A REPORT OF AN EDUCATIONAL PSYCHOLOGY INTERNSHIP AT THE PSYCHOLOGY DEPARTMENT, WATERFORD HOSPITAL, INCLUDING A REVIEW OF CASE STUDY RESEARCH ON THE EFFECTIVENESS OF TREATMENT MATCHING FOR DEPRESSED PATIENTS

JOHN R O'CONNELL

A REPORT OF AN EDUCATIONAL PSYCHOLOGY INTERNSHIP AT THE PSYCHOLOGY DEPARTMENT, WATERFORD HOSPITAL, INCLUDING A REVIEW OF CASE STUDY RESEARCH ON THE EFFECTIVENESS OF TREATMENT MATCHING FOR DEPRESSED PATIENTS

by

John R. O'Connell

Presented to

The Faculty of Graduate Studies

Memorial University of Newfoundland

St. John's, Newfoundland

In Partial Fulfillment

of the Requirements for the Degree

Master of Education

Faculty of Education

April, 1992

ISBN 0-315-73313-6

For Barbara

ABSTRACT

This report provides an account of a full time thirteen week internship served with the Psychology Department at the Waterford Hospital in St. John's, Newfoundland. The internship period was from May 6, 1991 to August 2, 1991.

Chapter 1 discusses the rationale for the placement, describes the setting and the department to which the intern was attached, and sets out the internship objectives.

Chapter 2 describes the intern's activities during the internship in detail, reviews the accomplishment of objectives, and makes recommendations for future internships at the site.

Chapter 3 outlines the background and rationale for the intern's research project conducted during the internship. Literature is presented to support the choice of research design and treatment methodology.

Chapter 4 details the intern's research project. The intern conducted a series of case studies with depressed patients, in an attempt to show that treatment matched to individual patient's problem areas is effective in alleviating depression. Results indicated that matched treatment effectively reduces depression.

ACKNOWLEDGEMENTS

The conclusion of this internship represents one of those rare opportunities in life when you're almost forced to look back and reflect. It is a milestone, sort of an intersection in life where you must pause and think; look back, look ahead, and look at the here and now.

This intern has been extremely fortunate to have had so many positive influences in his life, who have shaped his character, given him insight, and shared their humanity. Truly, their influence constitutes much of what the intern is being and becoming.

At this writing, I wish to share with the readers my feelings towards many of these influential people in my life, who have played a major part in who I am today, and who have contributed to the successful accomplishment of this internship experience.

No words can even come close to expressing the contribution to my life, and to this work, made by my wife, Barbara. She is my soul mate, my lover, my confidante, my partner, my teacher, and my best friend. I can't imagine my life without her. She has stuck with me on sunny days, and calm days, and stormy days. I am the beneficiary of her love, and her tenderness and understanding have always gotten me through. She has put up with considerable disruption in her daily life, and in her lifestyle, for me

to pursue this quest. Barb brings out the best in me, and overlooks the rest. I love her more than I can tell you, and she deserves much credit for her supportive role in this project.

My late parents, Lee and Dodie O'Connell, were the kind of parents I wish for every child. They were warm, compassionate, loving, and good teachers. During those important formative years, when many children seem to learn fear, mistrust, and hurt, I experienced all the good things. My father taught me responsibility, integrity, and to work hard and do the job right. He was also a warm man, who extended himself for others, and sought no credit. Mom taught me to reach for the stars. She was inspirational, and though in poor health for much of her life, was always helping others. To Mom, all things were possible. She had tremendous faith, and was always my confidante. My childhood was a wonderful experience. My parents were always there for me. They lived their convictions, and I learned from their example.

Lee Klas, professor, friend, and ally, has served in the role of university supervisor for this internship, and has been my advisor throughout my graduate program. I owe Lee an enormous debt of gratitude. He was there for me 15 years ago, and has steadfastly believed in me. Without Lee's help, it is unlikely that I would have been in this

program, and it was his suggestion that I consider the Waterford Hospital as a placement. Lee has been steady support in the sometimes unsteady waters of my life, and I am deeply grateful for his friendship, his guidance, and his understanding. I admire Lee and have truly benefited from both my professional and non-professional relationship with him over these many years.

Assen Alladin, Senior Psychologist at the Waterford Hospital, was my field supervisor for 2 terms. Assen was my mentor. He took me under his wing, and unselfishly shared his knowledge. He taught me how to judge, how to think, and how to practically apply psychological techniques. In short, he taught me the rudiments of being an effective therapist in a health setting. He also became my friend. Though we come from quite different backgrounds, we share many of the same professional interests and beliefs, and this has made working with Assen very rewarding. During my time at the Waterford, he has provided both professional and personal guidance, and his offer to help in any way is ever present. He is a master teacher, and I am indeed fortunate to have had the opportunity to work with him.

Hassan Khalili, Director of Psychology at the Waterford Hospital, is one of the kindest and gentlest people I have known. He is a man of limitless patience and great compassion. He is also a man of action, and follows up his

ideas with hard work and commitment. As both an able administrator and an effective clinician, he leads his staff with vision, understanding, and professionalism. He offered me his full support during the internship, and it has been my extraordinary good fortune to have been associated with him.

Bill Kane, Senior Psychologist, has shared with me his dedication to his service areas in the hospital, and his commitment to providing more psychological services and programming to this portion of the patient population.

Tom Honan, Staff Psychologist, befriended me upon my arrival at the Waterford, made my days more fun, and offered to assist me in any way. He has a deep commitment to the welfare of every patient, and it is my pleasure to have been associated with him.

Malcolm Simpson, Staff Psychologist, impressed me with his patience, dedication, and confidence. He has always made time for me, and I have appreciated his level-headedness and perspective.

Heather Dalziel, Staff Psychologist, has treated me like a brother. She has graciously shared her knowledge with me, and has helped me in a multitude of ways. I always felt like it was OK to "ask Heather," and she never let me down.

Karen Swinton, Staff Psychologist, went out of her way

to include me. She helped me to feel part of the team, and responded immediately whenever I asked her for something.

Nena Sandoval, Psychological Assistant, has a wealth of knowledge in the areas of assessment, sexuality, and mental retardation. She too was always very willing to share this knowledge with me, and to discuss cases and assessments.

During my internship, I was warmly treated by staff from many other departments in the hospital. Their names are too numerous to mention here, for there are dozens of them. Their hospitality and professionalism, however, helped to make every day a pleasure.

Within the hospital community, there is no doubt that my deepest gratitude is extended to the patients of the Waterford Hospital. These individuals allowed me to intrude in their lives, and to wander through their home on a daily basis. Many of them allowed me to see them at very low points in their lives, and shared with me their suffering, their desperation, and their humiliation. They trusted me to help them, and I was fundamentally changed by my encounters with them.

I owe much to my professors in the M.Ed. program in Educational Psychology at Memorial University of Newfoundland. I appreciated their individual attention and concern, and found each and every one of them to be

supportive of my efforts. I enjoyed working with them, and benefitted both from their expertise, and from the learning opportunities they presented. In addition to Lee Klas, I wish to especially thank Glenn Sheppard, Norm Garlie, Bill Spain, Gary Jeffery, Ron Lehr, Bruce Gilbert, Dave Watts, and Terry Boak for all that they shared with me. My thanks also go out to Mike Doyle for both his professional and personal input, and to Bev Kendall for so cheerfully answering my questions and looking after administrative details.

Additionally, I would like to acknowledge the considerable impact upon my life of the staff at Botwood Senior High School in Botwood, Newfoundland, during the eight years I taught there from 1977 to 1985. There too, I felt very much like part of a team, and I have very fond memories of my colleagues and of my students. Hubert Smith was my principal during those eight years. He is a man for whom I have great respect and affection. I have come to appreciate his leadership, wisdom, and compassion ever more over the years. He gave me his trust and supported my efforts at his school, which made my time there rewarding and fulfilling. Frank Dominie, dedicated English teacher and wonderful human being, went out of his way to welcome me at the school, to offer his assistance, and to be my friend.

As he is now retired, current and future students in the community will miss an enriching encounter. Wes Robbins, science teacher, consummate gardener, confidante, and friend, shared probably 1500 lunch hours with me over those eight years. As the only two teachers in the school during lunchtime, we had many conversations about many things. You can't do that for eight years and not be affected.

The aforementioned, my other fellow teachers at the school, and the teachers in the other schools in the community all welcomed me in what was my first substantial job in Newfoundland, and supported me during my stay there.

Finally, I wish to recognize the influence of my mother-in-law, May Byrne, of Grand Falls, Newfoundland. Mrs. Byrne has not only accepted me as part of her family for over 15 years, but she has continually encouraged my efforts and boosted my spirits. She has raised a fine family, who also have continually supported me in every way, and her personal philosophy is refreshing. She is truly young at heart, and I wish her many, many years of good health and happiness.

TABLE OF CONTENTS

LIST OF TABLES

FOREWORD

On a bronze plaque mounted in the front entrance of the Waterford Hospital, and posted throughout the complex, one will see the following words:

The Waterford Hospital...

...Believing in People.

The Waterford Hospital believes that every individual...Has the right to human dignity... Has the right to seek education and explore life's goals...Has the right to individual thought, freedom of speech and self-expression...Has the right to be loved and cared for in times of need...Has the right to the best of health services...Has the right to try again.

These inspirational words embody the spirit of many of the care-givers at the Waterford Hospital. They live this philosophy in their daily work. This is what makes the Waterford Hospital what it is, and this is why it has been such a pleasure and a privilege for me to work there.

Chapter I

INTRODUCTION

With nine years experience as a special education teacher in Newfoundland, the intern brought to his graduate program a substantial background in the workings of the educational system. Realizing that the internship option for his degree could afford him the opportunity for both skill improvement and a broadening of his experience, the intern and his advisor sought a placement where he could obtain additional clinical experience in a non-educational setting.

Initial placement at the internship site began with a pre-practicum experience of one-half day per week during the Fall semester, 1990. This was followed by a two day per week placement during Winter semester, 1991, and finally by the internship placement itself. The internship period encompassed the thirteen week period from May 6, 1991 to August 2, 1991. Additionally, the intern visited the site on a part-time basis during the remainder of the month of August, 1991, to continue therapy sessions with clients and to participate in other activities of professional interest.

This report will discuss the activities of the intern

during the internship period only. The prior placements at the setting, which facilitated a much richer internship placement, have been documented in earlier reports.

THE SETTING

The internship site, a continuation of the pre-practicum and practicum placement chosen by the intern and his advisor, was the Psychology Department of the Waterford Hospital, St. John's, Newfoundland.

The Waterford Hospital is the only major psychiatric treatment and referral centre for the Province. As of June, 1991 (Cantwell, 1991), the hospital offered the following clinical services:

a) Acute Service: three admissions units comprising a total of 70 beds.

b) Forensic Service: one 17 bed unit providing inpatient assessment and/or treatment for persons referred by the Justice System or the Correctional System.

c) Long Term Psychiatric Services: Three units, with a total of 80 beds, delivering a range of rehabilitative services.

d) Medical Services: One unit of 30 beds providing diagnosis and care for patients with acute or chronic medical conditions.

e) Psychogeriatric Services: Two units totalling 70 beds, one unit designed for those with advanced dementias/high level of care, and another housing more independent patients.

f) Mental Retardation Services: Four units comprising 106 beds, providing a range of care and rehabilitation programs.

g) Ambulatory Care Services: Crisis intervention, consultation, follow-up, aftercare, outreach, and day treatment programs.

h) Community Care Services: 280 beds. Long term supported and supervised boarding care for the chronically mentally ill in 20 licensed homes in Conception Bay South/Holyrood and on the Southern

Shore.

Clinical departments represented at the hospital include:

a) Department of Nursing

b) Department of Psychology

c) Department of Social Work

d) Department of Occupational Therapy

e) Rehabilitation Services

f) Department of Pastoral Care

Diagnostic supportive services include laboratory medicine, radiology, electrocardiography, electroencephalography, physiotherapy, and pharmacy.

The hospital has its own Department of Dentistry and a Department of Dietetics. An Adult Educational Academic Program sponsored by the Department of Career Development of the Province is available, as are both staff and patient libraries. In addition to its customary functions, the Personnel Department has responsibilities in both Staff Health and Staff Education.

In addition to the Medical Director and the Clinical Director, both of whom are psychiatrists, the Waterford

Hospital currently employs eight staff psychiatrists and ten physicians. Additionally, the hospital utilizes staff consultants in Psychiatry, Internal Medicine, Neurology, Radiology, Anesthesiology, Oral Surgery, and Ophthalmology.

Not to be forgotten in an overview of the setting are the substantial contributions made by volunteers and supportive services staff, both in patient care and in providing a pleasant and clean environment for patients and staff.

WATERFORD HOSPITAL MISSION GOALS

The Board of Trustees of the Waterford Hospital has enacted the following goals in pursuit of its Mission of providing high quality mental health services to the population of the Province:

1. To provide comprehensive programs of care to persons with mental health problems, and to provide for such persons an atmosphere conducive to carrying out therapeutic programs.

2. To provide Mental Health Services and facilities to meet identified community and provincial needs, through an integrated plan which recognizes the services provided by other health care and social agencies.

3. To participate in all aspects of the continuum of care related to the field of mental health, through promotion, prevention, intervention, diagnosis, treatment, and rehabilitation.

4. To provide an organization, with competent and dedicated professional, medical and support staff, which is conducive to the provision of quality health care.

