

Chapter Three
Methodology
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I. Overview of the study

In this study my primary focus was on how foreign students learning English can overcome the fear of speaking in a foreign language as manifested in the experience of language anxiety. My research rests on the belief that many students experience debilitating levels of language anxiety in the classroom. I am particularly interested in what causes these feelings of language anxiety in the student and whether the use of humanistic techniques such as experiential awareness (increasing students' awareness of the language learning process, correcting erroneous beliefs about language learning and keeping a journal) and group awareness (creating a sense of belonging to a supportive community working towards a common goal, increasing student's opportunities for oral communication and providing a supportive framework for oral preparation and presentation) in the language classroom can serve to alleviate feelings of language anxiety.

The three research questions and associated hypotheses were as follows:

Research question 1 – Does the use of selected humanistic techniques (experiential awareness and group awareness) result in a decrease in anxiety levels associated with oral performance in the TESOL classroom?

My hypothesis was that the use of selected humanistic techniques results in a decrease in anxiety levels associated with oral performance in the TESOL classroom.

Research question 2 – What is the effect of language anxiety associated with oral performance in the TESOL classroom on the students' final results in the course as measured by two written examinations and an oral examination?

My hypothesis was that lower anxiety levels would not affect the cognitive learning process significantly and students in the experimental and control groups would receive similar results for the two written examinations. I hypothesised that students in the experimental groups would, however, receive higher results for the oral examination due to the intervention of humanistic techniques.

Research question 3 – What is the effect of language anxiety associated with oral performance in the TESOL classroom on drop out rates from the course?

My hypothesis was that drop out rates for the experimental groups (those with humanistic intervention) would be lower than drop out rates for the control groups.

This research study utilised aspects of both qualitative and quantitative methodology and was conducted in a real-life classroom over the period of one year. Nunan (1992:91-2) describes a survey of research in which it was discovered that of fifty classroom-oriented investigations ‘only fifteen took place in genuine classrooms where actual teaching occurs’. Researchers may avoid real-life classrooms as their research context as it is difficult to control the many variables that threaten the internal validity of the study; however, teachers who are also researchers create a link between learners, teachers and research. It is imperative that classroom-based research is conducted in order to provide valuable information for teachers on how to improve student achievement in language classrooms and to ‘contribute to our general research knowledge about how language classrooms work’ (Allwright in Nunan 1992:109).

II. Details of the study

A. Approach

This study used an analytic approach which aims to identify and investigate a single factor or cluster of factors which are constituents of a major system (Seliger and Shohamy 1989). In this study two variables were closely analysed:

- Language anxiety associated with oral communication in a foreign language (dependent variable)
- The influence of humanistic techniques on language anxiety levels (independent variable)

Seliger and Shohamy (1989) state that experimental research projects must utilise an analytic approach as the degree of manipulation and control of the research context are important measures of the internal and external validity of the research.

B. Purpose

This study had a deductive purpose which was to test specific hypotheses about language anxiety associated with oral communication in the TESOL classroom and the influence of humanistic techniques on that anxiety. Seliger and Shohamy (1989) state that deductive research begins with a preconceived notion or expectation and is, therefore, hypothesis-driven.

C. Design

Quasi-experimental research is characterised by the existence of pre and post treatment, the presence of experimental and control groups but no random assignment of subjects to groups (Seliger and Shohamy 1989). Quasi-experimental designs are constructed from situations which already exist in the real world and are considered to be more representative of the conditions found in educational contexts (Seliger and Shohamy 1989). These research designs have two main advantages which are:

- The research is more likely to be generalisable to a wider population as it is conducted in conditions similar to those found in real-life educational contexts.
- It is easier for the researcher to gain access to subjects and conduct the research as the research design is less intrusive and disruptive (Seliger and Shohamy 1989).

This research project was designed as a separate sample pre-treatment/post-treatment design which was necessary because the researcher had access to only one group of subjects at a time. The treatment was administered to one group and its performance was compared with another seemingly equivalent group. Each group (experimental and control) was treated as separate and the pre-treatment/post-treatment design was repeated over the period of one year at the end of which the results of the three groups were pooled and treated as one experimental and one control group. The researcher,

therefore, replicated the same experiment each time with a different class, the population characteristics of which were assumed to be the same. This method has four advantages:

- It allowed the researcher to study a reasonably large population which overcame the problem of lack of access to large groups of subjects at one time (Seliger and Shohamy 1989).
- It allowed the researcher to study the phenomenon of language anxiety and the influence of humanistic techniques over a reasonably long period of time.
- The researcher was able to conduct inter-group comparisons which served as a control for extraneous variables as it is unlikely that the same event could have affected three different groups (Seliger and Shohamy 1989).
- The design of the research required the least amount of disruption of the learning environment as it involved methodological components which were integrated into the course such as the journal writing and it did not involve the reassignment of teachers as the researcher was also the level five teacher over the one year research period.

