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EFFECTS OF GUIDED IMAGERY EXERCISES VERSUS WRITING AND EDITING EXERCISES ON WRITING ANXIETY AND SELF-PERCEPTION OF WRITING ABILITY OF HEALTH PROFESSIONALS

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

Lilless McPherson Shilling, A.B., M.A.

* * * * *

The Ohio State University

1983

Reading Committee: 

Paul V. Peterson
I. Keith Tyler
J. Robert Warmbrod
Frank Zidonis

Approved By

Educational Communications
DEDICATION

To my father, J. James McPherson

You always believed in me
This study was conducted to determine the effects of guided imagery exercises, when compared with writing and editing exercises, on reducing writing anxiety and improving self-perception of writing ability of health professionals.

A nonrandomized control group pretest-posttest design was used. The treatment period lasted four weeks, with sessions meeting two and one-half hours a week. The researcher conducted two continuing education workshops entitled "How to Reduce Writing Anxiety and Improve Writing Skills." The workshops were similar except for a one-half hour segment each week during which either a guided imagery or writing and editing exercise was used. The workshops also included other techniques for reducing writing anxiety (for example, peer evaluation and sharing of writing problems). Treatments were randomly assigned to workshop groups. The two treatment groups were compared with each other and with a control group. Subjects were 74 adults from Central Ohio, about equally divided between the three groups.

The primary data collection instruments were the Daly-Miller Writing Apprehension Test and the Shilling Writing Ability Self-Assessment. The instruments were administered at the beginning and end of the workshops and four weeks later.
T-tests indicated that the guided imagery and writing and editing groups significantly reduced their writing anxiety and improved their self-perception of writing ability. The effects lasted at least a month after the workshops ended. The control group showed no significant change.

Although the results favored the guided imagery group, analysis of covariance indicated the posttest means for the two treatment groups were not significantly different. The treatment groups differed significantly from the control group at posttest time.

The researcher concluded that it is possible to reduce writing anxiety and improve self-perception of writing ability in a relatively short period, that guided imagery and writing and editing exercises are almost equally effective, that the positive results were probably due to the workshops as a whole, rather than to any one particular technique, and that a program to change attitudes toward writing should include a variety of techniques.
ACKNOWLEDGEMENTS

I feel like I should tear off little pieces of my diploma and spread them around as thanks to all those who helped me complete this degree.

My deep appreciation goes to my adviser, I. Keith Tyler, who has encouraged me throughout the seven years I took to complete the doctoral program. At the time he agreed to be my adviser, Professor Tyler had recently retired from teaching. Rather, he had retired from being paid for it. He remains a devoted educator.

I also thank the other members of my committee -- master teachers all. Paul Petersen saw me through a master's and a Ph.D. Robert Warnbrod helped make the results chapter infinitely more readable than it was when he first saw it. Beth Nismar expressed interest in the topic and made me feel it and I were worthwhile. Frank Zidcnis served with grace and humor.

Chris Hayes, Ed Lotto, Cheryl Seitz, and Maura Taaffe, writing teachers at Ohio State University, helped validate the Writing Ability Self-Assessment instrument I developed.

Fran Blake, Sri Ban, Fred Buland, and Larry Sachs helped me overcome my computer illiteracy and statistics anxiety.
Professor Don Sanders and his classes of graduate students listened and made suggestions during the early uncertain stages.

Norna Gilliam also encouraged me during the early stages. She made me do the first literature search.

The participants in my classes and workshops helped me learn about writing. Three students, Jan Keller, Lori Bitemauer, and Cindy Wood, were particularly helpful as research assistants.

Mary Ellen Belton and Rita Patton cheerfully gave excellent secretarial help.

The Research Committee of the School of Allied Medical Professions at Ohio State University granted me Departmental Research Contingency Funds to help pay for the study.

My friends have been wonderfully supportive. They helped me move through my own anxiety about writing the dissertation. Midge Brunner helped plan and coordinate the workshops. Melissa Widner was there the whole way. She reminded me that the dissertation was not an albatross, but rather a challenge I chose to tackle. Sharon Gutterman contributed a quick mind, humor, vitality, and warm support. Other friends who helped along the way were Ida Balasz, Cheryl Lowry, and Jane Haye.

I also thank my family -- the Shillings and the McPhersons -- all encouraged me. My mother, Louie Pendleton McPherson, helped instill a love for words in me. My fa-
ther, J. James McPherson, who died in 1972, was a pioneer in educational communications. I hope to be like him.

And, finally, I thank those family members who lived with me. My husband, Hackie, saw me through it all and willingly took on many roles to give me time. My daughter, Paz, my greatest "achievement," helped me keep perspective. Her presence reminded me of life's most important things. My working on this dissertation had an effect on her too. At the age of 4 Paz developed her own definition of research: "Research is when you study and write -- a lot."
VITA

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>DEDICATION</th>
<th>ii</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>v</td>
</tr>
<tr>
<td>VITA</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xiv</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xv</td>
</tr>
</tbody>
</table>

## CHAPTER 1. INTRODUCTION

- Background .......... 1
- Statement of the Problem .......... 5
- Development of the Problem and Methodology .......... 7
  - Research Hypotheses and Research Questions .......... 8
  - Writing Anxiety .......... 9
  - Self-Perception of Writing Ability .......... 9
  - Writing Anxiety and Self-Perception of Writing Ability .......... 10
- Instrument Development .......... 10
- Workshop Development .......... 11
- Pilot Trials .......... 11
- Recruitment of Subjects .......... 11
- Design .......... 12
- Data Collection .......... 12
- Data Analysis .......... 13
- Significance of the Study .......... 14
- Limitations .......... 15
- Definitions .......... 17
- Summary of Chapter .......... 19

## CHAPTER 2. REVIEW OF RELATED LITERATURE

- Related Literature on Writing Anxiety .......... 22
- Definition of Writing Anxiety .......... 23
- Causes of Writing Anxiety .......... 24
- Characteristics of High and Low Writing Anxiety .......... 31
- Relationship of Writing Anxiety to Other Factors .......... 33
  - Academic and Occupational Decisions .......... 33
  - Writing Quality .......... 35
  - Self-Perception of Writing Ability .......... 41
### Treatments for Writing Anxiety

- Related Literature on Guided Imagery
- Definition and Description of Guided Imagery
- History of Guided Imagery
- Recent Applications of Guided Imagery
  - Psychotherapy, Counseling, and Health Care
  - Career Counseling
  - Athletics
  - Educational Settings
- Summary of Section on Guided Imagery

### CHAPTER 3. CARRYING OUT THE STUDY

- Restatement of the Problem
- Research Design
- Population
  - Recruitment of Subjects
- Subjects
- Instrumentation and Instrument Development
  - Demographic and Academic Information (DAI)
  - Writing Apprehension Test (WAT)
  - Writing Ability Self-Assessment (WASA)
  - Early Planning
  - Systematic Development and Validation
  - Reliability Testing
- Writing History
- Change of Writing Attitude
- Daily Check-Up
- Workshop Evaluation Form
- Pilot Trials
- Treatment
  - Needs Assessment
    - Personal Experience
    - Interviews
    - Literature Searches
    - Suggestions from Educators
    - Participant Information
  - Planning
    - Audience
    - Objectives
    - Content
    - Workshop Characteristics
  - Implementation
    - Designing Learning Experiences
    - Preparing the Materials
    - Pilot Testing
    - Publicizing the Workshop
    - Presenting the Workshops
- Evaluation
  - Researcher's Journal
  - Participant Comments
  - Observer's Notes
  - Daily Check-Up
  - Workshop Evaluation Form
# Data Collection

Description of Chapter

# CHAPTER 4. RESULTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>142</td>
</tr>
<tr>
<td>Treatment of the Data</td>
<td>144</td>
</tr>
<tr>
<td>Response Rate and Absenteeism</td>
<td>146</td>
</tr>
<tr>
<td>Tests of Null Hypotheses</td>
<td>148</td>
</tr>
<tr>
<td>Writing Anxiety</td>
<td>148</td>
</tr>
<tr>
<td>Null Hypothesis 1</td>
<td>154</td>
</tr>
<tr>
<td>Null Hypothesis 2</td>
<td>155</td>
</tr>
<tr>
<td>Research Question 1</td>
<td>157</td>
</tr>
<tr>
<td>Self-Perception of Writing Ability</td>
<td>159</td>
</tr>
<tr>
<td>Null Hypothesis 3</td>
<td>164</td>
</tr>
<tr>
<td>Null Hypothesis 4</td>
<td>165</td>
</tr>
<tr>
<td>Research Question 2</td>
<td>167</td>
</tr>
<tr>
<td>Writing Anxiety and Self-Perception of Writing Ability</td>
<td>169</td>
</tr>
<tr>
<td>Null Hypothesis 5</td>
<td>169</td>
</tr>
<tr>
<td>Open-Ended Materials</td>
<td>173</td>
</tr>
<tr>
<td>Pretest Materials</td>
<td>173</td>
</tr>
<tr>
<td>Posttest and Follow-Up Materials</td>
<td>175</td>
</tr>
<tr>
<td>Treatment Groups</td>
<td>175</td>
</tr>
<tr>
<td>Control Group</td>
<td>179</td>
</tr>
<tr>
<td>Workshop Evaluation Form</td>
<td>181</td>
</tr>
<tr>
<td>Summary of the Results</td>
<td>184</td>
</tr>
</tbody>
</table>

# CHAPTER 5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of the Study</td>
<td>185</td>
</tr>
<tr>
<td>Restatement of the Problem</td>
<td>185</td>
</tr>
<tr>
<td>Research Hypotheses and Questions</td>
<td>187</td>
</tr>
<tr>
<td>Writing Anxiety</td>
<td>187</td>
</tr>
<tr>
<td>Self-Perception of Writing Ability</td>
<td>188</td>
</tr>
<tr>
<td>Writing Anxiety and Self-Perception of Writing Ability</td>
<td>189</td>
</tr>
<tr>
<td>Treatment of the Data</td>
<td>190</td>
</tr>
<tr>
<td>Limitations</td>
<td>190</td>
</tr>
<tr>
<td>Conclusions</td>
<td>191</td>
</tr>
<tr>
<td>Recommendations for Further Research</td>
<td>197</td>
</tr>
<tr>
<td>Concluding Statement</td>
<td>199</td>
</tr>
</tbody>
</table>

# BIBLIOGRAPHY

# Appendix

## A. PUBLICITY AND CORRESPONDENCE

<table>
<thead>
<tr>
<th>Material</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop Brochure</td>
<td>211</td>
</tr>
<tr>
<td>Flier</td>
<td>213</td>
</tr>
<tr>
<td>Flier</td>
<td>214</td>
</tr>
<tr>
<td>Newsletter Item</td>
<td>215</td>
</tr>
</tbody>
</table>
First Letter to Control Group .......................... 216
Letter Transmitting Posttests to Control Group ...... 217
Letter Thanking Control Group for Participation ... 218
Letter Transmitting Follow-Up Tests to Treatment Groups .................................................. 219

B. DATA COLLECTION INSTRUMENTS ........................................... 220
Demographic/Academic Information .................... 221
Daly-Miller Writing Apprehension Test .............. 224
Shilling Writing Ability Self-Assessment ........... 226
Writing History .............................................................. 229
Daily Check-Up ............................................................ 230
Changes in Writing Attitude ....................................... 231
Workshop Evaluation Form ....................................... 232
Permission Slip ............................................................ 235

C. WORKSHOP MATERIALS ..................................................... 236
Session 1 ................................................................. 237
  Purpose and Objectives ........................................... 238
  Workshop Agenda .................................................... 239
  Peer Review Guidelines .......................................... 240
  Bibliography ........................................................... 241
Session 2 ................................................................. 242
  Gunning Fog Index .................................................... 243
  Editing Exercise ...................................................... 244
  Book Review ........................................................... 247
  Essay on 10 Principles ........................................... 248
Session 3 ................................................................. 249
  Techniques for Breaking Blocks ......................... 250
  Conciseness Exercise ............................................. 252
  Flesch Human Interest Score .................................. 253
  Nonsexist Writing Editing Exercise ...................... 254
Session 4 ................................................................. 255
  Quotes on Writing and Life ................................. 256
  Essay on the Writing Process .............................. 258

D. GUIDED IMAGERY SCRIPTS .................................................. 260
A Helping Companion .................................................. 261
Your Ideal Writing Environment ......................... 263
Climbing Your Mountain ........................................... 265
Seven Qualities You Have ......................................... 268
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Breakdown of Subjects by Phase and Treatment</td>
<td>86</td>
</tr>
<tr>
<td>2.</td>
<td>Distribution of Subjects by Profession</td>
<td>88</td>
</tr>
<tr>
<td>3.</td>
<td>Distribution of Subjects by Sex and Age Range</td>
<td>89</td>
</tr>
<tr>
<td>4.</td>
<td>Means and Standard Deviations on the Writing Apprehension Test (WAT) for Each Group</td>
<td>149</td>
</tr>
<tr>
<td>5.</td>
<td>Pretest Means and Unadjusted and Adjusted Posttest Means on the Writing Apprehension Test (WAT) for Each Group</td>
<td>151</td>
</tr>
<tr>
<td>6.</td>
<td>Analysis of Covariance of Treatment and Control Groups' Performance on the Writing Apprehension Test (WAT) Posttest</td>
<td>152</td>
</tr>
<tr>
<td>7.</td>
<td>Differences Between Pretest and Posttest Means on the Writing Apprehension Test (WAT) for Each Group</td>
<td>156</td>
</tr>
<tr>
<td>8.</td>
<td>Differences Between Posttest and Follow-Up Means on the Writing Apprehension Test (WAT) for Each Group</td>
<td>158</td>
</tr>
<tr>
<td>9.</td>
<td>Means and Standard Deviations on the Writing Ability Self-Assessment (WASA) for Each Group</td>
<td>159</td>
</tr>
<tr>
<td>10.</td>
<td>Pretest Means and Unadjusted and Adjusted Posttest Means on the Writing Ability Self-Assessment (WASA) for Each Group</td>
<td>161</td>
</tr>
<tr>
<td>11.</td>
<td>Analysis of Covariance of Treatment and Control Groups' Performance on the Writing Ability Self-Assessment (WASA) Posttest</td>
<td>162</td>
</tr>
<tr>
<td>12.</td>
<td>Differences Between Pretest and Posttest Means on the Writing Ability Self-Assessment (WASA) for Each Group</td>
<td>166</td>
</tr>
<tr>
<td>13.</td>
<td>Differences Between Posttest and Follow-Up Means on the Writing Ability Self-Assessment (WASA) for Each Group</td>
<td>168</td>
</tr>
</tbody>
</table>
# List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mean Scores on the Writing Apprehension Test (WAT) Pretest, Posttest, and Follow-up for All Groups.</td>
<td>153</td>
</tr>
<tr>
<td>2.</td>
<td>Mean Scores on the Writing Ability Self-Assessment (WASA) Pretest, Posttest, and Follow-up for All Groups.</td>
<td>163</td>
</tr>
<tr>
<td>3.</td>
<td>Scattergram of the Correlation Between the Writing Apprehension Test (WAT) and the Writing Ability Self-Assessment (WASA) Pretests.</td>
<td>170</td>
</tr>
<tr>
<td>4.</td>
<td>Scattergram of the Correlation Between the Writing Apprehension Test (WAT) and the Writing Ability Self-Assessment (WASA) Posttests.</td>
<td>171</td>
</tr>
<tr>
<td>5.</td>
<td>Scattergram of the Correlation Between the Writing Apprehension Test (WAT) and the Writing Ability Self-Assessment (WASA) Follow-Ups.</td>
<td>172</td>
</tr>
</tbody>
</table>
CHAPTER 1. INTRODUCTION

Accomplishment is directly proportional to starting.

David Anderson

Background

Linda, a medical technologist, cringed when given a writing assignment in college. She avoided writing courses and chose a profession that meant she would not have to write. After working in a laboratory for several years, she was promoted to section head. In her new position, she has to write employee training manuals, budget justifications, letters, memos, and personnel appraisals. Linda lacks confidence in her writing skills and feels unprepared to fulfill her professional responsibilities. Her family is also suffering because of her frustrations at work.

Anthony, a physical therapist, is a procrastinator. He also has a negative attitude toward writing. Every time he's faced with a writing project he starts to fret and find excuses to put it off. He waits until the deadline is almost upon him. He then does the work rapidly and excuses its poor quality by saying he didn't have time to do a better job. He avoids seeking feedback on what he has written. His employer is extremely displeased with his written reports. Even some of Anthony's notes on patients have had errors.
Pilar, a biomedical communications student, had thought she wanted to be a medical writer and editor. She has good writing skills but she is a perfectionist. She thinks she could always be doing a better job. She delays starting a writing project until she has read everything she can on the topic (more than necessary). She always feels she should read another article or refer to another book. When she writes, she finds the work slow going. She may get an inspiration and start to write. Then, her internal critic says, "You're not expressing that well, use another word, stupid. Would you want anyone to read that?" Her constant editing while she is writing the first draft causes her to lose track of many creative thoughts. She is beginning to think she had better give up her ambition to write and choose another profession.

For many students and professionals, writing is a painful and punishing activity. They experience extreme anxiety when faced with a writing project that will be judged by others.

Writing anxiety has been variously defined. Daly and Miller (1975b), who coined the term writing apprehension and were pioneering researchers in the field, characterized it as a general tendency to avoid situations perceived to require writing accompanied by some amount of evaluation. L. Bloom defined it as a cluster of feelings, beliefs, and behaviors that keep a person from writing at all, or with less efficiency and effectiveness than he or she might have.
otherwise (Thompson, 1979). Thompson (1979) called it a fear of the writing process that outweighs that projected gain from the ability to write. This researcher defines it as the fear that hampers an individual's ability to start, complete, and submit writing projects.

Writing anxiety is a widespread problem. L. Bloom (1980) estimated that between 10 and 25% of college students suffer from high writing anxiety. Heaton (1980) found that 19% of the high school students she studied had high writing anxiety. Presumably, a number of these high school students would decide not to continue their education after high school. Yet Scott and Wheless (1977) also found that 19% of their sample of college students had high writing anxiety. More recently, researchers at the University of Maryland found that almost 22% of the students they studied were highly anxious about writing (Schultz & Meyers, 1981).

Aldrich (1982) studied 89 adults who held various professional positions and found that 49 (55%) of her sample reported negative attitudes toward writing. This researcher has observed that even people who have a moderate degree of writing anxiety often suffer an undue amount when faced with a writing project.

Writing anxiety can be viewed as a continuum — from completely relaxed to completely crippled. Most teachers have seen students who are not anxious enough.

L. Bloom (1980) calls these the "what, me worry? kids." They just write whatever comes into their heads, copy it
over neatly (maybe), and hand it in without bothering to re­
visit it. They probably need somewhat more anxiety, which,
they often start to have when their work is evaluated.

Most people who write feel some degree of anxiety (some
call it creative or facilitating tension) that energizes
them to produce. They claim they can't work well unless the
deadline is near. They have anxiety they are able to chan­
nel and manage.

Writing anxiety becomes a problem when it affects a per­
sone's personal, academic, or professional life, as in the
examples of Linda, Anthony, and Filar.

Some highly anxious individuals panic when faced with a
writing project. They avoid writing. Therefore, they miss
opportunities for evaluation and improvement, promoting a
vicious cycle. They may drop or fail courses because they
didn't finish their assignments. They may avoid jobs or
promotions that require a lot of writing. Their fear of
writing may even affect their personal lives, causing them
to be miserable (and make those around them miserable) when
they face a writing assignment.

Passman (1976) reported that a common complaint of the
university students he saw in the clinical setting was a
difficulty in writing assigned papers. This problem often
led these students to leave college, he wrote.

It is important to distinguish between most writing anxi­
ety and pathological illness. M. Bloom (1979) pointed out
that many of those with writing anxiety appear to function
well in the other areas of their lives. However, he and other researchers (for example, Cope, 1978) have noted that writing anxiety may be symptomatic of deeper problems that should be tackled before or along with problems with writing.

When one considers the extent to which achievement in school and in many professions is measured by a person’s ability to communicate in writing (on papers and tests or in reports, memos, and letters), a fear of writing that leads to avoidance of writing is a significant problem.

After studying the relationship of writing anxiety and writing performance, Bock (1976) concluded,

Written communication is an essential aspect of educational and professional life. Apprehension severely limits or modifies an individual’s ability to function with confidence and fulfill his/her aspirations. With a better understanding of this debilitating phenomenon, communication experts should be able to help those who are affected overcome their anxieties and improve their writing skills. (pp. 14-15)

Statement of the Problem

This study focused on one aspect of the problem of writing anxiety: techniques for reducing it. The purpose of the study was to compare the effects of two experimental treatments designed to reduce writing anxiety and to improve self-perception of writing ability in health professionals. One treatment included guided imagery. The other included writing and editing exercises.
Guided imagery is sometimes called structured fantasy, directed daydreaming, or controlled visualization. As an instructional technique it allows individuals to isolate themselves mentally and to use their natural abilities to daydream or fantasize in ways that accomplish educational objectives (G. Richardson, 1982). The technique has been used effectively in a variety of instructional settings. It has also been used by counselors as a weight reduction technique, by psychotherapists to treat phobias and reduce stress in children and adults, and by other health professionals to help women in childbirth classes and patients with life threatening illnesses (Lazarus, 1977; Michaelson, 1981; and Singer, 1974 & 1980).

While guided imagery has been used by writing instructors to enhance creativity in writing (Hershey & Kearns, 1979) and by counselors and psychotherapists to relieve anxiety, the investigator found no reports in the literature of its use as a treatment for writing anxiety. A related technique, systematic desensitization, has been found effective in reducing writing anxiety and is discussed in the section in Chapter 2 on treatments for writing anxiety.

Health professionals have generally had little formal course work in writing but nevertheless need to be able to communicate effectively in writing. Their writing ability can be crucial to their patients, to other health professionals, and to the general public. Writing is also important to their own career development and advancement.
Interviews with faculty members in the School of Allied Medical Professions, the School of Nursing, and the College of Medicine at The Ohio State University indicated that health care students and professionals had a need for and would have an interest in a workshop designed to reduce their writing anxiety and improve their writing ability.

Writers in health related journals have long stressed the importance of writing for health professionals and have advocated including scientific writing courses in the curriculum (Bell, 1979; DeFate, 1965; Henkin & Martin, 1973; Ecland & Cox, 1976; & Woodford, 1967).

Development of the Problem and Methodology

The general research question for the study was as follows: What effects do guided imagery exercises, when compared with writing and editing exercises, have on reducing writing anxiety and improving self-perception of writing ability of health professionals?

To explore this question, the researcher developed and presented two four-session, 10-hour continuing education workshops. The workshops were similar except that one included guided imagery and the other included writing and editing exercises in place of guided imagery. The effects of the two treatments on the level of writing anxiety and the self-perception of writing ability of workshop participants were compared. The two treatment groups were also compared with a no-treatment control group.
The independent variable in the study was type of treatment received. There were three levels of the treatment: (a) the workshop emphasizing guided imagery exercises, (b) the workshop emphasizing writing and editing exercises, and (c) a no-treatment control group.

The dependent variables were writing anxiety and self-perception of writing ability. These were determined by the scores on two instruments: the Daly-Miller Writing Apprehension Test (WAT) and the Shilling Writing Ability Self-Assessment (WASA). The dependent variables were assessed at the beginning and the end of the workshops and, again, for the treatment groups, four weeks after the workshops.

The subjects were 74 adults (primarily health professionals) from the Central Ohio area. Although the subjects were not randomly assigned to the treatment groups, the researcher was able to assess the comparability of the three groups by using pretests. The researcher randomly assigned the treatments to the two groups. The control group was made up of people who expressed interest in the workshops but could not attend them at the times offered or who signed up too late to attend them.

Research Hypotheses and Research Questions

Based on a review of the literature and the researcher's experience in teaching writing, five research hypotheses and two research questions were developed. Two hypotheses and one question relate to writing anxiety (hypotheses 1 and 2
and Question 1), two hypotheses and one question relate to self-perception of writing ability (hypotheses 3 and 4 and Question 2), and one hypothesis relates to the relationship between writing anxiety and self-perception of writing ability (Hypothesis 5). As mentioned earlier, writing anxiety was assessed by the Writing Apprehension Test (WAT) and self-perception of writing ability was assessed by the Writing Ability Self-Assessment (WASA).

**Writing Anxiety.**

**Hypothesis 1.** The guided imagery group will have a lower posttest level of writing anxiety than the writing and editing group, which in turn will have a lower level than the control group.

**Hypothesis 2.** Participants in the guided imagery and writing and editing groups will show a significant decrease in writing anxiety from pretest to posttest.

**Question 1.** Four weeks after the workshops are over, will there be significant differences between the mean posttest scores and mean follow-up scores on writing anxiety for the guided imagery and writing and editing groups?

**Self-Perception of Writing Ability.**

**Hypothesis 3.** The guided imagery group will have a higher posttest level of self-perception of writing ability than the writing and editing group, which in turn will have a higher level than the control group.
Hypothesis 4. Participants in the guided imagery and writing and editing groups will show a significant improvement in self-perception of writing ability from pretest to posttest.

Question 2. Four weeks after the workshops are over, will there be significant differences between the mean posttest and follow-up scores on self-perception of writing ability for the guided imagery and writing and editing groups?

Writing Anxiety and Self-Perception of Writing Ability.

Hypothesis 5. Participants' pretest, posttest, and follow-up scores on the WAT and the WASA will show an inverse relationship between level of writing anxiety and self-perception of writing ability. That is, the higher the level of writing anxiety, the lower the self-perception of writing ability.

The above research hypotheses and questions were used to generate null hypotheses to be tested.

Instrument Development

The researcher developed four instruments to collect information during the study:

1. The Demographic/Academic Information (DAI) form;
2. The Writing Ability Self-Assessment (WASA) form;
3. An open-ended instrument, Change in Writing Attitude; and
4. An evaluation form to be completed at the end of each weekly session.

The other instruments used to collect data for this study (the WAT, the Writing History form, and the Workshop Evaluation Form) were developed by other investigators and adapted slightly by the researcher (Daly & Miller, 1975; Heaton, 1980; Brunner, 1981).

Workshop Development

The researcher planned the content, techniques, and activities and wrote the guided imagery scripts for the workshops.

Pilot Trials

All instruments and some of the techniques, activities, and guided imagery scripts to be used in the workshops were tried out during winter and spring 1982 with health professionals and health professions students and with students and professionals in other fields. Based on the pilot trials, some of the instruments, techniques, activities, and scripts were modified.

Recruitment of Subjects

Participants for the study were recruited by brochures, fliers, and newsletter items that announced the offering of continuing education workshops for health professionals entitled "How to Reduce Writing Anxiety and Improve Writing Skills."
Design

A nonrandomized control group pretest-posttest design was used. Campbell and Stanley (1963) called it a nonequivalent control group design. The participants in the two experimental groups chose the day (section) they wished to attend. The researcher randomly assigned the type of treatment to the workshop sections.

Data Collection

Using the instruments mentioned above, the researcher administered pretests, posttests, and follow-up tests to the experimental groups. The control group completed only the pretests and posttests. The subjects were not told the specific purpose of the study, only that the researcher was studying the attitudes of health professionals toward writing.

In addition, the following techniques were used to gather data.

1. The researcher (who was also the workshop instructor) kept a journal on both workshops to document the sessions;

2. Participants were asked to keep journals of their thoughts, feelings, and attitudes about their own writing and about writing in general during the workshop and to share these journals with the instructor; and
3. An observer attended several sessions to take notes and give feedback to the instructor.

Data Analysis

The researcher used analysis of variance (ANOVA) on the pretests of the two experimental groups and the control group to see whether the different groups were similar or different in their levels of writing anxiety and self-perception of writing ability.

Analysis of covariance (ANCOVA) with pretest scores as the covariate was used to compare the groups on the posttests and follow-up tests. Scheffe tests were used to test for statistically significant differences between groups.

t-tests were performed to see if the differences between pretests and posttests and between posttests and follow-ups of individual groups were statistically significant.

To explore the relationship between the NASA and the WAT, Pearson product-moment correlation coefficients were calculated.

In addition, the researcher informally analyzed the open-ended responses (including writing history, change of attitude toward writing, journals, observer's notes, weekly evaluations, and final evaluations) to note important trends.
**Significance of the Study**

While the findings may not provide complete answers to the research hypotheses and questions, this study extends the previous research on writing anxiety, self-perception of writing ability, and guided imagery.

The study explores some of the same questions other researchers have asked, for example, what relationship does writing anxiety have to self-perception of writing ability? Daly and Wilson (1980) described a number of studies that dealt with similar issues. These studies are discussed in more detail in Chapter 2.

The researcher found no other studies that explored the effects of guided imagery exercises in reducing writing anxiety and improving self-perception of writing ability. However, she did find a report about a study by Galyear (1982) that indicated that guided imagery contributed to helping tenth grade students improve their writing skills, concentration, and feelings of self-worth.

Most studies on writing anxiety have used high school students or college students in freshman composition or communications skills classes. Only recently are studies on adults starting to be reported. To the researcher's knowledge, this is the first study on writing anxiety done with an adult population of health professionals.

The findings of the study will be valuable to educators and learners in many settings, from elementary school to university, continuing education, and inservice programs.
The findings could be used by other researchers, curriculum developers, writing teachers, teachers in other disciplines who require writing in their classes, teachers of health professionals, and, of course, people who suffer from high writing anxiety. The conclusions and recommendations could also have an impact on the patients, health professionals, and general public affected by a health professional's ability to communicate in writing.

To conduct the study, the researcher developed new instruments and guided imagery scripts other researchers and educators may use. She also identified some techniques to reduce writing anxiety and improve self-perception of writing ability. She hopes the instruments, scripts, techniques, and findings of this study will be used by educators at all levels to help prevent, reduce, or control writing anxiety.

Limitations
This study had five limitations:

1. **Subjects were not randomly assigned to treatment groups.** The study was limited to people who registered to take the workshops or expressed interest in them. Therefore, the results may only be generalized with caution beyond health professionals who wish to reduce their writing anxiety and improve their writing ability.
2. **Subjects were primarily health professionals in one location.** Since the subjects for the study were primarily health professionals from the Central Ohio area, generalization of the results to other populations may only be made with caution.

3. **Instructor bias could have affected results.** Since the researcher was the instructor of the workshops, unintentional bias may have been transmitted to the subjects and have had some effect on the results of the study, leading to a self-fulfilling prophecy.

4. **Treatments were presented at different times.** The researcher tried to make the treatments as similar as possible. However, because the treatments were presented at different times, it was impossible to maintain complete similarity. This could have affected the validity of the study.

5. **Control group did not complete instruments under same conditions as treatment groups.** Because of the design of the study, it was not possible to ensure that the control group members completed the instruments in one sitting as the treatment groups did or that they understood the instructions in the same way the treatment group members did.
Definitions

The following terms are used often in this study:

Writing anxiety. This is characterized by a fear that hampers an individual’s ability to start, complete, or submit writing projects. In many cases, writing anxiety is related to a fear of having one’s work evaluated by others. Writing anxiety is also called writing apprehension, writer’s block, and fear of writing.

High writing anxiety. This is defined as one standard deviation above the mean or higher for local populations as measured by the Daly-Miller Writing Apprehension Test (WAT).

Low writing anxiety. This is defined as one standard deviation below the mean or lower for local populations as measured by the WAT.