5. To participate in teaching programs, designed to assist in the provision of manpower for the Mental Health field.

6. To support continuing education, and encourage all staff to take an active part in programs of education, both internal and external to the hospital.

7. To participate in, and encourage Mental Health Research in cooperation with other health, social, and educational facilities and agencies.

8. To co-operate with other health, social, and educational facilities and organizations in the rationalization, coordination, and planning of mental health services.

9. To participate in the development, upgrading and upholding of standards related to mental health services.

(Waterford Hospital Board of Trustees, 1988.)

PSYCHOLOGY DEPARTMENT

Philosophy:

The philosophy of the Psychology Department at the Waterford Hospital is stated in a preface to the Department's Policy and Procedure Manual (1991):

> The Waterford Hospital is the major psychiatric hospital in the province of Newfoundland and

> Labrador. The Psychology Department is committed to the hospital's mission statement to provide quality patient-oriented care within the multidisciplinary team approach. Each member of the department also adheres to the Standards for Providers of Psychological Services and the Canadian Code of Ethics for Psychologists. (p. i).

In addition to adhering to the Canadian Code of Ethics for Psychologists (Canadian Psychological Association, 1986) each psychologist in the department must be registered in Newfoundland under The Psychologists Act 1986.

The Psychology Department functions as an autonomous unit within the hospital, reporting directly to the Associate Executive Director, who is responsible only to the Executive Director. Neither of these individuals is a medical practitioner.

Operations and Roles:

Members of the Department exercise substantial professional judgement in the carrying out of their duties, and as members of an interdisciplinary team, contribute their expertise primarily in the areas of assessment, consultation, and treatment. In addition, staff are

expected to be engaged in teaching, research, professional development and program development, related to both their personal interests and departmental assignments.

All new admissions to the hospital are screened by Psychology staff, and a decision is made as to whether the patient is likely to benefit from the Department of Psychology's involvement. Sometimes these decisions are straightforward, but often cases are discussed with other psychologists on the team to determine the appropriate course to follow. Generally, all first admissions to the hospital are interviewed by a psychologist, and a special effort is made to give full attention to young patients with no or few prior admissions. Patients under sixteen years of age are admitted to the Waterford Hospital only in extraordinary circumstances.

Patients are assigned to a psychologist for follow-up at weekly allocation meetings, and a balance is attempted between psychologist interest, area of expertise, workload, rapport with patient, and other factors. Oftentimes, the psychologist assigned to screen admissions on a certain unit accepts the assigned cases on that unit.

Assessments are conducted upon request of the

respective interdisciplinary team on a given unit, but generally only if they can be shown to be of potential value to the patient. Assessments are never administratively ordered, and the psychometrician becomes involved only if the Department of Psychology is convinced there is good reason to conduct an assessment. If an assessment will help to clarify a diagnosis, support an opinion, or assist a patient in obtaining proper services/treatment, then the Department of Psychology provides testing services.

Psychologists are available as consultants to all departments in the hospital, and often assist in developing behavior modification and rehabilitative programs on the units. Consultation with nursing staff, social workers, medical professionals and others on a patient's treatment team is a routine, ongoing occurrence, both in weekly ward rounds meetings, and in everyday interchange.

Structure:

The structure of the Psychology Department at the Waterford Hospital has undergone considerable change during the internship. The current organization divides the staff into two separate teams, each headed by a Senior Psychologist. These two Senior Psychologists report to the Director of Psychology. The Psychology staff rembers at the

Waterford Hospital are organized as follows:

Director of Psychology

Acute, Forensic, Outpatient Team:

1 Senior Psychologist*

3 Staff Psychologists

Habilitation/Rehabilitation Team:

1 Senior Psychologist

1 Staff Psychologist

1 Psychological Assistant

*The intern's supervisor during this internship was the Senior Psychologist on the Acute, Forensic, Outpatient Team.

SUPERVISION

The intern's work with the Psychology Department at the Waterford Hospital was supervised by both a university supervisor and a field supervisor. Dr. Leroy Klas, Professor, Faculty of Education, served as university supervisor during all of the intern's placements at the

Waterford. His support and advice have been deeply appreciated by the intern.

Dr. Hassan Khalili, Director of Psychology, directly supervised the intern during his Fall semester pre-practicum placement, and he has generously offered his assistance to the intern during his entire stay at the Waterford.

Dr. Assen Alladin, Senior Psychologist, supervised the intern during the Winter practicum and during this full-time internship. During the internship, Dr. Alladin and the intern met formally for at least one hour weekly to discuss the intern's activities, and his therapy with patients. Dr. Alladin provided superb guidance to the intern, graciously sharing his considerable knowledge, and providing endless learning opportunities. The intern consulted with Dr. Alladin extensively outside of the formal supervision period, and he invariably responded with kindness and professionalism.

While other members of the Psychology Department are not listed as official field supervisors, the intern would be remiss not to mention their substantial contributions to his learning. The intern always felt warmly accepted by everyone in the department, and had the opportunity to work

alongside many of the department staff. Each individual was receptive to taking the intern "under his/her wing," or letting him "tag along" when feasible. They drew his attention to situations they felt might be of interest to him, answered his many questions, and treated him more as a colleague, than as a student.

INTERNSHIP OBJECTIVES

Since the intern had spent the two prior semesters in part-time placements with the Psychology Department at the Waterford Hospital, he was familiar with the setting, and had already accomplished a broad range of specific goals prior to the commencement of the internship.

Accordingly, the intern proposed to function as a "junior member" of the Psychology Department during his internship, with his major thrust being the further development of his therapeutic skills. Additionally, assessments, consultation, and other activities would be carried out as needed, and as appropriate opportunities to do so occurred.

I. MAJOR OBJECTIVE

a. Individual counseling and therapy

The intern proposed to learn and practice cognitive-behavioral therapy skills, and utilize them in the treatment of a minimum of five patients in the Psychology Clinics in the hospital.

Activities would include:

Patient therapy

Co-therapy

Observation of treatment

Study of the treatment methodology

Consultation regarding treatment

Scheduled supervision and feedback

It was suggested that skills learned/applied might include:

Relaxation Training

Cognitive Restructuring

Assertiveness Training

Systematic Desensitization

Hypnosis

II. MINOR OBJECTIVES

a. Assessment

The intern proposed to conduct clinical interviewing and formal testing as required by the department. Staff psychologists would be encouraged to consider the availability of the intern when assessments were indicated.

The intern had conducted assessments with the following ten different instruments in his placement with the Psychology Department during the prior semester:

Assertion Questionnaire
Beck Depression Inventory
Beck Hopelessness Scale
Dysfunctional Attitude Survey
Millon Clinical Multiphasic Inventory
Minnesota Multiphasic Personality Inventory
Psychopathology Inventory for Mentally Retarded Adults
SCL-90 Symptom Scale
Self Evaluation Questionnaire (State/Trait Anxiety Index)
Wechsler Adult Intelligence Scale-Revised

Therefore, further assessments were not considered a priority during the internship.

b. Consultation

The intern proposed to function as both a consultant and a consultee regarding patients and their treatment, as feasible.

It was suggested that those consulted with during the internship might include:

Psychologists

Psychiatrists

Medical doctors and interns

Nursing staff

Social Workers

Occupational Therapists

Physiotherapists

Community Care Personnel

Clergy

Family members

Community agencies

Patient Activity staff

c. Group counseling

Since the Psychology Department did not have any active groups immediately prior to, or during, the internship, the Day Care Department (Nursing) consented that the intern could continue his involvement with one of their

groups. The intern had been involved in co-leading their Advanced Social Skills group during the previous semester. It was proposed that the writer would either continue with the Advanced Social Skills group or, preferably, be involved in the Understanding Schizophrenia group. The Understanding Schizophrenia group was due to start soon after the commencement of the internship. The intern's activity would include planning, co-therapy, and pre and post-group discussions with the Day Care nurses.

d. Exposure to other mental health settings

It was proposed by the supervisors that the intern briefly visit some other mental health settings in the St. John's area. It was felt that it would be beneficial for the intern to have some exposure and orientation tc other mental health settings, even though the official internship site was the Waterford Hospital.

It was proposed that these visits be made as practicable, and as available as possible. They would be arranged by the Department of Psychology staff at the Waterford.

e. Other activities

1. It was proposed by the intern that he visit the Community Care Centre at Long Pond, including a tour of

one or two of the associated boarding homes.

2. The intern proposed attending one Grand Rounds or Waterford Rounds during the internship.

Chapter II

DESCRIPTION OF ACTIVITIES

During the internship, the intern was joined by two Memorial University Clinical Psychology graduate students serving two-day-per-week placements. The intern benefited from and enjoyed working with these two bright and capable individuals. Their concurrent presence, however, led to decreased participation by the intern in some activities. These students had not had previous exposure to the Waterford Hospital. A decreased level of admissions generally, a smaller number of admissions for which psychological intervention was deemed appropriate, and the necessity of providing assessment and screening opportunities for these students, which the intern had enjoyed the previous semester, decreased the frequency of both assessment and screening opportunities for the intern.

1. Liaison psychologist

For five weeks during the internship, the intern, assisted and supervised by Dr. Alladin, substituted for staff psychologists who were ill or vacationing. The intern did not assume responsibility for ongoing patient therapy with patients of these absent psychologists, but assumed their role as liaison on a particular acute/admission unit.

Primarily, this involved the screening of all new admissions on the respective units during their absence, and attendance at the weekly multidisciplinary rounds meetings where all patients on the unit are discussed. The intern filled in for two psychologists on unit N2B, and for one on unit N3B. In addition, the intern attended rounds on the Forensic unit, N4B, for Dr. Alladin, during one occasion when he was unable to attend.

2. Screening interviews

Not all new admissions to the hospital are interviewed by members of the Psychology Department. While a thorough chart review is completed, many patients' conditions on admission are not conducive to interviewing. Some refuse an interview. Many have multiple previous admissions and are well known to the multidisciplinary unit team.

During the internship, the intern participated in seventeen screening interviews, as follows:

Interviewed by intern alone	7
Interviewed as co-interviewer	
with Dr. Khalili	2
with Dr. Alladin	3
with Mr. Simpson	3
with Ms. Dalziel	2
TOTAL	17

Prior to each interview, the intern read the admitting physician's report, the notes of nursing unit staff, and the written comments of any other team members who may have recorded their observations or interactions with the patient. If the patient had been admitted to the Waterford Hospital on previous occasions, the past records were also reviewed. On some occasions it was possible to briefly converse with other team members regarding a patient to be interviewed, if they happened to be present during this pre-interview review period. Oftentimes, additional valuable information could be gleaned quickly in this way, or confusion cleared up. The intern found that this pre-interview review gave him a flavor for the patient, as well as helping him to informally structure his screening interview. Information recorded by other team members could be checked by asking similar questions and discerning whether the answers were consistent with earlier replies.

While the intern used no set list of questions, common queries included:

a) How did you come to be here?

b) What do you think the problem is?

c) Has anything like this happened to you before?

d) What have you tried to do about it?

e) A check of orientation to time and place.

f) Questions of demographics.

g) Personal history of previous difficulties.

h) Family history of mental difficulties.

i) An attempt to determine stressors.

j) Hallucinations/delusions and content.

k) What did you do?

l) How did you feel?

m) What were you thinking?

n) Present affect and appropriateness.

o) Presence/absence of insight into problem.

p) Willingness to work with psychologist.

q) Agreeable to psychological testing?

r) Attitude towards medications.

s) Availability for outpatient therapy.

t) Motivation/Psychological mindedness.

u) Support system outside hospital.

v) Nutrition/lifestyle

w) Do you have any questions for me?

x) Is there anything I can do for you now?

During the screening interview, the intern would initially attempt to establish rapport quickly with the patient, by introducing himself and explaining that his purpose was to see if the Psychology Department could be of help to the patient. The intern attempted to vary his style

to suit the patient, but always to act professionally, and to be supportive and reassuring. In addition to the administrative function of screening patients to judge their appropriateness for psychological intervention, the intern also realized that these interviews could be potentially therapeutic for the patients. With that goal in mind, he always attempted to instill hope and reduce anxiety for the interviewee, regardless of whether he felt it likely that the patient would have further involvement with Psychology staff.

At the conclusion of the interview, a judgement must be made regarding whether the patient is likely to benefit from psychological involvement at this time. Some of these decisions are rather straightforward. If a patient is psychotic, has had multiple previous admissions, has a clear diagnosis, and stopped taking his/her medications prior to admission, then psychological intervention is probably not warranted. On the other hand, if a patient is motivated, has insight into his/her difficulty, is not psychotic, is a resident of the St. John's area, available as an outpatient, and eager for psychological help, a Psychology staff member will likely be assigned to work with the patient. In many cases, however, whether or not to allocate the patient for psychological intervention involves difficult judgements. The intern sometimes discussed these questions with other

members of the Psychology staff, or delayed judgement, pending the future progress of the patient.

During the internship, the intern, through both experience and observation, gained a better grasp of what questions to ask patients, what clues to follow up, and the important factors to look for when reviewing records prior to the interview. In the interviews he conducted jointly with other staff members, he was exposed to their different styles of interviewing, noted areas he should be sure not to overlook when interviewing alone, and received immediate post-interview feedback regarding his performance. The intern feels that through this on-the-job training he has sharpened his interviewing skills. Not only does he feel more competent as an information gatherer and decision maker, but his exposure to a wide range of patients and a variety of interviewing styles has resulted in a more mature and sensitive personal interviewing style for the intern. The intern can now confidently conduct these screening interviews, which he had never previously conducted, and about which, initially, he knew very little.