The degree of control and manipulation of the study was measured in terms of:

1. Restriction of focus

The research design was restricted to a narrow focus, that is: the effect of humanistic techniques/no humanistic techniques on the phenomenon of language anxiety associated with oral performance. This narrow focus led to higher levels of control over the research environment and facilitated the use of deductive hypothesis-testing (Seliger and Shohamy 1989).

2. Control of variables

Research designs with high levels of control run the risk of manipulating the research environment to such an extent that the results become a function of the manipulation rather than an outcome of the treatment. In research designs such as this one the

internal validity is problematic as there is no way of knowing whether the groups were equal before the treatment and differences in performance may be due to group differences and not the experimental treatment. In this study, the researcher conducted a thorough literature review and discovered that there is as yet no published research which shows a relationship between language anxiety and different L1 backgrounds, levels of motivation (both highly motivated and demotivated students can experience language anxiety) or length of exposure to the target language. These variables were, therefore, unlikely to affect the results of the study. The experimental and control groups received instruction using the same upper-intermediate syllabus at the same time of day which meant that different course work and fatigue could be ruled out as intervening variables. The researcher was also the instructor of all the groups which meant that different instructor characteristics could not influence the results. Furthermore, three different groups were studied and intergroup comparisons were made which served to control the influence of intervening variables.

3. Subject awareness

In order for data to be representative of 'real-life' situations, subjects should be unaware that they are involved in a research study as this awareness can lead to subjects changing their behaviour which serves to distort the phenomenon being studied (Seliger and Shohamy 1989). In this research project, subjects were not informed of the details of the objectives of the research but were told that they would be asked to fill in questionnaires, participate in interviews and keep journals (experimental groups) for the purpose of highlighting which aspects of language courses caused feelings of anxiety, specifically anxiety centring on oral communication so as to improve the course offering at Wits Language School. As the focus was not clear to the participants it is likely that the data collected was representative of their true feelings and perceptions at the time.

4. Researcher subjectivity

The researcher remained objective at all times during the research period and no attempt was made to persuade students to adopt viewpoints different from those they

held. In terms of the analysis and interpretation of the questionnaires, examination results and drop out rate forms, the collected data was quantifiable and could be interpreted in an objective manner by means of statistical analysis. The journals and oral interviews, however, required a more inferential approach and one in which the researcher's interpretive ability and judgement came into play. Specific procedures were put into place to ensure that patterns and themes in the data were confirmed (these procedures are discussed in the relevant section on journals and oral interviews).

D. Subjects

The research took place over a period of one year. The study was limited to full-time students registered at Wits Language School for a level five or Upper-Intermediate English as a foreign language course. The students were from a variety of countries and language backgrounds. At the time of the study, all students included in the samples had spent less than five years living in an English speaking country.

The following students were excluded from the study:

- Students who registered for less than two months or one complete level five course.
- Students who had lived in South Africa or another English speaking country for longer than five years.

E. Ethical considerations

The following ethical guidelines were put into place for the research period:

1. The dignity and wellbeing of students was protected at all times.
2. The research data remained confidential throughout the study and the researcher obtained the students' permission to use their real names in the research report.

III. Methodology

A. Specific treatment of data for each research question

1. Research question 1: Does the use of selected humanistic techniques (experiential and group awareness) result in a decrease in anxiety levels associated with oral performance in the TESOL classroom?

a. Data needed

i. The results of the five questionnaires: the BALLI, the PRCA, the FLAS, the Mid-course and Post-course questionnaires.