Health professional. As used in this study, this term refers to people who work in a health care setting (or who are students majoring in health professions). Such professionals may range in education from highly specialized physicians and scientists to medical clerks. Other examples include art therapists, communications specialists, dentists, health educators, medical record administrators, medical technologists, nurses, occupational therapists, pharmacists, physical therapists, and public health employees.

Guided imagery. Sometimes called structured fantasy, directed daydreaming, controlled visualization, or guided meditation, this is an instructional technique that allows learners to isolate themselves mentally and to use their
natural abilities to daydream or fantasize in ways that accomplish educational objectives (G. Richardsen, 1982). Typically, the instructor reads and the learners listen to a script that includes scenarios that guide visualization.

**Writing Apprehension Test (WAT)**. This is a 26-item Likert scale instrument designed by Daly and Miller to assess writing anxiety (Daly & Miller, 1975b).

**Writing Ability Self-Assessment (WASA)**. This is a 38-item Likert scale instrument designed by the researcher in 1982 to assess self-perception of writing ability.

**Self-perception of writing ability**. This refers to an individual's own opinion of the quality of his or her writing. This was assessed by the WASA.

**Quality of writing**. This refers to one's degree of effectiveness in written communication, based on factors such as content, organization, style, sense of audience, and mechanics.

**Writing history**. This refers to an individual's background experiences, including the influences of home, school, and other experiences, which have shaped his or her attitudes toward writing. The Writing History form in this study is an open-ended question given as a pretest.

**Peer evaluation**. Sometimes referred to as peer editing or helping circles, this technique is used in and out of writing classes to give writers feedback on how their work affected their classmates or colleagues. Participants in the workshops were given guidelines for how to give feedback to their peers.
Writing and editing exercises. These exercises are designed to give learners practice in writing and editing. They were used in both workshops; however, participants in the writing and editing group did more of them.

Guided imagery group. This refers to participants in the workshop section that received the treatment including guided imagery.

Writing and editing group. This refers to participants in the workshop section that did not include guided imagery exercises.

Summary of Chapter

High writing anxiety can be a significant problem if it affects one's academic, professional, or personal life. Some research indicates there is a strong negative relationship between writing anxiety and self-perception of writing ability. Generally, researchers have found that the quality of writing of people with high writing anxiety is not as high as that of people with low writing anxiety.

A number of treatments have been suggested to help people (primarily high school and college students) reduce or channel their writing anxiety. Little research has been conducted on adults, and the researcher found no other studies that dealt primarily with health professionals.

To explore the effectiveness of guided imagery exercises as compared to writing and editing exercises as techniques for reducing writing anxiety and improving self-perception
of writing ability of health professionals, the researcher used a nonrandomized control group pretest-posttest design. She presented two four-session, 10-hour continuing education workshops. The workshops were similar except for a half-hour segment each session that included either a guided imagery or a writing and editing exercise.

The subjects were 74 adults (primarily health professionals) from the Central Ohio area who registered to take or wished to take a workshop entitled "How to Reduce Writing Anxiety and Improve Writing Skills." The subjects chose the section (Tuesday or Thursday) they wished to attend. The treatments were randomly assigned to the groups.

All subjects completed pretest and posttest instruments at the beginning and end of the workshops. In addition, the workshop participants completed follow-up instruments four weeks after the workshops ended.

The researcher formulated research hypotheses and questions to determine the effects of the workshops on participants' levels of writing anxiety and self-perception of writing ability. She also hypothesized that the results would show a negative correlation between the two variables.

This study extends the research on writing anxiety and self-perception of writing ability. It is one of the few experimental studies dealing with treatments for writing anxiety. It is unique in that it explores the effectiveness of guided imagery and uses an adult population of primarily health professionals. The results of the study will be
useful to teachers of writing and other educators and researchers who may use the instruments, guided imagery scripts, and other techniques developed for the study. The study could also be beneficial to those individuals who suffer from high writing anxiety.

This study had five limitations:

1. Subjects were not randomly assigned to treatment groups.
2. Subjects were primarily health professionals from one location.
3. Instructor bias might have affected the results.
4. Treatments were presented at different times.
5. Control group did not complete instruments under same conditions as treatment groups.

Chapter 2 contains an overview of related literature divided into two sections: writing anxiety and guided imagery. Chapter 3 details the methodology used to conduct the study. Chapter 4 describes the results of the study. Chapter 5 includes a summary of the study and sections on conclusions and recommendations.
CHAPTER 2. REVIEW OF RELATED LITERATURE

Writing is not just a way
of spitting back what you know.
It's a way of discovering
what you know.

Donald Murray

This chapter, containing an overview of related literature, is divided into two main sections: writing anxiety and guided imagery.

Related Literature on Writing Anxiety

After a restatement of the researcher's definition of writing anxiety, this section describes the research dealing with its causes, the characteristics of people with high or low writing anxiety, the relationship of writing anxiety to other factors (such as academic and occupational decisions, writing quality, and self-perception of writing ability), and some of the treatments for writing anxiety that have been tried or suggested.

Most of the recent research on writing anxiety dates from 1975 when John Daly and Michael Miller reported the development of the Writing Apprehension Test (WAT), a 26-item, Likert scale, self-report instrument designed to assess level of writing anxiety (Daly & Miller, 1975).
The research on writing anxiety grew out of earlier research on communication anxiety (one aspect of which is fear of speaking in front of groups). The research on writing anxiety is also related to the general body of research on anxiety, learning, and performance.

The research on writing anxiety is young, and it is still relatively unsophisticated. Some of the studies are correlational. Others have been based on extremely small samples and teachers' classroom observations, not systematic studies. To date there have been few experimental studies.

**Definition of Writing Anxiety**

Writing anxiety is characterized by a fear that hampers an individual's ability to start, complete, or submit writing projects. In many cases, writing anxiety is related to a fear of having one's writing judged. Writing anxiety is also called writing apprehension, writer's block, and fear of writing. It can be seen as a continuum. Some people, usually those who do not value writing, seem not to have enough writing anxiety. Most writers have a desirable amount, which may be called creative tension or facilitating anxiety. Writing anxiety becomes a problem when it negatively affects a person's academic, occupational, or personal life.
Causes of Writing Anxiety

Most researchers on writing anxiety give at least some attention to the causes of writing anxiety, and some researchers have devoted their entire studies to them.

Daly (1978b) surveyed 89 elementary and secondary teachers who listed possible causes of writing anxiety in the classroom. The teachers considered students' lack of writing skills the main cause. Other causes they listed were overgrading on mechanics, disagreement with students' ideas, poor assignments, embarrassment of students, and association of writing with punishment. The teachers also listed students' poor self-esteem and poor role models as possible causes.

For her doctoral dissertation, Zena Camille Harvey-Felder (1979) surveyed 203 tenth grade students and conducted case studies to explore what factors in the person, the environment, and the writing situation related to writing anxiety in high school students. She identified three factors:

1. Positive or negative initial writing experiences in school in grades 1 through 6.
2. Positive or negative reinforcement of writing in grades 7 through 10.
3. Communication seeking behavior in the classroom (how much learners talk to teachers about writing).

As part of her research Harvey-Felder conducted case studies of 12 students who were highly anxious about writing.
and 12 with low writing anxiety. She found marked differences between the two groups in their previous experiences with writing in school and at home. She noted that highly anxious writers generally had less verbal stimulation (such as being read to) from family and friends, fewer prewriting experiences, and little positive reinforcement for writing even before they entered school. Once they entered elementary school, highly anxious writers generally started to write later, did not write much in or out of school, and had few role models of people who valued writing. They perceived that their teachers expected less of them, emphasized mechanics (spelling, neatness, and handwriting) over originality of ideas, and used writing as punishment. These individuals generally left elementary school with a negative attitude toward writing and toward themselves as writers that persisted throughout their school years. They reported that they received little positive feedback about their writing and that their teachers assigned boring topics, were unclear about assignments, and did not emphasize the purpose of writing. They also reported that they did not seek opportunities to discuss their writing in or out of school.

Harvley-Felder noted that such students are sometimes caught in the vicious cycle of negative attitude, poor performance, criticism by others, low confidence, avoidance of writing, and avoidance of feedback by peers or teachers on their writing. Thus, even when they do write they do not have positive reinforcement for continuing.
During her interviews with these students, Harvley-Felder observed that these students generally had less verbal ability than those with low writing anxiety.

The background of students with low writing anxiety was markedly different from that of those with high writing anxiety. The former reported primarily positive experiences with writing, both at home and in school. For example, they often said they were read to as children, had role models among friends and family who valued writing, started school with some knowledge of how to read and write, received positive feedback from teachers about their early attempts to write, and generally spent some time on personal writing not assigned in school. Their experiences with writing throughout school tended to reinforce their positive feelings about writing.

In another doctoral dissertation, Helen Heaton (1980) reported that she studied 320 high school students (freshmen through seniors) in a rural public school. Heaton administered the WAI to determine how many students in the school were anxious about writing. She also collected writing autobiographies, open-ended essays in which students described their attitudes toward writing and what past experiences influenced their attitudes. Like Harvley-Felder, Heaton found that parents and teachers influenced students' attitudes toward writing. She emphasized that teacher evaluations and comments about student writing have a significant effect on students' attitudes toward writing. While
analyzing the writing autobiographies of the students, she found that the other most prevalent causes of negative or positive feelings about writing were teachers' writing assignments and students' lack of writing skills.

Although she surveyed 320 students, Heathen's population was limited to one rural public high school.

Merle O'Houck Thompson, a writing teacher at Northern Virginia Community College who presents workshops on reducing writing anxiety in the Washington, D.C. area, has also, based on her observations, identified lack of writing skills as a cause of writing anxiety. In addition her list included the following: "lack of appropriate knowledge about the writing process, fear of revealing oneself through the written word, fear of structuring and ordering thoughts, fear of the blank page, and fear of being evaluated" (Thompson, 1979, p.1). Her paper did not mention how many students or workshop participants she observed.

Thomas Newkirk (1979), an assistant professor of English at the University of New Hampshire, made these observations about college freshmen:

[They] hate writing for a number of reasons. Some students, having exploited loopholes in high school elective programs, have written so little that they have not developed confidence in their writing ability. Some have been traumatized by a sadistic form of marking papers that, unfortunately, still flourishes. Some have lost confidence in the evaluation process and resent having to meet the shifting, idiosyncratic expectations of teachers. A few have basic language difficulties. (p. 1)
Newkirk identified five pressures that make freshman composition students find writing to be torture: perfectionism, desire to interest an audience, length requirements, search for an appropriate topic, and time. Granting that these are pressures any writer might face, he continued,

Picture an old card table, so old and worn that the top surface is paper thin. Now imagine having to place a number of bricks on that table. Beginning writers often fail because they attempt to handle all the pressures at once. They pile all the bricks in one vertical column and the surface breaks. Mature writers respect these pressures and know they cannot face them all at the same time; they know they must use the entire surface of the table. They place the bricks in smaller piles -- and the table holds. (p. 1)

While Newkirk was referring to freshmen in college, the pressures he described could be applicable to other people with little writing experience, such as health professionals.

Mike Rose (1980), a lecturer in English at UCLA, wrote of case studies he conducted on 10 undergraduates, all good writers. Five of his subjects had writer's block and five wrote with "relative or enviable" ease. He noticed that the blockers operated under rigid or inappropriate rules. For example, he wrote, "always grab your audience" is a rule that stymies some writers who will not continue until they have a good lead (a characteristic many journalists have learned to live with). Rose also found blockers often have inflexible or confused planning strategies; for example, they believe they are locked in by their outlines. Rose's observations, of course, were based on case studies of only 10 students in one institution.
In a paper about graduate students, Lynn Bloom, who conducts workshops to help reduce writing anxiety, wrote, "Paradoxically, a major cause of writing anxiety among graduate students is their previous academic success....Such students fear that their self-esteem, or their reputation, will suffer if their writing is not perfect" (L. Bloom, 1981, p. 3).

Bloom quoted one of her students as saying, "There's always the fear that you're not as good as you or your professors thought you were" (p. 3). Continuing, she wrote,

Although apprehensive graduate students will acknowledge intellectually that only those judged likely to succeed will be admitted and thereby receive commitments of costly resources and time, they often convince themselves emotionally that by some fluke they and they alone managed to slip through the otherwise fine mesh in the screening net. (p. 3)

In Bloom's opinion, "procrastination helps insecure students to avoid (from their viewpoint) humiliating self-exposure or confrontation with their alleged ineptitude" (p. 3).

Bloom said graduate students also, more often than undergraduates, have other conflicting demands and priorities, such as jobs, families, and community activities. Bloom's comments were based on case studies and her experience in dealing with highly anxious writers. She did not mention how many students she had observed. Her comments about graduate students are relevant to health professionals as well.

In an overview of the literature on writing anxiety, Sylvia Holladay (1981), a writing teacher at St. Petersburg
Junior College, concluded that the causes of writing anxiety are many and complex. She cited some of the same causes already discussed above. She also mentioned two others that researchers have identified:

1. Lack of neurolinguistic development. If a child is forced to write before he or she is physically ready, a cycle of failing at writing will begin that may lead to writing anxiety.

2. Paradox of the child writing for the adult reader in school. While a characteristic of strong writing is that it reflects confidence and authority, such writing may be difficult for the child writing for the adult authority figure.

Finally, Holladay noted that writing anxiety perpetuates itself, leading to the vicious cycle that Daly, Harley-Felder, Thompson, and others have described.

In summary, researchers have identified the following as some of the causes of writing anxiety:

1. Lack of writing skills, practice, and knowledge of the writing process.

2. Negative experiences with writing at home and in school.

3. Low self-esteem.

4. Poor or few role models at school and home.

5. Fear of revealing oneself.

6. Fear of being evaluated.

7. Fear of structuring and ordering thoughts.
8. Fear of the blank page.
10. Perfectionism
11. Misunderstanding of the normal pressures a writer faces.
12. Rigid rules.
13. Inflexible outlines or plans.
14. Previous academic success.
15. Conflicting demands on time.
16. Lack of neurolinguistic development.
17. Paradox of child writing for adult reader.
18. Previous history of writing anxiety.

Characteristics of High and Low Writing Anxiety

People with high and low writing anxiety tend to think and behave differently when faced with a writing project. Their characteristics relate to the causes of writing anxiety described in the previous section and to the "effects" of writing anxiety described in the next section. Profiling people with high writing anxiety, Belladajy (1981) wrote,

They are frightened by a demand for writing competency. They fear evaluation of their writing because they think they will be rated negatively -- they expect to fail. They avoid writing whenever possible. When they are forced to write, they behave destructively. In classroom situations they consistently fail to turn in papers or turn them in late; they do not attend class when papers are due or when essay tests are scheduled. They (avoid writing courses if possible).... Outside the classroom they do not engage in any activities which require writing, such as working on the school newspaper, serving as secretary of a club, or even writing letters to friends and
relatives.... If they find themselves in situations demanding writing, they are unhappy and often procrastinate. (pp. 2-3)

Heaton (1980) found that high school boys were twice as likely to have writing anxiety as girls. Daly and Miller (1975c) found men college students more anxious than women students. On the other hand, Garcia (1978) and Schultz and Meyers (1981) found no significant difference between men and women on writing anxiety in the college students they studied.

L. Bloom (1980) did case studies on her undergraduate and graduate students to compare the composing processes of people with high and low writing anxiety. Some of the common problems she found for highly anxious writers were lack of knowledge about the composing process, lack of structured writing times, procrastination, distractions, and self-deceit about the consequences of not writing.

She characterized non-anxious writers as people who look forward to writing, are confident in their writing ability, know writing will take effort, and like discussing their work with others. Non-anxious writers usually begin to think about the topic well before the due date and do the necessary reading and other research beforehand to give themselves time to incubate their ideas. When they do start writing they concentrate more fully and permit less interruptions than highly anxious writers. They spend more time during a writing session and tend to revise more extensively than highly anxious writers. In general, non-anxious writers show more efficient use of their time.
Bloom did not mention how many students were included in her study.

Relationship of Writing Anxiety to Other Factors

Some researchers refer to the effects of writing anxiety. However, this writer has called this section relationship of writing anxiety to other factors because much of the research on writing anxiety has been correlational, not experimental. Researchers have also acknowledged that it is difficult to determine which came first, the writing anxiety or the other factors (for example, poor writing quality). In fact, many of the factors discussed above as causes of writing anxiety or characteristics of people with high writing anxiety (for example, procrastination) might actually be effects of writing anxiety.

This section includes information about the relationship of writing anxiety to academic and occupational decisions, writing quality, and self-perception of writing ability.

Academic and Occupational Decisions. Research indicates that severe writing anxiety can be a handicap to an individual's academic and professional career, affecting choice of courses, college major, and occupation.

Daly and Miller (1975c) studied 246 university undergraduate students enrolled in basic or remedial composition courses. They asked students to complete the Writing Apprehension Test (WAT) and to respond to other statements
related to their willingness to take other writing courses, their perceived likelihood of success in writing courses, and their actual success in past writing courses. They found that people with high writing anxiety were less likely to enroll in advanced writing courses, believed they were less likely to be successful in writing courses, and judged their past experience in writing as less successful than students with low writing anxiety.

The Daly-Miller study was limited because it only used students in intact classes and relied only on self-report for its results.

Daly and Shamo (1978) hypothesized that a person's level of writing anxiety would affect his or her choice of academic major. They asked 181 undergraduate students enrolled in a basic communication course to complete the WAI and, in addition, other forms that surveyed the students' perception of the writing demands of 28 majors, the desirability or undesirability of the 28 majors, and the actual choice of major the student had made. Daly and Shamo found that students with high writing anxiety rated majors they perceived to be high in writing demands as less desirable than did students with low writing anxiety. Highly anxious writers also indicated that their chosen majors were significantly lower in writing demands than those chosen by students with low writing anxiety. The researchers concluded that people with high writing anxiety find writing "unrewarding or even punishing. As a consequence they seek to avoid situations where it is required" (p. 124).
Daly and Shamo (1976) asked 95 undergraduate students to complete the WAT and an instrument to assess the perceived writing requirements and perceived desirability of different occupations. The students also indicated the perceived writing demands of their actual career choices. Daly and Shamo found that people with high writing anxiety considered occupations with low writing demands more desirable. (Interestingly, these people saw all occupations as significantly less desirable.) Daly and Shamo also found that people with low writing anxiety chose jobs that had significantly higher writing demands than did people with high writing anxiety.

In a study of 600 undergraduate students, Schultz and Meyers (1981) also noted a relationship between writing anxiety and the amount of writing students expected to do in their careers.

Writing Quality. Most research indicates that academic performance, writing quality, attitudes toward writing, and self-perception of writing ability are highly correlated.

Some researchers have found that high writing anxiety hampers academic performance. In a classic study, Gerald Kincaid (1953) imposed stressful conditions on students, such as emphasis on grades and testing situations. The results of the study indicated that stress did affect writing performance. Furthermore, Kincaid found that the usually good writers were more affected by stress than the usually
poor writers. His study also demonstrated that the quality of a person’s writing is not the same in different situations.

Daly and Hiller (1975a) studied writing anxiety as a predictor of message intensity. The subjects were 98 undergraduate students who completed the WAT and a measure of language intensity in which they chose words from a list provided to complete a message with 10 blank spaces. The words available had previously been rated for their intensity. As predicted, students with high writing anxiety encoded significantly less intense messages than those with low anxiety.

In an often quoted article, Virginia Bock (1976) wrote of her study of 40 undergraduate students, 19 with high writing anxiety and 21 with low anxiety. She found that messages written by the highly anxious writers tended to be evaluated lower in quality than those written by students with low writing anxiety. Students with high writing anxiety wrote fewer words, provided less information, used more adjectives that watered down their writing, and misspelled more words.

Daly (1977) studied 43 undergraduate students, 21 with high writing anxiety and 22 with low, who completed the WAT, read a short essay, and wrote a brief composition about the essay. Daly had some of the same findings as Bock. Students with high writing anxiety wrote fewer words and sentences. Raters judged their writing quality to be poorer than that of students with low writing anxiety. Unlike
Book, who found that highly anxious writers used more qualifiers, Daly found that highly anxious writers used fewer qualifiers.

For his doctoral dissertation, Garcia (1978) studied 32 college students, 16 with high writing anxiety and 16 with low. He found that quality of writing performance was dependent on level of writing anxiety, and low-anxiety students demonstrated syntactic characteristics of mature writers more consistently than did high-anxiety students.

Daly (1978a) described a study in which over 3,000 undergraduate students completed the WAT and a writing competency questionnaire that appraised three main areas: grammar, mechanics, and larger elements of writing (such as the students' ability to recognize writing problems and to use adjectives, adverbs, and correct diction). Daly found that students who suffered from high writing anxiety did not perform as well on the writing competency test as did less anxious writers.

A limitation of Daly's study that applies to some of the other studies on writing anxiety and writing quality is that the term "competency" was used in a limited sense and measured by an objective test that did not examine some of the more important elements of writing, such as quality of ideas and ability to organize thoughts.

In further research on writing anxiety and writing performance, Faigley, Daly, and Witte (1981) used a sample of 110 college students, 55 with high and 55 with low writing
anxiety. The students completed the WAT and eight standardized tests of writing related skills. They also wrote two different types of essays (one narrative/descriptive and the other argumentative). Faigley and his colleagues found that students with high writing anxiety scored lower than those with low writing anxiety on all but two measures of writing competency. They also found that writing anxiety was highly and negatively correlated with writing performance. They wrote, "Highly anxious writers produced essays significantly shorter and less syntactically 'mature' or 'fluent' than their low-apprehensive counterparts" (p. 10).

However, interestingly, differences between the two groups in the quality of the written essays were observed only in the narrative/descriptive essays, not in the argumentative essays. The researchers concluded that highly anxious writers may be more fearful of expressing themselves than of arguing a point.

Some researchers have looked specifically at the writing style of people with high writing anxiety. Jo Ann Cope (1978) reported research that indicated that the style of anxious writers is flat, neutral, self-hiding, and less expressive than that of less anxious writers. In her doctoral dissertation, Bova (1979) also wrote that high writing anxiety was related to a flat and passive style. She concluded that fear of writing and evaluation can impede clear writing.
Not all researchers have found that high writing anxiety is correlated with poor academic performance and poor writing quality.

Scott and Wheless (1977) did not find that highly anxious writers achieved significantly worse than those with low writing anxiety. More recently, Roy Fox (1980) reported that his experimental treatment succeeded in reducing writing anxiety but had no more effect on writing quality than traditional methods.

Edgar Richardson (1981), associate professor of English at the University of Cincinatti, studied two-year college freshmen. He asked 21 subjects, 13 with high writing anxiety and eight with low, to complete the WAI and write two in-class essays. Raters analyzed the essays for syntactic maturity and coherence. They found no significant relationship between writing anxiety and overall quality of writing. Richardson pointed out that his measures (which analyzed a student's ability to handle transformations, subordinate, and think logically) were different from the criteria used by some other researchers. Richardson's number of subjects was small, and different subjects might have produced different results.

As part of her doctoral study, Heaton (1980) administered the WAT and collected three writing samples from all the twelfth graders (n=52) in a small rural high school. Her objective was to correlate writing quality with the students' WAT scores. Her results indicated no statistically
significant correlations between writing quality and writing anxiety.

Heaton also pointed out that not all students fit the predictable patterns of high writing anxiety coupled with low standardized test scores and low school achievement. Other researchers have made similar observations. For example, L. Bloom (1980) reported that some individuals with low writing anxiety write more poorly than those with high writing anxiety. She characterized them as "what, me worry? kids" and said they probably need to be somewhat more anxious about writing than they are.

To summarize, most of the researchers who have examined the correlation between writing anxiety and writing quality have found that students with high writing anxiety perform significantly more poorly than those with low writing anxiety. Researchers who compared the two groups found that students with high writing anxiety used less intense language (Daly & Miller, 1975a), provided less information, misspelled more words, used fewer words (Book, 1976; Daly, 1977), did not perform as well on objective tests of writing competency (Daly, 1978), and wrote essays that were syntactically less mature or fluent (Faigley, Daly, & Witte, 1981; Garcia, 1978).

Cope (1978) and Bova (1979) found the writing style of people with high writing anxiety to be flat, neutral, self-hiding, and less expressive than that of less anxious writers.
On the other hand, a few researchers did not find any significant correlations between writing anxiety and writing quality (Scott & Wheeless, 1977; Heaton, 1960; E. Richardson, 1961). Most researchers have also qualified their findings by saying that not all subjects fit the stereotypes and that different measures of writing quality may produce conflicting results.

The researcher found no studies of the relationship between writing anxiety and IQ scores. However, Daly and Miller (1975c) studied the WAI scores and scores on the verbal portion of the SAT of undergraduate students (n=246) and found a very low positive correlation (.19).

**Self-Perception of Writing Ability.** Most researchers have noticed a negative association between writing anxiety and self-perception of writing ability, but there has been little systematic study of the relationship. This section describes the literature related to writing anxiety and self-concept and self-perception of writing ability. It also describes teacher perceptions of writing ability and touches on the importance of the self-fulfilling prophecy in teaching.

Daly and Miller (1975c) found that students with high writing anxiety believe they do not write as well as other people. Their study was described in a previous section, "Academic and Occupational Decisions." It deserves mention here because it indicates that self-perception of writing ability is related to writing anxiety.
Daly and Miller predicted that individuals with high apprehension of writing would probably avoid writing courses if they could. If they were forced to take some, they would report that they felt significantly less likelihood of success in them than would low apprehensives. The all important point to remember here is that we are discussing perceptions and predispositions. Yet, what we believe may happen, more often than not, does. (p. 251)

Daly and Miller's study of 280 undergraduate students confirmed their hypotheses that (a) people with high writing anxiety will report lower expectations of success and willingness to take courses in writing than people with low writing anxiety, and (b) people who voluntarily enroll in advanced writing courses will have a significantly lower mean score on writing anxiety than a general population mean.

The researchers concluded that no matter how skilled people are as writers, if they believe they will do poorly or if they don't wish to take writing courses, then these skills matter little (p. 265).

Although Daly and Miller did not examine self-perception of writing ability per se, their study did indicate that it is associated with writing anxiety.

Other researchers have also noticed a negative association between writing anxiety and self-perception of writing ability. Cope (1978) said people with high writing anxiety tend to see themselves negatively as writers. Heaton (1980) cited research that indicated that students' self-perception of their writing ability and their attitudes toward writing
are significantly affected by teachers' comments on their writing.

Cynthia Selfe (1981) described case studies of eight students during which she observed that the four students with high writing anxiety were fearful as they approached their writing assignments. They were not confident of their ability to successfully compose an effective essay. The four students with low writing anxiety, on the other hand, approached their writing assignments with confidence and expectations of success, even if they did not always enjoy writing.

Selfe also mentioned that the students she studied with high writing anxiety typically manifested their lack of confidence about their writing ability in physical behaviors. She described one student who,

holding her head in both hands, would bow her head in defeat over her papers even at their earliest stage. When she began writing, she would pause frequently to re-read her own words and mutter in disgust at her efforts. (pp. 13-14)

Although Selfe's study is based on an extremely small sample, it is indicative of the observations by other writing teachers.

Some researchers have discussed the relationship of writing anxiety and general self-esteem. In Daly's survey of teachers (1978b), one cause of high writing anxiety the teachers listed was low self-esteem.

Daly and Wilson (1980) reported on five studies relating writing anxiety to general self-esteem and one study that
explored the relationship between writing anxiety and self-perception of writing ability.

To quote Daly and Wilson,

while empirical research on the association between self-esteem and writing oriented variables is quite limited, anecdotal evidence, as well as social theories of self-esteem, suggests an inverse relationship between apprehension and self-esteem. Comments from teachers of writing often include the suggestions that the way a student feels about him or herself affects, and is affected by, how he or she writes. (p. 3)

A history of positive evaluations of one's writing should lead to higher self-esteem on the part of the writer than would a series of negative reactions. Heightened self-esteem should be associated with lower writing apprehension. A person's apprehension about writing develops, and is maintained, at least in part, by others' evaluations of his or her writing. (p. 4)

Of the five studies that explored the relationship of writing anxiety and general self-esteem, two used undergraduate subjects and three used adult subjects:

1. 172 undergraduates in basic composition courses at a large Midwestern university;
2. 292 undergraduates at a large Southern university;
3. 202 elementary school teachers;
4. 384 high school teachers; and
5. 211 employees of a federal government agency.

All groups completed the WAI and one or more instruments designed to appraise self-esteem. The results of the five studies indicated a small inverse relationship between writing anxiety and general self-esteem. (Correlations ranged from -.23 to -.40.) Daly and Wilson concluded that "the
relationship between writing apprehension and general self-esteem seems well established. While its magnitude is small, it is consistent across samples and measures" (p. 6).

The sixth study Daly and Wilson described was the only study the researcher could find that explored the relationship between writing anxiety and self-perception of writing ability. Unfortunately, the report is worded in such a way that the reader cannot be sure who conducted the study. The subjects were 388 undergraduates enrolled in a basic communications course at a large Eastern university. All completed the WAT and a measure developed by Daly to assess

self-perceptions of writing.... Respondents were asked to focus on their own writing... and to complete a number of semantic differential scales in relation to their writing. Their responses were clustered into 14 dimensions. Each dimension assessed a different component of writing. (p. 7)

The dimensions in Daly's instrument are as follows (pp. 22-23):

1. Evaluation (good-bad; effective-ineffective; worthwhile-worthless).
2. Organization (organized-disorganized; orderly-disorderly; structured-unstructured).
3. Tempo (reads well-reads poorly; free flowing-choppy; graceful-clumsy).
4. Accuracy (factual-opinionated; accurate-inaccurate; true-false).
5. Competence (knowledgeable-not knowledgeable; intelligent-unintelligent; expert-inexpert).
6. Meaningfulness (meaningful-meaningless; purposeful-pointless; important-unimportant).
7. Timeliness (timely-obsolete; relevant-irrelevant).
8. Interest (varied-monotonous; interesting-boring; engaging-dull).
9. Readability (readable-unreadable; neat-sloppy; legible-illegible).
10. Clarity (cluttered-uncluttered; concise-wordy; repetitious-not repetitious).
11. Mechanics (good spelling-bad spelling; grammatical-ungrammatical; good word choice-bad word choice).
12. Support (evidenced-unevidenced; supported-unsupported; logical-illogical).
13. Honesty (honest-dishonest; trustworthy-untrustworthy).
14. Forcefulness (forceful-not forceful; bold-timid; strong-weak).

(The writer wrote John Daly several times and left telephone messages for him in an attempt to learn more about this study and the instrument. Daly did not respond to the letters or the phone calls.)

The results of the study showed a statistically significant inverse relationship between writing anxiety and self-perception of writing ability as assessed by Daly's instrument. (The correlation was -.73.) This was substantially
larger than the correlations between writing anxiety and general self-esteem (that ranged from \(-.23\) to \(-.40\)) in the five studies described earlier.

Some mention has already been made about the effects of teacher expectations on student perceptions of their writing. Daly (1979) surveyed 39 elementary and secondary teachers, all women, to determine their expectations of students with high and low writing anxiety. Daly used descriptions of hypothetical male and female students who had the characteristics of people with high and low writing anxiety. The teachers were asked to evaluate the hypothetical students by using a rating scale designed to determine how well the respondents thought the students would perform in overall academic work and in a number of different disciplines. Daly found that the teachers had lower expectations of students who were highly anxious about writing. The teachers saw such students as less likely to succeed "in a variety of different academic subjects, less likely to succeed in the future, and less likely to receive positive recommendations from them to other teachers" (p. 42). Interestingly, the teachers rated highly anxious women lower than highly anxious men. Daly concluded that this was because the women students did not meet the stereotypes the teachers held of women students whereas the male students did meet the expectations of them.