3. Patient contact/therapy

The intern had contact of at least three sessions with ten patients:

One patient was a male inpatient the intern had been counseling since his admission in February, 1991. The intern continued to counsel and provide support for this patient during the internship, until he was transferred from the Waterford to a nursing home facility. Until his transfer, the intern saw this patient several times a week. His case was challenging and involved considerable consultation with unit staff.

A female outpatient in her mid-fifties was seen by the intern on several occasions during the internship, both jointly with Dr. Alladin, and as a sole therapist. The intern had been present during each of the weekly sessions with this patient during his placement the previous semester. This woman had suffered from severe anxiety and panic attacks, and was treated with relaxation training, cognitive therapy, and systematic desensitization. During the internship, she was primarily given supportive counseling related to her continuing progress, and to prescription drug withdrawal.

Two other inpatients were interviewed on several occasions, but the intern was unable to establish a program of therapy for them. One was a middle-aged male with multiple previous admissions and a long history of psychological involvement. Another was a female in her early twenties who both Dr. Alladin and another staff

psychologist felt was too much of a challenge for the intern at this point in his career. Both continue as inpatients at the time of this writing.

Another patient treated was a middle-aged male on the Forensic unit who was extremely anxious. The intern initially interviewed him with Dr. Alladin, and then followed up with additional counseling, and relaxation in vivo prior to his court case.

Five additional patients were seen on multiple occasions for treatment, and will be discussed in depth in Chapter III, as their treatment constitutes the research component of the internship.

Prior to coming to the Waterford Hospital, therapy for patients in a mental health facility was something the intern had only read about. He had read in his texts about many disorders, but most of them he had never actually seen. While the intern had developed some therapeutic skills through his previous graduate training and work experiences, he had never treated patients as a therapist in a mental health setting. The major thrust of his internship was arranged so as to provide the opportunity for the intern to enhance his therapeutic skills, and to actually work as a therapist at his internship site. This was accomplished.

The intern was trained in the basic skills of cognitive therapy by his field supervisor, Dr. Alladin, and during the

internship, the intern served as a therapist to hospital patients. The intern had regular meetings with his field supervisor, during which previous patient treatment sessions were reviewed, and suggestions were made for upcoming therapy sessions. As well, pre and post measures were carried out for those patients seen in the Cognitive Therapy for Depression Clinic.

The intern had his most meaningful and profound learning experiences when he served as sole therapist, and actually applied those techniques he had learned. Prior to the internship, the intern had never treated anyone with cognitive therapy. He has now done it. He has learned and applied the skills, and while by no means is he a seasoned therapist, he is confident in his ability to work effectively with patients utilizing these newly-learned skills. The intern has received feedback from his field supervisor as well, that he is satisfied that the intern has successfully learned and applied cognitive therapy techniques.

4. Assessments

As previously noted, assignment of assessments to the intern during the internship was limited by availability of assessments, and by the need to provide assessment experience for the two other graduate students there

concurrently with the intern.

a) Minnesota Multiphasic Personality Inventory (MMPI) - The intern scored, interpreted, ran through a computer interpretation program, and discussed the results of the test with Dr. Alladin.

b) Millon Clinical Multiphasic Inventory (MCMI) - The intern scored, interpreted, and discussed the results of the instrument with Dr. Alladin.

c) Minnesota Multiphasic Personality Inventory II (MMPI II) - The intern scored, interpreted, and discussed the results of the test with Dr. Khalili.

d) The following five instruments were administered, scored, and interpreted ten times by the intern during his internship:

Assertion Questionnaire

Beck Depression Inventory

Beck Hopelessness Scale

Dysfunctional Attitude Scale

State-Trait Anxiety Inventory

These instruments constituted the pretest and posttest measures for the case studies discussed in Chapter III. Four individuals completed the instruments as both pre and post tests, while two other individuals completed the measures as pretests only. One of these individuals dropped out of the program. The other was not included in the

treatment program, due to complicating psychopathology, on the advice of the intern's field supervisor, Dr. Alladin.

While the intern had previous assessment experience, the majority of the instruments he used at the Waterford were new to him. During the internship, he became more comfortable with these new instruments he was using, and in becoming more familiar with them, his assessment skills improved in several areas:

a. He was better able to understand the rationale behind the use of these particular tests, and had a better feel for what was being measured.

b. He was more comfortable in explaining the purposes of these instruments to patients, and in drawing their attention to important aspects of the directions.

c. He gained speed and confidence in the scoring and interpretation of these instruments.

d. He gained further insight into patient difficulties through the analysis of results of these instruments. He also experienced the satisfaction which occurred when written tests confirmed his clinical observations, and the quandary which resulted when testing disconfirmed his observations.

e. He came to appreciate the value of testing as an efficient "shortcut" in information gathering, which affords the patient more directed treatment, and hopefully,

quicker relief.

f. He came to more fully appreciate the difficult judgements inherent in assessment in a clinical setting. There is a limit to the amount of assessment that can be done, and assessment per se does not make a patient better.

g. He noticed weaknesses in some of the instruments he used, such as ambiguous items, excessive length, and poor layouts. His patients sometimes drew these facts to his attention, either directly or through omission.

h. He experienced the willingness of most patients to cooperate with testing in their quest to feel better, and their hopes that the writer would be able to help them as a result of their efforts on the tests.

i. He feels that, as a result of the internship experience, he is now more competent to choose, administer, score, and interpret psychological tests properly than he was prior to the internship.

5. Consultation

The intern had extensive opportunity to consult with other staff regarding patient care and programming. In addition to ongoing consultation with the field supervisor and other members of the Psychology Department, the intern had regular contact with nursing staff, social work staff, psychiatrists, medical doctors, and medical residents and

interns. This contact was both through the weekly multidisciplinary rounds, as well as informally on the units.

While the intern had substantial consultation experience during his previous placement at the Waterford, he was able to become more deeply involved during this full time internship. As well, since he had been at the hospital since September, 1990, staff were more familiar and comfortable with him during the internship than might otherwise have been the case.

In particular, the intern consulted with one psychiatrist on an ongoing basis regarding a particular patient, and with two social workers regarding two patients. On occasion, the intern was asked for his opinion by staff other than Psychology staff, and he found this gratifying.

The intern was also able to consult closely with a medical intern on one case. The two had become acquainted during the fall at the hospital, and this was a particularly rewarding experience.

Three additional consultation opportunities were afforded to the intern, which had been unavailable to him previously: The intern consulted with the head nurse on one of the hospital units, as well as with the head nurse on a unit in another facility, regarding the potential transfer of a patient to the other facility. The intern had occasion

to consult with the Waterford unit head nurse concerning several issues pertaining to this patient. As well, after the patient's subsequent transfer, the unit head nurse from the other facility phoned the intern to consult with him regarding the patient. The intern also had contact with the patient after his transfer, assisting him with minor matters.

The second new area of consultation for the intern during this placement was in working with volunteer agencies to assist an outpatient in finding meaningful activity. This entailed some phone calls and a visit by the intern and the patient to the Community Services Council, as well as some phone calls and a personal visit to Volunteer Services at the Waterford Hospital.

Additionally, the intern met with the Director of Social Work, Ms. Frankie O'Flaherty, on July 5. This meeting was arranged at the request of the intern. Ms. O'Flaherty and the intern discussed her department, the operation of the hospital, and potential opportunities for Social Work and Psychology to work together. Ms. O'Flaherty has an extensive background at the Waterford Hospital, and the intern gained from her historical overview, and from her Social Work perspective.

The intern learned that the Waterford Hospital, though filled with many caring individuals, is an institution where

internal politics is very important. In order to best serve in the role of patient advocate, the intern had to fully absorb and appreciate the hierarchical structure of the institution. He had to become aware of the differences in perspective of various disciplines, the territoriality of different departments, and the individual differences and personalities of many of the individuals with whom he dealt.

In the interest of the patients, he learned to adopt the politics of pragmatics, and to work as earnestly for the patients as he could, without jeopardizing professional relationships. He learned to choose his allies, and his battles, carefully, and to withdraw when it seemed prudent to do so. Sometimes he was disappointed with his results, but he realized that building professional credibility with a vast array of new acquaintances, particularly as a student, is a slow process.

The intern had two prime foci in his consultation encounters:

a. He endeavored always to present himself in such a way so as to bring credit to the Psychology Department at the Waterford. He was, after all, their representative, and he strove to make the experiences of those other professionals with whom he consulted fruitful, positive, and professional.

b. He knew that his purpose was to help the

patients, but that many things the patients needed he could not do for them directly. Therefore, with the goal of helping the patients in mind, the intern attempted to apply his psychclogical and behavior change skills with staff members, as well as with patients. Through practically applying his skills of listening, empathy, reinforcement, selective attention, and negotiation, the intern attempted to build relationships with other hospital staff members that would facilitate the welfare of the patients.

6. Weekly Allocation Meetings

The intern attended Psychology Department patient allocation meetings weekly. At these meetings, staff discuss newly-admitted patients whom they have screened and found likely to benefit from psychological services. The staff member who has screened the patient presents details of the patient and the presenting problem to the group, who then discuss the case. The patient is then allocated to a staff member for follow-up.

During the majority of the internship, one meeting was held weekly, which the entire staff attended. Commencing in July, the Psychology Department reorganized into two teams as outlined previously in the department structure. After the reorganization, the intern attended the Acute, Outpatient, Forensic team allocation meeting weekly.

At the allocation meetings, the intern presented information on patients to be allocated, and discussed cases. These meetings serve an important educational purpose, as well as an administrative one, in that staff offer their personal expertise and perspective to each case. The intern found these meetings to be both highly interesting and an excellent learning vehicle.

Since staff meetings are held only once a month in the Psychology Department, the time period immediately following patient allocation often served as a further opportunity for group exchange regarding therapy, or brief administrative matters. The intern was always included in these matters, and this inclusion enhanced his experience significantly.

Aside from its necessary administrative function, the allocation meeting serves as a forum for discussion of new patients and their problems. Here the intern was exposed to the varying perspectives and orientations of department members. Here is where psychologists often form alliances to work together on a case, even if one serves only as a consultant to another. Here the intern learned the strengths of individual psychologists, as they offered the benefits of their experience to each other, and asked for advice on how to proceed. Here is where Psychology Department staff members wondered aloud about the origins of patient problems, and asked the screening psychologist

focused questions to try to shed further light on where to proceed with a patient. Here too, psychologists would sometimes bring up difficulties they were having with a staff member in another discipline, and ask for advice.

To the intern, the allocation meeting was a weekly experience where he learned a lot. He learned what kind of patients were currently being admitted that the psychologists felt they could help. He heard an overview of these patients' backgrounds and circumstances. He learned what he should be sure to know about his patients by listening to the presentations made and questions asked by other psychologists. He picked up many clinical "tidbits" that were exchanged between department members. Perhaps most of all, it was in the allocation meetings that the intern observed the humanity and commitment to helping that made being a part of the Psychology Department so rewarding.

7. Monthly Staff Meetings

The intern attended the monthly Psychology Department staff meetings for May, June, and July, 1991. These meetings were particularly interesting due to the reorganization of the department, which was in the final planning and early implementation stages during the internship. Two of these meetings were followed by presentations on time management, which the intern also

attended.

The intern was often asked for his contribution during these meetings, which were very cooperative and productive in nature. Prior to the July meeting, the intern had expressed concern to his field supervisor that many potential patients were not being seen due to the enduring stigma of the Waterford Hospital, and the 8:30 AM to 4:30 PM, Monday through Friday, hours. This item was included on the July meeting agenda. The intern presented it along with some suggestions for change at the meeting, and staff members showed great interest and support for addressing this issue. This situation is currently being pursued by the Department.

While the intern is generally not fond of meetings, he found the Psychology Department staff meetings to be focused and productive. Under the leadership of the Director of Psychology, Dr. Khalili, sweeping changes are underway in the department, which appear to be very positive. In the intern's opinion, these are exciting times at the Waterford, and he was fortunate to have been witness to their planning and implementation.

Each of the meetings was held in a conference room, around a large table, and coffee was provided. Items for the agenda were accumulated over the prior month, and could be contributed by any Psychology Department member. Minutes

were taken by staff members on a rotating basis, which was the ultimate in fairness. All items of business were recorded, along with the column notation, "For Action By", which served as a convenient reminder of who would follow up on that item. The intern found this system to be very efficient. Tasks were assigned, and in this way everyone knew who had the responsibility for a project, and who to check with for progress reports. Each staff member was provided with a copy of the minutes, and the prior month's minutes were briefly reviewed at the start of each monthly meeting.

The intern found these monthly meetings to be an avenue through which senior staff members shared planning ideas and hospital news with the entire staff, and through which the entire department was able to come together around an issue and form a cohesive position.

The intern found the meetings well run and organized, and a good model for efficient information sharing and planning.

8. Suicide Prevention and Treatment

On June 13th and 14th, the intern, his field supervisor, and the two Clinical Psychology graduate students attended the 16 hour Suicide Intervention Workshop

coordinated by Mr. Gerry Dooley of the Staff Education Department of the Waterford Hospital. Mr. Dooley has conducted this program for several years, and deals directly with suicidal individuals on an ongoing basis. We were the first representatives of the Psychology Department to attend the course.