Questionnaires enable researchers to collect data in field settings, allow researchers to focus on specific areas of interest and result in data which is more amenable to quantification than discursive or descriptive data (Nunan 1992). In this research study, students were asked not to put their names on the questionnaires in order to ensure anonymity and increase the likelihood that the data obtained was an accurate reflection of their feelings at the time.

ii. The results of the learner journals:

The keeping of learner diaries or journals is an introspective method which has been used in 'investigations of second language acquisition, teacher-learner interaction (and) teacher education' (Nunan 1992:118). The data consist of verbal descriptions of the student's emotional state which are then analysed in order to identify patterns, themes and significant events. Diary and journal studies yield rich, qualitative data which provide 'valuable insights into...social and psychological aspects of language development, and in most of them affective factors emerge as...significant in language learning' (Nunan 1992:121).

iii. The results of the mid and post course oral interviews:

The oral interview has been widely used as a research tool in applied linguistics (Nunan 1992). All subjects were provided with a brief explanation of the purpose of the interview and permission was obtained to use the data given to the researcher. Both the mid and post course interviews are structured interviews in which the questions were predetermined by the researcher. The questions were asked in a predetermined order which gave the researcher a high level of control over the interview. The researcher chose to take notes rather than record the interviews as subjects either refused to grant the researcher permission to record the interview or stated that they felt very uncomfortable with the presence of the tape recorder. The researcher ensured that the exact responses to the questions were noted down and confirmed these responses with the subjects.

b. Treatment and interpretation of the data

i. The Beliefs about Language Learning Inventory (Horwitz 1988)

Students and teachers differ in their perceptions of the classroom environment and students often have preconceived notions and unrealistic expectations about language learning. The BALLI (Horwitz 1988) is used as a diagnostic tool to correct erroneous beliefs which can be detrimental to the student's progress in learning a language. The BALLI was administered to each group twice, once at the beginning of the course and again at the end of the course. The students in the experimental groups were given the benefit of a BALLI discussion in which erroneous beliefs and unrealistic expectations were countered with evidence from second language learning research. These students showed a change in their responses on the second administration of the BALLI. Students in the control groups did not have the benefit of a BALLI discussion and their responses tended to be similar or the same as on their first attempt.

The BALLI consists of 34 items designed to assess students' beliefs and opinions about language learning in five different areas:

- Difficulty of language learning
- Foreign language aptitude
- The nature of language learning
- Learning and communication strategies
- Motivations and expectations (Horwitz 1988)

Students were asked to read each statement and indicate a response ranging from strongly agree to strongly disagree. A single composite score is not derived from the BALLI as individual items yield descriptions of discrete student conceptions of language learning (Horwitz 1988). The responses for each item are added up and then divided by the number of subjects in the sample in order to obtain a percentage of responses for each item. The final results for each item are expressed as a percentage which is rounded off to the nearest whole number (Horwitz 1988).

The structure of the BALLI is as follows:

Difficulty of language learning:

Items 4 and 15 –concerned with the general difficulty of learning a foreign language.

Items 21, 25 and 34 –concerned with the difficulty of different language skills.

Item 5 – concerned with students' expectations of success

Foreign language aptitude:

Items 1, 2, 6, 10, 11, 16, 19, 22, 30 and 33 – concerned with the belief in the existence of specialised abilities and beliefs about the characteristics of successful and unsuccessful language learners.

The nature of language learning:

Item 3 – concerned with students' perceptions of the structural differences between languages.

Items 8, 12 and 13 – concerned with the role of culture contact and language immersion.

Items 7, 17, 23 and 28 – concerned with the students' conception of the focus of the language learning task.

Item 27 – concerned with the students' belief that language learning is different from other types of learning.

Learning and communication strategies:

Items 9 and 14 – concerned with communication strategies.

Items 18 and 26 – concerned with learning strategies.

Motivations and expectations:

Items 20, 24, 29, 31 and 32 – concerned with the desires and opportunities students associate with learning the target language (Horwitz 1988).

In terms of data presentation, five questions, which were felt to be indicative of feelings of language anxiety, were selected from the BALLI. The questions are presented in tabular form showing a comparison between experimental and control groups for administration one and two of the BALLI. The researcher felt that a tabular comparison of five selected questions would be sufficient to determine whether feelings of anxiety decreased in the experimental group and remained the same or increased in the control group. The overall group tables for BALLI administration one and two are presented in the appendix.

ii. The Personal Report of Communication Apprehension

The PRCA is widely regarded as a reliable and valid measure of oral communication apprehension (Mc Croskey 1977). The internal reliability estimates range between .92 and .96 and test-retest reliability over a six-week period was .82 (Mc Croskey 1977). In this study, the PRCA was used in both experimental and control groups as a means of identifying students who were apprehensive about oral communication and were likely to experience language anxiety. The main purpose was to determine incoming

communication apprehension levels as communication apprehension was identified as one of the major components of language anxiety (Horwitz 1988). In the experimental groups, students participated in the humanistic interventions and were provided with a significant amount of encouragement and a secure, nurturing environment. In the control groups, the students who were identified as experiencing high levels of communication apprehension did not receive any special attention or treatment.