Daly noted that his study did not provide any evidence that the teachers' expectations would actually affect teach-
er behavior or student learning. However, he concluded that the potential certainly exists.

Other researchers have discussed the influence of teacher expectations on performance. For example, in an article entitled "Stuttering Pencils," Den Steen (1976) said a teacher's negative approach to teaching writing can be a self-fulfilling prophecy. Mary Denham (1975) argued for the influence of positive feedback, citing biofeedback research that demonstrated that if a person receives a signal every time he or she produces desired behavior, the "desired behavior will increase to the point of crowding out the undesired behavior" (p. 308).

* * *

To summarize, this section has described the relationship of writing anxiety to factors such as academic and occupational decisions, writing quality, and self-perception of writing ability. Researchers have found that high writing anxiety tends to limit a person's options in courses, academic majors, and occupations. The research on the relationship of writing quality and writing anxiety has had mixed results. Some researchers have found that people with high writing anxiety have poor writing ability; others have found little correlation. Most of the literature on the relationship of writing anxiety and self-perception of writing ability is anecdotal, based on teachers' observations, not systematic study. However, a study reported by Daly and Wilson (1980) did show a strong inverse correlation between
the two variables. Researchers have also observed a positive correlation between students' self-perception of writing ability and their teachers' expectations of them.

Treatments for Writing Anxiety

Since writing is important academically and professionally, high writing anxiety is a serious problem if it affects a person's options in life. It follows that ways to treat writing anxiety and to help people learn to reduce or control their writing anxiety would be welcome. Heaton (1980) said, "Efforts to reduce anxiety are important to increase career options, to say nothing of the personal satisfaction gained by increased confidence and ability in writing" (p. 10). When they reported the development of the Writing Apprehension Test, Daly and Miller (1975b) called for research on treatments for writing anxiety. Most researchers on writing anxiety conclude their work by suggesting some techniques for reducing writing anxiety and by calling for more research on treatments to reduce, control, or channel it. To date there has not been much experimental research on treatments.

The present study explores one suggested treatment for reducing writing anxiety. As a basis for this study, the researcher examined the literature to identify some of the treatments and techniques for reducing writing anxiety that scholars and writers have reported. The information on treatments ranged from experimental studies to suggestions
by English teachers, journalists, and other writers on how to break writing blocks.

Daly and Miller (1975b) suggested that the current practice of many writing classes -- requiring writing -- probably is not helpful to those with high writing anxiety.

Powers, Cook, and Meyer (1979) wrote about their study on the effects of compulsory writing on writing anxiety. Their subjects were 57 students in basic composition courses taught by traditional methods (teacher evaluation, detailed criticism of papers). They found the students' writing anxiety scores were significantly higher at the end of the compulsory writing period than at the beginning.

Thompson (1979, 1980) had different results with compulsory writing. Using classes taught by different teachers, she studied several different teaching strategies (traditional, free organic, self-paced, and one based on individual interviews) and compared them with a language based approach (in which students read about language, talk about language, and write about language). She found that regardless of teaching strategy, writing anxiety scores decreased significantly and writing ability improved. However, she found that the language study approach was significantly better than the others for reducing writing anxiety. One of the key elements of her approach was examination of the process accomplished writers use.

Fox (1980) also had results different from those of Powers, Cook, and Meyer. Using six classes of university
freshmen (106 students), he compared two methods of teaching writing: one, the traditional teacher-centered method, and the other, a learner-centered workshop method that emphasized peer evaluation and peer interaction. Students completed the WAI as a pretest and posttest and wrote a two-hour posttest writing sample. Fox found that both treatments led to a significant decrease in writing anxiety by the end of the 16-week treatment period but that the writing anxiety scores for the learner-centered group were significantly lower than those for the group taught by traditional methods. He did not find any significant difference in writing quality of posttest essays between the two groups.

The conflicting findings on the effects of compulsory writing on writing anxiety indicate that in those studies that explored those factors, an important variable might have been the way the teacher in the traditional classes treated the students, not so much the fact that writing was compulsory.

Other researchers and theorists have also found peer evaluation (sometimes called peer editing or helping circles) an effective technique for reducing writing anxiety (Elbow, 1973; Garcia, 1978; Macrorie, 1980; Mcffett, 1968; Scanlon, 1979; Sears, 1979).

In contrast, Jerilyn Pfeifer (1981) examined the effects of peer evaluation on writing anxiety and writing performance of freshman composition students for her doctoral
study. Her subjects were 92 university students enrolled in five freshman composition classes. Two of the classes were designated as the experimental group (n=40) and the other three classes as the control group (n=52). Efeifer found that peer evaluation did not significantly reduce writing anxiety or improve writing performance in the experimental group.

Weiss and Walters (1980) also studied a learner-centered approach and its effects on writing anxiety. Their study involved 353 undergraduates enrolled in 20 classes in eight disciplines. Weiss and Walters hypothesized that the more students do learning-centered writing in content classes, the less anxious about writing they will be. They defined learning-centered tasks as those that do not call for formal academic prose, do not require evaluation, and do not encourage self-revelation. Examples are tasks designed to answer two questions: How well am I learning something? and How well can I express what I am learning? The results of their findings were not statistically significant.

For his doctoral study, Donald Davis (1979) used systematic desensitization to treat a volunteer group of 17 highly anxious college writers. The experimental group underwent a six-week, one-hour-per-week treatment. Seventeen other students were randomly selected to make up a control group.

In systematic desensitization, the client and/or therapist sets up a hierarchy of events related to the general fear involved. Several examples of items in a writing anxi-
ety hierarchy might be writing a letter to a friend, writing an entry in a diary, writing a letter for a job, writing a short story, writing an analytical paper about a piece of literature, writing a research report, and writing a grant proposal. The client is asked to visualize him or herself coping with a particular task until the fear of it subsides. This technique may also be used with groups.

In his experiment, Davis found that the writing anxiety of the experimental group members had substantially diminished by the end of the six weeks. The pretest and posttest scores on the WAT of the no-treatment control group of students showed no significant differences.

Davis's study was the only experiment the researcher could find that used visualization to reduce writing anxiety (although not in the same format as she proposed to do).

In a descriptive article, Friscilla Sears (1979) suggested breaking the writing process into steps. She listed 11 steps.

1. Choosing a topic student is interested in.
2. Brainstorming ideas about the topic.
3. Categorizing the details that emerge.
5. Brainstorming ideas about the narrowed topic.
6. Sorting out the new details.
7. Amplifying the details.
8. Deciding on a point of view about the topic.
9. Choosing an order for the details.
10. Making the order clear through the use of transitions.

11. Writing the first draft nonstop without worrying about how it sounds.

Cope (1978) also suggested teaching the stages of the writing process (how to choose a topic and narrow it, collect and organize information, and produce and revise a rough draft.) L. Bloom (1980) reported success in her writing anxiety reduction workshops when she helped writers organize tasks into discrete steps and budget their time. She found that as writing anxiety decreased, some participants even learned to like writing.

Sears, Cope, and Bloom based their suggestions on classroom experience, not experimental studies.

Writing in the Journal of Behavioral and Experimental Psychiatry, Richard Passman (1976), a psychologist, described a case study in which he successfully used a contract fulfillment and positive reinforcement (behavior modification) approach with a college student who was in danger of failing a course because of problems in completing assigned papers. He and his client developed a contract. After completing each component, for example, one paragraph, the client rewarded herself by listening to music or going outside. Passman reported that the client's writer's block was eliminated in five therapy sessions with no recidivism. Passman's report was based on only one case.
Bova (1979), Cope (1978), Denham (1975), Elbow (1973), Fox (1980), Harvey-Pelder (1979), Heathc (1980), and others have emphasized the importance of positive reinforcement in reducing writing anxiety and encouraging positive attitudes toward writing. Cope (1978) suggested encouraging students to do their own positive reinforcement (positive self-talk).

Peter Elbow (1973, 1961), a writing theorist and teacher who has been widely cited, has recommended free-writing exercises (brainstorming on paper) and journal writing to help people break blocks.

Writer Lois Duncan (1979) suggested that looking at a topic from a new direction, playing editor, borrowing enthusiasm, setting the mood, and keeping a notebook are techniques for overcoming blocks.

In an article in Writer's Digest, Tom Mach (1981) presented two dozen anti-stress tools. Several examples are "eat the cherry first" (do the easiest parts first), "take yourself dancing" (reward yourself), "be a part-time runaway" (temporarily abandon a project if you feel bogged down and tense).

In a lighter vein, the Journal of Applied Behavior Analysis published an item by Dennis Upper (1974) in which he depicted his own attempt at self-treatment of writer's block. The item is entitled "The Unsuccessful Self-Treatment of a Case of 'Writer's Block'" and consists of several inches of blank space, followed by comments from a reviewer who could find nothing wrong with the manuscript. The reviewer said,
I have studied this manuscript very carefully with lemon juice and x-rays and have not detected a single flaw in either design or writing style. I suggest it be published without revision. Clearly it is the most concise manuscript I have ever seen -- yet it contains sufficient detail to allow other investigators to replicate Dr. Upper's failure. In comparison with the other manuscripts I get from you containing all that complicated detail, this one was a pleasure to examine. Surely we can find a place for this paper in the Journal -- perhaps on the edge of a blank page. (p. 497)

In summary, a wide variety of treatments for reducing writing anxiety have been tried or suggested. Some have been systematically studied in research experiments. Others are based on personal experiences in the classroom or at the writing desk.

Some of the techniques are as follows:

1. Compulsory writing (in teacher-centered classes).
2. Language-based study.
3. Peer evaluation (in learner-centered classes).
4. Learning-centered writing tasks.
5. Systematic desensitization.
6. Emphasizing the writing process.
7. Contract fulfillment and positive reinforcement.
Summary of Section on Writing Anxiety

This section includes sub-sections on the causes of writing anxiety, the characteristics of people with high or low writing anxiety, the relationship of writing anxiety to other factors (such as academic and occupational decisions, writing quality, and self-perception of writing ability), and some of the treatments for writing anxiety that have been tried or suggested.

Research on writing anxiety is still young. Most of it has been conducted since 1975 when Daly and Miller reported the development of the Writing Apprehension Test. Much of it is anecdotal and based on case studies or extremely small sample sizes. Much of it has been presented at conferences and has appeared as ERIC documents but has not as yet been published in the scholarly journals respected in the field. In contrast, the research by Daly and his colleagues has received much recognition and has appeared in several scholarly journals. While Daly's research is based on large samples, it is primarily correlational. Daly and his colleagues have examined the relationship of writing anxiety to other factors, such as academic and occupational decisions and writing quality.

Some of the literature on the causes of writing anxiety has been based on observations of classroom teachers or on small sample sizes. However, since most of the researchers have made similar observations about the causes of writing anxiety, this researcher believes that the research is worthwhile.
Little systematic research has been conducted on the relationship of writing anxiety and self-perception of writing ability. Daly and Wilson (1980) did report on five studies that had explored the relationship of writing anxiety and self-esteem and one study that examined the relationship of writing anxiety and self-perception of writing ability.

Of those writing about treatments for writing anxiety, some have conducted experiments and some have based their suggestions on experience in the classroom or at the writing desk. Although not all the literature on writing anxiety is based on empirical research, it is worthwhile to pay attention to the observations and suggestions of experienced teachers and writers. Often their ideas are socially significant if not statistically significant.

There is some evidence that many different techniques are effective in reducing writing anxiety -- if the teachers care about their students' writing anxiety -- leading one to presume that the Hawthorne effect is also at work. The self-fulfilling prophecy is a strong factor in education.

The preliminary nature of most of the research on techniques for reducing writing anxiety suggests a need for more research on the topic.
Related Literature on Guided Imagery

This section includes the following elements: Definition and description of guided imagery as used in this study, history of guided imagery, applications of guided imagery, and summary of the section.

Definition and Description of Guided Imagery

Guided imagery is also called guided meditation, guided fantasy, structured fantasy, directed daydreaming, and controlled visualization, among other terms. As a teaching technique it allows people to isolate themselves mentally and to use their natural abilities to daydream, fantasize, or visualize in ways that accomplish educational objectives. The instructor or guide directs the process by describing a scenario that participants imagine as clearly as they can (G. Richardson, 1962). Examples of scenarios are an ocean setting, images of oneself as a healthy person, and images of what one's fear looks like.

Among other things, guided imagery is used to learn complex information, improve athletic ability, enhance creativity, promote personal growth, and reduce anxiety.

Guided imagery differs from ordinary, solitary daydreaming or visualizing in that in guided imagery a leader (who might be a therapist, counselor, teacher, coach, or group member who has agreed to serve temporarily as leader) reads or recites a script describing a scenario designed to evoke images in the minds of listeners. Later, of course, an
individual may wish to imagine the scenario again. For in-
structional purposes, guided imagery is usually more effi-
cient than ordinary daydreaming for encouraging people to
draw on their images.

A guided imagery exercise consists of four parts: (a) in-
troduction, (b) relaxation, (c) imagery, and (d) follow-up
activity.

The technique is usually carried out as follows. The
instructor introduces guided imagery and briefly describes
what listeners will hear. The instructor then leads the
group through a brief relaxation exercise and asks the mem-
bers to let their imaginations flow as they visualize a
scene stimulated by the instructor's words. One guided ima-
gery script used during the present study encouraged partic-
ipants to visualize their ideal writing environments. The
instructor did not outline the scene in detail. Participants
filled in the details with their imaginations.

The imagery portion may be followed up in a number of
ways. Participants may draw the scenes they visualized,
write about them, or discuss them with others in pairs or
groups. From the scenes they have visualized, participants
may gain some insight about themselves or a problem they
face. Other scenes may help participants relax and put them
in a frame of mind for learning, sharing, or creating.
History of Guided Imagery

Human beings have long realized the power of their minds -- including their imaginations -- for helping them cope with a variety of challenges. But it was not until the twentieth century that imagery began to be widely accepted as a tool in psychotherapy.

Imagery has now gained such widespread acceptance that it is also used in medical settings, counseling, athletics, education, and other fields.

This section highlights the background of the development of guided imagery and related techniques. Jerome Singer (1974) and Mike and Nancy Samuels (1975) have written in detail about the uses of imagery.

Singer, a psychologist at Yale University and one of the pioneers in research on imagery, wrote of the long history of the use of dreams, fantasy, daydreams, and imagery in psychotherapy and behavior modification. He pointed to the many uses therapists have made of the imagination. He also cited numerous case and research studies on the effectiveness of imagery techniques, emphasizing that imagery has been used in all major schools of psychotherapy.

In their book, Seeing With the Mind's Eye (1975), Mike and Nancy Samuels, a physician and teacher who are active in the holistic health care movement, described the use of visualization by the ancient Babylonians, Egyptians, Greeks, and Indian and Oriental civilizations, saying that these groups held a common belief in a spiritual center of the
universe that could be reached through meditation and imagery (Samuels & Samuels, 1975, p. 216).

Singer reported that at the end of the nineteenth century, Sigmund Freud used the technique of pressing on the foreheads of his patients to stimulate images. He then asked them to share the images they saw. Freud later rejected imagery and shifted to a more verbal type of psychoanalysis in which he used the technique of free association. Some believe he may not have had success with imagery because he was such an authoritarian figure that he inhibited the ability of his patients to visualize.

Early in the twentieth century, psychoanalyst Carl Jung began to explore his own imagination and dreams and then to analyze them. He later used the same technique with his patients. Jung advocated a technique called active imagination, which required the patient in a therapy session to try to conjure up images of a dream and to report general reactions to the therapist (Singer, 1974).

Another pioneer in developing imagery techniques was J.H. Schultz, a German psychiatrist and neurologist. In the 1920s Schultz developed a technique called autogenic training that used relaxation and the power of the imagination to affect a person's physiology. He used the technique in the treatment of disease. This was a precursor of the modern practice of biofeedback, which uses machines and imagery to help a person control physiological states.
From the 1920s to the early 1950s, with the rise of behaviorism and the emphasis on observable behavior and speech, imagery fell out of favor in the United States. John B. Watson, the founder of behaviorism, is said to have made fun of earlier efforts at introspection by examining one's imagination.

Interest in imagery was revived in the early fifties with the rise of the cognitive psychology movement and a renewed interest in how the brain functions.

Meanwhile, starting in the thirties, a French engineer interested in psychotherapy, Robert Desoille, developed a technique he called the guided waking dream or the directed daydream. His technique first used progressive relaxation (in which an individual tenses and then relaxes parts of the body) to put patients in a receptive mood to visualize a scene described by the guide (therapist). Depending on the nature of the patient's problem, the patient was then guided through specific activities in the image. After a session during which the patient had gone through a guided waking dream, he or she was encouraged to write out a full description of the experience and to bring it to the next session to be discussed in detail. Desoille is credited with being the major influence on the development of mental imagery techniques as they were later used in psychotherapy.

In 1955 Erich Fromm suggested that therapists move away from the free association technique and design scenarios for their patients and analyze patient reactions (G. Richardson, 1982, p. 15).
During the fifties and sixties, Hanscarl Leuner, a prominent German psychiatrist from the University of Goettingen, developed the technique of guided affective imagery, which was based on Desoille's technique but more systematized. Much research has been conducted on Leuner's application of the technique. He used guided affective imagery with children and with a broad range of patients, from those suffering from test anxiety to those suffering from severe obsessional neuroses, alcoholism, and sleep walking (Singer, 1974).

Also during the fifties and sixties, Roberto Assagioli, an Italian psychiatrist, and Robert Gerard, an American psychologist, collaborated to develop a technique called symbolic visualization. According to Singer,

Symbolic visualization has both diagnostic and therapeutic implications and ranges from the controlled imagining of specific symbols to a rather unstructured, spontaneous visualization.... (Singer, 1974, p. 110)

Singer distinguished between mental imagery therapists (most of those already mentioned), who relied mostly on anecdotal case studies, and proponents of behavior modification, who have conducted considerably more experimental research.

As an example of a behavior modification technique, Singer cited systematic desensitization, developed by Joseph Wolpe during the fifties and sixties primarily for people with phobias. Systematic desensitization helps patients move from images that are mildly anxiety-producing to images
that produce high anxiety -- all while they are practicing progressive relaxation -- on the theory that relaxation and anxiety cannot co-exist and so the phobia or anxiety will be eliminated. Desensitization has been called "a guided journey into fear in order to overcome it" (Sommer, 1978, p. 161).

This method of counterconditioning has been the subject of many experimental studies (including one on writing anxiety that is described earlier in this chapter). Citing a number of clinical and experimental studies showing the effectiveness of systematic desensitization, Singer (1974) said,

Certainly in terms of treatment time, often several months or fewer, and the possibilities of the patient learning to practice some of the techniques himself, desensitization seems at this point superior to any other known method for the treatment of fairly circumscribed irrational fears, especially by individuals who are not grossly disturbed in a great variety of areas. (p. 128).

Moving from the psychotherapist's couch, imagery has also been used by other health professionals. In fact, it has a long history of association with healing. Paracelsus, a Swiss physician in the early sixteenth century who is called the father of scientific medicine and modern drug therapy, believed the imagination could produce and cure diseases in humans (Samuels & Samuels, 1975).

Singer (1974) pointed to the promising results of positive imagery in reducing anxiety. He cited a study published by Chappel and Stevenscn in 1936 in which a positive
imagery technique was used to help hospitalized peptic ulcer patients (pp. 133-134). Thirty-two subjects received the positive imagery treatment along with the medical and dietary treatment. A control group of 20 subjects received the same medical and dietary treatment. Follow-ups with both groups showed significantly less recidivism among the imagery group.

Other medical applications of guided imagery are described in the next section on recent applications.

By 1977 there was enough interest in the study of imagery that the *Journal of Mental Imagery*, a scholarly publication, was started. It is published twice a year.

To summarize the background of guided imagery, people have long been interested in their imagery and have long believed that their "mind's eye" held some clues to help them in their lives. Freud and Jung both incorporated various imagery techniques into their psychoanalysis. With the rise of behaviorism in the twenties, imagery fell out of favor in the United States for about 30 years. Indeed, many people today are still suspicious of the terms imagery, fantasy, and daydreaming, believing that such activities are wasteful and perhaps not too healthy ways to spend one's time. In the fifties, with the rise of the cognitive psychology movement, psychotherapists and even some behaviorists again started to explore the uses of imagery. Meanwhile, in Western Europe, the related techniques of directed daydreaming, guided waking dreams, and guided affective imagery had been
developed and were starting to be incorporated into the treatments used by American psychotherapists.

Today most schools of psychotherapy use imagery, the use of imagery has spread to many other fields, and a scholarly journal is devoted to the study of imagery.

Recent Applications of Guided Imagery

This section includes an overview of some of the current applications of guided imagery in psychotherapy and personal counseling, other areas of health care, career counseling, athletics, and education. In recent years books by Lazarus (1977), Samuels and Samuels (1975), Singer and Switzer (1980), and Sommer (1978), all written in lay terms, have done much to popularize the use of imagery.

Psychotherapy, Counseling, and Health Care. Today guided imagery is being used by psychotherapists and personal counselors for a wide variety of problems. Examples include marital and sex therapy; management of conflict, anger, and grief; and weight reduction. Therapists have also used guided imagery to help people overcome blocks and cope with fear and anxiety.

As mentioned in the section above, guided imagery and related techniques have been applied to medical settings. Recently, one of the best known applications of guided imagery to health care has been the work of the Simontons with cancer patients. Carl Simonton is a radiologist who with
his partner, Stephanie Matthews-Simonton, established the Cancer Counseling and Research Center in Fort Worth, Texas. The Simontons use a technique they call imaging or healing visualizations in which patients are encouraged to visualize the effects on their disease of the chemotherapy or radiation treatments they are undergoing. (The Simontons do not recommend dispensing with medical treatment.) For example, a patient might visualize the white blood cells of the immune system waging war with the cancer cells, and winning. The Simontons' book, *Getting Well Again* (1978), describes their treatment and some of the research they have conducted. While the Simontons have had some success with their treatment, their research has also met with some skepticism in the medical community.

Gerald Jampolsky, another physician, uses visualization techniques at his Center for Attitudinal Healing in Tiburon, California. The center is for children who suffer from life-threatening illnesses, in many cases cancer. Jampolsky believes that the visualization techniques he uses help instill positive attitudes and reduce his patients' fears. He encourages his patients' parents to use guided imagery with their children (Michaelson, 1981).

Guided imagery is also used by health professionals to help patients cope with real or imagined pain. In his book, *The Spirit of Synergy* (1978), Robert Keck, a national leader in the holistic health movement, wrote about his own bout of several years with crippling back pain caused by former
injuries. He described how imagery was one of the techniques that enabled him to overcome his pain. Tali Conine, director of the School of Rehabilitation Medicine at the University of British Columbia, lists guided imagery among the techniques to be used to help amputees cope with phantom pain (Conine & Evans, 1982).

A prominent biofeedback researcher at the Menninger Foundation, Elmer Green, has used imagery and biofeedback machines to help patients control their autonomic nervous system. He has had success in helping patients eliminate migraine headaches, among other ailments.

**Career Counseling.** In addition to its applications in psychotherapy and health care, guided imagery has a broad range of applications for well people. It has been used by career counselors as a strategy for helping clients explore career options and interests. Morgan and Skovholt, psychologists at the University of Florida, described the uses of guided imagery, which they call guided fantasy, in career counseling. They cited a number of research studies that attested to the efficacy of guided imagery in helping clients discover for themselves where their career interests lie. In discussing the distrust some people have of fantasy, the authors presented their argument for its use.

When fantasy and daydreaming are mentioned, many career counselors flinch a bit, believing that the terms fantasy and daydreaming are indicative of personal problems or psychopathology. Such beliefs are not surprising since many career counselors were taught about fantasy and daydreaming in
educational psychology courses. In these courses, personal maladjustment is a common topic and fantasy is often considered one characteristic of personal maladjustment. Labeling fantasy a suspect human activity is especially prominent in the introductory educational psychology texts of the 1950s and 1960s.

Perhaps the most productive way to view fantasy, however, is to see fantasy as being on a continuum of sorts, with one end representing unhealthy activity and the other representing healthy activity. It is the healthy end which has recently begun to be emphasized in personality research. Recent research indicates that fantasy and daydreaming can be—and often are—positive, life-enriching, stress-reducing, creativity-increasing human activities that should be encouraged in many instances. (Morgan & Skovholt, 1976, p. 391)

The authors cited studies that indicated that the fantasy life of children leads to their later development of creative ability and that fantasy can play a healthy role in one's development. Later articles in the career development literature have cited the Morgan and Skovholt paper.

Athletics. Guided imagery and other imagery techniques have also been used in athletics. As used in athletics, the technique is sometimes referred to as mental rehearsal or mental practice. A. Richardson (1969), G. Richardson (1962), Singer and Switzer (1960), Sommer (1978), and others have written about the use of guided imagery with athletes to help them improve motor skills, reduce anxiety, gain confidence, and foster motivation.

Alan Richardson (1969), an Australian psychologist and one of the pioneers in the recent study of imagery, reported on some 30 studies of mental rehearsal. He concluded that
although the studies had a variety of methodological inadequacies, their trends indicated that mental rehearsal is associated with improved performance.

Glenn Richardson, author of *Educational Imagery* (1982), a text for teachers, wrote that many studies have demonstrated that guided imagery is an effective tool for improving psychomotor performance. He cited basketball players, dancers, football players, gymnasts, jumpers, skaters, and skiers as examples of athletes who have used imagery to improve their performance.

Robert Sommer (1978), a California psychologist and author of several books, cited experimental studies that compared mental rehearsal with physical practice in dart throwing, basketball free throws, ring toss tasks, and ski racing. The results of the studies indicated that mental rehearsal was almost as beneficial as physical practice. Furthermore, combining mental and physical practice led to more improvement than doing either alone (pp. 25-27, p. 165).

Sommer also wrote that Olympic medalist Bruce Jenner kept a hurdle in his living room while he was training for the Olympic games. Jenner practiced jumping the hurdle mentally while he lay on his couch looking at the hurdle (pp. 25-26).

Singer and Switzer (1980) reported that O.J. Simpson also ran through plays mentally before he had to execute them (p. 180).
Mental rehearsal is not limited to athletes, of course. It has a wide variety of applications. For example, career counselors have recommended that clients mentally rehearse before a job interview or before asking their employers for a raise. It can be applied to writing as well. The writer can visualize himself or herself sitting at the writing desk, feeling productive, and working diligently with little strain, for example.

**Educational Settings.** Guided imagery has been broadly applied in educational settings, from elementary school to adult education, from science classes to literature courses. It has been used to enhance learning, reduce anxiety, and foster creativity.

Although some of the literature on guided imagery deals only with anecdotal and case study information, in recent years many research studies have also been conducted on the effectiveness of various imagery techniques. Following are brief descriptions of several doctoral studies dealing with imagery and its effects on anxiety in educational settings. The studies mentioned here deal with the effects of guided imagery or related techniques on test anxiety, speech anxiety, math anxiety, interpersonal communications anxiety, and anxiety in children. These studies had mixed results.

Richard Driscoll (1974) used physical exertion along with positive imagery to reduce test anxiety — with positive results.
Carol Ann Pierce (1979) found that visual imagery suggestions made prior to testing reduced anxiety, but it did not lead to improved test performance.

Michael Weissberg (1974) compared desensitization, desensitization with coping imagery, and cognitive modification as treatments for speech anxiety -- with mixed results.

June Hyman (1973) studied the effects of imagery on math anxiety, using different types of desensitization therapy. Contrary to Hyman's expectations, the desensitization with imagery group did no better than the desensitization group.

Lee Warren (1978) used rational emotive imagery to reduce interpersonal anxiety in 60 high school students. Warren reported nonsignificant results.

Lynne McDonald (1975) used fantasy to reduce anxiety in children -- with no significant results.

The researcher did not find much information on the application of guided imagery in writing classes. However, she did find a few related studies, and they are described below. This section is limited to a few studies that have explored the effectiveness of guided imagery for enhancing creativity, verbal skills, and writing ability.

In his doctoral dissertation, Daniel Bagley (1977) investigated the use of guided imagery to enhance short-range verbal creativity. His subjects were 27 university students, members of a public relations class, who volunteered to participate. Subjects were divided into treatment (n=13)
and control (n=14) groups through stratified randomization based on pretest scores on a creativity measure. The treatment consisted of one 10-minute period during which subjects listened to a guided imagery script that suggested that they reflect on a number of personality traits they have that are common to creative people. The control group members were asked to relax in another area. The posttest was administered immediately after the treatment period. Bagley found that the creative problem-solving abilities of the experimental subjects were enhanced by the treatment. He also found that overall fluency and originality scores of the experimental group increased more than those of the control group. He concluded that guided imagery is a viable mode of enhancing short-range verbal creative problem-solving performance. While Bagley had significant results, his study included few subjects, only explored short-range effects, and consisted of only one treatment with a tape-recorded script.

In another doctoral dissertation, Richard Hurlbut (1979) studied the stability of guided imagery as a facilitator of verbal learning. The task was learning the French words for certain English words. His subjects were 80 eighth grade students who were randomly assigned to one of two groups. The guided imagery treatment was coupled with direct suggestions of increased motivation and powers of concentration. Hurlbut used an audiotape script. The control group was exposed to a period of relaxing classical music coupled with
similar direct suggestions for increased performance. The guided imagery group was exposed to two sessions of guided imagery. Hurlbut found no statistical difference in performance between the two groups. In his conclusion he said live presentations might have better results and suggested using as human an approach as possible.

The researcher was only able to find a few reports by researchers or teachers who studied guided imagery and its relationship to writing.

Hershey and Kearns (1979) studied the effects of guided imagery on the creative thinking and writing ability of gifted children. Their subjects were 51 fourth, fifth, and sixth grade students in classrooms for the gifted. According to the researchers,

The subjects were randomly assigned to two groups stratified by grade level. Each group participated in eight weekly sessions conducted simultaneously by two facilitators. Group A took part in four weekly half hour relaxation/guided fantasy sessions with facilitator A and four weekly half hour relaxation/guided fantasy sessions with facilitator B. Group E participated in four weekly half hour arithmetical exercise sessions with facilitator B and four weekly half hour arithmetical exercise sessions with facilitator A. This schedule established a control over possible facilitator bias and time fluctuations. (p. 73)

Hershey and Kearns found that guided imagery had a positive effect on creative thinking abilities. However, the results related to the creative writing ability of the two groups were inconclusive; the ratings of the students' writing samples could not be analyzed with confidence because inter-rater reliability was not established.

Hershey and Kearns speculated that
an extension of the relatively short time spent on inducing states amenable to pre-conscious influences would result in further positive effects on the creative process. Increasing the time spent in processing the imagery experiences might also have enhanced the creative writing results of the experiment. (p. 76)

In an article in Instructional Innovator, Peter Kline, who with his wife founded the Interlocking Curriculum School in 1972 in Silver Spring, Maryland, wrote about combining classical music with the guided imagery technique. He wrote,

Guided imagery accompanied by a Mozart Symphony makes it possible for students to release creative forces inside themselves and produce writing of a quality they have not achieved before. (p. 20)

Kline cited several case studies of how the technique had improved writing quality and productivity but did not mention how many cases he had observed.