The program was educational, highly experiential, and served as a springboard for the intern, his field supervisor and the two Clinical Psychology graduate students to pursue the topic further. Based on our interest in suicide, and our desire to make a contribution to prevention and treatment, those of us who attended the workshop formed a suicide study group. Several meetings were held, and a Suicide Management Workshop is planned for October 24th and 25th, designed as a follow-up to the Suicide Intervention Workshop. The intern's field supervisor, Dr. Alladin, will be the primary presenter at the initial offering of the course. It is intended that this workshop be a permanently available follow-up to the intervention workshop.

At the last meeting regarding this project, Mr. Dooley expressed his strong support, and his department is assisting with preparation of materials, promotion, registration, and so on. The workshop is designed to pick up where his workshop leaves off, and, according to Mr. Dooley, is greatly needed.

The intern conducted a literature search for journal contributions on the topic of suicide by a recommended author, and distributed copies to group members. As well, he contributed to discussions regarding the workshop format, and to discussions pertaining to media treatment of suicide being actively pursued by Ms. Rhonda Hackett, one of the Clinical Psychology graduate students.

The group has also discussed the possibility of a further workshop dealing with the aftermath of suicide, as well as the establishment of a Provincial Suicide Center which would serve as an information and education source.

While the intern was well aware, prior to the internship, of the very serious issue of suicide, his experiences during the internship have both heightened his awareness of this problem and motivated him to become more skilled as a therapist/intervener in these cases.

Many inpatients and outpatients at the Waterford Hospital express suicidal ideation. They state that they see no reason to live, and often feel that they will make things better for others if they kill themselves. Their feelings of helplessness and hopelessness can be profound. To be aware of this aspect of life only in the abstract sense is disturbing. To be these patients' therapist is the ultimate in responsibility.

The intern has learned the importance of asking

straightforwardly, "Are you thinking of killing yourself?", and has asked this question of patients. He has been exposed to the frustration and dilemma of treatment for those patients who frequently self-mutilate; they seemingly do not want to kill themselves, but sometimes succeed.

He has been confronted with people who say they do not wish to live, and with having to know how to respond most therapeutically. Not only does the intern have to be skilled at preventing the suicide, he has to know what to do next. A mistake here could mean the death of the patient. Even if he does everything right, the patient could still kill himself/herself.

Yet the intern has learned that the threat of suicide is a regular part of clinical work, and he now realizes that he needs to become very competent in this area. During the internship, he has begun to learn some of these skills, and expects to add to his abilities and understanding through whatever means are available to him. While he never expects to be comfortable with the issue of suicide, the intern has now dealt with patients with suicidal ideation, and he accepts the responsibility of providing these individuals with sensitive and competent care.

9. Visit to Community Care

On July 22, the intern paid a visit to the Community Care Department in Long Pond. He toured the main facility, and spoke with the director, Ms. Karen McGrath. Ms. McGrath gave the intern a thorough overview of the operation and its history, and answered all of his questions. He appreciated her frankness, and found her to be a very competent professional.

Ms. McGrath arranged a tour of three of the affiliated boarding homes for the intern, so that he would be able to sample the range of facilities used to house patients in the Community Care program. There was indeed a vast difference in the facilities viewed, and the intern felt his time in exploring this department of the hospital was well-spent.

10. Prozac Presentation

On June 20, the intern and his field supervisor attended a presentation at the Waterford on Prozac by its manufacturer, Eli Lilly. This presentation was also attended by the majority of the staff psychiatrists, doctors, and medical interns, whose questions and comments the intern found interesting.

Prozac, a controversial antidepressant which has received much negative publicity in the popular press, was presented favorably by the manufacturer. The company's

representative refuted much of the evidence against the drug, and offered suggestions concerning the source of the stories condemning it.

The intern's field supervisor, Dr. Alladin, had also had exposure to Prozac in England, where the drug has been in use for many years, and his comments were also quite interesting to the intern.

11. University Rounds

On June 7, the intern and his field supervisor attended a presentation at the Waterford by staff from Memorial University Medical School on Alzheimer's Disease. The focus of the talk was the review of experiments on rats which looked at the introduction of viruses through the nasal cavity as a potential source of Alzheimer's Disease. Tentative conclusions were that this seemed possible.

The presentation was heavily attended, and the intern again benefited from the question and answer session at the end of the presentation. While he found some of the material presented quite technical, it became clearer during his evening course in neuropsychology which commenced several weeks later.

12. Neuropsychology Course

During Summer Session, June 27 to August 6, the intern was enroled in Education G6855 at Memorial University. This graduate course met on Tuesday and Thursday evenings, and did not disrupt the intern's day schedule at the Waterford Hospital. During this course, the intern obtained a broad overview of neuropsychology, and did extensive reading in the area. In addition to assigned readings, the intern intensively studied Wernicke-Korsakoff's Disease, the subject of his paper and presentation for the course. He chose this topic due to an interest in the brain and alcohol, generated by involvement with alcoholic patients during the internship.

While not formally considered part of the internship, the intern felt the course deserved mention in his report, since it absorbed most of his evening and weekend time during the latter portion of the internship. Formerly, much of the intern's evening and weekend time had been spent in reading related to the intern's work at the Waterford. During the neuropsychology course, this was no longer possible.

13. Reading

The intern did extensive reading during the internship period. While the majority of this reading took place at home, after working hours, some reading was accomplished at the Waterford. The intern made several visits to the staff library at the Waterford to consult journals, and also made extensive use of the Queen Elizabeth II Library and Health Sciences Library at Memorial University.

When dealing with patients, the intern soon realized the enormous amount he did not know, and he attempted to learn as much as possible, as quickly as possible, in order to become more competent. He shared a number of the recent journal articles he read with his field supervisor and other staff.

Readings during the early portion of the internship primarily focused on the areas of depression and cognitive-behavioral therapy, which were the focus of the intern's case study research. Most of these sources will be found in the reference section of this paper. General readings on therapy, alcoholism, and other topics were undertaken later as time permitted, primarily driven by curiosity sparked by patient contact.

Lists of additional readings are included in Appendices F and G.

REVIEW OF OBJECTIVES

I. MAJOR OBJECTIVE

a. Individual counseling and therapy

The intern accomplished this objective through the learning of cognitive-behavioral therapy skills, and through the direct treatment of five patients. Skills were learned through co-therapy and observation, extensive reading, and regular case review with the intern's field supervisor, Dr. Alladin.

The intern learned and applied the skills of relaxation training. He conducted in vivo relaxation sessions for five patients, and recorded personalized relaxation audio tapes for four patients.

Cognitive restructuring was applied with five patients, and support in this area was supplied to one other individual. The learning and application of this skill constituted a major portion of the intern's therapeutic training.

Assertiveness seemed to be a part of some patients' difficulties. The intern studied assertiveness training and included assertive components in the cognitive restructuring work with some patients.

Opportunities for the intern to apply systematic desensitization did not occur during the internship; however, he had the opportunity to observe the ongoing

treatment of one patient with this therapy during his prior term placement.

While the intern had hoped to be introduced to the skills of hypnosis during the internship, the opportunity was not available. The intern was fortunate, however, to attend a two-day Introduction to Clinical Hypnosis inservice on August 22 and 23. This seminar was offered by the Psychology Department at the Waterford, and led by Dr. Assen Alladin, the intern's field supervisor. This inservice was designed to be the first of three two-day workshops offered at six-month intervals, and the intern has been invited to participate in the entire program.

II. MINOR OBJECTIVES

a. Assessment

The intern carried out a number of assessments, as detailed in the Activities section above, and feels his objectives in this area were met.

b. Consultation

Consultation is an integral part of working as a student, and as a part of an interdisciplinary team. The intern had regular opportunities to consult with his field supervisor, Psychology staff, hospital staff, and patients. As well he had some opportunity to consult with individuals

outside of the hospital. Also, as previously mentioned, the intern was asked for his professional opinion on several occasions, which he found gratifying.

c. Group Counselling

The intern was, unfortunately, unable to continue his involvement in group counselling during this placement. The intern had earmarked the Understanding Schizophrenia group as the group in which he would participate during the internship. This choice was made on the advice of Ms. Barbara Lukins, R.N., and Ms. Lorna Gibbons, R.N., coordinators of the Day Care Department, and co-leaders of all the Day Care groups. The intern had worked with these individuals in the Advanced Social Skills group the prior term, and looked forward to working with them again. The Understanding Schizophrenia group was due to start about the same time as the internship.

Early in the internship, the intern was advised that there were not yet enough potential group members to begin the Understanding Schizophrenia group, but that its start-up was imminent. When the intern checked back, the group was still not ready to start, due to a shortage of members. The Advanced Social Skills group had ended, and Ms. Lukins was on sick leave with pneumonia. Ms. Gibbons advised the intern that she had started an Assertiveness group, but that

it was not going well, and she did not feel it appropriate for the intern. She suggested that the intern wait for the return of Ms. Lukins.

After a lengthy illness, Ms. Lukins returned briefly, and then took her summer holidays. Ms. Gibbons advised the intern that there were still only three or four potential members for the Understanding Schizophrenia group, and that it would not be going ahead. She saw no other potential opportunities for the intern to become involved with Day Care groups during the internship.

The Psychology Department had no groups ongoing or planned. Ms. Sandoval, Psychological Assistant, was involved in a sexual education group with another department, but when contacted during the latter stages of the internship, this group was ending.

The intern consulted with Ms. Cathy Croucher, social worker, about the possibility of participating in one of the Addictions Groups, but this also did not come to fruition. Two of the intern's individual therapy patients were members of one of the groups, and two of the groups met weekly on Tuesday nights. As previously mentioned, during the latter part of the internship the intern was enroled in Education G6855, Neuropsychology and Its Educational Implications, at Memorial University. The class met on Tuesday and Thursday nights, ruling out the Tuesday night Addictions Groups.

While the intern was unable to experience more group psychotherapy during the internship, he had been able to participate in the Advanced Social Skills group at Day Care during the prior term placement. As well, his participation in Education G6000, Personal and Professional Development Group, and his completion of Education G6200, Processes and Procedures in Group Counselling, afforded him additional experience and learning in group psychotherapy during his graduate program.

d. Exposure to other mental health settings

Arrangements to visit other sites outside of the primary internship placement were not accomplished. Dr. Khalili, Director of Psychology at the Waterford, suggested that the intern might visit some other settings during his internship. While the intern's primary interest was in the Psychology Department at the Waterford Hospital, Dr. Khalili felt that additional exposure might be helpful. He advised the intern that he would make contacts on the intern's behalf regarding these visits.

Later in the internship, Dr. Khalili advised the intern that he had made some contacts, and done some thinking about some of the potential settings which the intern might visit. He stated that he did not think visiting some of these sites was advisable at the time. He had contacted two

individuals, where he felt visits would be possible. The intern tried on several occasions to reach one of these individuals, and was unable to connect. He received her home telephone number during the final days of the internship, but felt it was too late to arrange a visit, as his schedule was quite full. The intern was successful in contacting the other party, and arranging a visit to Community Care, which he had proposed as a specific objective.

As mentioned, the objective of visiting other mental health settings was included at the suggestion of the Director of Psychology. His suggestion was sincerely made, with the personal welfare of the intern in mind. In addition to the educational benefit to the intern, he wished to assist the intern with exposure to potential employers.

The intern is partially aware of some of the ongoing dynamics in other Psychology Departments. As well, the Psychology Department at the Waterford was undergoing a major restructuring during the internship, and the Waterford Hospital was being visited by the Canadian Council on Hospital Accreditation. Combined with the difficulties of summer schedules and summer holidays, the suggested visits did not occur.

The intern thanks Dr. Khalili for his efforts on the intern's behalf, in attempting to provide the intern with

more exposure.

Prior to the internship, the intern had exposure to the Psychology Department at the Janeway Hospital in St. John's, and to Family Court in St. John's, through class visits arranged by Dr. Klas. As well, the intern visited Mr. Jim Woodrow individually at his work place. Mr. Woodrow is a clinical psychologist, specializing in neuropsychological assessments, at the Health Sciences Centre in St. John's. The intern and Mr. Woodrow discussed the Psychology Department at the Health Sciences Centre, as well as his particular area of expertise.

e. Other Activities

1. The intern had proposed visiting the Community Care Centre at Long Pond, and visiting one or two of the associated boarding homes. He visited the facility, spoke with the director, and toured three boarding homes.

2. The intern proposed attending one Grand Rounds or Waterford Rounds during the internship. He was able to attend a University Rounds, and a presentation on the drug, Prozac, by a pharmaceutical manufacturer. Many of the Waterford Rounds anticipated were cancelled due to summer vacations of the persons responsible for organizing them. On one occasion, the intern went to the appointed place, at the appointed time, for Waterford Rounds, and it took a

period of time to determine that it was indeed cancelled.

SUMMARY AND RECOMMENDATIONS

The intern enjoyed a very enriching experience while working with the Psychology Department at the Waterford Hospital. He was exposed to a learning environment which surpassed any others which he has encountered. Under the leadership of Dr. Khalili, the entire Psychology staff offered the intern their friendship and their camaraderie. They unselfishly shared their knowledge and experiences, and treated the intern with respect and sensitivity. The intern owes a special debt of gratitude to Dr. Alladin, who put up with countless interruptions in his work to answer questions and offer advice to the intern. The intern is indeed fortunate to have been able to work closely with Dr. Alladin, and to have had the opportunity to learn from him.