The PRCA consists of 24 statements relating to feelings about group, meeting, dyadic and public communication. Students were asked to read each statement and indicate a response ranging from strongly agree to strongly disagree. Each response corresponds to a number ranging from 1 – 5. The scoring procedure for the PRCA is as follows:

Group discussion 18+ scores for items 2, 4 and 6 – scores for items 1, 3 and 5.

Meetings 18+ scores for items 8, 9 and 12 – scores for items 7, 10 and 11.

Interpersonal/Dyadic 18+scores for items 14, 16 and 17 – scores for items 13, 15 and 18.

Public speaking 18+ scores for items 19, 21 and 23 – scores for items 20, 22 and 24.

The four sub scores are added together and the total score should range between 24 and 120. Any sub score above 18 indicated a degree of communication apprehension in that area.

It should be noted that the PRCA is normally used to determine the communication apprehension levels in mother tongue speakers of a language. The fact that the students in this study were communicating in a foreign language resulted in communication apprehension levels which were higher than the norms provided by Mc Croskey (1977).

The PRCA results were subjected to statistical analysis in order to determine whether students in the experimental and control groups experienced similar initial levels of communication apprehension which provides statistical support to the proposal that the two groups were equivalent in terms of initial apprehension levels. The results of the

statistical analysis are presented in tabular form. The PRCA table with the raw scores of the experimental and control group students is presented in the appendix.

iii. Foreign Language Anxiety Scale

The Foreign Language Anxiety Scale was developed as a standard instrument to test an individual's response to language learning (Horwitz and Young 1991). The FLAS assesses the degree of anxiety experienced by the individual as reflected in negative performance expectancies and social comparisons, psycho-physiological symptoms and avoidance behaviour (Horwitz and Young 1991). The items are reflective of communication apprehension, test anxiety and the fear of negative evaluation (Horwitz and Young 1991). The reliability and validity of the FLAS have been proven (Horwitz and Young 1991). The FLAS has an internal reliability of .93 with all items producing significant item-total scale correlations. Test-retest reliability over a period of eight weeks yielded an $r = .83$ (Horwitz and Young 1991). The FLAS is, therefore, considered to be a suitable instrument for identifying students with debilitating language anxiety. In this research study, the FLAS was used to determine the initial anxiety levels of students.

The FLAS consists of 33 items reflective of communication apprehension, test anxiety and the fear of negative evaluation (Horwitz and Young 1991). Students were asked to read each statement and indicate a response ranging from strongly agree to strongly disagree. The FLAS does not yield a single score as scores for each item are added up and converted to a percentage calculated in terms of the number of respondents. The final scores for each item are expressed as a percentage rounded off to the nearest whole number.

In terms of data presentation, five questions which were felt to best represent feelings of language anxiety were selected from the FLAS and five questions which were felt to be relatively equivalent were selected from the mid and post course questionnaires respectively. The three questionnaires correspond to the time periods of before, during and after the course as the FLAS was administered in the first week, the mid course

questionnaire in the fourth week and the post course questionnaire at the end of the course. The researcher felt that a tabular comparison of the selected questions would be sufficient to determine whether feelings of language anxiety decreased in the experimental group and remained the same or increased in the control group. The overall FLAS, Mid Course and Post Course questionnaire results for the experimental and control groups are presented in the appendix.

iv. Mid-Course Questionnaire

The mid-course questionnaire for the experimental groups was developed by the researcher and consists of five sections which are: language anxiety, classroom activities, instructor behaviour, group awareness and experiential awareness. The language anxiety section contains questions based on those in the FLAS and was designed to measure anxiety levels at the mid-course point. Classroom activities are often the source of anxiety (Young 1991) and the items cover a wide range of daily and weekly activities that take place in a language classroom. It is well-documented that instructor behaviour can increase or decrease anxiety levels (Young 1991). The purpose of this section was to determine what type of behaviour students perceived as the ideal for a low-anxiety learning experience. The two sections on the humanistic techniques were included in order to assess students' perceptions of these techniques at the mid-course point. The mid-course questionnaire for the control groups was developed by the researcher and consists of three sections which are: language anxiety, classroom activities and instructor behaviour. The rationale behind these sections is the same as for the experimental groups, that is: to determine anxiety levels at the mid-course point in terms of general language anxiety, classroom activities and perceptions of instructor behaviour.