Thelma Palmer (1980), a high school English teacher, also discussed the effect of guided imagery on writing ability. In an article in the English Journal, she said she saw trends that student writing was improving. She attributed the improvement to teaching techniques designed to reach the right brain. One of the techniques she described was guided imagery. She wrote,

Kids who might otherwise have struggled for an hour to get a mediocre paragraph down on their paper find they can write three or four amazing pages as they tour around in a world that is usually only available to them when they sleep. Later when they go on to complete the more formal exposition, they find they have greater facility with the language. (p. 51)
Palmer's article was based on her experience as a teacher, not on empirical research. She did not mention how many students she had observed.

An item in the *Association for Humanistic Psychology Bulletin* (1982) described a study by Beverly-Colleen Galyean on the effects of a guided imagery exercise on the writing skills of tenth grade remedial English students. Galyean taught three tenth grade teachers to use a guided imagery exercise during one 50-minute class period. Her summary of the experiment follows:

At the beginning of an assigned class period students were shown a slide of a rose. They were given one minute to draw the rose and two minutes to write about it. Following this they were asked to take a second sheet of paper and to prepare to repeat the activity after engaging in a guided imagery exercise. The students were instructed to close their eyes, take a few deep breaths, and picture themselves walking on a road that would lead to a beautiful garden. Once in the garden they would find a rose bush on which they would see one special rose, a rose that was more beautiful than any rose they had ever seen. Then they projected themselves into the rose, became the rose, and felt what it was like to have the body and senses of a rose. Then they would see a person coming to them, a human being, who thought they were the most exquisite rose in the world. This person would say something to them and then disappear. They would then return to their bodies, look once more at the rose, and then leave the garden.

When the students finished the imagery the slide was shown once again and they were instructed to draw the rose and write about it. One minute was given for the drawing and two minutes for the writing. The pre and post compositions were scored according to standard criteria for composition skills (i.e., vocabulary and complexity).

Analyses of both the art work and the compositions showed that as the students' art improved, became more centered, balanced, and detailed, so also did
their compositions. In other words, as the students relaxed, centered, sharpened their inner focus and awareness of emotional response to the rose stimuli, their ability to draw and write simultaneously improved. One student rated as "very poor in writing" by her teacher commented after seeing the changes in her work: "After we did the imagery everything became easy. It was as if someone were writing for me. I want to do this again." Teachers reported that the students asked that they be allowed to do more imagery in conjunction with their writing. They also began to image themselves as successful writers, competent in both creativity and grammar. (p. 7)

Follow-up studies showed that approximately 65% of the students showed significant improvement in writing skills, about 20% showed some improvement, and the rest showed no improvement. The students themselves reported that they not only liked the guided imagery exercises but also felt they did better work with them.

The report on Galvean's study did not mention how many students she had studied or whether she had repeated the study in other circumstances with other groups. It also did not mention whether she had attempted to control for the fact that improvement might have been due to practice.

Summary of Section on Guided Imagery

Guided imagery has a long history of use in psychotherapy and health care. More recently it has also been applied to well people, for example, in career counseling, athletics, and education. Most of the literature supports the effectiveness of guided imagery as a technique for reducing anxiety, easing phobias, and improving self-image. An article in the Journal of Creative Behavior stated it well:
In the past decade, imaging has been applied to sex therapy, weight loss, enhanced performance in sports, memory improvement, setting life goals, and solving complex problems. Imaging has been used to break through, to control, to run from, to manipulate, to cure, to create, to censor, to build ego, to tear it down, to expand consciousness. (Ainsworth-Land, 1982, p.9)

Although the technique has been used in writing classes to enhance creativity and improve writing ability, the researcher could find no reports of its use for reducing writing anxiety and only one item on its effect on self-perception of writing ability. The author could only find one other experimental study where a technique related to guided imagery had been used to reduce writing anxiety. That was the study by D. Davis (1979), who used systematic desensitization and found it effective. The study by Galyean was the only one the researcher could find that explored the usefulness of guided imagery in improving self-perception of writing ability.

To the researcher's knowledge, hers is the only study to date of the effectiveness of guided imagery in reducing the writing anxiety and improving the self-perception of writing ability of an adult sample of health professionals.
CHAPTER 3. CARRYING OUT THE STUDY

We cannot do everything at once, but we can do something at once.
Calvin Coolidge

After a restatement of the problem, this chapter describes the research methodology used to explore it. The chapter includes sections on research design, population, instrumentation and instrument development, treatments, and data collection.

Restatement of the Problem

This study, conducted in 1982, focused on one aspect of the problem of writing anxiety: techniques for reducing it. The purpose of the study was to investigate the effects of guided imagery exercises, as compared to writing and editing exercises, on the level of writing anxiety and self-perception of writing ability of health professionals. The researcher compared the effects of two experimental treatments, presented as continuing education workshops. One workshop included guided imagery and other activities. The other, similar to the first, substituted writing and editing exercises for the guided imagery exercises. The experimental groups were also compared with a third group, a no-treatment control group.
Research Design

The researcher used a nonrandomized control group pre-test-posttest design. Campbell and Stanley (1963) called this a nonequivalent control group design. The participants in the two experimental groups chose the particular day (section) they wished to attend the workshops, forming intact groups. The researcher randomly assigned the type of treatment to the workshop sections.

The independent variable was the type of treatment received. There were three levels of the treatment: (a) workshop with guided imagery exercises, (b) workshop with writing and editing exercises, and (c) no-treatment control group.

The dependent variables were writing anxiety and self-perception of writing ability. They were assessed by scores on two instruments -- the Writing Apprehension Test (WAT) and the Writing Ability Self-Assessment (WASA). Daly and Miller (1975b) developed the WAT and the researcher developed the WASA. For the treatment groups, the dependent variables were assessed at the beginning and the end of the workshops and, again, four weeks after the workshops ended. The control group completed only the pretests and posttests.

The researcher chose this particular design because it seemed appropriate for the research question. She conducted a quasi-experiment in a setting that was typical of the instructional settings to which one might wish to generalize the results. The design was the closest she could get to a
true experiment since she was not able to randomly assign subjects to treatment groups.

Campbell and Stanley (1963) called this design "one of the most widespread designs in educational research" (p. 47). They indicated that adding the control group greatly reduces the equivocality of result interpretation, saying:

The more similar the experimental and the control groups are in their recruitment, and the more this similarity is confirmed by the scores on the pre-tests, the more effective this control becomes. (p. 48)

However, they cautioned that intrasession history can be a threat to the internal validity of this design since the treatments take place at different times and something could occur during one treatment that does not occur in the other. (This did indeed turn out to be a problem when the workshops were presented.)

Population

The population for this study was health professionals from the Central Ohio area. The researcher chose this population for several reasons:

1. Other studies have dealt primarily with high school and college students. The researcher was interested in studying adults, people who have started working and realize that writing is important to their careers.

2. The researcher has worked with health professionals and health professions students and found that many do have negative attitudes toward writing.
3. The researcher believes health professionals are fairly representative of some other groups of professionals, for example, scientists and engineers, who generally have little background in writing but find they must write for work and feel handicapped by their lack of experience.

4. The researcher was encouraged by colleagues and students to develop workshops for health professionals.

5. The researcher was able to obtain funding for the study from her institution and to use the resources of the Office of Continuing Education at her school to recruit subjects and to handle many of the other details involved in carrying out the study.

Recruitment of Subjects

Participants for the study were recruited by brochures, fliers, and newsletter items about workshops entitled "How to Reduce Writing Anxiety and Improve Writing Skills." Two workshops were scheduled for June 1982 and two for September-October 1982.

The publicity about the workshops included the information that two sections would be offered (Tuesday or Thursday afternoon) and that registrants could choose the one most convenient for them. As an incentive, one continuing education unit was offered to those who completed all four sessions. A minimal fee was charged to encourage commitment and to help cover costs.
A brochure announcing the two June 1982 workshops was sent to 400 locations in Central Ohio (such as hospitals, educational institutions, laboratories, government agencies, clinics, voluntary organizations, nursing homes, and other facilities). Since many of the brochures went to areas outside Columbus but only one person from outside the Columbus area registered for the June workshops, brochures for the September workshops were sent more selectively—only to Columbus area locations.

Other types of publicity included items placed in newsletters to Central Ohio health professionals, fliers sent to numerous departments in Ohio State University Hospitals and the College of Medicine, and announcements placed on bulletin boards around the health science complex at Ohio State University.

Because the workshops were sponsored by the Office of Continuing Education of the School of Allied Medical Professions at Ohio State University, that office handled much of the publicity for the workshop. (See Appendix A for copies of the brochure, fliers, and a newsletter item used to publicize the workshop.)

All participants and control group members were recruited similarly. They were not aware that different treatments would be given.

The control group consisted of people who expressed interest in the workshop but could not take it at the times offered or who registered too late. They were told the
instructor was conducting a study on the attitudes of health professionals toward writing and asked to participate in the study.

Control group members were encouraged to participate in several ways. They were told they would be placed on the mailing list of people to receive information first the next time the workshop was offered. They were told they might gain insights about their own writing by completing the forms and would be adding to the knowledge of others interested in research on attitudes toward writing. The researcher offered rewards too -- a bibliography on writing and a list of techniques to help one start a writing project -- that would be sent when she received both sets of forms from the control group. As an incentive the researcher included a granola bar or a packet of hot chocolate with the first materials sent to the control group. (See Appendix A for copies of the letters to the control group.)

Subjects

The subjects of the study were 74 adults (primarily health professionals) from the Central Ohio area. The guided imagery group contained 25 (after one person dropped out), the writing and editing group 23, and the control group 26. The treatment groups consisted of adults who signed up to take the workshops.

The two workshops were offered twice, in June and in September-October; and the data from the two phases were com-
bined. There were 38 subjects in the first phase and 36 in the second. A breakdown of subjects by phase and treatment appears in Table 1.

Table 1
Breakdown of Subjects by Phase and Treatment

<table>
<thead>
<tr>
<th>Group</th>
<th>June '82</th>
<th>Sept-Oct '82</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided Imagery</td>
<td>12</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>Writing &amp; Editing</td>
<td>13</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>Control</td>
<td>13</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>38</strong></td>
<td><strong>36</strong></td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>


One of the constraints under which the researcher was operating was that because the workshops were being offered through the Office of Continuing Education, she had to take participants in some other fields (for example, engineering) who registered before the sections were filled. However, since she had pretest information on these people, she was able to determine that they did not differ significantly from the other subjects.

Table 2 indicates the distribution of subjects by profession and Table 3 by sex and age range.
## Table 2
### Distribution of Subjects by Profession

<table>
<thead>
<tr>
<th>Profession</th>
<th>Freq</th>
<th>Cum Freq</th>
<th>%</th>
<th>Cum %</th>
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<td>Art Therapy</td>
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<td>2.7</td>
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<td>4.1</td>
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<td>8</td>
<td>6.7</td>
<td>10.8</td>
</tr>
<tr>
<td>Computer Science</td>
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<td>12</td>
<td>5.4</td>
<td>16.2</td>
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<td>Education</td>
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<td>5.4</td>
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Table 3
Distribution of Subjects by Sex and Age Range

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Since the study was limited to subjects who registered for or wished to participate in the workshop, the results may only be generalized to other groups who choose to seek help in reducing their writing anxiety and improving their writing skills.

**Instrumentation and Instrument Development**

Several instruments were used to gather data. They were as follows:

1. Demographic and Academic Information (DAI)
2. Writing Apprehension Test (WAT)
3. Writing Ability Self-Assessment (WASA)
4. Writing History
5. Change in Writing Attitude
6. Daily Check-Up
7. Workshop Evaluation Form

This section discusses the instruments in detail and includes information about the development of those instruments designed especially for this study. The instructor developed the DAI, WASA, Change in Writing Attitude, and Daily Check-Up. She adapted the other instruments from instruments by others.

The DAI, WAT, WASA, and Writing History were all used in pilot trials.

The DAI, WAT, WASA, and Writing History were used as pre-tests. The WAT, WASA, and Change in Writing Attitude were used as post-tests and follow-up tests. The Daily Check-Up
and Workshop Evaluation Form were used for formative and summative evaluations.

(Appendix B contains copies of all instruments used in the study.)

Demographic and Academic Information (DAI)

This 18-item form was designed to be used at the beginning of the treatment. The first section gathers such information as the respondent's name, address, profession, age, sex, marital status, writing hand, and opinion of his or her handwriting. Other sections request information about the respondent's academic and professional writing background and the types of writing the respondent does.

Some of the demographic information was encoded and is reported in Tables 2 and 3. The researcher used the rest of the information as a needs assessment to help her know her audience when she taught the workshops. Finally, the researcher hoped respondents would gain some insights about their writing from filling out the form.

A pilot trial of the instrument was conducted with four groups of health professions students. In addition, the researcher's adviser (I. Keith Tyler) reviewed the instrument and made suggestions for changes. Based on the questions respondents asked during the pilot tests and on Professor Tyler's suggestions, the researcher modified the instrument to eliminate some ambiguous items. (Appendix B includes a copy of the revised DAI.)
Writing Apprehension Test (WAT)

This 26-item, likert scale, self-report instrument was developed by John Daly and Michael Miller (Daly & Miller, 1975b). It has a 5-point scale and a mid-point of 78, a high of 130, and a low of 26. In this study the WAT was used as a pretest, posttest, and follow-up test to assess respondents' level of writing anxiety.

To make the WAT more appropriate for health professionals and health professions students, the researcher changed the instrument slightly. For example, she changed the term composition to paper in several items. (A copy of the WAT as used in this study is included in Appendix E.)

When reporting the development of their instrument, Daly and Miller discussed the measures they had taken to determine its reliability and validate it. They used a split half technique to obtain the reliability of the instrument, comparing the top half of the instrument with the bottom half. They said, "Corrected for attenuation the obtained reliability was .940. Test-retest reliability of the instrument over a week was .923" (p. 245).

The researcher ran internal consistency tests on the WAT. She had a coefficient of .99 for a group of 44 health professions students and .95 for the 38 subjects (primarily health professionals) in the June treatment and control groups.

Daly and Miller discussed how the WAT's validity had been tested. They said, "Certainly there is face validity to the
instrument items. They seem to represent the construct. But apart from this face validity, predictive success is demanded if we are to retain the instrument" (p. 247).

They reported a study conducted in 1974 by Daly and McCrosky on 176 adults in extension courses at West Virginia University. One of the purposes of the study was to determine the predictive validity of the WAT. Daly and McCrosky predicted that people with high writing anxiety would choose jobs they perceived to have low writing requirements. They administered the WAT during the extension courses. At the end of the courses they asked subjects to complete another questionnaire that included an item related to the writing requirements of their job. They found that "individuals with high anxiety of writing...perceived their occupations as having significantly less...written communication requirements than did those with low apprehension of writing..." (p. 247).

Since 1975 Daly and his colleagues and other researchers have reported numerous studies that examined the predictive validity of the WAT (Book, 1976; Daly, 1977, 1978a, & 1979; Daly & Shamo, 1976, 1978; and Powers, Cook, & Meyer, 1979). The general conclusion of these studies has been that the WAT is a valid measure of writing anxiety.

Many researchers have used the WAT to assess degree of writing anxiety. Most researchers used the WAT as one of their data collection tools with other instruments to measure other constructs. Others have used the WAT to compare it with similar instruments they had developed.
This researcher decided to use the WAT in part because it has been so widely used and in part because it is easy to administer. However, she was aware of what some researchers considered to be problems with the instrument. For example, it does not differentiate between different types of writing. Nor does it distinguish between those people who just dislike writing but complete satisfactory writing projects and those whose dislike of writing interferes with the writing process.

**Writing Ability Self-Assessment (WASA)**

This 40-item instrument was developed by the researcher to assess self-perception of writing ability.

The WASA is based on a Likert-type five-point scale, ranging from strongly agree to strongly disagree. The scores may range from a low of 38 to a high of 190, with a mid-point of 124. In this study the WASA was used as a pretest, posttest, and follow-up test.

While the other major instrument used to collect data for the study, the Writing Apprehension Test (WAT), does have a few items that measure respondents' opinions of their writing, the researcher was looking for a more thorough instrument that appraised a person's opinion of his or her writing along several dimensions (for example, sense of audience, style, and content).

The researcher first tried to find an instrument to assess self-perception of writing ability. She conducted
an extensive search of the literature on teaching writing and attitudes toward writing. She examined the *Eighth Merrill Measurements Yearbook* (Eurcs, 1978). She queried several Ohio State University professors of writing and humanities education.

Daly and Wilson (1980) discussed an instrument developed by Daly to "tap self-perception of writing." They said respondents were asked to complete a number of semantic differential scales related to their own writing. Responses were clustered into 14 dimensions, each of which assessed a different component of writing. The components are listed in Chapter 2. However, a copy of the instrument was not included in the Daly and Wilson paper.

Starting in fall 1981 the researcher tried repeatedly to reach John Daly to ask for a copy of the instrument he had developed. She made three long distance calls and wrote two letters to Daly. However, he did not respond to the telephone messages or the letters. Therefore, the researcher was not able to obtain a copy of the instrument.

The development of the WASA had three main phases, each with a number of steps. The phases can be characterized as (a) early planning, (b) systematic development and validation, and (c) reliability testing.

**Early Planning.** This phase had five steps.

1. The researcher read several articles on questionnaire development.
2. The researcher brainstormed about 60 positively worded statements related to self-perception of writing ability. These items were based on her reading and experience as a writing teacher.

3. The researcher used a Likert scale format to design a draft instrument using 43 of the 60 statements.

4. Several health professions students were asked to complete the instrument.

5. An assistant professor of English, an expert in questionnaire development, and the researcher's adviser reviewed the instrument and made specific suggestions for the next steps to take.

Systematic Development and Validation. This phase had eight steps.

1. The researcher searched the literature on instrument development more thoroughly. She also read more literature on evaluation of writing in general (Campbell & Odell, 1977; Dederick, 1974; Judice, 1965; among others) and interviewed several writing teachers about elements they look for when evaluating their students' writing.

2. Based on the literature, interviews, and the researcher's judgment, she decided to limit the instrument to assessing respondents' opinions of six broad categories: sense of audience, organization, style, mechanics, editing ability, and content. Items about
a seventh category (overall writing ability) were also included. The categories, of course, are inter-related.

3. The researcher discussed the categories with three writing teachers who agreed that these categories did have face validity as a way of evaluating one's writing ability.

4. Drawing in part from the original pool of items, the researcher wrote about 10 items for each category and asked a panel of three writing teachers to review the items to determine whether the items reflected the particular categories.

5. Several health professionals responded to all the items to indicate whether any were confusing, used unfamiliar words, or caused other problems.

6. The researcher refined and eliminated items until she had five items for each of the six specific categories and eight items for the overall writing ability category. Some of the items were similar and were included on purpose to check for consistency of response.

7. The researcher tossed a coin to determine which items would be negatively worded and which would be positively worded (19 of each).

8. The order the items would appear in the instrument was also decided by random.
The final validated instrument had 38 Likert scale items related to self-perception of writing ability. A 39th item asked for the respondent's opinion of the instrument as a means of assessing one's own writing ability.

**Reliability Testing.** This phase had four steps.

1. **In May 1982, the researcher administered the WASA to an interdisciplinary class of junior and senior health professions students at Ohio State University.** The researcher told the students she was studying health professionals' attitudes toward writing and asked for their cooperation in completing a questionnaire. She did not tell them she planned to administer the same instrument again in another week.

2. **One week later, the researcher administered a slightly revised WASA to the same group. The second time, only 30 of the original 38 students were present. Six students who had not been present the week before took the WASA for the first time. For the retest, the researcher changed the color of the paper and added an open-ended item that asks for the respondent's general opinion of his or her writing. She told respondents she had changed the instrument slightly and would appreciate their continued cooperation with the study. The 38 original Likert scale items related to self-perception of writing ability were unchanged.**
The responses for the 44 students who responded one time and the 30 students who responded both times were encoded on IBM computer sheets.

Two types of reliability tests were conducted on the data.

a) A test of internal consistency. This test indicates the degree to which the items as a whole and the items in each category fit together. The FORTRAN Analytical Package (FORTRAN) was used for this test. The internal consistency coefficient of correlation for the total instrument was .94. The estimates for the individual categories were as follows: sense of audience = .75, organization = .76, style = .76, mechanics = .70, editing ability = .80, content = .56, and overall ability = .84.

b) A test of stability. This test indicates the concordance of the scores on two different testing occasions and is done by calculating a test-retest Pearson product-moment correlation coefficient. This coefficient was .85 for the total instrument. The Statistical Analysis System (SAS) was used to determine the correlation.

Based on the results of the reliability tests and the advice of the computer consultants, the researcher decided not to change the WASA any more before using it with the subjects in her study.

(A copy of the WASA is included in Appendix E.)
Writing History

This instrument was used in the pretest. It asks respondents to spend a few minutes writing about the experiences in their lives that shaped their thoughts, feelings, and attitudes about writing. The researcher used the Writing History because she wished to have some information from participants in addition to the responses to Likert scale items.

The Writing History was adapted from a similar form, Writing Autobiography, by Helen Field Heaton (1980), which Heaton used to collect data for her dissertation.

Pilot trials were conducted on the Writing History, and it was slightly modified. For example, respondents were asked to write for a few minutes instead of for 10 minutes as originally requested, because the researcher thought 10 minutes might be too threatening to people already anxious about writing.

(A copy of the Writing History form is included in Appendix B.)

Change of Writing Attitude

This form asks respondents to write a few minutes to discuss whether they have noticed any changes in their thoughts, feelings, and attitudes about writing; and, if so, to what they attribute the changes, and if not, why they believe they have not changed. The form was used along with the WASA and the WAT as part of the posttest for all groups and also as a follow-up for the experimental groups.
The researcher used this form because she was interested in having subjects respond to some open-ended questions at the end of the workshops. She wished to find out whether any events, other than the workshops, which might affect attitudes toward writing, had occurred during the four weeks of the treatment. (A copy of the form is included in Appendix B.)

**Daily Check-Up**

This form was written by the researcher, based on similar evaluation forms, and contains four items:

1. What did you gain from today's session?
2. What part or parts of today's session were most valuable to you? Why?
3. What part or parts of today's session were least valuable to you? Why?
4. Other comments or suggestions.

The form was distributed and collected at the end of the first three sessions of the workshops so participants could summarize for themselves what they had gained from the sessions and give the instructor feedback about the sessions. The information helped her plan future sessions. (A copy is included in Appendix E.)
Workshop Evaluation Form

This form was administered at the end of the fourth session of the workshop. It was adapted from a form designed by Marjorie Brunner, director of the Office of Continuing Education of the School of Allied Medical Professions, Ohio State University.

Its purpose was three-fold:

1. To give participants a chance to reflect on what they had gained from the entire workshop.

2. To give the researcher feedback on the effectiveness of the workshop and some of its elements. For example, one item asks participants to comment on the value, or lack of value, of the guided imagery or writing and editing exercises. (The two groups received slightly different forms.)

3. To give the Office of Continuing Education information about one of their offerings and about the participants in it. For example, one item asks participants whether they were reimbursed for the cost of the workshop.

(A copy of the form is included in Appendix E.)

Pilot Trials

As mentioned above under some of the individual sections, pilot trials were conducted on several of the instruments (DAI, WAT, WASA, and Writing History) during winter and spring 1982. The instruments were used with health
professions students in biomedical communications, medical dietetics, medical technology, and occupational therapy and with students and adults in other professions. As a result of the pilot trials, some of the instruments were modified before being used with the treatment groups.

**Treatment**

The researcher planned the techniques, activities, guided imagery activities, and other content for the workshops. She also taught the workshops. The basic premise behind the development of the workshops was that participants' writing anxiety would be reduced and their attitudes toward writing would be improved as they gained confidence in their writing ability.

This section includes the rationale for using a workshop format and outlines the major stages in developing and presenting the workshop. The researcher used the general model for program development suggested by Brunner (1981), which includes needs assessment, planning, implementation, and evaluation. The model is similar to that suggested by other adult educators, for example, Malcolm Knowles (1980), one of the pioneers in adult education.

Not all stages were completed in order or before another stage was begun. Program development, like writing, is not a linear process.

In developing and presenting the workshops, the researcher was guided by the theories of learning-centered teaching
of writing expressed by Elbow, Macrorie, Moffett, Shaughnes-
sy, and others. She was also guided by the theories of
adult education expressed by Knowles and others. In fact,
the theories of learner-centered teaching of writing and of
adult education are based on some of the same principles.

According to Knowles (1980), a workshop is a short, in-
tensive, multiactivity learning experience that emphasizes
the development of individual competencies in a defined area
of concern largely through a variety of small groups.
Brunner (1981) said, "The distinguishing feature of the
workshop is that it combines instruction with laboratory or
experimental activity for the participants" (p. 21).

The researcher decided to use a 10-hour, four-session
workshop format for several reasons:

1. Health professionals attend workshops. Many of them
need continuing education units to maintain their li-
censes. They obtain the units by attending workshops
and other continuing education offerings.

2. The researcher wanted to see whether a 10-hour,
four-session treatment would be effective for reduc-
ing participants' writing anxiety and improving their
self-perception of writing ability. Most other re-
searchers have used a treatment that lasted an aca-
demic quarter or semester. The researcher wished to
see if writing anxiety could be reduced in less time.
Since her audience was health professionals, she
chose a length of time that seemed convenient for
them.
3. The literature cites workshops as an effective way of teaching and learning (Rogers, 1981; Cox & Roland, 1974) for health professionals. Rogers (1981) wrote that the workshop uses basic principles of adult education and is a good forum for providing problem-centered learning that offers learners a chance to experience and apply what they are learning.

4. The researcher's past experience in teaching and learning led her to believe that workshops are an effective means of learning and that she was capable of presenting them.

Needs Assessment

Health professionals have generally had little formal coursework in writing but still need to be able to communicate effectively in writing. Their writing ability can be crucial to their patients, to other health professionals, and to the general public. Writing is also important to their own career development and advancement.

The researcher used many resources to answer the question: What does the learner need and want?

1. Her own experiences as a learner and teacher.
2. Interviews with health professionals and health professions students.
3. Literature searches.
4. Suggestions from educators.
5. Information from the participants themselves.
**Personal Experience.** The researcher first became interested in doing research on writing anxiety in winter 1980 when one of her students in a biomedical writing and editing course was so blocked for the first few weeks of the course that she was unable to turn in assignments. Through the years she had seen many other students with varying degrees of writing anxiety (some of them to the point where they dropped the course after a few weeks). Even before 1980, the researcher had developed and incorporated techniques (including guided imagery) and content that helped improve her students' attitudes toward writing.

The researcher's experience as associate editor of a professional journal and leader of writing workshops for health professionals also revealed to her the need to help health professionals improve their attitudes toward writing.

Before presenting the actual treatment, the researcher gave numerous workshops for health professionals and other groups, starting in summer 1980, during which she gained information on the writing strengths and weaknesses many health professionals (and other adults) have.

**Interviews.** When the researcher wrote a proposal for funding, she interviewed at least 10 health professionals in different disciplines to learn whether they believed health professionals would be interested in and would attend a continuing education workshop designed to reduce writing anxiety and improve writing ability. She also asked what
information about writing they believed health professionals needed to have to perform well in their professions. Suggestions included how to write clearly and concisely, how to organize papers, how to prepare research reports, and how to revise. The grant proposal was approved and funded, indicating that the school's research committee recognized the need.

**Literature Searches.** Writers in health related journals have long stressed the importance of writing for health professionals. Some have advocated including scientific writing courses in the curricula (Bell, 1979; DeBakey, 1965; Menkin & Martin, 1973; Roland & Cox, 1976; and Woodford, 1967).

An extensive review of the literature on writing anxiety and on teaching writing, some of which is reported in Chapter 2, also led the researcher to believe that many people suffer unduly from writing anxiety and that there are techniques and treatments that could be appropriately used with health professionals.

**Suggestions from Educators.** The instructor presented her proposal to a group of educators (graduate students and professionals) and asked for their suggestions of what to incorporate in the workshops. They said such things as, "I'd like an opportunity to share my problems, practice writing, and have my writing reviewed by small groups." "I'd like suggestions for ways of motivating myself to start a writing
"I'd like information about effective writing techniques." Many of this group's suggestions were later incorporated into the workshops.

By the time the workshops began, the researcher had a good idea of what would be relevant content and appropriate teaching methodology for her audience.

**Participant Information.** The needs of the actual participants in the workshops were assessed in several ways: (a) The Demographic/Academic Information form and other instruments used as pretests provided information; (b) participants introduced themselves at the beginning of the first session and talked about why they had registered; (c) at the end of each session participants completed the Daily Check-Up; and (d) Participants made suggestions during the sessions and in their journals for information they would like to have.

In sum, the researcher conducted an extensive needs assessment based on her experience, interviews, literature searches, discussions with educators, and information provided by participants. The needs assessment gave her input for the second stage: planning the workshops.

**Planning**

This section covers the following elements: audience, objectives, content, and workshop characteristics. Although discussed separately, the elements are interrelated. Some
elements that could be included in the planning section (for example, designing learning experiences) are discussed later under implementation.

**Audience.** To know the audience the researcher had to be aware of the characteristics of adult learners, the needs of health professionals, and more specifically, the needs of the participants in the workshops.

The researcher kept in mind the characteristics of adult learners. Generalizing about adult learners, Knowles (1980) said they (a) are self-directed and independent, (b) have a growing reservoir of experience that is a resource for learning, (c) have a readiness to learn that is directed toward a professional role, and (d) are interested in immediacy of application of what they learn.

The researcher planned the content and activities of the workshop to be relevant to health professionals. She was aware of the types of writing projects many health professionals have.

During the introductions in the first session of the workshop, the instructor took notes on comments participants made about why they had registered for the workshop and the types of writing they do or would like to do. She also carefully read the pretests after the first sessions, which helped her know her specific audience.

**Objectives.** The general objectives for the workshops as they appeared in the brochure were as follows:
1. Identify and use techniques for reducing writing anxiety that work for you.

2. Apply a three-phase process for writing to your own projects.

3. Use the principles of clear writing.

4. Apply a readability index to your writing.

5. Revise a writing project systematically.

6. Evaluate the writing of your peers, colleagues, or students.

The objectives were based on the extensive needs assessment the researcher had already conducted to learn about the attitudes toward writing and writing ability of health professionals.

Content. The general outline of the content for the four sessions for both treatments was as follows:

**Session 1**

Myths about writing

Writing process overview (prewriting, writing, and post-writing)

Guided imagery or writing and editing exercise

**Session 2**

Organization

Readability

Principles of clear writing

Peer review

Guided imagery or writing and editing exercise
**Session 3**

Revision

Conciseness

Guidelines for non sexist writing

Human interest

Guided imagery or writing and exercise exercise

**Session 4**

What editors look for

Bibliography

Guided imagery or writing and editing exercise

Summary of workshop

The researcher planned that the content and activities of the two treatments would be much the same except that in one section the participants would spend 30 to 40 minutes each week on a guided imagery exercise and in the other section they would have an extra writing and editing exercise.