The intern's positive experience at the Waterford would never have been possible without the continuing support and encouragement of Dr. Lee Klas, Professor, and friend, who arranged the placement and counseled him throughout the program.

The major objective, and most of the minor objectives, of the internship were met. Those that were not, were not for lack of trying. The difficulties which normally occur in summertime, including staff shortages, annual vacations,

changes in patient admissions, and so on, occurred against a background of financial constraint, a reorganization of the Psychology Department, preparation for hospital accreditation, shortages of "appropriate" patients, and the concurrent placement of two Clinical Psychology graduate students.

While the intern accomplished most of what he had intended to accomplish, he also did a number of things he had not anticipated doing. In his opinion, these additional activities more than make up for any shortcomings in the meeting of proposed objectives. Particularly, the intern was pleased to substitute as liaison psychologist for several staff members during their absence, and appreciated the confidence placed in him by Dr. Khalili, allowing him to serve in this capacity. As well, the intern's continuing involvement in the suicide study group, which grew out of an unplanned attendance at the Suicide Intervention Workshop, was completely unanticipated. The intern had also not anticipated the concurrent presence of the Clinical Psychology graduate students, and found consultation and exchange with them to be rewarding.

Perhaps one of the aspects of the experience which would be most useful to underscore for future interns would be the general unpredictability of the setting. This type of setting is patient driven, and, in the intern's

experience, it is impossible to predict the type, number, and severity of patients who will be present at any time. As a practical matter, this requires considerable flexibility on the part of staff, and makes the setting and achieving of firm goals challenging for an intern. One simply cannot know beforehand what patients will be available for assessment or treatment in the acute, forensic, and outpatient populations. While the long term unit population is more stable, one cannot assume full cooperation from patients or staff in these instances.

The Waterford Hospital is a warm, caring institution, with many staff who are truly dedicated to their work, and to the patients. It is a friendly place, where the exchange of pleasantries between staff, and between patients and staff, is commonplace. The frequent exchange of greetings in the corridors is striking, compared to many everyday environments. While the Waterford Hospital has a reputation for labor difficulties, what the intern generally sees is a place of high morale, and spirited individuals showing compassion and care for patients.

A prospective intern should also remember, however, that the Waterford Hospital is a psychiatric hospital. Some individuals living in the hospital have profound difficulties, and their appearance and behaviors may be

unsettling. Some may also make noises which can be disconcerting.

The Waterford Hospital also has a stigma. It is still often referred to by the public as, "the mental," and many individuals avoid the institution due to unfounded notions.

This intern has had a marvellous experience at the Waterford. Since last September, he has been privileged to spend time with the Psychology Department at the Waterford, having served all of his graduate program placements there. The people are wonderful, and the opportunities to learn are unlimited. This intern would not hesitate to recommend placement here strongly to any individual with an interest, and would recommend that they visit the setting and the staff prior to making decisions to go elsewhere.

This intern has found that being at the Waterford since September was of great help to him in getting off to a quick start on the internship, and would recommend a similar path to those who have considerable experience in educational settings, as did the intern.

This intern holds the strong belief that there is but one "Psychology," and that most of the adjectives placed before the word "psychology" are more descriptive of the setting than they are of differences in function. In the

intern's experience, an Educational Psychology graduate student has all of the core skills required to do well in this setting, but is generally weak in knowledge of mental illnesses, and would do well to become more familiar with this area. In the intern's opinion, much of therapy is the patient learning new ways of thinking and doing, which is a primary focus of educational psychology.

It would be difficult for this intern to imagine an internship setting that is more professionally challenging and filled with opportunities, yet is also so highly supportive of the intern, and so much fun. This intern did not want to leave.

Chapter 3

LITERATURE REVIEW AND RATIONALE FOR THE STUDY

RESEARCH DESIGN

The intern was faced with a number of decisions regarding the conducting and reporting of his research. Perhaps foremost among his concerns was that his research be considered "proper" and "acceptable." Though supported by both his university and field supervisors, the intern experienced some uneasiness with the research design since it was foreign to much of his prior experience. Whether intentional or not, the quest for "truth" has led many to accept only findings which are portrayed as uncompromisingly objective, and buttressed with statistical comparisons and "proof" of significance.

The "acceptable" group comparison designs seemed neither applicable nor relevant to the treatment of individuals in a clinical setting. The highly popular single-case experimental designs, largely an outgrowth of the application of behaviorist methods, seemed to be of merit. However, the shortage of subjects, the limited time period of the internship, and ethical questions concerning the withholding of appropriate treatment in the absence of a bona fide waiting list made these designs unworkable.

In searching for support for an alternate design, the intern found both substantial dissatisfaction with the

"status quo" in psychology research, and encouragement in the pursuit of nontraditional research which is meaningful.

Goldman (1989) discusses the relief that graduate students in counseling psychology feel when the anxiety and drudgery of statistics, research design, and theses are over, "so that they may now do work that is meaningful to them" (p. 81). He adds, "The evidence is clear: Almost no practitioners ever do any formal research after the dissertation, and those who even read published research find that it seldom relates in any meaningful way to their work" (pp. 81-82).

Hoshmand (1989) notes the limited use of and participation in research by practitioners, the need for greater relevance of research, and the growing support for a more open methodological stance.

Mahoney (1991) argues strongly for the expansion of traditional research methodologies, to include qualitative, process-oriented measures, and measures sensitive to individual change. He suggests that we should combine our search for generalizations through factorial studies and inferential statistics with a study of the individual.

Kratochwill, Mott, & Dodson (1984), in discussing clinical and applied psychology, state, "Increasingly, researchers and other scholars in the field are recognizing the importance of case study and single-case investigations

for the development of a knowledge base in the field" (p. 55).

Hayes (1983) states that "the nature of clinical psychology puts a fundamental emphasis on the individual, for both the consumption and the production of clinical knowledge. Multiple analyses of the individual case should be a major source of clinical knowledge" (p. 193). He suggests that the idea that group comparison methods provide more generalizable knowledge is not true. These designs do not generally tell us which individuals improved, but rather how a group improved against a background of individual variability.

A concern in the implementation of a research design that is not the "status quo" is the subject of a control group. As Kazdin (1983) states, "Assigning clients to 'control' conditions that have a low probability of producing change would be an obvious violation of the professional commitment to treatment" (p. 270). At the clinical level, this issue is sometimes addressed by a "waiting list control," but as previously mentioned, no waiting list existed at the internship site. To have artificially created a waiting list for control purposes would have been grossly unethical and immoral. Kazdin (1983) adds, "Clinical work at the level of the individual case has remained uncontrolled in part because of the lack

of viable alternatives" (p. 277). In addition to the unsuitability of delaying or withholding treatment in a clinical setting, the recruiting of homogeneous patients and control over standardization of treatment are usually not viable options.

Kazdin (1983) suggests a "valid inference" approach, where the uncontrolled case study is viewed as an experiment, and relies on increased sources of information to bolster inferences which may be made. These additional sources of information would include objective measurements, repeated measures, information from other cases, and the accumulation of several cases to compare patterns of change.

While the suggestion of this alternate paradigm may seem "unscientific" to some, there is widespread feeling within the clinical community that purely quantitative psychology research is often not relevant. Prominent practitioners have explicitly stated for some time that their own research has not had much of an impact on their practice of psychotherapy (Bergin & Strupp, 1972).

Runyan (1983), in discussing personality psychology, suggests that there are three separate concerns which need to be addressed in advancing our knowledge of people:

1. What is true to all human beings

2. What is true of groups of human beings

3. What is true of individual human beings

(pp. 416-417)

He states that the goal of understanding individuals, such as clinical patients, cannot be accomplished with only universal and group knowledge, and refutes some of the criticisms of idiographic (particular to the individual) approaches.

In response to the criticism of "How can you generalize from that idiographic study?", Runyan (1983) asks why some seem to assume that generalizing at the highest level of abstraction is our only goal. He retorts, "How can you particularize from that group or population study?" and adds that "the fact that inquiry at one level does not automatically answer questions at the other two levels is not a telling criticism" (p. 420). Indeed, he describes each of the aforementioned three levels as semi-independent, suggesting that it is quite conceivable that a concept or category created to describe an individual might eventually

become a nomothetic concept. Hermans (1988) underlines clearly the importance of idiographic investigations when he states, "Since a host of the statistical findings in psychology are of the aggregate-type, we have no way of knowing whether a particular conclusion is true of a given individual" (p. 789).

Runyan (1983) further states that "laws" pertaining to an individual are just as important as "universal laws", and that the study of individuals is just as "scientific" and important as the study of groups.

In responding to the criticism that case studies are not sufficiently controlled so as to rule out competing causal explanations, Runyan concedes that naturalistic studies do not do that well in this regard, but adds:

> Does this, however, mean that they are "not scientific?" It carries this implication only if one believes that developing causal generalizations is the sole or primary objective of scientific endeavor. If one believes that science is concerned with the full range of tasks of describing, explaining, predicting, and intentionally changing phenomena, as well as generalizing about them, then the case study method has considerable scientific value, as it is undoubtedly useful for describing the particulars of persons and

> their circumstances, for conveying explanations or interpretations of their experience, for presenting patterns and trends in the individual case useful for making predictions, and for providing information on the individual useful in guiding intervention efforts. [Emphasis added.] (p. 428)

In discussing the unique needs of practitioners in psychology, Oetting (1982) suggests that while scientists look for flaws, practitioners look for things we can use that will help our patients. We look for things that have clinical significance for our clients. "Acceptable" statistical significance does not clearly relate to the practitioner's need to make decisions and to "find something that works" (p. 62) to help an individual client. For example, Oetting (1982) suggests that in traditional scientific inquiry, a .20 level of confidence would be dismissed as indicating that no real difference exists. However, from the clinical point of view, this means that there is only a one-in-five chance that the results are meaningless. He suggests that probability is only one of many factors to consider in the decisions a practitioner makes, and that it may well be very logical to take a chance and try an alternative that is not "statistically" significant. He likens research in counseling psychology

more to evaluation than hard science, stating that the evaluator has to use both hard and soft data to try to find out what really happened, not just what statistical analysis might suggest.

Krauskopf (1982) is even more critical of "mindless hypothesis testing without sufficient attention to other forms of inference" (p. 72) as limiting the advance of psychology. He discusses the "garbage" produced within tight research designs and statistically significant results, which essentially involves counting masquerading as science. Krauskopf's opinions are similar to Meehl's. Meehl (1978) laments the absence of a cumulative character of knowledge building in psychology, distinguishes between "substantive theory" and "statistical hypothesis," and suggests that we not confuse "rational" with "statistical." He points out that we all believe a lot of things that we in no way relate to probability, that are well-corroborated without t tests or the possibility of calculating them, and calls significance testing a "pretentious endeavor." (p. 831).

Meehl (1978) points out that other sciences were originally developed with little reliance on statistical significance testing, and states, "I would take Freud's clinical observations over most peoples's t tests any time" (p. 817). Meehl feels that qualitative evidence can

sometimes even be superior. One of his major arguments is that our traditional reliance on refuting the null hypothesis as evidence is in error:

> I suggest to you that Sir Ronald has befuddled us, mesmerized us, and led us down the primrose path. I believe that the almost universal reliance on merely refuting the null hypothesis as the standard method for corroborating substantive theories in the soft areas is a terrible mistake, is basically unsound, poor scientific strategy, and one of the worst things that ever happened in the history of psychology. (p. 817).

Jacobson, Follette, and Revenstorf (1984) comment that: "Statistical comparisons based on group means provide no information on the variability of treatment outcome, and statistical significance tests do not address clinical significance" (p. 336).

Ball (1961) provides some real food for thought regarding decision-making and probabilities, and questions whether the benchmark .05 level of significance really does, or should, automate our inferences. If you were forced to enter one of two lotteries, with the winner to be publicly hanged, would you pick the lottery with 49 tickets or the lottery with 51 tickets? Alternately, if you had a choice

whether to enter a 1,000 ticket lottery where the ticket holder of one randomly-drawn ticket will be hanged, and the other 999 will receive $100 each, would you enter this lottery? Indeed, it seems that decision-making in real life, including the daily encounters of a psychologist with his/her patients in a clinical setting, is not determined simply by reference to statistics and probability.

In expanding on Oetting's (1982) statement that there may indeed be a discrepancy between a statistically significant outcome and one that has any practical importance, Sechrest (1982) notes that for assessing the magnitude of effects, "purely statistical measures such as are provided in measures of variance accounted for are not likely to be of much help" (p. 74).

In addition to the realization that psychology seems to have been neglecting the study of the individual of late, there also seems to be an increasing realization of the potential of qualitative research. Campbell (1979) wrote, "Qualitative knowing cannot be replaced by quantitative knowing. Rather, quantitative knowing has to trust and build on the qualitative, including ordinary perception" (p. 66).

Rather than a "war" between idiographic and nomothetic methods, between qualitative and quantitative methods, between statistical and non-statistical inferences, there

appears, to the intern, to be an increasing accommodation, tolerance, and respect for differing perspectives. Howard (1983) argued for methodological pluralism and recommended the addition of intensive case studies to psychotherapy research. Gaston and Marmar (1989) state that "quantitative and qualitative knowledge are both essential for the understanding of the change process in psychotherapy. Ideally, information from both paradigms should be acquired within single investigations" (p.169). They point to the importance of the qualitative analysis of single case studies in generating hypotheses, followed by controlled experiments and statistical analyses only after many replications and much accumulation of data.