Students were asked to read each statement and indicate a response ranging from strongly agree to strongly disagree. The mid-course questionnaire does not yield a single score as scores on each item are converted to a percentage calculated in terms of the number of respondents. The final results for each item are expressed as a percentage rounded off to the nearest whole number.

v. Post-Course Questionnaire

The post-course questionnaire for the experimental and control groups was developed by the researcher and consists of the same sections and questions as the mid-course questionnaire. The only difference is that the wording of the questionnaire was changed to the past tense as the questionnaire was designed to sum up the students' entire experience in the language classroom at the post-course point.

Students were asked to read each statement and indicate a response ranging from strongly agree to strongly disagree. The post-course questionnaire does not yield a single score as scores on each item are converted to a percentage calculated in terms of the number of respondents. The final results for each item are expressed as a percentage rounded off to the nearest whole number.

vi. Journals

The use of learner journals enabled students to articulate problems they experienced with oral communication and assisted them in becoming more responsible for their language learning experience. The researcher read the weekly journals and identified common patterns and themes in the journals. Extracts of students' actual writing are also presented in order to support the selection of particular patterns and themes.

Journal studies are data collection procedures of low explicitness and rely to a certain extent on the researcher's judgement. Two procedures were used by the researcher to guard against threats to the integrity of the data:

- Interrater reliability was established by allowing two different colleagues to examine the journal data collected from each experimental group in order to establish agreement regarding the selection of the journal themes (Seliger and Shohamy 1989).
- Regrounding (a type of test-retest reliability) was used by the researcher. The researcher returned to the data a second time and compared the

patterns and themes with those obtained from the first viewing in order to confirm initial conclusions (Seliger and Shohamy 1989).

The journal data is presented in terms of overall themes that emerged from the journals supported by quotes from students' journal entries. The themes are limited to those that directly pertain to students' perceptions of feelings of language anxiety associated with the act of speaking in another language.

vii. Mid-Course Oral Interviews

Mid-course oral interviews took place with selected students in the experimental and control groups who had been identified by means of the questionnaires as experiencing language anxiety. The mid-course oral interviews took place during week four of the course and were designed to measure students' anxiety levels in terms of the course in general, classroom activities and instructor behaviour at the mid-course point.

The researcher took notes during the interview and compiled the full interview directly after it had taken place. The researcher then conducted an interpretive analysis of the oral interviews and identified common patterns and themes. Extracts of students' actual interviews are also presented in order to support the selection of particular patterns and themes.

Interviews are open to bias and distortion and the researcher controlled this by means of interrater reliability and regrounding as used in the analysis of the journal themes and patterns. The researcher ensured that the subjects understood the questions and noted down exactly what the subjects said in response to the questions. At no time did the researcher ask leading questions or attempt to shape responses in the desired direction.

viii. Post-Course Oral Interviews

Post- course oral interviews took place with selected students in the experimental and control groups who had been identified by means of the questionnaires as experiencing language anxiety. The post- course oral interviews took place during the final week of

the course and were designed to measure students' anxiety levels in relation to the course in general, classroom activities and instructor behaviour at the post course point.

The researcher took notes during the interview and compiled the full interview directly after it had taken place. The researcher then conducted an interpretive analysis of the interviews and identified common patterns and themes. Extracts of students' actual interviews are also presented in order to support the selection of particular patterns and themes. As in the mid- course oral interviews, the researcher attempted to control bias and distortion by means of interrater reliability and regrounding.

The mid and post course oral interview data is presented in terms of overall themes which emerged from the oral interviews. The data is supported by quotes from students. The themes discussed are limited to those directly concerned with feelings of anxiety regarding oral communication in another language.

2. Research question 2: What is the effect of language anxiety associated with oral performance in the TESOL classroom on the students' final results in the course as measured by two written examinations and an oral examination?

a. Data needed:

- i. The results of the two written examinations
- ii. The result of the oral examination

b. Treatment and interpretation of the data

i. Written examinations

The two written examinations were compiled by the researcher and are based on work covered in the course book. Both written examinations consist of a reading comprehension exercise, grammar and vocabulary questions and a short composition. Each written examination is two hours long. The first written examination was administered in week four of the course and the second written examination was administered in the final week of the course.