**Workshop Characteristics.**

Based on the audience, objectives, and content, the researcher decided to offer a workshop with the following characteristics. The workshop would last a total of 10 hours and meet for two and one-half hours once a week for four weeks from 3:00 to 5:30 p.m. on either Tuesday or Thursday (depending on which section participants chose). Both sections would meet in the same seminar room (large enough for about 20 people) with a chalkboard, overhead
projector, and screen. Participants and instructor would be seated around a table so that everyone could see everyone else. The two sections of the workshops would be offered twice, once in June 1982 and again in September-October 1982. The latter decision was made because the researcher wished to have ample subjects for the study but did not wish to have the individual sections too large.

In summary, the researcher planned the workshop objectives, content, and characteristics with the needs of adult learners and health professionals in mind.

Implementation

The implementation stage had several components:

1. Designing learning experiences
2. Preparing materials
3. Pilot testing
4. Publicizing the workshops
5. Presenting the workshops

Each component is discussed below.

**Designing Learning Experiences.** In trying to provide the same treatment to both groups (other than the guided imagery or writing and editing exercises), the researcher prepared detailed written plans that incorporated the time, activity, and necessary materials. The plans were based on the objectives.
For each session she used a variety of techniques, for example, mini-lectures, group discussion, application of information, small group interaction, working in pairs, and a guided imagery or writing and editing exercise.

An outline of the content for the four sessions is included earlier in the section on content. A summary of the sessions appears later in the section on workshop presentation.

Preparation of the Materials. The researcher developed most of the learning materials. Some were based on materials prepared by other writing teachers. A few of the handouts were prepared by others. (Copies of most of the handouts are included in Appendix C.)

One of the researcher's former students prepared an overhead transparency series on the writing process that was used during the first session to introduce some of the activities in each stage of the writing process.

The researcher wrote the guided imagery scripts for the four sessions of the guided imagery group. The scripts were based on the literature and on the researcher's experience in using imagery. Eva Krueger, an art therapist who started the art therapy program at Bowling Green State University in Ohio and who is doing research on guided imagery herself, reviewed the scripts. She characterized them as motivational and psychologically sound. (Copies of the scripts are included in Appendix C.)
Pilot Testing. Most of the content, techniques, and activities and two of the guided imagery scripts were tried out during 1981 and 1982 with groups of health professionals, health professions students, and students and professionals in other fields. For example, in winter 1982, the researcher taught a 10-week course, Biomedical Writing and Editing, during which she incorporated most of the content to be included in the four-session workshops.

During 1981 and 1982, the researcher also presented at least 10 workshops that lasted two to three hours each on various aspects of writing. Five were on reducing writing anxiety. For each of the latter workshops, the researcher tried some new techniques and wrote a new guided imagery script. This gave her practice in using different techniques and in using guided imagery.

Since the researcher asked for evaluations at the end of the 10-week course and the workshops she taught, she was able to benefit from the participants' comments and suggestions. Based on the evaluations and on the researcher's own judgment of what was effective and what was not, some of the techniques, activities, and guided imagery scripts were modified.

Publicizing the Workshop. As described in the section on population earlier in this chapter, the researcher worked with the director of the Office of Continuing Education to plan the publicity for the workshops. The brochure for the
workshops was distributed about six weeks before the date of
the beginning of the workshops. Items for newsletters were
sent out in time to meet deadlines. Fliers announcing the
workshops were placed on bulletin boards around the medical
complex at Ohio State University about three weeks before
the workshops. (Some of the materials used for publicity
are included in Appendix A.)

**Presenting the Workshops.** In a two-part series that ap­
peared in *Medical Meetings*, Cox and Ecland (1974) discussed
how to make writing workshops work. Their suggestions in­
cluded the following: schedule the day's activities effi­
ciently, start on time, divide participants into small
groups, carefully plan the use of audiovisual materials, en­
courage individuals to participate equally, and tie up loose
ends in a concluding session. The researcher tried to fol­
low all these suggestions in presenting the workshops.

This section includes a description of the following ele­
ments: (a) establishment of a supportive learning climate,
(b) highlights of the sessions, and (c) differences between
the guided imagery and the writing and editing groups and
between the June and September-October workshops, including
problems encountered during the treatments.

(a) **Establishment of a supportive learning climate.**

Knowles (1980) and other educators have stressed the im­
portance of establishing a climate conducive to adult learn­
ing. They point out that the how (process) of a learning
experience is probably more important than the what (content).

The researcher considered this element particularly important because she expected to be working with people with negative attitudes toward writing and writing classes who were looking for ways to improve their attitudes and their writing.

Therefore, from the beginning of the sessions the researcher tried to establish and maintain an open and trusting environment. Her goal was to lead a workshop that was informal but well planned and organized, a climate appropriate for adult learners and for people anxious about writing. To do so she used techniques suggested by Knowles (1980), Krumboltz and Potter (1973), and numerous others.

Some of the techniques and activities used to establish a climate conducive to adult learning follow.

The room was arranged so that all participants and the instructor were sitting around a table so they could see one another.

Participants introduced themselves by stating their name, where they worked, types of writing they do and wish to do, how they feel about writing, and one of their resolutions in taking the workshop.

The instructor introduced herself and shared openly how difficult writing has been for her. She also encouraged participants to share their feelings about and problems with writing when they introduced themselves and at other times
during the sessions. The instructor tried to serve as a role model for acceptance and positive reinforcement when participants shared their thoughts, feelings, and attitudes about writing.

The participants and instructor called each other by their first names. All wore name tags during the sessions and the instructor learned the participants' names by the second session.

In general, the instructor was supportive of participants and planned ways to cause them to interact (in pairs and small groups) and to make them feel their contributions were valued.

(b) Highlights of the sessions.

The researcher followed the written outline as closely as possible. For the most part she even told the same jokes and anecdotes and used the same quotes in the two treatments. (They were written into the lesson plans.) However, she tried not to be too rigid about the outlines and planned time for discussion, comments, and questions. (She did not always plan enough time for this, however, as will be discussed in the section under problems.)

Session 1

At the beginning of the workshop, the instructor suggested that the following saying be the motto of the workshop:

If you think you can,
Or if you think you can't,
You're absolutely right.
She spoke about the self-fulfilling prophecy and said she hoped all participants would complete the workshop thinking they could meet the writing and other challenges in their lives.

Most of the current literature on teaching writing emphasizes that we should look at writing as a process, not just a product (Elbow, 1973, 1981; Macrorie, 1980; Moffett, 1968; Murray, 1980; Shaughnessy, 1977).

As an overall framework for the four sessions, the participants covered various aspects of a three-phase writing process (prewriting, writing, and postwriting). During the first session, the instructor presented a mini-lecture and led a discussion on the writing process, detailing the various activities that might take place at each stage. She used the terms prewriting (some call this planning or rehearsal), writing (often called drafting), and postwriting (also called rewriting, revision, or editing).

The writing exercises during the first session were an application of the stages of the process. Participants first discussed in small groups an idea or general topic they were thinking of writing about (a prewriting exercise). They then did a freewriting exercise (a technique recommended by Elbow, Macrorie, and others), which consists of writing steadily without editing for five or more minutes. Their instructions were to write fast, without editing and without being critical, to keep their pens moving on the paper, even if they had to say, "I don't know what to write
about. I'm stuck. I'm starting to dislike this instructor. I want out of here."

After the writing stage, participants went back over what they had written to revise it (postwriting).

The instructor's plan was to give the writing and editing group more time than the guided imagery group to complete and discuss these activities. However, in June there was not time during the writing and editing group's first session to give that group extra time. This will be discussed later under problems.

Another highlight of the first session was a discussion of some of the myths people believe about writing that get in their way. This section was based on articles by Frank Smith (1981) and Boohar and Davidson (1982). Examples of the myths are as follows:

1. It's got to be right the first time.
2. I have to know what I'm going to say before I start to write.
3. Other people find writing easier than I do.
4. Writing should be neat and tidy.

During the first session of the guided imagery group, the instructor introduced guided imagery and presented a rationale for using it. The guided imagery script was "A Helping Companion" (see Appendix D). Briefly, this script asks participants to visualize themselves struggling with a writing project -- to feel the discomfort they are having. While they are struggling, a being comes to help them. It could
be someone they know or not; it could be a being other than a human. They visualize themselves discussing their writing project with that being, who reminds them that writing doesn't have to be right the first time, and they sense themselves relaxing. At the end they are reminded that they can summon the helping companion wherever they wish because it is part of their imaginations.

After the instructor finished reading the script, the participants wrote about the experience they had when visualizing. Those who wished to then talked about their helping companion with the rest of the group.

Homework was assigned each session. At the end of the first session in June participants were asked to bring in one to five pages of a draft of a writing project they were working on. In September-October, the instructor modified the homework assignment by asking for just one page.

All participants were asked to keep logs on their thoughts, feelings, and attitudes about writing and to pass in a journal entry each week.

The guided imagery groups were encouraged to use imagery during the week to help them with their writing projects, and the writing and editing groups were encouraged to think positively about their writing projects.

Each week participants were encouraged to apply what they had covered in the workshop to their writing.
Session 2

From the second session on, some time at the beginning of the sessions was devoted to questions and discussion of the participants' writing world during the week. Participants shared what happened when they applied something covered the previous week or some other experience with writing. For example, the second week several participants said they had tried writing without worrying about whether it was right and had found it worked well for them. They finished their writing project faster than usual because they did not fret as much about it; they just did it. The instructor also shared her own experiences.

The rest of the second session was devoted to organization, readability, principles of clear writing, a guided imagery or writing and editing exercise, and peer review.

Organization is part of prewriting. The instructor gave a mini-lecture and led a discussion devoted to a plan for organizing a long writing project (Hcup and Fearsall, 1980). She stressed that the plan works for some writers but that variations might be necessary to individualize the plan. Briefly, the steps include the following:

1. Brainstorm all you can think of about the topic on a large sheet of paper or on a chalkboard.
2. Write the audience and purpose for the project on another large piece of paper.
3. Keeping in mind the audience and purpose, underline key ideas in the brainstormed materials.
4. Write the key ideas on index cards so you can move them around easily.

5. Arrange them in a logical order and tape them to the sheet that has audience and purpose written on it. This is a type of outline, but it does not have to be a rigid one. The cards can always be moved.

6. Organize your research notes into piles corresponding to the key ideas.

The instructor said this technique, even though it seems like a lot of detail, is a useful way of working with a long project because it forces writers to be physically handling their key ideas and to be thinking of different ways the paper could be organized.

During this section, the participants and instructor also discussed the formulas for writing certain types of papers, for example, scientific papers and journalistic pieces.

The next two topics for Session 2, readability and principles of clear writing, were included to help participants examine their writing style. The instructor based these sections on the work of Robert Gunning (1968). Gunning was a writing consultant who advised numerous organizations, for example, the Wall Street Journal, to help them improve the readability of their written materials.

For the readability section the participants and instructor discussed the importance of writing so that the audience can understand. Participants used the Gunning Fox Index with the homework they had brought in. The Gunning
Fog Index is a way of determining the reading level of a particular passage. (See Appendix C, Session 2, for instructions on how to use the index.) While there are other formulas for determining readability, the instructor used Gunning's because it is relatively easy to use and because it is one of the best known. After participants had determined scores on their own writing passages, the instructor discussed what the scores meant and gave examples of the average readability scores of well known magazines, professional journals, and books. She also gave guidelines for the readability scores writers for various audiences should aim for. For example, most materials for patients should be written at the eighth grade level.

The next activity was a lecture-discussion of 10 principles of clear writing (Gunning, 1968). While many writers have discussed style and guidelines for it, the instructor based this section on Gunning's book because he gives so many useful examples and because he includes humor. The 10 principles (Gunning emphasized that they are guidelines, not rigid rules) are as follows:

2. Prefer the simple to the complex.
3. Prefer the familiar word.
4. Avoid unnecessary words.
5. Put action in your verbs.
6. Write like you talk.
7. Use terms your reader can picture.
The next activity for the guided imagery group was the guided imagery exercise. The instructor read the script "Your Ideal Writing Environment" (see Appendix E). The script asks participants to imagine that they are going to a place that is their ideal environment for writing. They imagine the sights, sounds, smells, and other sensations they have while they are there. They imagine that they feel invigorated, creative, and productive. They are reminded at the end that they may return to their ideal writing environment whenever they wish because it is in their imaginations.

After the visualization, participants used magic markers and newsprint to draw pictures of their ideal writing environments. They then taped their drawings to the wall. Most participants responded enthusiastically to doing the drawings, and the ensuing discussion brought a number of insights. For example, participants said such things as, "Most of us did not draw our offices." "I see ways I could change where I write to make it closer to my ideal." "It's fascinating to see what other people like in their writing environment -- the similarities and the differences."

For the writing and editing group, the instructor gave the following instructions:

Spend a few minutes writing about your own writing process. Consider how you approach a writing
project, the kinds of things you do to put off writing, when and where you write, what difference the type of writing you are doing makes, whether you like music or quiet, and anything else you would like to add.

Participants wrote enthusiastically for about 10 minutes. They then talked in groups of three or four (June session) or in pairs (September-October session) about their writing process. Then the whole group discussed what they had learned from this exercise.

The next activity was a discussion and practice of peer review. The instructor presented a rationale for peer review. She pointed out that it is an excellent way to get an idea of how an audience reacts to our writing. It gives the writer ideas for revisions. Participants also shared their ideas about peer review. The participants and instructor reviewed a handout entitled "Peer Review Guidelines" (see Appendix C, Session 2). In groups of three or four, participants practiced peer review with the homework they had brought in.

The instructor circulated among the groups and tried to be a role model for how to make comments (positive and negative) about papers.

If they did not have time during the session to review everyone's paper, participants were asked to do the review as part of their homework.

The instructor also gave participants a sample of her own writing to review. Many theorists and teachers of writing suggest that teachers share their own work with students.
The sample the instructor gave to the guided imagery group was a review of a book on imagery. The sample for the writing and editing section was a discussion of the 10 principles of clear writing. (The samples are included in Appendix C, Session 2.)

The homework for the second session was to bring in another page of writing, use the readability score, write a journal entry, and practice imagery (guided imagery group) or think positively about writing (writing and editing group).

**Session 3**

After the opening discussion and questions, the session was devoted to techniques for getting started, guidelines for nonsexist writing, a human interest index, writing concisely, and peer review.

The group split into two groups to discuss techniques for getting started. Their instructions were to brainstorm a list of techniques they could use to help themselves write. Each group wrote its list on newsprint and appointed a reporter to share the lists with the larger group. The entire group then discussed the ideas. Examples included: Get a deadline, keep idea folders, just write anything, do some exercise, and have a set time and place for writing.

The instructor next presented guidelines for nonsexist writing, pointing out that nonsexist writing is a trend increasingly followed by textbook publishers and journal editors (Miller & Swift, 1980).
The instructor introduced an index developed by Rudolf Flesch (1949) to determine the human interest level of one's writing (see Appendix C, Session 3). Some of the elements that enhance human interest are personal pronouns, proper names, direct address, and quotations.

During the section on revision, the group discussed how they approach revising and the instructor suggested a systematic way to revise.

During the section on conciseness, the instructor covered 10 specific things to avoid, as follows:

1. Passive voice (fat was hit by Geri).
2. Expletives (there are, it is).
3. Relative pronouns (who is, that is).
4. Extra words and empty words (it must be remembered that...).
5. Junk nouns (area, field, type).
6. Redundant nouns (blue in color, few in number).
7. Verbs made into nouns (the committee made a recommendation).
8. Unnecessary prepositions (free up, jump down).
9. Weak intensifiers and qualifiers (very, rather, quite).
10. Wordy use of to be, to have, to make (the detective has knowledge that her client is alive).

At this point the instructor reminded the participants that the Golden Rule of Writing is "Write unto others as you would be written unto." It is not "Write for others in a
manner not unreasonably dissimilar to the manner in which you would have them write for you" (Barnet & Stubbs, 1975, p. 216).

About one-half hour was devoted to peer review. Participants were asked to keep the discussions on revision, conciseness, nonsexist writing, and human interest in mind as they reviewed each other's writing.

The writing and editing group completed and discussed an in-class exercise during which they edited a number of sentences to make them more concise (see Appendix C, Session 3).

In the guided imagery group, the researcher read the script "Climbing Your Mountain" (see Appendix D). The script asks listeners to visualize a far away mountain. It is awesome. They approach it and start to climb it. As they climb, they realize that they do not have to climb it all at once. They do not have to go straight up. They first hit foothills, then trails that wind up the side of the mountain. At the end they are asked to compare climbing their mountain to tackling some of their writing projects.

After the imagery the participants wrote a few minutes about the experience and then discussed it with the larger group.

The homework for the week was to bring in a page of writing, to apply the information covered during the session, and to practice guided imagery or think positively about writing.
This was the last session. After the group shared the week's events related to writing, the instructor led a discussion of what journal editors look for and why they reject manuscripts. This content was included because many health professionals wish to (or must) write for professional journals. They also read the literature in their fields and are sometimes asked to review papers for professional journals. In addition, they are asked to read and give feedback on papers their colleagues are writing. Knowing what editors look for and why they reject manuscripts can help one write better and review and read more critically.

For the guided imagery group, the instructor read a script entitled "Seven Qualities You Have" (see Appendix D). Briefly, listeners are asked to visualize scenes that demonstrate qualities they have that are important to a writer, such as curiosity, organizational ability, and industriousness. In June, the instructor asked participants to draw pictures of one of the scenes and to discuss them. Several participants found this difficult and the ensuing discussion was not lively. Therefore, in September the instructor changed the follow-up activity and asked participants to write several minutes and then share in pairs and later with the larger group. Participants responded much more enthusiastically to this follow-up.

The writing and editing group did an exercise on how to take apart a pen. The instructor held up a ball point pen
(the kind with several parts) and gave the following instructions:

This is an object. Working in pairs, your assignment is to write instructions for disassembling this object for someone who does not know what it is. You have 15 minutes to complete the assignment.

Each group read their instructions to the rest of the groups and the discussion centered on elements included in good instructions.

This exercise was included because health professionals often have to write instructions for colleagues, employees, students, and patients. Instructions should be written clearly so that an uninitiated audience can understand them. Too often instructions are, as Edgar Dale says, CCIK -- clear only if known (Dale, 1966).

The instructor then reviewed in detail the bibliography she had passed out during the first session (see Appendix C, Session 1). She introduced this section by citing the old Chinese proverb: "Teachers open the doors but you enter by yourself."

The instructor passed around copies of most of the books on the bibliography. She discussed each book (or asked a participant who had read it to discuss it) and mentioned the ones that referred to topics or questions participants had brought up that had not been covered during the four sessions (for example, grant writing). Participants also shared information on materials they had read.
As a summary of the workshop, participants reviewed what they had covered and what they had learned during the four sessions. The participants and instructor discussed the three-phase writing process. Participants volunteered insights and information they had gained about the different phases that they could apply to their own writing. The participants and instructor then wrote resolutions for their future in writing and shared them.

The instructor thanked the participants for attending and told them how much she had enjoyed working with them. She also reminded them of the motto of the workshop — If you think you can, or if you think you can't, you're absolutely right — and said she hoped they would all leave thinking they could meet the writing and other challenges in their lives.

The instructor then passed out the posttest forms and announced that when they had completed the forms they were to pick up their "rewards" for participating in the workshops: a compilation of the quotes about writing and life the instructor had used during the sessions (several participants had requested this) and an essay about the writing process (see Appendix C, Session 4).

Thus concluded the four sessions.

(c) Differences and problems

The treatments for this study were both presented two times (in June and in September-October).
This section describes the differences between the guided imagery and the writing and editing treatments and between the June and September-October sessions when the treatments were actually given. It also points out some of the problems the researcher faced in carrying out the study.

As mentioned earlier, the researcher planned that the guided imagery and the writing and editing treatments would be alike except for the guided imagery or writing and editing exercises each session.

Although the instructor tried to follow the outline as closely as possible, she also wished to be flexible and open to discussion and questions. Occasionally this meant that content covered during one session of a treatment was not covered during the corresponding session of the other treatment. For example, during the June workshops participants in the writing and editing group covered guidelines for non-sexist writing during the third session and participants in the guided imagery group covered the same content during the fourth session. Overall, however, both the guided imagery and the writing and editing groups covered the same material.

There was one other difference between the guided imagery and writing and editing groups that was not planned. During the first session, the instructor had intended to give the writing and editing group more time to complete the exercise on the three-phase writing process than the guided imagery group had. However, because the discussions during the
writing and editing session took longer than those in the guided imagery session, time was too short to give the writing and editing group extra time. They had about the same amount of time for the exercise and discussion as the guided imagery group.

One of the differences between the June and September-October sessions was that the instructor changed the homework assignments. In June she asked both groups to bring in one to five pages of a draft to use for peer review each week. She noticed that about one-half the group did not do the homework and thus did not gain as much from the peer review sessions. If one person got feedback on several pages of writing, that meant less time for another person’s work or that the peer review time had to be extended. The peer review sessions were not as valuable for those who got less feedback and participant evaluations reflected this. Therefore, for the September-October sessions, the instructor felt she had to change the homework assignments to make the peer review experience more valuable. She asked participants to bring in just one page of writing, with the idea that while participants would not be able to review each other’s work for content, they could react to style and readability. With only one page to review, they would also have time to get to more people.

In September-October more people in both groups brought in homework and the peer review sessions were better received by participants. Therefore, the instructor felt
justified in changing the homework assignment even though
that meant the treatments for the September-October groups
were slightly different from those of the June groups.

In June an observer, the director of the Office of Con­
tinuing Education, attended three of the four sessions for
both treatments to give the instructor feedback on how
closely she was sticking to the treatment plan and on how
participants were reacting. The other participants did not
know the purpose of the observer and considered her another
participant. In September-October, there was no observer.

In September the instructor noticed that although she
felt better prepared for the sessions, having conducted them
in the same format twice before, she was also occasionally
less enthusiastic about the material. She was also some­
times frustrated because although she was trying to keep the
treatments similar she learned ways in June she could have
improved the workshops had they not been "treatments" in an
experiment. For example, she would have collected the data
differently during the first session in September if she had
not felt compelled to ask participants to complete the forms
during the first half hour of the workshops as had been done
in June. (Having participants fill out forms for about
one-half hour before they had even introduced themselves
made the researcher uncomfortable.)

During the second session for the writing and editing
group in June, participants discussed what they had written
about their writing process in groups of three or four. In
In September, they discussed in pairs and the exercise was less time consuming and more effective.

During the first guided imagery session in September, the instructor did not spend as long introducing and giving a rationale for guided imagery as she had in September because it did not seem necessary.

During the final guided imagery session in June, the instructor asked participants to draw a picture as a follow-up to their visualization on seven qualities they had. This follow-up made several participants uncomfortable. Therefore, the instructor changed the follow-up in October and asked participants to write for a few minutes and then share in pairs what they had written. Participants responded much better to this follow-up.

Finally, because the participants and instructor are humans, not automatons, differences in treatments probably existed that the instructor was not able to document. It is difficult to keep an experiment "pure" when one is working in an instructional setting. Trying to present the same treatment is physically and emotionally tiring. Some days participants might feel more or less enthusiastic. Same with instructors. Questions and comments arise in one session that do not in others. The researcher changed some things slightly because she felt she ethically had to. In other cases the changes were inadvertent. Overall, the treatments were probably as similar as could be expected in an educational study.
Absenteeism posed a problem for this study since the treatment period was short and the number of subjects few. For one reason or another (those the instructor heard were illness, sick child, vacation, car trouble, meetings, and conflicts with job responsibilities), some of the participants in all sessions missed part or all of a session. Therefore, they did not receive the same treatment other participants received. To compensate somewhat for absenteeism, the instructor offered make-up sessions in her office or on the telephone. Almost all participants who had missed all or part of a session took advantage of the make-up sessions. However, this individual attention was still not the same treatment the other participants received. The instructor did not know whether the individual attention had any effect on the participants' writing anxiety or self-perception of writing ability.

In sum, the implementation stage included the following elements: designing learning experiences, preparing materials, pilot testing, publicizing the workshops, and presenting the workshops.

Evaluation

A critical review of various elements of the study took place at several stages. For example, the pilot trials of the activities, techniques, guided imagery scripts, and instruments helped the researcher to modify them and to appraise their effectiveness. And, of course, the results of
the study, reported in Chapter 4, were the major indices of the effectiveness of the treatments. However, other types of evaluative data were also collected during the experimental period.

**Researcher's Journal.** The researcher maintained a detailed journal before, during, and after the treatments. During the treatments she noted what went on, how she felt, and insights she gained. She observed the apparent effectiveness or lack of effectiveness of techniques she tried during the treatments.

**Participant Comments.** The oral and written comments made by participants about the workshop and its effectiveness were systematically recorded. At the beginning of each session, time was devoted to discussing participants' thoughts, feelings, attitudes, and activities related to writing. For example, participants recounted that they tried a particular technique and commented on its success or failure. Some participants volunteered evaluative comments at other times during the sessions. Participants occasionally gave feedback about the workshop in their weekly journals.

**Observer's Notes.** During the June workshops, an observer attended three sessions of both treatments to give the instructor feedback about how similar the sessions were. The observer kept track of the actual time spent on various activities and reminded the instructor of anything that happened with one group that did not happen with the other.
Daily Check-Up. At the end of the first three sessions, the instructor passed out the Daily Check-Up forms for participants to complete before they left.

Workshop Evaluation Form. This was completed at the end of the fourth session and provided data on participant perceptions of the workshops.

Data Collection

All subjects completed four forms as pretests: the Demographic/Academic Information (DAI), the Writing Apprehension Test (WAT), the Writing Ability Self-Assessment (WASA), and the Writing History. The treatment groups completed the forms at the beginning of the first session. The control group received their forms in the mail at about the same time. At the end of the four-week workshops, all subjects were asked to complete the WAT, WASA, and Change of Writing Attitude as posttests. Workshop participants were also sent the WAT, WASA, and Change of Writing Attitude form four weeks after the workshops ended. (See Appendix A for the letter accompanying the follow-up materials.) The control group members completed only the pretests and posttests.

For convenience, the pretests, posttests, and follow-up tests were printed on different colored paper.

Slips requesting permission to use and/or quote from the materials and guaranteeing respondents' anonymity were attached to the posttests for all subjects.
The first half hour of the first session of the workshops was devoted to completing the instruments. The instructor introduced the four forms and said they would help her know her audience better, help the participants examine their own writing history and attitudes toward writing, and help the instructor with research she was doing on health professionals' attitudes toward writing. Subjects were not told the exact purpose of the study or that the researcher was conducting an experiment and would present two different treatments. The researcher did not mention at the beginning that she would ask participants to complete the forms again at the end of the workshops.

After participants had completed the four forms, the instructor carried on with the workshop. There was no discussion of the forms. One week later a woman in the writing and editing group in September asked about her results. She was the only person in all groups who inquired about scores. She was told the scores would be available later and that she was welcome to see them and discuss their meaning. She did not follow up.

Several participants in each of the groups (including the control group) said the forms had given them insights about their writing.

Nothing was said in any of the workshop sessions to lead the instructor to think the participants knew they were part of an experiment. In fact, the instructor was surprised not to have any questions about why something occurred during
the Tuesday session that did not occur in the Thursday session because some people who worked in the same organization took different sections of the workshops.

A few of the treatment group members were absent for the fourth session. The researcher called them and offered to give them a summary of the session or the phone or in her office. For those who went to her office she handed them the posttests after the make-up sessions and asked them to complete the forms within a week and return them in the self-addressed stamped envelopes she provided. She mailed forms to those who did not attend make-up sessions.

Since the control group received their materials by mail, they did not complete the instruments under the same conditions as the treatment groups, a problem often encountered in social and educational research.

Response among all groups was enhanced because the researcher knew most of the subjects personally and was able to make follow-up telephone calls to those subjects who did not initially return forms. For the June groups there was 100% response rate. For the September-October groups the researcher had 100% response rate in the writing and editing and control groups. One member of the guided imagery group dropped out, which left 74 subjects. (Her check for payment of the workshop even bounced; she could be considered the ultimate in dropouts.)
Description of Chapter

This chapter describes how the study was carried out. It includes sections on research design, population, instrumentation and instrument development, treatments, and data collection.
CHAPTER 4. RESULTS

I personally consider as tentative everything I think I have learned about the teaching of writing.

Don Stien

Introduction

After a brief description of the study, this chapter includes sections on treatment of the data, response rate and absenteeism, tests of null hypotheses, open-ended materials, and summary of the results.

This study was conducted to determine the effects of guided imagery exercises, when compared with writing and editing exercises, on reducing writing anxiety and improving self-perception of writing ability of health professionals. The researcher also explored the relationship between writing anxiety and self-perception of writing ability.

A nonrandomized control group pretest-posttest design was used. The subjects were 74 adults (primarily health professionals) from the Central Ohio area. To conduct the experiment, the researcher presented two four-session, 10-hour continuing education workshops entitled "How to Reduce Writing Anxiety and Improve Writing Skills." The treatment period lasted four weeks. In one workshop she included a
one-half hour guided imagery exercise in each two and one-half hour session (guided imagery group). In the other she substituted a writing and editing exercise (writing and editing group). Both sections of the workshop were otherwise identical. They included other techniques for reducing writing anxiety (for example, peer evaluation and discussion of writing problems) as well as content and activities designed to improve writing ability. The two treatment groups were compared with each other and with a no-treatment control group.

The Daly-Miller Writing Apprehension Test (WAT) was used to assess writing anxiety and the Shilling Writing Ability Self-Assessment (WASA) was used to assess self-perception of writing ability. The WAT is a 26-item, Likert scale instrument. Each item has five responses, ranging from strongly agree to strongly disagree. The possible scores on the instrument range from 26 to 130; the higher the score, the higher the level of writing anxiety. The WASA is a 36-item, Likert scale instrument. Each item has five responses, ranging from strongly agree to strongly disagree. The scores on it could range from 36 to 190; the higher the score, the higher the self-perception of writing ability.

The instruments were administered at the beginning and end of the workshops and (for the treatment groups) four weeks after the end of the workshops. In addition, at the beginning of the study, all subjects completed a form that asked for demographic and academic information. They also
wrote an open-ended essay on the experiences in their lives that had influenced their attitudes toward writing. At the end of the four-week workshops, and again one month later, workshop participants completed open-ended essays about whether their attitudes toward writing had changed in the past month. The control group completed only the pretests and posttests.

Treatment of the Data

The researcher encoded the responses to WASA, WAT, and some of the items on the Demographic/Academic Information (DAI) form on IBM computer sheets. She proofread them by reading the responses out loud while an assistant checked the IBM sheets. The data were then key punched on cards to be used for statistical analysis. As another check for accuracy, the computer printouts of the raw data were compared with the encoding sheets.

All statistical analysis, with the exception of the Scheffe tests described below, was done with the Statistical Analysis System (SAS), a well respected general purpose statistical package. The Scheffe tests were done manually.

The researcher decided in advance to accept a .05 level of significance for the statistical analysis.

The mean pretest scores for all groups on the WAT and WASA were subjected to analysis of variance (ANOVA) to see if there were significant differences among the groups at the beginning of the study.
Analysis of covariance (ANCCVA) with pretest scores as the covariate was used to test the null hypotheses that compared the groups with each other. The Scheffe test of significance was used to compare each group with each other group on writing anxiety and self-perception of writing ability (null hypotheses 1 and 3).