Dar (1987) also strongly supports the importance of replication, condemns null hypothesis testing, and states: "I believe that statistical significance tests and related practices are often serving as an unfortunate substitute for a truly creative and progressive scientific enterprise" (p. 151).

Hermans (1988) recommends the integration of nomothetic and idiographic concepts, and offers an analogy of a city street system with both parallel streets representing nomothetic concepts and cross streets (which are themselves parallel) representing idiographic investigations. At each intersection, an investigator may choose whether to pursue a

concept in depth, or to follow the nomothetic route.

Neimeyer and Resnikoff (1982) also suggest a convergent strategy between qualitative and quantitative methods, and use an "understanding a city" analogy to make their point: The information you gather from walking around in the city is different in many respects from that gained by driving around the city, or by flying overhead. Traffic which looks orderly from above may be chaotic as you drive on the streets. The point is that impressions vary with your perspective, but that no perspective is necessarily better than another. Flying over the city might give you an idea of its historical development, but would not give you much information on which house in the city would make a comfortable home for you and your family. The choice of perspective, and the information sought, depends on the questions being asked.

Niemeyer and Resnikoff (1982) encourage the creative design of investigations which use both qualitative and quantitative methods to maximize both scientific validity and personal meaningfulness. They point out that both cognitive psychology and the "qualitative-phenomenological" perspective share the assumption "that the way in which events are interpreted by individuals is a major component in the prediction of resultant behavior" (p. 76).
Since the intern's study is based in cognitive psychology,

and since this domain will be sampled by self-report instruments, as well as through informal interviewing, this noted similarity strongly suggests that idiographic methodology would be an appropriate choice.

The following excerpts from Niemeyer and Resnikoff's (1982) discussion of the intensive case study design will further illustrate how the individual case study is a proper format for the intern's present study:

> The intensive case design assumes that the thinking frameworks of individuals are the most important data for the researcher to understand. How an individual makes sense of the events around him/her and the ideographic [sic] effects of these events are thought to be the primary vehicles for an individual's change.... This particular methodology does not have the element of control that one may find, for example, in an intensive experimental design. There is often no baseline data. There is neither a careful experimental intervention nor a withdrawal of that experimental intervention; hence cause and effect relationships are not easily derived. However, the richness of a person's reported experiences represents a wealth of data in itself. The major intent is to capture how an intervention has affected an individual, the process of

> the change within that individual, and the assumptions, beliefs, or attitudes which accompanied that change. [Emphasis added.] (p. 81)

Both Goldman (1982) and Shontz (1982) further support what might be called "non-traditional" research in counselling psychology. Goldman (1982) persuasively argues that most of the dichotomies we insist on discussing regarding research issues are really much fuzzier than we suppose. As an example, he suggests that we consider a study which statistically analyzes the data obtained on questionnaires. This might be considered traditional, correlational, and quantitative. However, it is not objective, for each person's answer to each question is subjective and has unknown meaning. We do not know what each person thought each question meant, nor what they meant when they indicated "frequently" on the answer sheet. Goldman (1982) raises similar doubts about our notions of active/passive, inductive/deductive, vague/precise, and exploratory/definitive. In fact, Goldman (1982) states that the actual practice of counseling psychology owes little to published research:

> Nor is there any reason to believe that theories of counselling psychology have grown out of or benefited

> to any extent from the published research. I believe it is a fact that theory has grown much more often from the subjective, exploratory, and inductive activities of researchers, practitioners, and observers of the counseling scene whose minds are open to new ideas. Others later try to test these theories and their accompanying counseling methods through traditional types of research whose major conclusion typically is that further research is needed. It might just be that those traditional methods are not likely ever to answer important questions. (p. 88)

Goldman (1982) suggests that in the tradition of such individuals as Darwin, Freud, and Piaget, we forge ahead with nontraditional research, willing to consider observations of real-life behavior as "scientific" data, willing to collect non-quantifiable data if it seems appropriate, valuing the whole person rather than trying to isolate one small piece of the organism, and using natural settings (even though it means giving up a lot of control).

Shontz (1982) states that there is no justification for assuming that quantitative methods are more basic, valid, precise or objective than qualitative methods, and no method of research consistently superior to any other. He too suggests that the distinction between objectivity and

subjectivity cannot be maintained, and that all knowledge is ultimately a product of fallible human judgement. He posits that we should intensively investigate individual human beings, and revitalize the investigative techniques of pioneers such as Carl Rogers, Kurt Lewin, and Gordon Allport.

Niemeyer and Resnikoff (1982) make a strong argument for the single case and qualitative techniques, pointing out that it is possible to generalize from a specific case; that what you learn in one situation can apply to similar situations. As an example of how the general often resides in the particular, they ask if Arthur Miller's Death of a Salesman is really just a play about a travelling salesman and no one else?

Klienmuntz (1990) also makes an important distinction which seems germane to this discussion. He notes that the work of a clinician usually involves backward reasoning, that is, that practitioners are often attempting to link observed effects to prior causes. Statistical prediction, rather than post hoc explanation, attempts to forecast future outcomes on the basis of observed information. To the intern, it seems that the clinician actually does both. He first attempts to determine causal variables, and then attempts to manipulate them to effect an improved future for his/her client.

Despite the increasing attention being given to qualitative research, however, the intern agrees with the aforementioned integrationists that quantitative information is also of value. Klienmuntz (1990), though arguing for the use of both heads (intuition) and formulas, points out that there is not much convincing evidence that heads are always better than formulas. Meehl (1986) also observed, "When you check out at a supermarket, you don't eyeball the heap of purchases and say to the clerk, 'Well it looks to me as if it's about $17.00 worth; what do you think?' The clerk adds it up" (p.372).

In summary, a review of recent literature seems to indicate that psychology at this time is multi-paradigmatic, with no single agreed upon theory or research method. There does, however, seem to be an increasing feeling that traditional research methods have not been particularly helpful in providing the practitioner with things that can be used to help patients on a daily basis. This disenchantment seems behind a quest for additional acceptable research methodologies which will be applicable to practitioners both as end users and as participant-researchers. New perspectives are being sought, and one result has been the rediscovery of idiographic approaches:

There seems to be a growing interest in idiographic

goals and methods across a variety of theoretical orientations. We can find examples of phenomenological, trait, psychodynamic, behavioral, and cognitive theorists all attempting to develop methods and procedures capable of understanding the particularities of individuals and their circumstances.... No matter how much progress is made at the level of understanding universal processes, or at the level of understanding group differences, there is much that will remain unknown about particular individuals, since these three levels of analysis are at least partially independent. Universal and group generalizations, can, without a doubt, illuminate some facets of individual lives, but there are many other problems in describing, understanding, making predictions about, and intentionally changing the course of individual lives that cannot be accomplished without the use of idiographic methods. If we aspire to develop a science of psychology capable of contributing to the understanding of individual persons, then, as a supplement to the relatively well-established nomothetic and differential methods, greater attention must be paid to the development and utilization of idiographic research methods.

(Runyan, 1983, p. 433)

There is no doubt that individual case studies have played a cental role in clinical psychology. Kazdin (1980) notes that case studies are responsible for the construction of psychological theories about the development and amelioration of clinical disorders, have served as sources of ideas and hypotheses about behavior, have contributed important leads in diagnosis and treatment of disorders, and perhaps most importantly have served as the "development ground" for generating new therapeutic techniques. He notes, however, that only a small fraction of the published research focuses on the individual. Possible reasons for this include both the lack of desire of practitioners to attempt research which is either impossible in a clinical setting, or irrelevant, and the reluctance of publishers to publish research which does not fit their established, albeit arbitrary, standards.

While Kazdin (1980) points out that we alter our beliefs about phenomena based upon acceptable evidence, he also notes that what is acceptable varies from individual to individual. At the very least, case studies may be persuasive and motivate pursuit of the issues which arise in the case.

From a review of the above literature, the intern has concluded the following:

Case study strengths include:

1. Focus on the individual, the subject of clinical psychology.
2. Ability to conduct research in the clinical setting, rather than contrived or analogue.
3. Relevant to the practitioner.
4. Focus on clinically meaningful results for individual patients, not statistical significance and averages.

Methods of bolstering the credibility of case studies include:

1. Addition of data from objective measures.
2. Replication.

In consideration of the above, and taking into account the clinical nature of the setting, the limited time frame, the limited patient population available during the internship period, and the research question, the intern made the following research decisions:

1. The research was conducted and will be reported as individual case studies.
2. In keeping with the spirit of qualitative/quantitative integration, and since the

short internship period does not allow the longitudinal character most desirable in an intensive case study, the research and individual case discussions will be a hybrid, or blend of both qualitative and quantitative methods.

a. Each case will be presented and discussed individually.
b. Subjective discussion will be supplemented and buttressed with quantitative results from self-report instruments administered pre and post treatment.
c. Quantitative pre and post data will be displayed visually for each patient.
d. As the level of analysis is that of the individual patient, there will be no comparisons between patients.
e. Hypotheses will be stated, but will not subjected to statistical analysis.

The study design will replicate the approach of Williams, Thompson, Haber, and Raczynski (1986), and Lake (1981), including a discussion of treatment outcome as presented by Lake.

TREATMENT MATCHING

"What treatment, by whom, is most effective for this individual with that specific problem, under what set of circumstances, and how does it come about?" (Paul, 1969, p. 44).

The above quotation summarizes the quest of the therapist, and is equally as challenging today as it was over 30 years ago.

When a therapist encounters a patient, what does he do? Some clinicians might practice the "law of the hammer" and treat everything and everybody with the one treatment approach they know. Others might suggest that the "common factors" in therapy distil the hundreds of therapeutic approaches into a handful of effective change agents common in any intervention, so the choice of treatment really doesn't matter.

In deciding what to do, the clinician's particular theoretical stance on the problem to be treated is also an integral factor. If, for example, the therapist sees anxiety as a unitary phenomenon, he/she may search for the singlemost effective treatment for anxiety. If the therapist sees anxiety as polydimensional, he/she may attempt to find the best treatment for individual anxious persons.

If for no other reason than it seems to make "intuitive

good sense," there seems reason to believe that the decisions practitioners make regarding treatment are important to the welfare of their patients. As Beutler and Clarkin (1990) state, there is "a faith that there are benefits to be derived from tailoring specific treatments to the needs of specific patients" (p. 13).

Interestingly, the concept of matching appropriate treatments to problems seems so "natural" that it is often treated as such. Kaplan and Sadock's (1991) latest volume talks about "formulating the treatment plan," determining the "problems and target symptoms [at which] the treatment is aimed," and "what kind of treatment or combination of treatments the patient should receive" (p. 205). Huber and Backlund (1991) state, "Counselors can tailor treatment to their clients as opposed to expecting clients to accommodate counselors' beliefs and treatment practices" (p. 19). Hollender and Ford (1990) allude to the inadvisability of not matching, when they say, "If a therapist becomes wedded to one type of treatment there is the danger that the patient will be expected to fit the treatment rather than the treatment fit the patient" (p. 36). Miller (1989) adds, "Few people would argue with the commonsense idea that treatment should be individualized to the needs and characteristics of clients" (p. 261).

Given the background presented in the previous section,

which indicates that often research does not seem to have much of an effect on clinical practice, and that most practitioners do not conduct or participate in research, a group of investigators recently decided to look into how treatment decisions are made. O'Donohue, Fisher, Plaud, and Curtis (1990) interviewed 25 practicing therapists in a search to find the systematic procedures clinicians use. They scored decisions as systematic if there was any evidence of either inductive or deductive reasoning cited to support the choice of assessment methods, treatment goals, or treatment methods. Their results are astounding.

"When asked to describe the decision process that led to the selection of the treatment methods, for 92 percent of the cases the therapists begged the question (e.g., responded, 'That is what I always do' or 'It seemed to make sense.')" (O'Donohue et al., 1990, p. 425). Further, they found no evidence of any systematic decision procedures in 96 percent of the cases for choice of assessment techniques, and in fully 98 percent of the cases reviewed there was apparently no systematic decision procedure in choosing treatment goals. They also noted infrequent use of psychological tests, self-monitoring, and direct observation as assessment techniques. These findings underscore Kleinmuntz's (1990) call for increased use of formulas and other procedures to supplement raw cognition in decision

making. O'Donohue et al. (1990) conclude their study by stating:

> This study reveals the need for an increased understanding and explicit recognition of the kinds of decisions that occur in psychotherapy as well as a need to understand how these decisions best can be made. Further research is needed to analyze the cognitive problems that typically confront psychotherapists and to provide a systematic analysis of how these critical decisions can be validly made. (p. 427)

Runyan (1977) also asked how treatment recommendations are made, and how they should be made. He concluded that in everyday practice therapists often simply used the treatments they knew best, regardless of what the patient needed, or that patients were pragmatically assigned to therapists or therapy groups that were available at the moment. He stated that "traditional treatment recommendations are often flimsy and unconvincing, sometimes embarrassingly so ... partly because the needed empirical information is often unavailable" (p. 558). His suggested alternative to continuing to make treatment recommendations in an informal and intuitive way, was to "utilize scientific-empirical, valuative, and technical-economic reasoning" (p.558). Runyan (1977) closed his article by

saying, "The problem of choosing among alternative forms of treatment is an increasingly important one, and we would do well to increase our skills in dealing with it" (p. 558).