The written examination results were subjected to statistical analysis in order to determine that there was no difference between the experimental and control groups in terms of the results achieved in the written examinations. The results of the statistical procedures are presented in tabular form. The raw scores that experimental and control group students obtained in the examinations are presented in the appendix.

ii. Oral Examination

The oral examination topics were chosen on the basis of being important themes in the course book. A list of oral examination topics was given to students in the experimental and control groups in week four of the course which gave students ample time to prepare their oral presentation. In the experimental groups, students presented their orals in pairs, then in small groups and finally presented their oral to the class. By the time of the actual oral examination, these students had presented their oral three times. Students in the control groups did not receive the opportunity to practice their oral presentation in the classroom.

The oral examinations were presented to a panel consisting of the researcher and two EFL instructors in order to ensure an objective assessment of the students' abilities.

The oral presentations were scored according to the following criteria:

- Organisation of ideas and logical presentation (10)
- Pronunciation (10)
- Range of vocabulary (10)
- Grammatical correctness (10)
- Presentation (tone, body language, confidence) (10)

The student's final score out of 50 marks was then converted to a percentage.

The oral examination results were subjected to statistical analysis in order to determine whether there was a statistically significant difference between the experimental and control groups for the oral examination results. The results of the statistical procedures

are presented in tabular form. The raw scores that experimental and control group students obtained in the oral examination are presented in the appendix.

3. Research question 3: What is the effect of language anxiety associated with oral performance in the TESOL classroom on drop-out rates from the course?

a. Data needed

i. The results of the drop-out rate interview.

b. Treatment and interpretation of the data

i. Drop out rate interview

Students in experimental and control groups who stopped attending the course were contacted telephonically. A short telephonic interview consisting of a set format of questions was conducted in order to determine the student's reasons for dropping out of the course.

The drop out rate data is presented in the appendix in tabular form detailing the number of experimental and control group students who dropped out of the course and their stated reasons for doing so.

IV. Reliability

Reliability refers to the consistency of the results obtained from a research study (Nunan 1992). This research study contains a significant amount of triangulation which entailed the researcher using a variety of methods, both quantitative and qualitative, to collect data. The same pattern or example of behaviour was sought in different sources which increased the reliability of the study (Seliger and Shohamy 1989)

A. Internal reliability

The data from the questionnaires, written and oral examinations and drop-out rate forms was easily quantifiable as the data was not open to subjective interpretation. The

researcher believes that an independent researcher, on reanalysing the data, would come to the same conclusions regarding the data.

The data obtained from the journals and the oral interviews is qualitative data with low explicitness which was open to a more subjective interpretation. The researcher used two techniques to protect the integrity of the data:

- Inter-rater reliability (Seliger and Shohamy 1989) – The data obtained from the journals and oral interviews was given to two colleagues who examined the data to determine whether they could identify the same patterns and themes in the data as the researcher had originally identified.
- Regrounding (Seliger and Shohamy 1989) – The data obtained from the journals and oral interviews was analysed a second time and the patterns and themes were compared with the results obtained the first time in order to confirm the original findings.

B. External reliability

The questionnaires, written and oral examinations and drop-out rate forms are relatively stable instruments and were easily quantifiable. The researcher believes that if an independent researcher replicated this study using the same data collection instruments and a similar sample of foreign students learning English, the researcher would come to the same conclusion.

The data obtained from the journals and oral interviews revealed patterns and themes which are common to any sample of adult foreign language students learning English. If an independent researcher were to use these data collection methods and adhere to the processes of inter-rater reliability and regrounding, the researcher would be likely to reach the same conclusion.

It should be noted that small samples tend to affect external reliability. The researcher, therefore, collected the data for each separate group so as to build numbers and

presented the data for the overall experimental and control groups so as to counteract the effect of small sample sizes.

V. Validity

Validity refers to the extent to which a research study actually investigates what the researcher claims to investigate (Nunan 1992).

A. Internal validity

There are several factors which influence the internal validity of a research study:

1. Subject variability

In order for a study to be generalisable to a wider context, it must be possible to assume that the sample used in the research is representative of the general population to which the research results would apply (Seliger and Shohamy 1989). In this research context, it was not possible to randomly assign subjects to different groups so the researcher ensured that the following were in place to guard against threats to internal validity in the form of subject variability:

a. A thorough literature review was conducted to ensure that there is as yet no published research showing a relationship between feelings of language anxiety and first language background, age and high or low motivation. Campbell (in Young 1999) conducted a study on the relationship between gender and language anxiety and discovered that after sixty hours of instruction, a considerable number of male students in intensive language courses were more anxious about using the target language than their female counterparts. As the context of the study was that of foreign language courses such as Arabic and French and the study was conducted with American military personnel, the researcher did not feel that the results were generalisable to the context of the present study.