Campbell and Stanley (1963), Popham and Sirctnik (1973), Van Daleh (1973), and others recommend using ANCOVA to analyze the results of studies that use the nonrandomized control group pretest-posttest design. ANCOVA has the statistical ability to equate groups of subjects as if they were the same on one or more independent variables. Even if the number of subjects in each group or the average pretest scores of each group are different, ANCCVA can adjust the means of the posttest scores to compensate for initial differences. In this study the pretest means on the WAT and the WASA were used as covariates in separate ANCCVA procedures -- one for the WAT and one for the WASA.

Following the ANCOVA, the Scheffe test of significance was used because it is a conservative technique for comparing pairs of means when the number of subjects in the groups is unequal (as in this study). With a conservative technique, a researcher is less likely to find significant differences and thus runs less risk of rejecting a null hypothesis that should not be rejected.

Fisher's t-tests were used to compare pretest and post-test and posttest and follow-up means of a specific group.
for significant differences (null hypotheses 2 and 4 and questions 1 and 2).

Pearson product-moment correlation coefficients were calculated to test Null Hypothesis 5 on the relationship between writing anxiety and self-perception of writing ability. The Pearson coefficient is the appropriate statistical device if the level of measurement is interval on both variables. Attitude scales, such as the WAT and WASA, are generally treated as interval measures. The same SAS program that calculated the coefficients also calculated the level of significance of the correlations.

The researcher also informally analyzed the open-ended materials -- Writing History, Change of Writing Attitude, weekly journals, observer's notes, weekly evaluations, and final evaluations -- for important trends. Some typical comments from these materials are included in this chapter.

Response Rate and Absenteeism

One of the 26 original members of the guided imagery group did not complete the posttest or follow-up test, thus 100% of the group responded to the pretests and 25 (96%) responded to the posttest and follow-up. The person who dropped out attended only two sessions. She had scores of 81 and 119 on the WAT and WASA pretests, close to the mean for all subjects. Her scores were dropped from the analysis.

Although the 23 participants in the writing and editing group returned all instruments, one participant left 18
blanks in the WAT follow-up. The researcher was not able to reach her to ask her to complete the WAT. Therefore, there was 100% response by the writing and editing group on the pretests and posttests of both instruments and on the WASA follow-up and 22 (96%) usable responses on the WAT follow-up. The person who left blanks on the WAT follow-up had scores of 77 and 78 on the WAT pretest and posttest, which indicated no change in her level of writing anxiety from pretest to posttest. Her WAT pretest score was average for the group but her posttest score was significantly higher. On the other hand, her self-perception of writing ability did change somewhat. She had 99 on the pretest, 111 on the posttest, and 109 on the follow-up. All her WASA scores were lower than average.

There was a 100% response by the 26 members of the control group on the WAT and WASA pretests and posttests. They were not asked to complete the follow-up tests.

Twelve people in the guided imagery group and eight in the writing and editing group missed one of the four sessions of the workshop. Although the researcher offered make-up sessions for those who were absent, she was concerned that the absenteeism might have affected the results of the study. Therefore, she calculated mean scores on the WAT and WASA for those who were absent in both groups and compared them with the mean scores of the particular group and with those who were not absent. Inspection of the means revealed only very slight differences between those who
missed one session and those who attended all four sessions. Of the 25 people in the guided imagery group who completed the workshop, 12 were absent at least one time. The person who dropped out missed two sessions. Four other people missed at least one guided imagery exercise because they had to leave early.

Tests of Null Hypotheses

The research hypotheses and questions listed in Chapter 1 were used to generate null hypotheses to be tested. There were five null hypotheses for this study: two on writing anxiety, two on self-perception of writing ability, and one on the relationship between writing anxiety and self-perception of writing ability. In addition, the two research questions, which asked whether there was any significant change in scores between posttest and follow-up, were formulated as null hypotheses to be tested.

Writing Anxiety

Table 4 shows the means and standard deviations of the WAT pretest, posttest and follow-up for each group. As shown in the table, the pretest means of the three groups on the WAT were slightly different. However, analysis of variance on the pretest means indicated that the three groups were not significantly different at pretest time on level of writing anxiety.
Table 4
Means and Standard Deviations on the Writing Apprehension Test (WAT) for Each Group

<table>
<thead>
<tr>
<th>Time</th>
<th>n</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Guided Imagery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>25</td>
<td>78.2</td>
<td>18.85</td>
</tr>
<tr>
<td>Posttest</td>
<td>25</td>
<td>65.3</td>
<td>16.32</td>
</tr>
<tr>
<td>Follow-up</td>
<td>25</td>
<td>63.0</td>
<td>17.66</td>
</tr>
<tr>
<td><strong>Writing and Editing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>23</td>
<td>79.9</td>
<td>18.06</td>
</tr>
<tr>
<td>Posttest</td>
<td>23</td>
<td>68.3</td>
<td>16.02</td>
</tr>
<tr>
<td>Follow-up</td>
<td>22</td>
<td>67.7</td>
<td>16.32</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>26</td>
<td>75.2</td>
<td>16.75</td>
</tr>
<tr>
<td>Posttest</td>
<td>26</td>
<td>74.1</td>
<td>17.82</td>
</tr>
<tr>
<td>Follow-up</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>
Analysis of covariance (ANCCVA) with pretest scores as the covariate was used to determine if the difference in mean posttest scores on the WAT among the three groups was statistically significant. Table 5 shows the pretest and the unadjusted and adjusted posttest means on the WAT for all three groups. Table 6 shows the results of the ANCCVA. The table indicates that the differences in the mean posttest scores were statistically significant.

Figure 1 graphically depicts the mean scores on the WAT pretest, posttest, and follow-up test for all groups. The figure shows that the mean scores of the guided imagery and writing and editing groups on the WAT sharply decreased between pretest and posttest and continued to decrease slightly during the one-month period after the posttest. On the other hand, the mean score of the control group dropped only slightly from pretest to posttest time.

Null Hypothesis 1 was tested by the ANCOVA technique, followed by the Scheffe test of significance, and relates to Tables 5 and 6 and to Figure 1.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided Imagery</td>
<td>78.2</td>
<td>65.3</td>
<td>65.0</td>
</tr>
<tr>
<td>n=25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing &amp; Editing</td>
<td>79.9</td>
<td>68.3</td>
<td>66.8</td>
</tr>
<tr>
<td>n=23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>75.2</td>
<td>74.1</td>
<td>75.7</td>
</tr>
<tr>
<td>n=26</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Table 6**

Analysis of Covariance of Treatment and Control Groups' Performance on the Writing Apprehension Test (WAT) Posttest

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sums of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>2</td>
<td>1665</td>
<td>833</td>
<td>5.69</td>
<td>.005</td>
</tr>
<tr>
<td>WAT Pretest</td>
<td>1</td>
<td>9742</td>
<td>9742</td>
<td>66.59</td>
<td>.0001</td>
</tr>
<tr>
<td>Error</td>
<td>70</td>
<td>10240</td>
<td>146</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Corrected total</td>
<td>73</td>
<td>21012</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
Figure 1. Mean scores on the Writing Apprehension Test (WAT) pretest, posttest, and follow-up for all groups.
Null Hypothesis 1. There will be no difference between the mean posttest level of writing anxiety for the guided imagery, writing and editing, and control groups.

The adjusted mean posttest score on the WAI for the guided imagery group was only 1.8 points lower than that of the writing and editing group (Table 5). The Scheffe test indicated that the difference was not statistically significant, \( F(2, 70) = .13, \ p > .25 \). The data supported that part of the null hypothesis that stated there would be no difference between the guided imagery and writing and editing groups at posttest time.

The adjusted mean posttest score on the WAI for the writing and editing group was 8.9 points lower than that of the control group (Table 5). The Scheffe test indicated the difference was statistically significant, \( F(2, 70) = 3.30, \ p < .05 \). The posttest level of writing anxiety of the writing and editing group was significantly lower than that of the control group. The data did not support that part of the null hypothesis that stated there would be no difference between the writing and editing and control groups.

The adjusted mean posttest score on the WAI for the participants in the guided imagery group was 10.7 points lower than that of the control group (Table 5). The Scheffe test indicated a statistically significant difference between the two means, \( F(2, 70) = 4.99, \ p < .01 \). The posttest level of writing anxiety of the guided imagery group was
significantly lower than that of the control group. The data did not support that part of the null hypothesis that said there would be no difference between the guided imagery and control groups.

In sum, the results did not support that part of Research Hypothesis 1 that stated that the guided imagery group would have a lower posttest level of writing anxiety than the writing and editing group. However, the results did support the other parts of the hypothesis because the posttest levels of writing anxiety of the guided imagery group and of the writing and editing group were significantly lower than that of the control group.

**Null Hypothesis 2.** Participants in the guided imagery and writing and editing groups will not show a significant decrease in writing anxiety between pretest and posttest time.

The differences between the pretest and posttest means on the WAI for each group are shown in Table 7. The mean level of writing anxiety of the guided imagery group decreased 12.6 points from pretest to posttest. The t-test indicated that the difference was statistically significant at the .0001 level.

The mean level of writing anxiety of the writing and editing group decreased 11.6 points from pretest to posttest (Table 7). The t-test indicated that the difference was statistically significant at the .0008 level.
Since the data did not support Null Hypothesis 2, it was rejected. Research Hypothesis 2, which stated that the two groups would show a decrease in writing anxiety, was supported.

Table 7
Differences Between Pretest and Posttest Means on the Writing Apprehension Test (WAI) for Each Group

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Difference Score (WAI)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided Imagery</td>
<td>25</td>
<td>-12.9</td>
<td>-7.98</td>
<td>.0001</td>
</tr>
<tr>
<td>Writing &amp; Editing</td>
<td>23</td>
<td>-11.6</td>
<td>-3.89</td>
<td>.0008</td>
</tr>
<tr>
<td>Control</td>
<td>26</td>
<td>-1.1</td>
<td>-.34</td>
<td>.73</td>
</tr>
</tbody>
</table>
Research Question 1. Research Question 1 was stated as a null hypothesis to be tested, as follows: Four weeks after the workshop is over, there will be no difference between the mean posttest scores and the mean follow-up scores for the guided imagery and writing and editing groups.

The differences between the WAT posttest and follow-up means for each group are shown in Table 8. The mean level of writing anxiety of the guided imagery group decreased 2.2 points from posttest to follow-up. The t-test indicated that the difference was not statistically significant ($t = -1.36, p = .19$).

The mean level of writing anxiety of the writing and editing group decreased .1 point from posttest to follow-up (Table 8). The t-test indicated that the difference was not statistically significant ($t = .08, p = .94$).

Since the data supported the null hypothesis, it was accepted. Thus, Research Question 1 was answered. The scores on the WAT did not change significantly during the course of the month, indicating that the participants in both groups maintained their reduced level of writing anxiety.
Table 8

Differences Between Posttest and Follow-Up Means on the Writing Apprehension Test (WAT) for Each Group

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Difference Score (WAT)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided Imagery</td>
<td>25</td>
<td>-2.2</td>
<td>-1.36</td>
<td>.19</td>
</tr>
<tr>
<td>Writing &amp; Editing</td>
<td>22</td>
<td>-0.1</td>
<td>-0.08</td>
<td>.94</td>
</tr>
</tbody>
</table>
Self-Perception of Writing Ability

Table 9 shows the means and standard deviations on the WASA pretest, posttest, and follow-up for all three groups. The means of the three groups on the WASA pretests were slightly different. However, analysis of variance of the pretest means indicated that the three groups were not significantly different at pretest time.

<table>
<thead>
<tr>
<th>Time</th>
<th>n</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Guided Imagery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>25</td>
<td>116.8</td>
<td>22.68</td>
</tr>
<tr>
<td>Posttest</td>
<td>25</td>
<td>138.1</td>
<td>17.55</td>
</tr>
<tr>
<td>Follow-Up</td>
<td>25</td>
<td>140.6</td>
<td>20.74</td>
</tr>
<tr>
<td><strong>Writing and Editing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>23</td>
<td>115.9</td>
<td>18.22</td>
</tr>
<tr>
<td>Posttest</td>
<td>23</td>
<td>131.7</td>
<td>17.20</td>
</tr>
<tr>
<td>Follow-Up</td>
<td>23</td>
<td>133.5</td>
<td>19.21</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>26</td>
<td>121.0</td>
<td>19.26</td>
</tr>
<tr>
<td>Posttest</td>
<td>26</td>
<td>125.1</td>
<td>22.45</td>
</tr>
<tr>
<td>Follow-Up</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>
ANCOVA with pretest scores as the covariate was used to determine if the difference in mean posttest scores on the WASA for the three groups was statistically significant. Table 10 shows the WASA pretest means and the unadjusted and adjusted posttest means for all groups. Table 11 shows the results of the ANCOVA. The mean scores for the three groups were significantly different at the .001 level.

Figure 2 graphically depicts the mean scores on the WASA pretest, posttest, and follow-up test for all groups. The figure shows that the mean scores of the guided imagery and writing and editing group on the WASA sharply increased between pretest and posttest time and continued to increase slightly during the one-month period after the posttest. On the other hand, the mean score of the control group increased only slightly between pretest and posttest time.

Null Hypothesis 3 was tested by the ANCOVA technique, followed by the Scheffe test of significance, and relates to Tables 10 and 11 and to Figure 2.
### Table 10

Pretest Means and Unadjusted and Adjusted Posttest Means on the Writing Ability Self-Assessment (WASA) for Each Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Pretest Mean</th>
<th>Posttest Mean</th>
<th>Unadj.</th>
<th>Adj.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided Imagery</td>
<td>116.8</td>
<td>138.1</td>
<td>138.9</td>
<td></td>
</tr>
<tr>
<td>(n=25)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing &amp; Editing</td>
<td>115.9</td>
<td>131.7</td>
<td>132.9</td>
<td></td>
</tr>
<tr>
<td>(n=23)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>121.0</td>
<td>125.1</td>
<td>123.3</td>
<td></td>
</tr>
<tr>
<td>(n=26)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 11
Analysis of Covariance of Treatment and Control Groups' Performance on the Writing Ability Self-Assessment (WASA) Posttest

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sums of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>2</td>
<td>3134</td>
<td>1567</td>
<td>6.99</td>
<td>.001</td>
</tr>
<tr>
<td>WASA Pretest</td>
<td>1</td>
<td>10802</td>
<td>10802</td>
<td>48.18</td>
<td>.0001</td>
</tr>
<tr>
<td>Error</td>
<td>70</td>
<td>15693</td>
<td>224</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Corrected total</td>
<td>73</td>
<td>28652</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

---
Figure 2. Mean scores on the Writing Ability Self-Assessment (WASA) pretest, posttest, and follow-up for all groups
Null Hypothesis 3. There will be no difference between the mean posttest level of self-perception of writing ability for the guided imagery, writing and editing, and control groups.

The participants in the guided imagery group had an adjusted posttest mean that was 6.0 points higher than that of the writing and editing group (Table 10). The Scheffe test indicated the difference was not statistically significant, $F(2, 70) = .96$, $p < .25$. The data supported that part of the null hypothesis that stated there would be no difference between the guided imagery and writing and editing groups in level of self-perception of writing ability at posttest time.

The adjusted mean posttest score on the WASA for the writing and editing group was 9.6 points higher than that of the control group (Table 10). The Scheffe test indicated that the difference between the means was not statistically significant, $F(2, 70) = 2.51$, $p < .10$. The data supported that part of the null hypothesis that stated there would be no difference between the writing and editing and control group at posttest time.

The adjusted mean posttest score on the WASA for the participants in the guided imagery group was 15.6 points higher than that of the control group (Table 10). The Scheffe test indicated that the difference between the two means was statistically significant, $F(2, 70) = 6.92$, $p < .01$. The
posttest level of self-perception of writing ability of the guided imagery group was significantly higher than that of the control group. Thus, the results did not support that part of the null hypothesis that stated there would be no difference between the guided imagery and control groups at posttest time.

In sum, the results did not support those parts of Research Hypothesis 1 that stated the guided imagery group would have a higher posttest level of self-perception of writing ability than the writing and editing group or that the writing and editing group would have a higher level than the control group. However, the results did support the other part of the research hypothesis because the level of self-perception of writing ability of the guided imagery group was significantly higher than that of the control group at posttest time.

**Null Hypothesis 4.** Participants in the guided imagery and writing and editing groups will not show a significant improvement in self-perception of writing ability between pretest and posttest.

The differences between the pretest and posttest means on the NASA for each group are shown in Table 12. The level of self-perception of writing ability of the guided imagery group increased 21.4 points from pretest to posttest time. The t-test indicated that the difference was significant at the .0001 level.
The level of self-perception of writing ability of the writing and editing group increased 15.8 points from pretest to posttest (Table 12). The t-test indicated that the difference was significant at the .0002 level.

Since the data did not support Null Hypothesis 4, it was rejected. Research Hypothesis 4, which stated that the two groups would show a significant improvement in self-perception of writing ability, was supported.

Table 12

Differences Between Pretest and Posttest Means on the Writing Ability Self-Assessment (WASA) for Each Group

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Difference Score (WASA)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided Imagery</td>
<td>25</td>
<td>21.4</td>
<td>6.09</td>
<td>.0001</td>
</tr>
<tr>
<td>Writing &amp; Editing</td>
<td>23</td>
<td>15.8</td>
<td>4.44</td>
<td>.0002</td>
</tr>
<tr>
<td>Control</td>
<td>26</td>
<td>4.1</td>
<td>1.08</td>
<td>.29</td>
</tr>
</tbody>
</table>
Research Question 2. This question was stated as a null hypothesis to be tested, as follows: Four weeks after the workshop is over, there will be no difference between the mean posttest and follow-up scores on self-perception of writing ability for the guided imagery and writing and editing groups.

Table 13 shows the differences between the posttest and follow-up means on the WASA for the guided imagery and writing and editing groups. The guided imagery group improved its mean score 2.5 points. The t-test indicated that the difference was not significant ($t = 1.70, p = .10$). The writing and editing group improved its mean score 1.3 points. the t-test indicated that the difference was not significant ($t = 1.06, p = .30$).

Since the data supported the null hypothesis, it was accepted. Therefore, the research question was answered. The scores on the WASA did not change significantly over the course of the month after the workshops had ended.
Table 13
Differences Between Posttest and Follow-Up Means on the Writing Ability Self-Assessment (WASA) for Each Group

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Difference Score (WASA)</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided Imagery</td>
<td>25</td>
<td>2.5</td>
<td>1.70</td>
<td>.10</td>
</tr>
<tr>
<td>Writing &amp; Editing</td>
<td>23</td>
<td>1.8</td>
<td>1.06</td>
<td>.30</td>
</tr>
</tbody>
</table>
Writing Anxiety and Self-Perception of Writing Ability

Pearson product-moment correlation coefficients between the scores on the WAT and the WASA were calculated on the pretests, posttests, and follow-ups of all subjects to test Null Hypothesis 5.

Null Hypothesis 5. Participants' pretest, posttest, and follow-up scores on the WAT and WASA will show no relationship between writing anxiety and self-perception of writing ability.

The correlation coefficient for the WAT and WASA pretests (n=75) was -0.77. It was -0.78 for the posttests (n=74) and -0.84 for the follow-ups (n=47). These coefficients showed a very strong inverse relationship between writing anxiety and self-perception of writing ability. The correlation remained about the same even when writing anxiety decreased and the self-perception of writing ability improved. The correlations were significant at the .0001 level. Therefore, Null Hypothesis 5 was rejected. The research hypothesis that stated that there is a strong inverse relationship between writing anxiety and self-perception of writing ability was supported.

The correlations between the two instruments on the pretests, posttests, and follow-ups for all subjects are graphically depicted in the scattergrams shown in Figures 3-5, which show a linear relationship between the two variables.
Figure 3. Scattergram of the correlation between the Writing Apprehension Test (WAT) and the Writing Ability Self-Assessment (WASA) Pretests.

NOTE: 7 OBS HIDDEN
NOTE: 8 OBS HIDDEN

Figure 4. Scattergram of the correlation between the Writing Apprehension Test (WAT) and the Writing Ability Self-Assessment (WASA) Posttest
Figure 5. Scattergram of the correlation between the Writing Apprehension Test (WAT) and the Writing Ability Self-Assessment (WASA) Follow-Ups

NOTE: 2 OBS HIDDEN

WAT

WASA
Open-Ended Materials

This section includes a summary of the open-ended materials the researcher collected and contains representative comments that indicated trends in the responses.

These materials enabled subjects to express in their own words their attitudes toward writing. They also added dimension to the numerical scores on the WAT and WASA and helped the researcher know her audience when she was conducting the workshops.

The section is divided into three sub-sections: pretest materials (Writing History, Demographic/Academic Information, and WASA), posttest and follow-up test materials (Change in Writing Attitude), and Workshop Evaluation Form.

Some of the comments have been edited for clarity and length.

Pretest Materials

The open-ended materials from the beginning of the study did not reveal any great differences among the groups. However, they did show many individual differences within groups. The subjects in all three groups (guided imagery, writing and editing, and control) expressed similar concerns about writing and showed a continuum of attitudes about it, ranging from positive to neutral to negative. Representative comments follow:

I have always enjoyed writing -- from the time I was a child. It has always given me great pleas-
ure to share my thoughts and feelings and knowledge with others. Often I find I can express myself more completely on paper than I can verbally.

* * *

I enjoy writing for personal pleasure but not for academic evaluation.

* * *

I enjoy writing but have a hard time getting the early thoughts together and putting pen to paper.

* * *

In most facets of my life I expect perfection and my writing skills fall well below that.

* * *

I prefer talking. It is more personal and faster. I tend to be impatient and don't want to wait. People accept mistakes or lack of clarity better in verbal communication than in written.

* * *

I don't hate writing. I don't love writing.

* * *

I write because I have to, rather than because I like to.

* * *

I view it as a painful process and one that has minimal rewards. I also do not feel any support from my peers in this area. We support each other in our dread of writing.

* * *

In general, I think my writing is poor, unimaginative, dull, "cliche-ish" and shallow in content.

* * *

I avoid writing as much as possible.

* * *

Writing for me is a painful ordeal.

As might be expected because of the title of the workshop they chose to take (How to Reduce Writing Anxiety and Improve Writing Skills), most subjects saw the value of writing but expressed negative views about it and little confidence in their own writing skills.

Subjects in all groups wrote about teachers in school and college who cared about their writing and encouraged them and of teachers who humiliated and punished them with writ-
ing. Only a few described home or work experiences that had shaped their attitudes toward writing. The comments about home and work experiences ranged from positive to negative, but most of them were negative.

While in general the open-ended materials collected at the beginning of the study supported the quantitative data, there were also some cases of people whose scores on the WAT and WASA were average but who nevertheless indicated that they felt miserable when faced with a writing project.

**Posttest and Follow-Up Materials**

**Treatment Groups.** Most of the subjects in each treatment group wrote that their attitude toward writing had improved and that they viewed it with less anxiety.

They saw the workshop's emphasis on thinking positively about writing as valuable.

> I feel less anxious about writing papers. I still don't feel confident in organizing a paper but it is easier getting started.

> I have noticed a change in my attitude toward writing. I seem to enjoy writing and am usually pleased with the finished product.

> Now I don't consider writing a chore. It's a challenging, creative, enjoyable experience inhibited only by a closed, narrow-minded, unimaginative attitude.

> The term "writing" no longer causes me to become anxious or to withdraw. Writing is a challenge like a lot of other parts of my life and profession. It's also a positive experience and can be fun and rewarding. I do not view writing as a sentence any longer.
I am starting to see writing as a challenge or an area that would be interesting to discover. In the past I knew I didn't see it as a challenge, more like a road block placed in front of me. 

I have noticed in the past month that I look forward to writing more than I have in the last year. 

A few members of the guided imagery group specifically singled out guided imagery as contributing to their more positive attitudes. Representative comments follow.

I have been more at ease when writing. I have a more positive attitude than I did a month ago. This I feel was brought about through the introduction of guided imagery....Guided imagery has helped me lower my anxiety levels, not only when writing but also when taking exams and at other stressful times.

The guided imagery helps in many situations other than just writing and has meant a great change in my attitude toward disliked jobs.

Finally, some workshop participants said their attitudes had not changed. For example, two members of the writing and editing group, who might have benefited from a more psychological approach than the writing and editing group was exposed to, said their attitudes had not changed.

I don't believe my attitudes have changed. Fear, to me, is an emotion and I believe my fear is unchanged. Course materials related to the conscious mind, and I believe my difficulties to be unknown to me -- unconscious. I understand that the doing of the writing would change things, but I never got that far. I do believe I will, however.

My attitude toward writing has not changed. I still hate and avoid it completely. Because of my inability to break this writing block, I won't be able to complete my E.A. My feelings about writing have not improved because I haven't done any productive work this month. Unfortunately, several personal problems have caused me additional stress and detracted from my already limited ability to write.
The open-ended materials revealed some other trends in what elements of the workshops participants found most valuable (in addition to the focus on thinking positively about writing.)

Many participants appreciated the opportunity to discuss their writing problems with others, to see that others shared their feelings toward writing.

The only major change I have noted in my writing is a lowered anxiety toward beginning writing projects. This is a result of realizing that most others experience the same blanks at times.

Although I have not yet reached the point where I enjoy writing, much of the tension and anxiety are gone....Discovering that other people, especially established professionals, still have trouble with their writing projects made me feel that it was all right for me to have trouble too.

I feel now that I am more relaxed when approaching a writing task. I have learned that other people have the same tensions about writing that I do, and this gives me hope and strength.

Sharing anxieties with others in the same boat made me realize I'm not alone and that I can accomplish good writing skills if I try hard enough.

I gained more confidence in writing because I found out others also spend a great deal of time in organizing the thoughts and ideas for the paper.

Knowing other people have trouble with writing -- I don't feel so isolated.

Participants often mentioned the value of the information on the three-phase writing process (prewriting, writing, and postwriting), which included suggestions for getting started, organizing, drafting, and revising.

I still find that writing is hard work, but I have some ideas about how to get started. I think if I practice the three phases of writing, I may be less likely to procrastinate.
The course was valuable in emphasizing the importance of the prewriting and postwriting process to me and not to balk so much when I need to rewrite something.

I have found out that the behaviors I exhibited in the past when it came to writing were really normal behaviors rather than abnormal. Behaviors such as procrastinating and false starts are actually part of the prewriting stage.

My confidence is increasing. "Write something." This was the most helpful advice. Phrases, incomplete sentences, etc., can easily be constructed into organized material; it's just a matter of seeing the ideas before me.

I am challenged by writing now. I want to do the best I can and it's fun doing the postwriting. It's O.K. not to get it right the first time.

Using the suggestion of getting my thoughts down on paper has been useful. Accepting that my first copy will not be my last copy has also helped. Putting my writing aside and looking at it later is a useful technique also, as well as reading it aloud.

I feel more comfortable spending greater amounts of time in prewriting, recognizing that proportionately it's important. Equally important is knowing that just completing a writing project doesn't mean it's over. Editing is essential and it takes time and means a better written project.

It is a good feeling to know that a piece of good writing is almost proportional to the number of revisions that were made.

Participants also appreciated the opportunity to participate in peer evaluation.

I find that I am more eager to share my writing with others and accept their comments and questions.

The peer review helped the most to relieve the anxiety I felt about having others read my work. It was less painful than I expected. And I enjoyed editing the writing of others. That was a lesson in itself.
The peer review exercises produced new insights about my writing style.

* * *

I'm not as anxious about having someone else (a peer) review my writing. There is still anxiety, but not as much.... I'm not so fearful of sharing my writing; yes, even the rough drafts with others and hearing their opinions of what I've written.

* * *

In the past, I've always looked for advice or help with my writing and never thought assistance was needed by others. Now, I find myself editing the work of others and often my comments are appreciated. I have gained confidence in my own writing.

Control Group - The control group only completed the pre-test and post-test materials, not the follow-up materials.

Almost all of the control group members said their attitudes toward writing had not changed since the first time they had completed the forms.

I really have not noticed much of a change. I still feel that writing is one of the most important skills anyone can possess.

* * *

I don't believe my writing attitudes have changed at all during the past month since I have not had the opportunity to write.

* * *

I have not noticed any changes in my attitude toward writing. I still "hate" to write, mainly because it does not come easily for me. I have not done anything in the last month to improve my writing or handle my fears.

* * *

I have not noticed any change during the past month. I still am hesitant to write and take a long time to finish any writing I have to do.

* * *

My attitude about writing has not changed. It is still something to fear and dread. When I try to write my hands get sweaty and at times the paper smears and falls apart. Having someone else evaluate my writing is not a happy experience. Since I dread it so much I wait until the last possible moment to start a project. Well, after all, the whole project will end in failure. The worst part is getting it back. Then my fears become
realities and all these things that could happen take place.

Although most control group members noticed no change in attitude, one respondent said her anxiety had increased.

My apprehension about writing has increased during the past month since I have begun writing my master's thesis. As usual, I postpone the writing as long as possible, and when I do finally force myself to sit down and begin I become very tense and irritable. Then, of course, I lose my concentration and don't do as well as I should or could if I were relaxed.

Others had experiences during the month that improved or reinforced a positive attitude toward writing.

In the past few weeks, I have been writing and presenting inservices for our nursing staff. The writing seems to be getting easier and more organized with more experience. My nursing supervisor is probably the one most responsible for helping me make writing an easier experience for me. Through her guidance, she has encouraged and assisted me to write down my behavioral objectives and construct a content outline.

I think I have gained more confidence in my writing. A month ago...I had just completed a class where the professor did not like my writing style. I found it difficult to change to meet her expectations. Since that time I have continued to write and have had some of my writing published. This has greatly improved my attitude.

I have noticed a change. I had to write several cover letters for resumes. I was very pleased with the results of my efforts. Subsequently, I was granted an interview for each resume sent in.

When I came back from the occupational therapy conference a couple of weeks ago, I was encouraged to write some papers for publication. I felt I had something to write and would like to see it published....I was also interested at the conference to hear a researcher say, "Writing is always hard." This made me feel better as she has had several things published and she still feels that way. Maybe I'm being too hard on myself.
I have spent the past month with my 85-year-old mother in Wisconsin during and following some orthopedic surgery she had done. During that time I had the opportunity to read several stories she has written this past year for a creative writing course. I was impressed with the content (yarns of yesteryear) and the colorful, tun, and sensitive way in which it was expressed. I couldn't help but think, "What a wonderful talent to have -- writing skills." And how fortunate we are to have these wonderful stories documented. My positive feelings about writing have been reinforced.

Two people even mentioned that filling out the forms for the study had caused them to think about their writing.

Filling out these forms has made me more aware of my attitudes toward writing. I now seem to be more interested in expressing my thoughts on paper. I have not had as much anxiety in completing detailed student evaluation forms. I do look forward to increased interest in writing.

* * *

I think I've gained a little more confidence in my writing abilities, partly because of this survey making me even more aware of my writing and partly because I've had to do more writing than usual.

**Workshop Evaluation Form**

The final evaluation form for the guided imagery group had the following question on it: What is your opinion of the value, or lack of it, of the guided imagery exercises you did during the workshop?

Of the 25 people in the guided imagery group who completed the workshops, 24 responded to that item. Of those, 17 (71%) found guided imagery valuable. They made such comments as very helpful, excellent, effective, very useful, worthwhile, great, widely applicable, very good, enjoyable, beneficial, and very interesting.

Some of the comments follow:
Very good. A new technique that I was familiar with in other areas (martial arts). Interesting when applied to writing. It is effective.