One way of dealing with treatment decisions is to "barrage the patient with all the interventions the therapist can think of, in the hope that one will work" (Persons, 1989). Similarly, Liberman (1981) said that: "One option for taking into account individual differences is to construct a comprehensive therapeutic package that incorporates key interventions aimed at remediating most problem areas" (p. 231).

The logic behind this approach would seem to be that if you expose everybody to everything, treatment matches will inevitably occur. As can be readily seen however, this method has problems. Persons (1989) summarizes them:

> One difficulty with this approach is that it is time-consuming, and the patient may become discouraged and drop out of treatment if the first interventions attempted are unsuccessful. Another disadvantage is that interventions applied in the absence of a formulation may actually be counterproductive and make the problem worse. (p. 14)

The opposite of this approach is deliberate client-

treatment matching, or a "best fit" strategy. Miller (1989) suggests that it does indeed appear that different kinds of people need different kinds of treatment. He cites the increased cost-effectiveness of matching, as well as the reduction in therapeutic failures by getting the right treatment the first time. He too notes the adverse effects which can result from giving a person the wrong kind of treatment. The client may actually get worse, become discouraged and hopeless, and drop out of treatment. Staff also can become discouraged and time is inevitably wasted.

The intern would also add that there is a high ethical and moral imperative upon all practitioners to treat patients in such a manner so as to alleviate their suffering in the most timely manner possible. Having patients wade through treatments they do not need while they wait for those that they do need, or matching treatments based solely on intuition, therapist's favorite method, or available openings/therapists would not seem to satisfy professional standards.

There have been a number of recent attempts to both investigate and utilize the concept of patient-treatment matching. Persons (1989), a practicing cognitive behavioral therapist, suggests a "case formulation approach" where psychological problems are conceptualized as consisting of both overt difficulties and underlying psychological

mechanisms. After gathering information about the overt difficulties, the therapist forms a hypothesis about the underlying mechanism, which are often, but not always, central irrational beliefs. This hypothesis then guides the therapist's choice of intervention strategies.

Turkat and Maisto (1985) have utilized a similar approach in treating and studying personality disorders. An individualized conception of each patient is formed, based on thorough assessments. Hypotheses are then formed and tested to confirm the conceptualization. A treatment plan is tailored and delivered to the patient, and, if effective, the case formulation is supported. If intervention is not successful, the conceptualization is re-evaluated. Beck, Freeman, and Associates (1990) state that this approach provides much stronger evidence of the effectiveness of interventions than simple uncontrolled case studies, since both behavioral observation and established empirical measures are used to document changes.

Hayes, Nelson, & Jarrett (1987) suggest that the real contribution of clinical assessment is in its effect on treatment outcome, and propose a vigorous expansion of research in this area. In suggesting that we further examine the "treatment utility of assessment," they are really asking how we might better use assessment to match our treatments to our patients.

Nelson (1988) followed up on the above discussion by presenting three strategies to further examine the relationship between assessment and treatment. She states that "it is generally believed that idiographic and functionally based assessment leads to more effective treatment than nomothetic and statistically based assessment; but there is no evidence for this belief" (p. 166). In responding to Nelson's (1988) article, Haynes (1988) expanded on these concepts and presented his own suggestions for further research. Turkat (1988) suggested that Nelson (1988) had underscored the importance of case formulation in the treatment of individual cases. He added that in addition to aiding clinical effectiveness, case formulations and hypothesis testing play an important role in the development of further knowledge and effective treatments.

In addition to the ongoing efforts at utilizing the case formulation approaches mentioned above, there have been other recent attempts to match patients with specific treatments based on individualized assessments. One of the early efforts was the Multimodal Psychotherapy of Lazarus (1976). Since then, the concept of treatment matching has been investigated in a number of areas, for example, the treatment of headache (Lake, 1981; Williams et al., 1986), the treatment of socially unskilled and socially anxious

patients (Trower, Yardley, Bryant, & Shaw, 1978), the treatment of alcoholic patients (Kadden, Cooney, Getter, and Litt, 1989), and the treatment of depression (e.g., Nelson-Gray, Herbert, Herbert, Sigmon, & Brannon, 1989; Heiby, 1986; McNight, Nelson, Hayes, & Jarrett, 1984).

Each of the above-cited studies on treatment matching with depression found matched treatment to be more effective than mismatched treatment in alleviating depression; this approach will be discussed further in a later section of this paper.

In summary, treatment matching seems to make intuitive good sense and seems supported by the literature. In an era which is witnessing increasing demands for mental health resources on the one hand, and demands for cost-control and proof of efficacy of treatment on the other hand, establishing efficient and effective treatments would seem to be worthwhile. The present study attempts to address this issue through the study of individual cases where treatment-patient matching was carried out.

DEPRESSION

Depression has been recognized for thousands of years. The book of Job in the Old Testament talks of King Saul's recurrent symptoms of depression and suicide, and Hippocrates discussed the mental illness of melancholia as early as 400 B.C. About 30 A.D., Aulus Cornelius Celsus described melancholia as a depression caused by black bile (Kaplan & Sadock, 1991).

The history of the Middle Ages describes melancholy persons to be sinners possessed by the devil, and the response throughout Europe and the colonies was the hunting down and punishing of these evil, demon-possessed witches (Wetzel, 1984).

Benjamin Rush, considered the father of American psychiatry (Wetzel, 1984), believed that melancholia and other mental disorders were caused by an excess of blood in the brain. In the early 1800's, his treatment consisted of massive blood letting, as well as "fright" for the cure of lunacy.

Despite these thousands of years of experience, depression remains the leading mental health problem known today, and the nature, classification, and etiology of depression are still hotly-contested topics.

Classification:

Some of the more popular depression classification issues are:

Endogenous vs. Exogenous Depression

Endogenous: caused by internal factors

Exogenous: caused by external factors

Reactive vs. Autonomous Depression

Reactive: responds positively to treatment and environmental modification

Autonomous: does not respond to intervention

Neurotic vs. Psychotic Depression

Neurotic: symptoms mild to severe, but no loss of contact with reality

Psychotic: symptoms extremely severe. Loss of contact with reality

Primary/Secondary Affective Disorder

Primary: no previous history of psychiatric disorder other than depression or mania

Secondary: previous history of major mental or physical disorder other than depression or mania

Unipolar/Bipolar Depression

Unipolar: recurring depression only

Bipolar: recurring mania fluctuating into severe manic or depressive episodes

(adapted from Wetzel, 1984)

As Rush and Giles (1982) state, "No commonly agreed-upon system has yet been derived" (p. 144).

The American Psychiatric Association has made continuing efforts since the 1950s to provide clinicians with an etiologically atheoretical system of describing mental disorders, including depression. The Diagnostic and Statistical Manual of Mental Disorders (Third Edition - Revised) (American Psychiatric Association, 1987), commonly referred to as DSM-III-R, is the current edition of this widely used classification system.

In DSM-III-R, Mood Disorders are divided into Bipolar Disorders and Depressive Disorders. Depressive Disorders, the subject of the intern's research, are further subdivided into:

a. Major Depression: requiring one or more Major Depressive Episodes

b. Dysthmia: a history of depressed mood (more days than not) for at least two years, with no Major Depressive Episodes during that first two year period of disturbance.

DSM-III-R adds: "In many cases of Dysthmia, there are superimposed Major Depressions" (American Psychological Association, 1987, p. 214).

In the DSM-III-R, Major Depressive Episodes can be specified as:

a. Melancholic type: typically severe and judged partially responsive to somatic therapy.
b. Chronic: lasting two years, with less than two asymptomatic months during that period.
c. Seasonal pattern: cyclically related to a particular 60-day period of the year.

Both Major Depression and Bipolar Disorder are further subclassified in DSM-III-R as either:

a. mild
b. moderate
c. severe without psychotic features
d. with psychotic features
e. in partial or in full remission

For a complete discussion of the various DSM-III-R classifications and diagnostic criteria pertaining to depression, the reader is referred to the Mood Disorders section of that publication.

Causes of Depression:

Current thinking is that the origin of depression may be:

1. Psychogenic: caused by mental conflicts.
2. Organic: a chemical imbalance in the brain/genetic influences.
3. Social: a result of environmental pressures.
4. A combination of the above.

(Wetzel, 1984)

Diagnostic signs and symptoms:

There are a number of diagnostic measures of depression currently in use. Wetzel (1984) has compiled a generic list of signs and symptoms which summarizes the major areas of assessment of depression, regardless of causation:

Affective Feeling State

Dysphoric mood--sad, blue, dejected

Fearfulness

Anxiety--nervousness, worry, apprehension

Inadequacy

Anger--resentment, rage

Guilt

Confusion

Tiredness

Hopelessness

Irritability

Cognitive Thought Processes

Negative view of the world, the self, and the future

Irrational beliefs

Recurrent thoughts of helplessness, hopelessness, worthlessness

Recurrent thoughts of death or suicide

Self-reproach

Low self-esteem

Denial

Indecisiveness

Slow thinking

Disinterest in activities, people, and pleasure

Confused thought

Poor concentration

Agitation

Behavioral activity

Dependence

Submissiveness

Nonassertiveness

Poor communications skills

Controlled by others

Crying

Withdrawal

Inactivity

Careless appearance

Slowed (retarded) motor response--poverty of speech, slowed body movements

Agitated motor response--pacing, handwringing, pulling at hair or clothing

Physical Functioning

Low energy

Weakness

Fatigue

Sleep disturbance--insomnia or hypersomnia

Weight loss or gain

Appetite disturbance

Indigestion

Constipation

Diarrhea

Nausea

Muscle aches and headaches

Tension

Agitated or slowed psychomotor reflexes

Sex-drive disturbance

(pp. 9-10)

Even though we have thousands of years of experience with depression, individuals seem to be suffering from this condition in ever-increasing numbers (Seligman, 1990). Despite all the differences of opinion about etiology and treatment, the practicing clinician is faced with the challenging task of helping depressed individuals.

One common approach to the treatment of depression often utilized by physicians and psychiatrists is the use of pharmacotherapy. The prescription of pharmaceutical agents is consistent with the medical model and utilizes minimal physician time. However, in addition to the fact that many individuals do not respond to antidepressants (Kaplan Sadock, 1991), there are questions about the durability of changes once medication is stopped (Hollon & Beck, 1979). Additional concerns with pharmacotherapy include contraindications due to other physical conditions or medications, side effects, problems with compliance, and patients' desires not to be treated or maintained with drugs. As well, the tricyclic antidepressants, which are the standard pharmacological treatment for depression, have one of the lowest treatment dose to lethal dose ratios of any of the psychotropic medications (Hollon & Beck, 1979).

Many depressed individuals are suicidal, and availability of means is a key factor in suicide attempts.

Regardless of personal feelings as to the efficacy or advisability of pharmacotherapy as a general treatment for depression, drug therapy is not an available treatment option for the overwhelming majority of psychologists. Psychologists utilize psychotherapy as their primary treatment method.

Within the over 200 different types of psychotherapy labelled (Karasu, 1977), the psychologist must choose a theoretical stance, a rationale, and accompanying methodologies which seem to best explain the origin and treatment of the problems.

COGNITIVE THERAPY: BASIC CONCEPTS

The intern chose Beck's Cognitive Therapy (CT) of Depression (Beck, Rush, Shaw, & Emery, 1979) for the purposes of this investigation, and in an attempt to provide appropriate and timely relief for his patients. The cognitive theorists, including Beck, view depression as a continuum, the severity of which is determined by the accumulation of symptoms. Symptoms are considered to be generated primarily by negative cognitive distortions (Beck, 1976). The underlying theory, thus, is that depression is an affective disturbance primarily caused by cognitive factors.

One of the primary tenets of the approach is that it is not events per se, but a person's interpretation of events, that leads to negative emotion. This idea was proposed by the Greek philosopher Epictetus approximately 2000 years ago (Beck, 1976), and serves as the foundation for much of the cognitive approach.

Beck's cognitive model (Beck et al., 1979) explains depression as composed of three processes: 1) the cognitive triad, 2) schemas, and 3) cognitive errors (faulty information processing).

1. The cognitive triad refers to the depressive's negative view of:
    a. self
    b. world
    c. future
2. Schemas are the relatively stable cognitive patterns or interpretations of situations which individuals develop. These schemas structure our experiences and determine how we respond.
3. Cognitive errors are systematic mistakes in thinking that maintain negative beliefs in spite of strong contradictory evidence.

Oakley & Padesky (1990) summarize the treatment portion of Beck's cognitive therapy as follows:

1. Teach clients to see the connection between thoughts and feelings.

2. Teach clients to critically appraise thoughts.

3. Teach clients to change inaccurate beliefs and develop more accurate ones.

4. Teach clients to do all of the above independent of the therapist (p. 16).

Cognitive therapy includes far more than direct cognitive restructuring techniques, however. The cognitive therapist is free to choose from a variety of behavioral techniques as well. Beck et al. (1979) state that while cognitive therapists work within the cognitive theory, they may use cognitive, behavioral, or abreactive techniques to effect cognitive change. Interestingly, since cognitions are often considered "learned covert behavior" by contemporary behaviorists, CT is often included in the "behavior therapies" as well (Antonuccio et al., 1989). While Beck has never used the term cognitive behavior therapy to describe his treatment, Murphy (1989) points out: CT is firmly rooted in the behaviorist tradition, and the

behavioral dimension is every bit as important as the cognitive" (p. 263).