- b. Inter-group comparisons were made and an overall comparison was made between all the experimental and control groups.
- c. The timing of the questionnaires, written and oral examinations and the oral interviews was identical for all groups.
- d. All groups were taught by the same teacher, therefore, different teacher characteristics could not influence the results obtained.

2. Size of subject population

Seliger and Shohamy (1989) state that the smaller the number of subjects, the more the study is susceptible to biases created by an over-representation of some subject characteristic. The researcher acknowledges that the size of each individual group is small. However, all the experimental and control groups are joined together at the end of the study to create two large groups which rules out the influence of individual variability.

3. Time allotted for data collection

The data was collected over a period of one year which, in the researcher's opinion, allowed sufficient time for significant patterns, themes and trends to emerge in the data (Seliger and Shohamy 1989).

4. History, attrition and maturation

History refers to the possible negative effects of the passage of time on the study (Seliger and Shohamy 1989). In this research study, each group studied English for a period of eight weeks which means that no student participated in the study for an extended period of time. Attrition refers to changes in the composition of the sample being studied over time (Seliger and Shohamy 1989). Attrition had no effect on the eight week time period. If students dropped out of the course it was noted on the drop-out rate interview form. Maturation refers to cognitive and developmental changes in the sample being studied (Seliger and Shohamy 1989). As this research study involved adults whose language acquisition was unlikely to be affected by maturational development, maturation did not affect this study.

5. Instrument or task sensitivity

All the data collection instruments were incorporated into the course such as the questionnaires, interviews and journals. Students were given the impression that the results of these items were to be used for feedback purposes in order to improve the course offering. The researcher does not believe that any student falsified a response because they became aware that they were participating in a research study.

B. External validity

External validity refers to the generalisability of the research results from the sample studies to a wider population. External validity is influenced by a number of factors:

1. Population characteristics

The sample population needs to possess the same or similar characteristics as the wider population to which the research findings will be applied. In this research study, the sample population consisted of adults from a variety of first language backgrounds who were voluntarily learning English as a foreign language. The researcher believes that the sample population was clearly defined and that the findings can be applied to other populations of adults learning English as a foreign language. One should be cautious, however, of applying the findings to children learning English as a foreign language, adults learning languages other than English and adults who are forced to study a language as a compulsory course requirement.

2. Interaction of subject selection and research

Seliger and Shohamy (1989) state that there is a threat to external validity when using paid or volunteer subjects as they may not be representative of the wider population to which the research findings are generalised. In this research study, the subjects were neither paid nor volunteer subjects. There was, therefore, no danger of subjects wanting to participate for monetary reasons or of subjects distorting the data in order to attract attention to themselves.

3. The descriptive explicitness of the independent variable

In this research study, the independent variable was explicitly described which makes it easier for the research findings to be generalised to a wider population (Seliger and Shohamy 1989).

4. The effect of the research environment

Seliger and Shohamy (1989) state that subjects who are aware that they are participating in a research study may change their behaviour which leads to distorted results. In this research project, all the data collection instruments were included as part of the course and students were given the impression that these were to be used for feedback purposes. The researcher does not believe that any student distorted their responses because they became aware that they were participating in a research project.

5. Researcher effects

The researcher did not attempt to influence students' to change their responses on the questionnaires, in the journals or during the oral interviews. All data collected was analysed in an objective manner and the findings reflect the actual data obtained from the subjects (Seliger and Shohamy 1989).

6. Data collection methodology

The researcher used a combination of quantitative and qualitative methodology in this research project. The data collection instruments differ qualitatively from one another but each data collection instrument and the data it yielded provided a particular perspective on the research questions. The combination of methods yielded a composite picture of the phenomenon of language anxiety (Seliger and Shohamy 1989).

7. The effect of time

The data collection phase took place over a period of one year which is sufficient time to determine the existence of significant patterns and trends. Each group participated in the research for eight week periods which was sufficient time to gather the data and

determine the effects of humanistic techniques. The researcher does not believe that time had a detrimental effect on the research project.

