker.
- \_\_\_ 21. I am willing to listen to a speaker with views different from mine.
- \_\_\_ 22. I am unwilling to listen to a speaker with views different from mine.
- \_\_\_ 23. I am willing to listen to a speaker who is not clear about what he or she wants to say.
- \_\_\_ 24. I am unwilling to listen to a speaker who is not clear, not credible, and abstract.

## Willingness to Listen

Directions: Below are some situations in which a person might choose to listen or not to listen. Presume you have completely free choice. What percentage of time would you choose to listen in each type of situation? Indicate in the space at the left what percentage of the time you would choose to listen. Ranging from 0=never, to 100=always. You can stipulate any percentage between 0% and 100%.

- \_\_\_\_\_ 1. Listen to a friend give a presentation at a school function.
- \_\_\_\_\_ 2. Listen to a stranger give a sales presentation to you in your house.
- \_\_\_\_\_ 3. Listen to a stranger participate in a group discussion on TV.
- \_\_\_\_\_ 4. Listen to a stranger participate in a group discussion during lunch.
- \_\_\_\_\_ 5. Listen to an acquaintance give a presentation at a business meeting.
- \_\_\_\_\_ 6. Listen to a friend participate in a group discussion during a business meeting.
- \_\_\_\_\_ 7. Listen to friend talk to you before a meeting begins at school.
- \_\_\_\_\_ 8. Listen to an acquaintance participate in a group discussion on TV.
- \_\_\_\_\_ 9. Listen to a stranger give a formal presentation on TV.
- \_\_\_\_\_ 10. Listen to a stranger talk to you before a meeting begins at school.
- \_\_\_\_\_ 11. Listen to a stranger talk to you before a meeting begins at work.
- \_\_\_\_\_ 12. Listen to an acquaintance give a presentation at a school function.
- \_\_\_\_\_ 13. Listen to a friend participate in a group discussion during a school meeting.
- \_\_\_\_\_ 14. Listen to an acquaintance on the phone.
- \_\_\_\_\_ 15. Listen to a stranger on a plane.
- \_\_\_\_\_ 16. Listen to a stranger give a presentation at a business meeting.
- \_\_\_\_\_ 17. Listen to an acquaintance participate in a discussion during a business meeting.
- \_\_\_\_\_ 18. Listen to an acquaintance on a plane.
- \_\_\_\_\_ 19. Listen to a stranger on the phone.
- \_\_\_\_\_ 20. Listen to a friend give a sales presentation to you in your home.
- \_\_\_\_\_ 21. Listen to a friend participate in a group discussion on TV.
- \_\_\_\_\_ 22. Listen to an acquaintance participate in a group discussion during lunch.
- \_\_\_\_\_ 23. Listen to a stranger give a presentation at a school function.
- \_\_\_\_\_ 24. Listen to an acquaintance participate in a discussion during a school meeting.
- \_\_\_\_\_ 25. Listen to an acquaintance talk to you before a meeting begins at work.
- \_\_\_\_\_ 26. Listen to a friend on a plane.
- \_\_\_\_\_ 27. Listen to a friend give a formal presentation on TV.
- \_\_\_\_\_ 28. Listen to a stranger participate in a discussion during a business meeting.
- \_\_\_\_\_ 29. Listen to an acquaintance talk to you before a meeting begins at school.
- \_\_\_\_\_ 30. Listen to a friend participate in a group discussion during lunch.
- \_\_\_\_\_ 31. Listen to an acquaintance give a sales presentation to you in your home.
- \_\_\_\_\_ 32. Listen to a friend on the phone.
- \_\_\_\_\_ 33. Listen to a friend talk to you before a meeting begins at work.
- \_\_\_\_\_ 34. Listen to a friend give a presentation at a business meeting.
- \_\_\_\_\_ 35. Listen to a stranger participate in a group discussion during a school meeting.
- \_\_\_\_\_ 36. Listen to an acquaintance give a formal presentation on TV.