** * *

Very interesting (my first exposure to this process).

** **

Excellent method to help reduce writing anxiety and to see completed writing projects. Should be continued in future workshops.

** **

Effective technique for relaxing and realizing the possibilities of success.

** * *

I believe in the use of guided imagery. I believe for it to work that the person doing the "guiding" has to be sincere and believe it will work. I really sensed that faith and sincerity throughout the course.

** * *

Guided imagery, as introduced in the workshop, has been the single most beneficial aspect of the workshop to reduce my writing anxiety.

The seven other respondents (29%) did not consider guided imagery as valuable as the rest of the group. One said a discussion of relaxation methods would have been more useful for her. Another said too much time was devoted to guided imagery. Another said one session would have been enough, and one said the exercises were too short for her to relax. Three of the seven people (13% of all the respondents) said the exercises were not helpful or had little value.

The final evaluation form for the writing and editing group had the following question on it: What is your opinion of the value, or lack of it, of the writing and editing exercises you did during the workshop?

Of the 23 people in the writing and editing group who completed the workshop, 22 responded to that item. Of
those, 19 (86%) found the writing and editing exercises valuable. They made such comments as excellent, of great value, very helpful, would have liked more and more time to discuss them, and provided time for practice.

Here are some of the typical comments:

I thought the writing and editing exercises were of great value. The editing exercises gave me another viewpoint on what an editor looks for in an article.

They were helpful in making me think about writing.

Very helpful, especially since they were followed with discussions.

Writing exercises very valuable. It really helps to use some of the skills and methods discussed while the course is in progress. The immediate response from instructor and peers supported what we learned.

Two respondents (9%) rated the exercises fair. One person (5%) did not find the writing and editing exercises valuable. She said examples, not exercises, were more useful to her.

In addition, two people in the writing and editing group made comments on their evaluations that indicated that they would have liked more techniques to help them reduce writing anxiety. One suggested that the workshop should include "techniques that deal with unconscious anxieties." The other said, "I didn't gain a great deal in terms of reducing writing anxiety. The primary means of reducing anxiety appears to be 'better-trained' writers."
Summary of the Results

The results indicated that the guided imagery and the writing and editing groups significantly reduced their writing anxiety and improved their self-perception of writing ability. The control group did not. The findings for the two treatment groups were not significantly different, however. The treatments made a difference but it did not make a difference which treatment was received.

The findings indicated that writing anxiety, as assessed by the WAT, and self-perception of writing ability, as assessed by the WASA, have a very strong inverse correlation.

In general, the responses to the open-ended items tended to support the quantitative results.
CHAPTER 5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

If you can imagine it, you can achieve it.
If you can dream it, you can become it.

William Arthur Ward

After a summary of the study, this chapter includes sections on conclusions and recommendations for further research and a concluding statement.

Summary of the Study

Restatement of the Problem

This study focused on one aspect of the problem of writing anxiety: techniques for reducing it. The main purpose of this study was to determine the effects of guided imagery exercises, when compared with writing and editing exercises, on reducing writing anxiety and improving self-perception of writing ability of health professionals. The researcher also explored the relationship between writing anxiety and self-perception of writing ability.

Guided imagery allows people to isolate themselves mentally and to use their natural abilities to daydream or fantasize in ways that accomplish educational objectives (G. Richardson, 1982).
The general research question for the study was as follows: What effects do guided imagery exercises, when compared with writing and editing exercises, have on reducing writing anxiety and improving self-perception of writing ability of health professionals?

To explore this question, the researcher used a nonrandomized control group pretest-posttest design. She developed and presented two four-session, 10-hour continuing education workshops (How to Reduce Writing Anxiety and Improve Writing Skills). The workshops were similar except for a one-half hour segment during which the researcher included either a guided imagery exercise or a writing and editing exercise. The workshops also included other techniques for reducing writing anxiety (for example, peer content and activities designed to improve writing ability.

The effects of the two treatments on the level of writing anxiety and the self-perception of writing ability of workshop participants were compared. The two treatments groups were compared with each other and with a no-treatment control group.

The two primary instruments for data collection were the Daly-Miller Writing Apprehension Test (WAT) and the Shilling Writing Ability Self-Assessment (NASA). The WAT is a 26-item Likert scale instrument. It was validated and tested for reliability by its authors and by other researchers. The NASA is a 38-item Likert scale instrument. It was developed by the researcher and validated and tested for reliability before being used for this study.
At the beginning of the study, all subjects completed the WAIS and WASA and a form that asked for demographic and academic information. They also wrote an open-ended essay on the experiences in their lives that had influenced their attitudes toward writing. At the end of the four-week workshops, and again one month later for the treatment groups, subjects completed open-ended essays about whether their attitudes toward writing had changed in the past month.

The subjects for the study were 74 adults (primarily health professionals) from the Central Ohio area. Although the subjects were not randomly assigned to the treatment groups, the researcher randomly assigned the treatments to the two groups. The control group was made up of people who expressed interest in the workshops but could not attend them at the times offered or who signed up too late to attend them.

**Research Hypotheses and Questions**

The research hypotheses and questions for this study were as follows:

**Writing Anxiety.**

**Research Hypothesis 1.** The guided imagery group will have a lower posttest level of writing anxiety than the writing and editing group, which in turn will have lower level than the control group.
This was only partially supported. The guided imagery and writing and editing groups were not significantly different from each other on writing anxiety but they were significantly different from the control group.

**Research Hypothesis 2.** Both the guided imagery and the writing and editing groups will show a significant decrease in their level of writing anxiety from pretest to posttest time.

This was supported.

**Research Question 1.** Four weeks after the workshops are over, will there be a significant difference between the mean posttest scores and mean follow-up scores on writing anxiety for the guided imagery and writing and editing groups?

The results indicated that the means of the two groups on writing anxiety did not change significantly between posttest and follow-up. Participants in both groups maintained their reduced level of writing anxiety.

**Self-Perception of Writing Ability.**

**Research Hypothesis 3.** The guided imagery group will have a higher posttest level of self-perception of writing ability than the writing and editing group, which in turn will have a higher level than the control group.

This was only partially supported. The guided imagery and writing and editing groups were not significantly different from each other on self-perception of writing abili-
ty. Neither were the writing and editing and control groups. However, the guided imagery and control groups were significantly different from each other.

Research Hypothesis 4. Both the guided imagery and the writing and editing groups will show significant improvement in self-perception of writing ability from pretest to post-test time.

This was supported.

Research Question 2. Four weeks after the workshops are over, will there be a significant difference between the mean posttest scores and follow-up scores on self-perception of writing ability for the guided imagery and writing and editing groups?

The means of the two groups on self-perception of writing ability did not change significantly between posttest and follow-up. Participants in both groups maintained their improved level of self-perception of writing ability.

Writing Anxiety and Self-Perception of Writing Ability.

Research Hypothesis 5. The pretest, posttest, and follow-up scores on the WAT and the WASA will indicate an inverse correlation between writing anxiety and self-perception of writing ability.

This was supported.

In general the responses to the open-ended items tended to support the quantitative results.

The results are detailed in Chapter 4.
Treatment of the Data

Several statistical techniques were used to analyze the data:

1. Analysis of variance on pretest scores;
2. Analysis of covariance followed by the Scheffé test on the posttest scores across groups;
3. T-tests on the differences between the pretest and posttest means and between the posttest and follow-up means of individual groups;

The researcher decided in advance to accept a .05 level of significance.

The researcher also analyzed the open-ended materials -- Writing History, Change of Writing Attitude, weekly journals, observer's notes, weekly evaluations, and final evaluations -- for important trends. Some typical comments from these materials are included in Chapter 4.

Limitations

This study had five main limitations:

1. Subjects were not randomly assigned to treatment groups.
2. Subjects were primarily health professionals in one location.
3. Instructor bias could have affected results.
4. Treatments were presented at different times.
5. Control group did not complete instruments under same conditions as treatment groups.

Conclusions

Based on the results of the study and bearing in mind its limitations, the researcher reached the following conclusions:

1. The results of this study may be applied, with caution, to other similar types of adults.

The subjects for this study were not randomly assigned. However, the researcher did administer pre-tests and was able to randomly assign the treatments to the experimental groups. Therefore, she was able to deal with some of the threats to internal validity.

Although the subjects for this study were primarily health professionals, that is, they worked in a health care setting, they came from such a wide variety of backgrounds that they could be called an interdisciplinary group. They ranged from a librarian to a pathologist, from an medical illustrator to a radiation safety specialist. Based on her experience, the researcher believes the subjects she worked with are fairly typical of other groups of adults with writing anxiety. Therefore, it is reasonable to generalize the results of this study to other groups of adults who choose to take a similar workshop.
2. **It is possible to reduce writing anxiety and improve self-perception of writing ability in a relatively short period.**

While it is generally thought that attitudes, especially those of adults, take a long time to change, this study shows that motivated adults can significantly change their attitudes toward writing in a relatively short period. The treatment lasted four weeks during which participants met each week for two and one-half hours. The fact that the attitude changes lasted at least a month after the end of the workshops was encouraging.

Most other experimental studies on writing anxiety have explored the effects of longer treatments (usually a college quarter or semester). To the researcher's knowledge, only Davis and Passman had success with shorter treatments. Davis (1979) used systematic desensitization in a treatment that lasted six weeks (one hour a week). Passman (1976) used five sessions of positive reinforcement but his report was only on one client. The researcher did not find any documented research on treatments that lasted a shorter time than hers.

3. **Guided imagery and writing and editing exercises appear to be almost equally effective as treatments.**

This study indicates that guided imagery exercises are at least as effective as writing and editing
exercises as part of a treatment to reduce writing anxiety and improve self-perception of writing ability. In fact, it is extremely effective for some people. To quote one participant, "Guided imagery was the single most important thing I gained from the workshop because it is something I took home with me. I have used it and it takes the edge off my nervousness about starting writing."

Since the groups were similar on level of writing anxiety at the beginning of the study, the researcher concluded that both treatments were about equally effective in reducing writing anxiety.

The treatments made a difference but it did not make much of a difference which treatment was received.

However, the mean scores of the guided imagery and the writing and editing groups were in the direction the researcher hypothesized. Therefore, it is possible that a larger sample size or a longer treatment period would have made the numbers significantly different.

4. **Guided imagery exercises should be carefully planned.**

Guided imagery can be a powerful tool but like any other instructional technique, it should not be used haphazardly. Before using guided imagery in this study, the researcher wrote, tested, and revised the scripts. In the workshops, she introduced the
technique by explaining its purpose and presenting a rationale for its use. She also planned appropriate follow-up activities so participants could process the experiences and share the insights they gained during the visualizations. Those using the technique should be aware that there may be a few people in a group who resist guided imagery and who do not find the experience valuable. In such cases, it helps to assure such people that their response is legitimate and that guided imagery is only one of the techniques that will be used.

5. A program to change attitudes toward writing should include a variety of techniques.

Since both treatments were similar other than the one-half hour each session devoted to the exercises, it is probable that neither the guided imagery nor the writing and editing exercises were entirely responsible for the changes in attitudes. Rather it was probably the combination of content and activities in both workshops that led to the changes. Written and oral comments by the participants lent credence to this belief.

Other techniques found useful by this and other researchers are a positive focus on writing, time to share writing problems and ideas about writing, peer evaluation, and instruction on the writing process and the principles of effective writing. Since some
techniques work for some people and others for other people, it behooves teachers and learners to use a variety of techniques.

6. **Teachers should incorporate techniques designed to affect both writing anxiety and self-perception of writing ability.**

The researcher found a high negative association between writing anxiety and self-perception of writing ability (-.77, -.78, and -.84 on the pretests, posttests, and follow-ups). These results support and expand on the findings of Daly and Wilson (1980), who had a Pearson correlation coefficient of -.73 when they correlated subjects scores on the WAI and an instrument that assessed self-perception of writing ability. The results also confirm the untested observations by many writing teachers that people with high writing anxiety often have a low opinion of their writing ability and vice versa. Daly and Wilson only reported a one-time measurement. This researcher measured the variable three times over the two-month period of the study and found that the relationship between writing anxiety and self-perception of writing ability remained constant. To her knowledge, this is the first study to assess the correlation between the two variables before and after a treatment.
The high negative correlations between writing anxiety and self-perception of writing ability suggest that teachers should incorporate techniques designed to affect both variables. This is not to say that teachers need to be dishonest in their assessments of students' writing. They can be honest but encouraging, pointing out good characteristics as much as possible. And negative feedback should be given in private when possible.

7. **The self-fulfilling prophecy can help people improve their attitudes toward writing.**

When people change their attitudes, there is likely to be more than one reason why. In addition to the treatments, which consisted of a variety of techniques, there are other possible explanations for the participants' change in attitudes during this study. Since the subjects chose to attend the workshops, they were highly motivated to change their views. Indeed, some experts believe that just the act of taking a writing course may have some influence on a person's attitude toward writing.

The participants were also aware that the researcher was studying attitudes toward writing. Therefore, the Hawthorne effect could have come into play. Participants may have responded to the post-test and follow-up instruments positively because they were trying to please the researcher, regardless of how much their attitudes really changed.
Finally, the instructor believed their attitudes could be changed and tried to help them believe it. Research indicates that the self-fulfilling prophecy is a strong factor in education. If teachers or learners believe something a particular objective can be achieved, they are likely not to be surprised.

Recommendations for Further Research

Following are recommendations for further research in areas related to the present study.

1. It is recommended that the study be replicated with a larger sample and with other instructors.

2. It is recommended that the present study be replicated with subjects from different populations, for example, groups of adults in other professions, returning students, graduate students, undergraduate students, and high school students.

3. It is recommended that a similar study be conducted using guided imagery as a treatment for a longer period, for example, a college quarter or semester.

4. It is recommended that studies be conducted on treatments that last a shorter period. For example, is it possible to significantly reduce writing anxiety and improve self-perception of writing ability in just one session? In two sessions? The purpose of such studies would be to find the optimum time for treatments.
5. It is recommended that a study be conducted to compare guided imagery with other treatments, for example, systematic desensitization, peer evaluation, or the traditional teacher-based method of teaching writing.

6. It is recommended that a longitudinal study be conducted to see if subjects maintain their changed attitudes toward writing over time or revert to former negative attitudes. The longitudinal study could include follow-ups three, six, and 12 months after the treatment.

7. It is recommended that a study be conducted to assess writing productivity of subjects before and after a treatment to reduce writing anxiety.

8. It is recommended that a study be conducted on the effects of guided imagery on writing quality. For example, writing samples could be collected at the beginning and end of treatments similar to those described in the present study.

9. It is recommended that a study be conducted to compare teachers' levels of writing anxiety and self-perception of writing ability with those of their students.

10. It is recommended that a qualitative study be conducted in which subjects are interviewed and asked open-ended questions about what elements of a treatment affected their attitudes toward writing.
It is recommended that a study be conducted on the relationship of self-perception of writing ability and writing quality.

**Concluding Statement**

People with low writing anxiety and high self-perception of writing ability are likely to be better and more productive writers. If those with negative attitudes toward writing can be helped to improve them, they can be helped to break the cycle of little writing, little or negative feedback, no improvement, and fear of writing.

Guided imagery is one technique to help people improve their attitudes toward writing. With such help, people like Linda, Anthony, and Pilar, whose cases were described in Chapter 1, can be led to change their attitudes toward writing. As William Arthur Ward has said,

> If you can imagine it, you can achieve it.
> If you can dream it, you can become it.
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Appendix A

PUBLICITY AND CORRESPONDENCE
How to Reduce Writing Anxiety and Improve Writing Skills

THE OHIO STATE UNIVERSITY
SCHOOL OF ALLIED MEDICAL PROFESSIONS
announces
HOW TO REDUCE WRITING ANXIETY AND IMPROVE WRITING SKILLS
Sept./Oct. 1982

PURPOSE AND OBJECTIVES

Do you put off writing that report, proposal, article, or letter? Do you shy away from professional positions that require writing? Do you depend on others to judge whether your writing is good or not? As a health care professional, your ability to communicate effectively in writing can be crucial to patient care. Good writing skills can also enhance your own career development. Writing anxiety can lead you to avoid writing and to miss opportunities for evaluation and improvement of your writing.

This four-session workshop will help you reduce your anxiety about writing and improve your writing skills. You will discuss your attitudes toward writing and examine the process you use when faced with a writing task. You will learn some specific techniques for making yourself start a writing project. You will also participate in weekly writing and editing exercises.

After completion of the four sessions, you will be able to:
1) Identify and use techniques for reducing writing anxiety that work for you.
2) Apply a three-phase process for writing to your own projects.
3) Use the principles of clear writing.
4) Apply a readability index to your writing.
5) Revise a writing project systematically.
6) Evaluate the writing of your peers, colleagues, or students.
HOW TO REDUCE WRITING ANXIETY AND IMPROVE WRITING SKILLS  
September/October 1982

WORKSHOP AGENDA

Session I - Sept. 14 or Sept. 16
Overview
Pre-writing, Writing, Post-Writing
(A three-phase process)
Organizing a Writing Project
Reducing Writing Anxiety

Session 2 - Sept. 21 or Sept. 23
Calculating Readability Scores
Applying Principles of Clear Writing
Reducing Writing Anxiety (cont'd.)

Session 3 - Sept. 28 or Sept. 30
Revising a Writing Project
Writing Concisely
Reducing Writing Anxiety (cont'd.)

Session 4 - Oct. 5 or Oct. 7
Editing and Evaluating the Writing of Others
Reducing Writing Anxiety (cont'd.)
Wrap-up

LOCATION
This program will be held at The Ohio State University School of Allied Medical Professions, 1583 Perry Street, Columbus, Ohio 43210. (614) 422-5618. University maps will be made available to registrants.

PROGRAM FACULTY

LILLES McPHERSON SHILLING, M.A.
Instructor, Biomedical Communications, School of Allied Medical Professions and Associate Editor, Journal of Allied Health, the official publication of the American Society of Allied Health Professions.

REGISTRATION

This writing workshop is open to health care professionals and students. Inexperienced and experienced writers are welcome. Two sections of the four-session workshop will be offered:

Section I - Tuesdays, 3-5:30 p.m.  
Sept. 14, 21, 28, Oct. 5

Section II - Thursdays, 3-5:30 p.m.  
Sept. 16, 23, 30, Oct. 7

The registration fee of $35.00 covers workshop materials. Registration deadline is Sept. 3, 1982. Fees will be refunded only if notice of cancellation is received no later than Sept. 3. Any registration refund is subject to a $5.00 non-returnable fee.

CREDIT

This program is eligible for 1.0 CEU's through The Ohio State University.
WRITING WORKSHOP

DO YOU PUT OFF WRITING THAT PAPER, REPORT, PROPOSAL, ARTICLE, OR LETTER? DO YOU SHY AWAY FROM ACADEMIC COURSES OR PROFESSIONAL POSITIONS THAT REQUIRE WRITING? DO YOU DEPEND ON OTHERS TO JUDGE WHETHER YOUR WRITING IS GOOD OR NOT? IF YOUR ANSWER TO THESE QUESTIONS IS YES, YOU MAY WISH TO ATTEND A FOUR SESSION WORKSHOP, "HOW TO REDUCE WRITING ANXIETY AND IMPROVE WRITING SKILLS," WHICH WILL BE PRESENTED IN SEPTEMBER AND OCTOBER.

PARTICIPANTS MAY CHOOSE ONE OF TWO SECTIONS OF THE WORKSHOP:

SECTION I: TUES. 3 - 5:30 PM, SEPT. 14, 21, 28 AND OCT. 5

SECTION II: THURS. 3 - 5:30 PM, SEPT. 16, 23, 30 AND OCT. 7

BOTH SECTIONS WILL MEET IN THE SCHOOL OF ALLIED MEDICAL PROFESSIONS AT OHIO STATE UNIVERSITY. FOR MORE INFORMATION CALL: THE OFFICE OF CONTINUING EDUCATION (614) 422-5618.
HOW TO REDUCE WRITING ANXIETY AND IMPROVE WRITING SKILLS

Do you put off writing that report or proposal? Do you avoid writing those letters and memos? Do you shy away from professional positions that require writing? Would you like to reduce the anxiety you feel when faced with a writing project and improve your writing skills?

This four-session workshop will help you reduce your anxiety about writing and improve your writing skills. You will discuss your own thoughts, feelings, and attitudes toward writing and examine the process you use when faced with a writing task. You will also learn some specific techniques for reducing writing anxiety and making yourself start a writing project. You will participate in exercises designed to reduce writing anxiety and improve writing skills. Inexperienced and experienced writers are welcome.

The workshop will be taught by Lilless McPherson Shilling, M.A., Instructor, Biomedical Communications Division, School of Allied Medical Professions, and Associate Editor, JOURNAL OF ALLIED HEALTH.

Workshop Schedule (choose one section)

Section I Thursday 3-5:30 p.m. June 3-24, 1982
Section II Tuesday 3-5:30 p.m. June 8-29, 1982

Fee $30.00

Location: School of Allied Medical Professions
The Ohio State University

Contact: Office of Continuing Education
School of Allied Medical Professions
1583 Perry Street
Columbus, Ohio 43210
Phone: (614) 422-5618
WRITING WORKSHOP TO BE OFFERED IN SEPTEMBER & OCTOBER

Do you put off writing that paper, report, proposal, article, or letter? Do you shy away from academic courses or professional positions that require writing? Do you depend on others to judge whether your writing is good or not? If your answer to these questions is yes, you may wish to attend a four-session workshop, "How to Reduce Writing Anxiety and Improve Writing Skills," which will be presented in September and October. The workshop will emphasize the principles of clear writing. Participants will discuss their own thoughts, feelings, and attitudes toward writing and will learn some specific techniques for reducing writing anxiety. Each session will include writing and editing exercises. Inexperienced and experienced writers may register.

Lilless McPherson Shilling, an instructor in the Biomedical Communications Division at Ohio State University and associate editor of the JOURNAL OF ALLIED HEALTH, will be the instructor. Two sections of the workshop will be offered. Participants may choose the section most convenient for them. Section I will meet Tuesdays from 3:00 to 5:30 p.m. on September 14, 21, 28 and October 5, Section II will meet Thursdays from 3:00 to 5:30 p.m. on September 16, 23, 30, and October 7. Both sections will meet in the School of Allied Medical Professions at Ohio State University. For more information, call the Office of Continuing Education at the School of Allied Medical Professions: (614) 422-5618.
Dear __________:  

I am writing you to ask for your help with a study I am conducting on people's attitudes toward writing.

Your participation in the study would involve filling out the enclosed set of four forms and another set of three forms in a month. Responding to the forms will probably take a total of one hour of your time.

Your responses on the forms will help me in planning specific activities for the writing workshops I conduct. Filling out the forms may also give you some insights about your own attitudes toward writing and experience with writing.

If you will return all the forms I will later send you some handouts on techniques for reducing (or channelling) writing anxiety and the lists of references I have compiled on writing and on reducing writing anxiety.

Enclosed are the four forms, a self-addressed envelope, and a packet of hot chocolate (so you can enjoy a cup while you complete the forms). Of course, the information you provide will be kept entirely confidential.

I hope you will be willing to participate in the study and I look forward to receiving the forms. Please return them by September 30. If you have any questions please call me at work (422-1044) or at home (457-6423).

I will write you again in a month to send you the last set of forms. Thank you so much for your help.

Sincerely,

Lilless McPherson Shilling  
Instructor  

LMS:rmp  
Enclosures
Dear __________:

I am writing to send you the follow-up forms for the study you agreed to participate in on attitudes toward writing. Two of the forms are like some you have filled out before. The third, "Changes in Writing Attitude," is different.

I sincerely thank you for your cooperation so far and will appreciate your filling out this last set of forms.

It will probably take you between 15 and 20 minutes to complete all three forms. Please return them in the enclosed envelope by October 29. I'm working on a deadline; that's why I'm asking you to return the forms so promptly. When I receive them, I will send you some "rewards."

Hope you are enjoying your fall.

Cordially,

Lilless McPherson Shilling
Instructor

LMS:rmp

Enclosures
Dear _____________:

Thank you so much for returning the forms related to your attitude toward writing.

As promised, I am sending you the "rewards" for participating in the study. Enclosed are the following:

- Two bibliographies - one on writing in general and the other on writing anxiety.

- A list of techniques some writers find useful to help them write.

Again, thank you for participating in the study. I wish you good fortune with your writing projects.

Cordially,

Lilless McPherson Shilling
Instructor

LMS:rmp

Enclosures
Dear ____________:

I hope your writing world has been productive in the past month and that you are also enjoying the fall.

Enclosed are three forms like those you filled out the last day of class. I would very much appreciate it if you would complete the forms and return them to me in the enclosed self-addressed stamped envelope by November 21. I am working on a deadline; that's why I hope you will return the forms promptly.

Again, I want to tell you how much I enjoyed working with you and the others in your group this fall and to remind you that you are welcome to use me as a resource for your questions about writing.

Please stay in touch.

Cordially,

Lilless McPherson Shilling
Instructor

LMS:rmp

Enclosures
Appendix E

DATA COLLECTION INSTRUMENTS
DEMOGRAPHIC/ACADEMIC INFORMATION

1. Name
   Last ____________________________ First ____________________________ Middle ____________________________

2. Address
   Number ____________________________ Street ____________________________
   City ____________________________ State ____________________________ Zip Code ____________________________

3. Phone number: Home ____________________________ Work ____________________________

4. Occupation ____________________________________________
   Title ____________________________________________
   Organization ____________________________________________
   Address ____________________________________________

5. Level of education. (Please indicate highest level attained. Also indicate other diplomas, certificates, licences, or degrees.)
   ____________________________________________
   ____________________________________________
   Current educational status (e.g., continuing education, degree program, professional program) ____________________________________________

6. Current or last academic major ____________________________________________
   minor (if applicable) ____________________________________________

7. Name of academic institutions attended ____________________________________________

8. Type of high school attended (i.e., large, medium or small; urban, suburban, or rural) ____________________________________________

9. Age __________

10. Sex __________

11. Marital Status __________
Demographic/Academic Information

12. Racial background or ethnic origin

13. Which hand do you write with? Right _____ Left _____ Both _____

14. What is your opinion of the appearance of your handwriting?

15. Writing experience:
   a. University background (List specific writing courses. Briefly describe them. Start each description on a new line. Use the back of this page if necessary.)

   b. High school writing courses (Briefly describe the courses.)

   c. List other experiences with writing (personal writing, diaries, letters, writing for a school paper, freelance writing, etc.) Briefly describe.
Demographic/Academic Information

16. Types of writing you do now (briefly describe):
   a. for personal enjoyment or benefit
   b. for school assignments
   c. for professional purposes

17. Other information or comments you would like to offer.

18. Does this questionnaire give you an opportunity to comprehensively describe your writing background? Why or why not?

(c) Lilless McPherson Shilling
May 1982
PLEASE NOTE:

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

Pages 224-225 (Writing Attitude)

Page 253 (Human Interest Score)

Pages 258-259 (The Making of a Mansion-Builder)
WRITING ABILITY SELF-ASSESSMENT

This survey contains a number of statements related to your opinion of your writing ability. In responding, please bear in mind the type of writing you usually do for school or work. Please respond to all items even if some of them appear repetitious. Your responses will be kept confidential. If any of the statements are not clear to you, please indicate in the margin that they are not clear and change the wording to make them clearer. Thank you for your help.

Please mark your responses in the spaces to the right of the items.

If you strongly agree with the statement, mark the space below SA.
If you agree, mark the space below A.
If you are neutral or undecided, mark the space below U.
If you disagree, mark the space below D.
If you strongly disagree, mark the space below SD.

1. I usually don't have enough knowledge of my topic when I write.

2. My writing reflects the personality I want it to.

3. I am confident in my ability to organize my writing.

4. I am confident in my ability to tell the difference between good and bad writing.

5. My written work lacks originality.

6. The content of my writing is relevant.

7. My completed writing projects reflect a lack of planning.

8. I lack confidence in my ability to prepare an outline for a writing project.

9. I feel I am a poor writer.

(Continued on next page)
10. I consider my writing good enough to be published.

11. I believe the organization of my written work is poor.

12. My editing skills are good.

13. I lack confidence in my ability to start and complete a writing project.

14. I have a good writing style.

15. I am a poor speller.

16. I know how to eliminate unnecessary content when I edit.

17. I often use variety in my writing style.

18. My writing style is poor.

19. I lack confidence in my ability to edit my own writing.

20. I am confident in my ability to handle different types of writing projects (such as research reports, patient education materials, correspondence).

21. I don't have a good grasp of the rules of English grammar.

22. I make transitions well in my writing.

23. I am not sure if I make myself understood to my audience.

24. I am confident in my ability to make my writing understandable to my usual audience.

25. My written work is usually neat in appearance.

(continued on next page)
26. I find it hard to make clear what the purpose of my written work is. ( ) ( ) ( ) ( ) ( )

27. I am confident in my ability to punctuate correctly. ( ) ( ) ( ) ( ) ( )

28. I know where to find answers to my questions about writing. ( ) ( ) ( ) ( ) ( )

29. When I write I often doubt that I am putting words together correctly. ( ) ( ) ( ) ( ) ( )

30. I lack confidence in my writing ability. ( ) ( ) ( ) ( ) ( )

31. When I make a point in my writing, I am able to support it. ( ) ( ) ( ) ( ) ( )

32. I don't trust my judgement on what to leave in and what to take out when I'm revising. ( ) ( ) ( ) ( ) ( )

33. I write differently for different people. ( ) ( ) ( ) ( ) ( )

34. If I were grading my writing ability, I would give myself low marks. ( ) ( ) ( ) ( ) ( )

35. I am confident in my ability to write for different types of audiences. ( ) ( ) ( ) ( ) ( )

36. I don't think my writing is interesting to other people. ( ) ( ) ( ) ( ) ( )

37. My writing is stiff and unnatural. ( ) ( ) ( ) ( ) ( )

38. I have a good sense for how to revise my writing. ( ) ( ) ( ) ( ) ( )

39. This opinionnaire is an appropriate instrument to assess my opinion of my writing ability. ( ) ( ) ( ) ( ) ( )

40. In general, my opinion of my writing is

_____________________________________________________________________________________

(Please be sure you have completed all three pages.)

(c) Lilless McPherson Shilling, 1983
WRITING HISTORY

Please write freely for a few minutes about the pleasure or value, or lack of it, that you find in writing. Try to remember experiences that have shaped your thoughts, attitudes, and feelings about writing. Discuss specific instances from your childhood and home life if relevant. Include experiences with particular teachers, courses, subjects, assignments, grades, books, classmates, friends, relatives, or whatever is relevant. Think back. How did you come to feel the way you do about writing? Use additional sheets if necessary.

Adapted from a form entitled "Writing Autobiography," by Helen Field Heaton. The original form was used for Heaton's doctoral dissertation, "A Study of Writing Anxiety Among High School Students Including Case Histories of Three High and Three Low Anxiety Students," 1980.
DAILY CHECK-UP

1. What did you gain from today's session?

2. What part or parts of today's session were most valuable to you? Why?

3. What part or parts of today's session were least valuable to you? Why?

4. Other comments or suggestions.

Name (optional)
CHANGES IN WRITING ATTITUDE

Please take a few minutes to respond to the following questions. Have you noticed any changes during the past month in your attitudes, thoughts, and feelings toward writing? If so, what brought about the changes? Please be as specific as you can. Give examples of specific changes and events if possible. If you have not noticed any change at all, please indicate why you believe you have not changed.
How to Reduce Writing Anxiety and Improve Writing Skills  
Workshop Evaluation Form  
June 1982

Please respond to the following items. Your responses will help us plan future continuing education programs.

Health Profession _____________________________________________

1. How would you rate the total workshop? __Excellent __Good __Fair __Poor

2. Below are the objectives for this workshop. Circle the number that indicates the degree to which each objective was met for you.

   a) Identify and use techniques for reducing writing anxiety that work for you.  
   b) Apply a three-phase process for writing to your own projects.
   c) Use the principles of clear writing.
   d) Apply a readability index to your writing.
   e) Revise a writing project systematically.
   f) Evaluate the writing of your peers, colleagues, or students.
   g) Use guided imagery to reduce writing anxiety and improve writing skills.

<table>
<thead>
<tr>
<th>Not Met</th>
<th>Met</th>
<th>Exceeded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Below are the main topics covered during the workshop. Circle the appropriate number in the box.

   a) 3-phase writing process
   b) Organization
   c) Readability
   d) 10 principles of clear writing
   e) Revision
   f) Concision
   g) Nonexist writing
   h) Peer review
   i) Editors' decisions
   j) Techniques for reducing writing anxiety
   k) Guided imagery

<table>
<thead>
<tr>
<th>Little Use</th>
<th>Useful</th>
<th>Very Useful</th>
<th>Too Basic</th>
<th>Appropriate</th>
<th>Too Advanced</th>
</tr>
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<tbody>
<tr>
<td>1 2 3 4 5</td>
<td></td>
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</tr>
</tbody>
</table>

Usefulness of Content | Level of Instruction
4. For the time allotted, the amount of material presented was: Circle number

   Too Little    Just Right    Too Much
   1             2             3             4             5

5. The organization of the workshop (format, materials, presentations, etc.) was:

   ______Excellent   ______Good   ______Fair   ______Poor

6. Opportunity for discussion was:

   ______Excellent   ______Good   ______Fair   ______Poor

7. What were the strengths of this workshop?

8. What were the weaknesses of this workshop?

9. Did the workshop cover all the topics in which you are interested? _______
   If not, what additions would you suggest?

10. Would you recommend this workshop to others?

    ______Yes    ______No
11. What is your opinion of the value, or lack of it, of the guided imagery exercises you did during the workshop?

12. Please comment on the convenience of this workshop for you (ie. time, place, registration fee, etc.).

13. Did/will you get reimbursed by your employer for the registration fee?

_________ Yes

_________ No

14. What topics would you suggest for future continuing education programs?

15. Do you have any other comments or suggestions?

Thank you!

School of Allied Medical Professions
Ohio State University
1583 Perry Street
Columbus, Ohio 43210
PERMISSION SLIP

I give Lilless McPherson Shilling my permission to use and/or quote from materials I have written and questionnaires I have responded to during summer 1982. I understand my anonymity will be guaranteed in the use of such materials.

Signed _____________________________

Date _______________________________
Session 1
DO YOU PUT OFF WRITING THAT REPORT, PROPOSAL, ARTICLE, OR LETTER? DO YOU SHY AWAY FROM PROFESSIONAL POSITIONS THAT REQUIRE WRITING? DO YOU DEPEND ON OTHERS TO JUDGE WHETHER YOUR WRITING IS GOOD OR NOT? AS A HEALTH CARE PROFESSIONAL, YOUR ABILITY TO COMMUNICATE EFFECTIVELY IN WRITING CAN BE CRUCIAL TO PATIENT CARE. GOOD WRITING SKILLS CAN ALSO ENHANCE YOUR OWN CAREER DEVELOPMENT. WRITING ANXIETY CAN LEAD YOU TO AVOID WRITING AND TO MISS OPPORTUNITIES FOR EVALUATION AND IMPROVEMENT OF YOUR WRITING.

This four-session workshop will help you reduce your anxiety about writing and improve your writing skills. You will discuss your attitudes toward writing and examine the process you use when faced with a writing task. You will learn some specific techniques for making yourself start a writing project. You will also participate in weekly writing and editing exercises.

After completion of the four sessions, you will be able to:

1) Identify and use techniques for reducing writing anxiety that work for you.

2) Apply a three-phase process for writing to your own projects.

3) Use the principles of clear writing.

4) Apply a readability index to your writing.

5) Revise a writing project systematically.

6) Evaluate the writing of your peers, colleagues, or students.
HOW TO REDUCE WRITING ANXIETY AND IMPROVE WRITING SKILLS

September 1982

WORKSHOP AGENDA

Session 1

Overview
Pre-writing, Writing, Post-Writing (A three-phase process)
Organizing a Writing Project
Reducing Writing Anxiety

Session 2

Calculating Readability Scores
Applying Principles of Clear Writing
Reducing Writing Anxiety (continued)

Session 3

Revising a Writing Project
Writing Concisely
Reducing Writing Anxiety (continued)

Session 4

Editing and Evaluating the Writing of Others
Reducing Writing Anxiety (continued)
Wrap-up

PROGRAM FACULTY

Lilless McPherson Shilling, M.A.
Instructor, Biomedical Communications,
School of Allied Medical Professions and
Associate Editor, Journal of Allied Health,
the official publication of the American
Society of Allied Health Professions.

CREDIT

This program is eligible for 1.0 CEU's through
The Ohio State University.
Questions to ask yourself:

1. What is the purpose of the writing project?
2. Who is the audience for it?
3. How am I affected by it?
4. What positive comments can I make about it?
5. What struck me as interesting?
6. Where is the writing strongest?
7. Can I rephrase the writer's ideas?
8. Where do I want more information?
9. Where is the writing weakest?
10. What other comments or suggestions do I have for the writer?

Remember to give positive feedback first and to emphasize the positive. Give as much positive feedback as you honestly can. If you have negative comments to make, focus on one or two problems per writing project. Be specific in your comments. Stop giving feedback if the writer asks you to.

Lilless McPherson Shilling
June 1982
BIBLIOGRAPHY

STYLE BOOKS


BOOKS ON WRITING


Prepared by Lilless McPherson Shilling, January 1983
Session 2
**HOW TO DETERMINE THE FOG INDEX (GRADE LEVEL/READABILITY) OF YOUR WRITING**

1. Count out a 100-word passage in your writing (to nearest 100 at the end of a sentence). Count the number of sentences in the passage. Divide the number of sentences into the number of words. This gives you the average sentence length of the passage.

2. Count the number of words of three syllables or more in the 100-word passage. Don't count the words (a) that are proper names, (b) that are combinations of short easy words (like bookkeeper and shoemaker), (c) that are verb forms made three syllables by adding -ed or -es (like created or trespasses). This gives you the percentage of hard words in the passage.

3. To get the Fog Index, total the two factors just counted and multiply by .4.

*Developed by Robert Gunning.*
EDIBILITY EXERCISE

Edit the following. In the space to the left briefly indicate the main problems you see with the passages.

1. I plan soon to purchase an object that I will utilize for writing with.

2. The detective has knowledge that his client is alive.

3. The youngster was inundated with lacerations and contusions.

4. Prior to commencement of the graduation ceremony you will be visited by a pair of well-wishers.

5. There are a lot of perpetrators of criminal activities incarcerated in Ohio's penal institutions.

6. It's a lot of fun trying to think of long, redundant, verbose sentences that contain a lot of words.

7. It's rather interesting to learn that people are quite content not to know very much about what is occurring in their surroundings.

8. The manner in which specialized functions (of the brain) is presented requires an understanding of neuroanatomy and may be more appropriately discussed under the heading of "anatomy" earlier in the chapter.

9. When I activate and motivate myself to compose an examination, I have to put my cerebrum in a particular mind-set or mode because otherwise I possibly might not concentrate quite as well as possible on the material at hand.
10. It's very important to be cognizant of the importance of clear written communication.

11. From studies of those health programs which the system of priority indicated as offering significant potentialities for improving patient care, it became evident that since in one medical department a review of 50 consecutive records of patients revealed only a 30% correct usage of antibiotics, a program was required to correct the educational deficit.

12. An updated list of references related to all aspects of rehabilitation at the end of the book would be helpful.

13. We are very aware of the difficulty many of you have been experiencing with the cling-cal not adhering properly to a windshield when the cold weather prevails. Due in fact to a cling-cal manufacturers error, we learned of this situation too late.

14. Presently, there are about 1.3 million humans, including 5% over the age of 65, that are confined to nursing homes or other extended care facilities.

15. The distribution of courses per quarter will be more evenly distributed.

16. Problems were encountered with the operation of the optical scanning equipment and resulted in delays of the students' weekly progress reports.
17. New chapters have been added to assist the new students in understanding current trends in the health care area.

18. There are over 40 graphs which augment the test.

19. There is now a growing body of evidence that suggests that certain common characteristics are possessed by the effective manager, whether that manager be male or female.

20. Examination of the time spent by the department chairperson on leadership duties show that there was no significant difference between males and females.

21. In each chapter objectives are specified, content and rehabilitation techniques are explored, and post-tests are included for self-evaluation purposes.

22. Errors may be avoided in a subsequent interview.

23. The book comprises 13 chapters, each of which is an independent self-instructional unit.

24. The completed document is jointly received by the faculty member and his department chairman for the purposes of formative evaluation, feedback, and guidance.

25. The criteria and standards for contract renewals, promotion, and tenure are often unclear or not evident to faculty and even the department chairmen.

Written by a pioneer in research on imagination and daydreaming (Singer) and a freelance writer (Switzer), this nontechnical book discusses how our fantasies and daydreams can help us master our environment. The authors claim we can "enrich our lives in an infinite variety of ways with nothing more than the material stored away in our heads." They point out that imagery may be used to reduce stress, plan the future, gain control over undesirable habits, increase sexual pleasure, enhance creativity, overcome boredom, deal with loneliness, and confront death with dignity.

The authors suggest techniques and imagery exercises to foster relaxation and effective daydreaming. Health related examples appear throughout the book. A chapter on how to combat phobias with imagery gives examples of self-help exercises and techniques health professionals may use with clients. Another chapter on using mental images to overcome bad habits briefly covers smoking, overeating, alcohol abuse, and nail biting.

Health professionals will be especially interested in the chapter "Coping with Pain." Other chapters discuss combating bad moods and insomnia, improving empathy and interpersonal skills, improving skill at sports and games, and stimulating imagination in children. The authors also deal with how to tell when fantasies may be harmful, giving examples of a person who constantly fantasizes about committing violent acts or who is always daydreaming.

A rather superficial annotated bibliography lists only eight books. The book does have a helpful index, however.

While it does not contain much new information, this book is highly readable and offers a good summary of some of the research on the effects of imagery in our lives.

Lilles McPherson Shilling
Ohio State University

OBJECTIVE
To discuss and practice some principles of writing effective business letters.

OVERVIEW
Your letters are your representatives. They take your place in the absence of personal visits or telephone calls. You want them to have a good impact on your customers or clients.

In writing business letters, you first need to ask yourselves two questions: 1) To whom am I writing? Try to visualize the person who will read your letter. Think about what is important to your reader. 2) What response do I want? Make sure you know what effect you want your letter to have.

Like you, your readers are busy people. They will appreciate it if you keep in mind the ABC's of effective writing: Accuracy, Brevity, and Clarity. Readers want to know right away what your purpose is. The first sentence or two of your letter should say what the letter is about and tie it in to the reader's interests. The middle part should give details, reasons, and/or specific examples. The end should state exactly what you want and ask a question or suggest an action that the reader can take immediately.

In his book The Technique of Clear Writing, Robert Cunning, a writing consultant to numerous businesses, government agencies, and periodicals, suggests ten principles of clear writing. Cunning emphasizes that these principles are guidelines, not rigid rules.

1) Avoid unnecessary words. Say enclosed is instead of please find enclosed herewith.
2) Put action in verbs. Avoid the passive use of verbs. Instead of your proposal meets with our approval, say we approve your proposal.
3) Write like you talk. Would you say we regret to advise or we're sorry?
4) Use terms your reader can picture. Be specific. Use examples. Instead of unsuitable conditions, say dirty homes and polluted water.
5) Tie in with your reader's experience. Keep your audience in mind and think about how your reader is affected by or can benefit from what you are saying.
6) Avoid cliches.
7) Write to express, not impress. Saying it has been called to my attention sounds pretentious. I heard or I will do.
8) Re-read some of your letters and apply the above principles to them. Could your letters be improved? When writing business letters, keep in mind the Golden Rule of Writing: "Write unto others as you would be written unto."
- Get a deadline. Write a query letter. Call an editor. Make your own deadline.

- Set aside a work area.

- Set aside a time. Make a schedule for yourself.

- Reduce writing process into small steps and take one step at a time.

- Brainstorm. Write something down without worrying about what you are saying or how you are saying it. Later you can clip and paste.

- Keep idea folders. Look them over just before you are ready to start writing.

- Write a word or phrase outline.

- Try a blob outline (net lining).

- Do a freewriting exercise. Write about anything for 5-10 minutes to warm up.

- Do relaxation exercises before you start.

- Keep a diary.

- Talk to your inner critic.

- Use a tape recorder.

- Tell a friend what you want to write about. Ask the friend to take notes.

- Pretend you are writing your paper as a letter to a friend.

- Visualize your audience.

- Relieve the stress of the day before you start writing. Concentrate on a hobby, gardening, jogging, etc.

- Write the first line of the next paragraph before you leave what you are writing.

- Put big sub-headings on one sheet of paper. When you have 15 minutes or one-half hour, pick up one sub-heading you have something to say about.

- Keep note paper on hand to jot down ideas you have.
- Have expert reviewers look at your paper. Use peers and colleagues to look at drafts.

- Spend some time day dreaming or meditating to get yourself into a positive frame of mind.

- Make a contract with yourself (or another person) on how much you will do in a given time.

- Keep a log of your feelings about writing.

- Visualize yourself having completed the writing project. What are the results?

- Think about your writing project when you are walking, taking a bath, etc.

- Be generous with yourself with paper, pens, pencils, etc. Use things you feel good with.

- Identify the formulas used for different types of writing projects.

- Ask yourself questions about the topic. Then answer them.

- Interview and observe productive writers. What techniques do they use that you could apply to yourself?

- Practice positive self-talk.

- Read about writing and writers.

- Read. Read. Read: novels, nonfiction, periodicals, whatever.

- Reward yourself when you have completed one step or the entire writing project.

- If you are procrastinating, stop and look at why. Examine just what is involved in the writing you are putting off.

- Avoid the places where you go to procrastinate.

- Do it now. Act. Start whether you are in the mood or not. Action helps disinclination disappear. Order your mind to write and you will find it will cooperate.

Above are techniques some writers find useful. Perhaps you have others. What are they?

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REVISE THE FOLLOWING SENTENCES TO MAKE THEM MORE CONCISE. TO THE LEFT, INDICATE THE PROBLEM(S) YOU SEE.

1. She is a very famous person.

2. There are two horses in the stall.

3. He was rather critical of my writing.

4. It is important to note that runners usually look and feel better than the average man.

5. A significant number of apples dropped off the tree.

6. I was not so happy with her decision.

7. Regardless of the fact that everyone was there, the reunion was a flop.

8. The rising cost of cars is representative of higher costs for a number of consumer products.

9. The director has knowledge of that information.

10. His journal articles are few in number.

11. The article was written by a pharmacist.

12. She was appointed by the director of the department to head up the committee.

13. He came to the realization that he needed to seek further education.

14. The medical technologist who was in the lab left the door open.

15. She's in the field of preventive medicine.
1. We do not have the manpower to do the job.

2. Dear Sir:
   I am writing you to...

3. Each child should bring his lunch to school.

4. When we're in need of eye care,
   The doctor we should see
   Is the ophthalmologist,
   That is his specialty.

5. It is the patient's responsibility to take his medicine.

6. If you need anything, buzz the nurse. She will be happy to help you.

7. Each doctor should arrange for the girls in his office to attend
   the workshop for secretaries.

8. The average man takes better care of his car than of his health.

9. Research scientists often neglect their wives and children.

10. Man's search for knowledge has led him into ways of learning that
    bear examination.

LMS
Session 9
If you think you can
Or if you think you can't
You're absolutely right

--source unknown

Calvin Coolidge: We cannot do everything at once, but we can do something at once.

David Anderson: Accomplishment is directly proportional to starting.

Edward Albee: Writing has got to be an act of discovery.....I write to find out what I'm thinking about.

W.H. Auden: Language is the mother, not the handmaiden, of thought; words will tell you things you never thought or felt before.

Gabriel Fielding: Writing to me is a voyage, an odyssey, a discovery, because I'm never certain of precisely what I will find.

Don Murray: Writing is not just a way of spitting back what you know. It's a way of discovering what you know.

As a queen sits down, knowing the chair will be there,
Or a general raises his hand and is given the field glasses,
Step off in the blank of your own mind.
Something will come to you.

--Richard R. Wilbur

Source unknown: Where there is too much, something is missing.

William Zinsser: Executives at every level are prisoners of the notion that a simple style reflects a simple mind. Actually, a simple style reflects hard work and hard thinking.

Ernest Hemingway: Good writing is writing wherein you can't remove one word without changing the meaning.

Thomas Jefferson: The most valuable of all talents is never using two words when one will do.

William Zinsser: Just because people work for an institution doesn't mean they have to sound like one.
Frank Thompson: Sometimes it's nice to have a large vocabulary. Other times it's nice to be understood.

Jan Keller: Writing without feedback is like going through a tunnel without headlights on.

Pliny: Nulla dies sine linea. (Never a day without a line.)

Oliver Wendell Holmes: The great thing in this world is not so much where we are but in which direction we are moving.

Lilless McPherson Shilling: Remember, we chose our professions. Writing is one of the challenges we face in them - one that can help us grow. We should not look at writing as our albatross, but as our chance to discover, to learn.

Neil Simon: Rewriting is when playwriting really gets to be fun...In baseball you only get three swings and you're out. In rewriting, you get almost as many swings as you want and you know, sooner or later, you'll hit the ball.

Samuel Johnson: What is written without effort is read without pleasure.

Source unknown: The Golden Rule of Writing: Write unto others as you would be written unto.

Fred Rohé: We create the quality of our own experience.

Source unknown: A mistake is positive proof that something has been tried.

E.B. White: Delay is natural for a writer.

Mark Twain: The difference between the right word and the almost right word is the difference between lightening and the lightening bug.

Gene Fowler: Writing is easy, all you do is sit staring at a blank sheet of paper until the drops of blood form on your head.

Daniel Webster: (In "The Devil and Daniel Webster" by Stephen Vincent Benet) If my possessions were taken from me with one exception, I would choose to keep the power of communication, for by it I would soon regain all the rest.

Old Chinese Proverb: Teachers open the doors, but you enter by yourself.

Lincoln Barnett: The written word is the link between the past and the future.

Cindy Wood: Practice may not make perfect, but it does make better.
Appendix D
GUIDED IMAGERY SCRIPTS
A Helping Companion

Introduction: I'm going to take you through a brief relaxation exercise and then ask you to imagine that you are in your writing site and that you are fretting about a paper or report you have to write. As part of the exercise I will ask you to imagine that someone or something comes to help you. If you haven't done guided imagery exercises before, this may seem awkward for you at first. You may even feel like laughing or resisting the words. You may find your mind wandering as I talk. That's okay. Just try to put the other thoughts calmly away and go back to concentrating on the scene of your helping companion. Remember that you are in control of your own thoughts. My words are just guidelines to help structure what you visualize.

*****

First, find a comfortable position. Then, close your eyes, take a few deep breaths, and relax. Breathe deeply and let all sense of tension leave your body. Concentrate on your breath and on how relaxed you are feeling. Move your legs to check that they are relaxed. Move your torso to relax it. Move your arms to see that they are relaxed. Now relax all the muscles in your back, your neck, and your head. Continue to breathe deeply and relax. Nod to me when you are completely relaxed and at ease with yourself.

Now picture yourself at your writing desk. What is around you? You have a writing project to do and it's one of those days when you think you can't concentrate. You are beginning to feel trapped in the chair. The tension is mounting. You don't know how to start. What is your mind saying to you? How do you feel?

Now, picture that as you are sitting there a being comes to help you. This being may be a person you know, or it may just be someone or something in your imagination. But it is there to help and support you. What does your companion look like? Picture yourself starting to relax because you know now you are not alone. You are still at your desk but the scene has changed. You no longer feel trapped. Rather, you feel a sense of discovery and excitement. You know you are going to make it through this project and that it will be a positive experience. Your companion starts to talk in a calm voice. It asks you questions about your project and encourages you to talk about it. Soon the two of you are engaged in an animated discussion. You find the words coming easily as you start to explain what had seemed so confusing. You find that you are learning as you explain. You are discovering some new dimensions to the topic. You are seeing a way that you could organize your paper now. The scene has changed and now you see your writing site as a pleasant and supportive place. Your companion
reminds you that the first draft does not have to be perfect, just something you can work with later to revise.

Continue talking with your companion for a while. How do you feel now? Your companion gently encourages you to begin writing. It assures you that it will be close by if you need more help. You start to work. Now you feel a mixture of enthusiasm and energy that will sustain you through the first draft of your writing project. Remember that you can always summon your companion if you need help. Your helping companion is always there for you because it is part of your imagination.

Continue sitting at your writing desk a little longer. Visualize yourself full of excitement about the writing project you are working on. And when you are ready, come back to the room and without talking to anyone for the moment, write about the experience you have just had.

Follow-up: After participants have written for a few minutes, have them share in pairs and then with the larger group.

Questions to ask: What insights did you gain from this exercise? How did your companion help you?

(c) Lillëss McPherson Shilling, 1983.
Your Ideal Writing Environment

Introduction: I'm going to take you through a brief relaxation exercise and then ask you to imagine that you are going to build your own ideal writing environment. Remember, you are in control here. It is your imagination that builds what it wants. I am just making suggestions.

***

Close your eyes, take a few deep breaths, and relax. Breathe deeply and let all sense of tension leave your body. Concentrate on your breath and on how relaxed you are feeling. Move your legs to check that they are relaxed. Move your torso to relax it. Move your arms to see that they are relaxed. Now relax all the muscles in your back, neck, and head. Continue to breathe deeply and relax. Notify me when you are completely relaxed and at ease with yourself.

Now, it's time for you to start building your ideal writing environment. This might take you a while because you might not have one right now. In fact, it might be that your actual writing environment is far from ideal. But you can change that in your imagination as you start to visualize the scene.

Picture the place where you would find it most pleasant to write, where the creative juices would flow and you would be a productive, accomplished, confident writer. Where is this place? Picture yourself as you enter the site. What objects are around you? For example, what are you writing on? What are you sitting on? What are you writing with? What kind of paper are you using? Do you write to music or do you like things silent with only an occasional sound of nature? Are there any people, animals, or other beings in your ideal writing site? Are there any noticeable aromas there? What colors are around you? Is there anything you wish to add to this wonderful writing environment? Go ahead and add whatever you'd like.

Now, picture yourself as alert and full of energy as you sit down to work on a writing project. You feel confident that this will be a productive working session for you. You are eager to begin. You know that this will probably not be the last time you work on this particular project. You need not be worried about getting everything right this time. You are only concerned with making some progress. After a few moments of getting yourself organized, you begin to write and soon are completely engrossed in your writing. You feel truly inspired because you are in an environment of your own choosing -- one that you built with your imagination.

Continue working in your ideal writing environment for a while. And when you are ready, come back to the room, and
without talking to anyone for the moment, draw a picture of your ideal writing site. Use captions or other written descriptions if you wish. Above all, don't worry if your drawing isn't perfect. Just try to capture the flavor of what your imagination can so vividly see.

* * *

Follow-up: After they draw for 5-10 minutes, have them share their drawings in groups and discuss them. Then ask them to put them on the walls for the whole group to see. Ask if anyone wishes to talk about his or her environment or comment on anyone else's drawing.

If time is short, just have them write a few minutes to describe the environment or spend a few minutes discussing it.

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Climbing Your Mountain

Introduction: I'm going to take you through a brief relaxation exercise and then ask you to picture yourself faced with the task of climbing a huge mountain. The mountain looks awesomely high at first but you find yourself enjoying the trip. Try to let your imagination just run free.

Close your eyes, take a few deep breaths, and relax. Breathe deeply and let all sense of tension leave your body. Concentrate on your breathing and on how relaxed you are feeling. Move your legs to check that they are relaxed. Move your torso to relax it. Move your arms to see that they are relaxed. Now relax all the muscles in your back, neck, and head. Continue to breathe deeply and relax. Nod to me when you are completely relaxed and at ease with yourself.

Now, picture yourself looking off in the distance at a huge mountain. It may be a mountain that you know or it may be an imaginary one. You are planning to climb the mountain. The mountain is lovely but it is also astoundingly huge as you look at it. It looks almost too big to tackle. You begin to wonder whether you have set too big a challenge for yourself. But you remind yourself that this is a challenge you have chosen. You are determined to try.

As you approach the mountain you begin to realize that you do not have to climb the entire mountain at once. The road up the mountain does not go straight up. There are rest stops along the way. Gentle, welcoming foothills gradually lead to the higher parts of the mountain. You approach the foothills and enjoy the smells, colors, and sights around you. What do you see? Do you recognize anything from your past? As you move up the mountain, you leave behind you the cares of the day. You feel no sense of fatigue because you are concentrating on the immediate scene around you. Your doubts and fears about your ability to reach the top are beginning to drop away. Picture all negative thoughts moving from your head, down through your body and down to your feet. Then, with your next step, leave the negative thoughts behind.

You are increasingly invigorated as you move up the mountain. You are moving one step at a time and with each step your energy and confidence increase. With each step you are moving closer to your goal. The mountain is giving you some of its power and making you realize the power you have within you.

The road up the mountain is not a sharp incline. Rather, it is a gradual slope that moves back and forth across the
side of the mountain. While your goal is reaching the top, you are also enjoying the trip there. Occasionally, you stop to appreciate the scene, to enjoy where you are. What do you see as you look around you? What are you feeling? You continue to leave behind the cares of the day, to concentrate on the refreshing task of climbing the mountain, and to gain confidence in your ability to achieve what you have set out to do. You know now that you will reach the top.

Now, you have come to the top. Take some time to stop and appreciate what you have done. How do you feel now? What do you see? Enjoy the air...the sights...the smells around you. You have a sense of satisfaction. As you look out from the top you realize that you are a person of greater dimensions and capacities than you have believed. You realize that as you worked to conquer the mountain, you were learning something about yourself. You were growing.

While you are enjoying your feeling of accomplishment, think about how you can apply your experience on the mountain to your life as a writer. How is climbing a mountain comparable to some of the written projects you have been faced with in the past and will face in the future? At first, some writing projects seem awesomely big. You wonder whether you can complete them. But you start, taking one step at a time, and gradually you achieve your goal.

Stay a while at the top of the mountain. You feel relaxed but alert and full of energy. You have left the cares of the day and all negative thoughts behind you for a while. You are free. Concentrate on how you feel now so you can summon the feeling again when you need it. And remember you can always return to this place and this feeling by using your imagination.

When you are ready, come back to the room, and without talking to anyone for the moment, write down some of your thoughts about the experience you have just had. Then, if you have a writing project or another challenge facing you right now, jot down a list of some of the steps you will need to take to accomplish it.

* * *

Follow-up: After they have spent a few minutes writing, have them share what they have written in pairs or small groups and then with the whole group.

Questions to ask: What are some of the insights you gained? Thoughts? Feelings? How can you apply what you have learned to your life?

Quotes to remember:
We cannot do everything at once, but we can do something at once.

Calvin Coolidge

The great thing in this world is not so much where we are but in what direction we are moving.

Oliver Wendell Holmes

(c) Lilless McPherson Shilling, 1983.
Seven Qualities You Have

Introduction: I'm going to take you through a brief relaxation exercise and then ask you to imagine that you have returned to your ideal writing environment. While you are there I'll ask you to reflect on seven qualities you have that are important to a writer. I'll also ask you to visualize scenes (not necessarily related to writing) that demonstrate the seven qualities in you. Don't be concerned if you can't conjure up a scene for each quality. Just relax and let your imagination go. Remember, you'll be listening to my voice as a focal point but you will be in control of what your imagination does.

* * *

Close your eyes, take a few deep breaths, and relax. Breathe deeply and let all sense of tension leave your body. Concentrate on your breath and on how relaxed you are feeling. Move your legs to check that they are relaxed. Move your torso to relax it. Move your arms to see that they are relaxed. Now relax all the muscles in your back, neck, and head. Continue to breathe deeply and relax. Now to me when you are completely relaxed and at ease with yourself.

Now it's time for you to imagine that you have returned to your ideal writing environment that you built a few weeks ago. Picture yourself there. The air around you is fresh and clean. You are in a setting where you feel comfortable and alert, where you will find it easy to concentrate and enjoyable to work for an extended period of time.

While you are preparing to work on a writing project, I'd like you to reflect on seven important qualities you have that a good writer needs. You are familiar with these traits in yourself even though you may not have thought about some of them for a while.

As I talk about the seven qualities you have, try to form a picture in your mind of some scene that shows you do indeed have that quality. Remember, your scene doesn't have to relate to writing. And don't be concerned if you can't always conjure up a scene. Just relax and let your imagination go where it wishes.

Number 1, you are industrious. You are willing to work hard for projects you consider valuable. In the past your ability to work hard has led you to do things you are proud of. Think about a scene that shows you are industrious.

Number 2, you are curious. You like to learn, to discover new things, to grow. Think about a scene that shows this quality in you.
Number 3, you have organizational abilities. You may not always use them, but you know how to sort things out. You know how to arrange things in categories. You know how to arrange things according to importance. Think about a scene that shows your ability to organize.

Number 4, you are creative. You can often find creative solutions to problems. Sometimes they come fast. Other times they take a while. You look at the world in your own unique way and often have innovative ideas. Picture a time when you demonstrated your creativity.

Number 5, you are self-disciplined. When you are concerned about achieving a goal important to you, you are able to discipline yourself to take the steps you need to take. Picture a scene that reflects your self-discipline.

Number 6, you have an ability to concentrate. At times you are able to close everything out of your head except the task at hand. And you can do this for long stretches of time if you need to. Imagine a scene in which you demonstrated your ability to concentrate.

Number 7, you believe writing is important. You care about improving your writing and you are interested in how other people think about writing and approach their writing projects. You understand that you can't always expect to get it right the first time, that you need to have patience with yourself. You are gaining an appreciation that revising your work and seeking other people's ideas can be useful to you. You are gaining confidence in your own abilities. Visualize a scene that reflects your positive attitude toward writing.

You have just spent some time thinking about some qualities you have that are important to a writer. You may not demonstrate these qualities all the time. No one does. But you do have them and you can put them to work for you. Think about how you will apply these qualities to your writing. Remember the qualities. You are industrious...curious...organized...creative...self-disciplined...and able to concentrate. Finally, you believe writing is important. For a while, keep thinking about the scenes you have conjured up. And when you are ready, come back to the room and write about one or more of the scenes that came to your mind.

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Follow-up: Instructor tapes newsprint list of the seven qualities on the wall. Participants write, then discuss in pairs and with the larger group.
Questions to ask: How is it useful to think about these qualities? What other qualities are important to a writer (for example, initiative, persistence, desire to communicate, patience, confidence)?

Conclusion: As you leave today, keep thinking about how you can apply these important qualities to the writing and other challenges in your lives.

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