TREATMENT EFFICACY OF COGNITIVE THERAPY

Dobson (1989) conducted a meta-analysis of the efficacy of Beck's cognitive therapy for depression. He reviewed all studies from January 1976 to December 1987. In order to assess the comparative effectiveness of Beck's particular approach, Dobson required that the studies particularly reference Beck's work, focus on depression as the treatment target, and utilize the Beck Depression Inventory as an outcome measure. Dobson concluded from his analysis that cognitive therapy was more effective than waiting list or no-treatment controls, pharmacotherapy, behavior therapy, and other psychotherapies in the treatment of depression.

Murphy (1989), an M.D., Professor of Psychiatry, and Director of an outpatient psychiatric clinic, commented, "A growing number of reports show CT to be as effective as antidepressant medication in depressed outpatients. Where longer-term benefits have been examined, CT effects seem durable. To date, there have been no negative findings regarding CT in this condition" (p. 282).

Antonnucio et al. (1989) state that Beck's CT and the attributional reformulation of the learned helplessness model appear to have the most empirical support among

cognitive models of depression.

Studies:

Rush, Beck, Kovacs, and Hollon's (1977) study comparing Beck's CT to pharmacotherapy appears to be the first study showing psychotherapy to be more effective than drugs in the treatment of depression. While the study has its detractors, Rush, an M.D. and psychopharmacologist, designed the study. At the end of 12 weeks, as measured by the Beck Depression Inventory, 85% of those treated with CT had markedly improved. Only a third of those treated with tricyclic antidepressant (TCA) medication improved to the same criterion. Also of note was that over a third of the pharmacotherapy subjects dropped out of treatment, while only about 5% of the CT group dropped out.

Blackburn, Bishop, Glen, Whalley, & Christie (1981) studied the effects of CT alone, TCA alone, and CT & TCA in combination for their effects on depression. There was a highly significant treatment effect in all three conditions, but no significant differences in outcome, and no additive effect seen for the combination treatment.

Murphy, Simons, Wetzel, & Lustman (1984) replicated the Rush et al. (1977) study, and also used two additional treatment conditions. In addition to a CT condition and a TCA condition, a combination of CT and TCA, and a combination of CT and a pill placebo were used. Patients in

all four treatment groups improved, but there was no significant difference in outcome between any of the four groups. However, a higher percentage of patients improved on both combination treatments, and CT and TCA results were close to identical.

Beck, Hollon, Young, Bedrosian, & Budenz (1985) compared CT alone with a combination of CT and TCA. 71% of the CT group improved to criterion, while only 36% of the combination CT & TCA group registered the same reduced level of depression. Differences were not statistically significant, however.

Teasdale, Fennel, Hibbert, and Amies (1984) studied the addition of CT to "treatment as usual" by general practitioners in England, and found the combination treatment to produce significantly more improvement. "Treatment as usual" included antidepressant medication in two-thirds of the cases.

Elkin et al. (1989) recently reported results from the National Institute of Mental Health Treatment of Depression Collaborative Research Program in the United States. 250 patients were randomly assigned to four 16-week treatment conditions: cognitive behavior therapy (as described by Beck), interpersonal psychotherapy, imipramine hydrochloride (antidepressant medication) plus clinical management, and placebo plus clinical management. Patients in all

treatments showed significant reduction in depressive symptoms and improved functioning. The primary analyses showed no evidence of greater effectiveness of one of the psychotherapies over the other, and no evidence that either of the psychotherapies was significantly less effective than the standard reference treatment, imipramine plus clinical management. While this major study raises many issues, drug therapy was not found to be superior to CT.

Conclusions:

In summary, based on the evidence to date, cognitive therapy has been shown to be equal or superior to pharmacotherapy in the treatment of mild to moderate depression, but not severe depression. Therefore, the intern's investigation into the more effective utilization of this therapy, and his application of these methods with clinically depressed patients, seemed a worthwhile endeavor.

DURABILITY OF TREATMENT

Studies:

Rush et al. (1977) report that 68% of the pharmacotherapy group in their study re-entered treatment, while only 16% of the CT patients did so. Kovacs, Rush, Beck, & Hollon (1981) reported results of a one-year follow-up of the patients in the Rush et al. (1977) study, finding significantly lower Beck Depression Inventory (BDI) scores

in patients treated with CT, as compared to those receiving TCA.

Simons, Murphy, Levine, & Wetzel (1986) re-examined the Rush et al. (1977) data, and imposed a lower BDI score as a criterion for wellness. Using this new criterion, four of the six patients who had TCA alone, and who had been judged "well" at termination, were considered to have relapsed. None of the seven with CT alone, and none of the seven with CT plus placebo relapsed. One of six who received CT plus TCA relapsed. Only 1 of 20 patients who received CT as part of their treatment relapsed, when the data were examined using this more stringent criterion.

Blackburn, Eunson, & Bishop (1986) reported a two-year follow-up of the Blackburn et al. (1981) study. They found that more than three-fourths of the responders to TCA sought further treatment or experienced a recurrence of depression. Less than one-fourth of those receiving CT or CT plus TCA relapsed.

In a further analysis of his results, Murphy et al. (1984) compared groups receiving TCA versus no TCA, and those receiving CT versus no CT. He found that 71% of CT treated patients had retained their gains versus 33% of those treated with TCA alone.

Conclusions:

In conclusion, while one cannot yet state categorically

that the effects of CT are always long-lasting, and that CT's effects are invariably more durable than TCA, evidence does seem to be accumulating in that direction. As suggested by Beck et al. (1979), effective psychotherapy might be more beneficial to the patient in the long run than chemotherapy. What the patient learns in psychotherapy may be applied to help the individual better prevent, abort, or cope with potentially depressing situations in the future. Long term reliance on drugs may result in the patient not exercising and developing his/her own coping skills to the same degree, with the ultimate result being a higher rate of relapse.

MATCHED TREATMENT OF DEPRESSION

Beck's cognitive therapy (CT), as discussed earlier, has been shown to be effective in the treatment of depression. However, it has not been shown to be effective for all depressives.

To further confound the situation, practitioners accepting Beck's theory are not limited to cognitive restructuring techniques, but may utilize a wide variety of techniques, including cognitive, behavioral, and abreactive (Beck et al., 1979). For example, some patients may not require cognitive restructuring, but may require relaxation training, assertiveness training, or other treatment

methods. Beck (1976) himself has discussed the fact that particular techniques sometimes seem to help depression, and at other times seem to make the depression worse. He added, "In the course of time, I found that tailoring a technique to selected characteristics of the depression syndrome as well as to the personality of the patient was far more effective than the previous approaches (Beck, 1976, pp. 263-264).

The nosological distinctions applied to depression listed in an earlier section, which are not exhaustive, are supportive of the notion that depression is, at the very least, heterogeneous in many respects. While this should come as no surprise, insofar as individuals and their experiences differ markedly, the clinician is still faced with the problem of how to treat each depressed individual in the most effective manner.

Craighead (1980) and Liberman (1981) have suggested utilizing a "polydimensional" model of depression as an appropriate way to seek out these answers that clinicians treating depressives want: namely, what specific treatments are most effective for what specific individuals. The model focuses on individual differences in depressed patients. In addition to assessing depression, specific problematic response classes are identified. Treatments are then targeted to these problematic response classes, and

therapeutic change is measured in these response classes specifically, as well as changes in global depression. This procedure is, in effect, an investigation of the effectiveness of treatment matching for depressed individuals.

Studies:

Only a few studies have addressed the usefulness of treatment matching for depressives. Zeiss, Lewinsohn, & Munoz (1979) randomly assigned depressed outpatients to treatments focusing on either interpersonal skills, cognitions, or pleasant events. All treatment modalities significantly alleviated depression, but no treatment showed a treatment-specific effect on the targeted variables. Patients improved in most areas assessed, regardless of whether their treatment had addressed that particular aspect of behavior. Zeiss et al. (1979) did suggest, however, that their results might have been different had they assigned patients to treatment based on pre-assessment, rather than randomly. They noted that the random process had definitely mismatched some of their patients, and suggested that further research into the potential effectiveness of careful patient-treatment matching was needed.

McKnight et al.(1984) compared the effectiveness of depression treatments that were deliberately matched and deliberately mismatched to the assessments of nine depressed

women. Three of the women had problems with social skills. Three had problems with irrational cognitions, and three had problems in both areas. In a multiple baseline design, all subjects received four sessions of social skills training, and four sessions of cognitive therapy, which included cognitive restructuring, thought-stopping, and related techniques. Those individuals deficient in social skills improved more in both social skills and depression after receiving the matched treatment of social skills training, than when they received the unrelated treatment of cognitive therapy. Subjects with assessed problems in irrational cognitions improved more in cognitions and depression after the matched treatment of cognitive therapy, than they did after receiving the mismatched treatment of social skills training. Subjects with problems in both areas improved with regard to their depression and both social skills and irrational cognitions after having received the corresponding treatments. This study seemed to support the notion that matched treatment is more effective than mismatched treatment.

Rude (1986) recruited depressed females from the San Francisco Bay area through newspaper ads and articles. After screening out approximately 75% of the applicants through written measures, she randomly assigned 16 to a waiting-list control. The remaining 32 subjects were

randomly assigned to 1 of 8 treatment groups (4 subjects in each group). Pre-treatment levels of assertiveness and self-control were assessed in all subjects, and each of the 8 groups received treatment in both assertiveness and cognitive self-control. The order in which each of the two treatments was administered in each of the eight groups was determined randomly. Groups met twice weekly for 90 minute sessions over six weeks, with five 90-minute sessions devoted to each of the two treatments. Measurements were taken after each treatment, and compared to pretest measures. The results, which were reported in terms of statistical group comparisons, showed that reductions in depression were greater for those treated than those not treated. However, neither cognitive nor assertive skill level significantly predicted response to the treatments, and effects of treatments were not specific to targeted skills. In this study, matched treatment was <u>not</u> shown to be more effective in alleviating depression than mismatched treatment.

Heiby (1986), a university professor, reported on her treatment of four depressed females in her part-time private practice. Two were assessed as adequate in self-control but deficient in social skills, and two were deficient in self-control but adequate in social skills. She utilized a treatment crossover design, offering both social skills and

self-control training to each patient in a counterbalanced manner during six months of treatment. In line with Kazdin's (1980) suggestions for enhancing the value of case study research, Heiby (1986) utilized several psychometrically sound objective measures, repeated her measures once a month, utilized subjects who were chronically depressed, replicated the procedure four times (once for each patient), and looked for evidence of change soon after the implementation of treatment. She also regularly collected treatment satisfaction ratings from each subject at each session, in order to further reduce bias. While Heiby (1986) acknowledges the limitations of her study, her results illustrate dramatically that matched treatment was far more effective than mismatched treatment in alleviating both depression and the particular skills deficit. Of particular note, her inspection of the changes over time for each individual indicated that matched treatment led to a more immediate decline in level of depression than did mismatched treatment. The importance of this point cannot be overemphasized, as it points to a phenomenon which may have been overlooked by traditional statistical measures and end-of-treatment comparisons. Her work suggests that matched treatment may indeed provide faster relief than mismatched treatment, even if mismatched treatment is eventually effective.

Rehm, Kazlow, & Rabin (1987) treated 104 female depressives in 21 therapy groups for 10 weekly 1 1/2 hour sessions. Three separate versions of a self-control therapy program for depression were used. Seven groups were treated in a program with a behavioral target focused on activity levels. Another seven groups had a cognitive target, focusing on cognitive self-statements. The remaining seven groups had a combined focus encompassing the first two targets. After statistically analyzing the results, the investigators concluded that "despite the differences between the targets of therapy efforts, there were no significant differences on measures of target behaviors [and that] there was no evidence of a straightforward differential outcome as a function of the initial status on the event schedules" (p. 66). They reported that each of the 3 types of groups improved with statistical parity on both self-report and clinician ratings of depression, and that the reduction in depression levels was highly significant. They also reported that "all conditions improved equally on measures of both behavioral and cognitive target variables, and initial level on these variables was not related to outcome" (p. 60). While this study may be seen as further evidence that matched treatment is not more effective than mismatched treatment, no individual results were reported. Conclusions were based on

statistical comparisons between groups, and there were no measures taken in between the pre-post measures. The authors state, "The mean levels and distributions of posttest scores indicated that the programs ameliorated depression for a large majority of the participants" (p. 65). As has been previously discussed, group data and statistical decision making may not sufficiently inform the practicing clinician so as to assist him/her in clinical treatment decisions. This study, while extensive, does not answer the question of whether individual patient-treatment matching by clinicians is a worthwhile endeavor.

Nelson-Gray et al. (1989) conducted a recent study specifically to determine the relative efficacy of matched, mismatched, and package treatments of depression. Following the suggestion of Zeiss et al. (1979), subjects were deliberately matched or mismatched to treatment, rather than randomly assigned. A between subjects design was utilized in order to attempt to evaluate differential treatment effectiveness. This was an attempt to improve on the McKnight et al. (1984) study where all subjects received both the matched and mismatched treatment. In this study, each subject received only matched, mismatched, or a package treatment. The study's aims were to determine: 1) if matched treatment is more effective than mismatched treatment in alleviating depression, 2) if a package

treatment is superior or equal to matched treatment in alleviating depression, 3) if a package treatment is superior to mismatched treatment in alleviating depression, and 4) if specific treatments have a greater effect on their logically-related response classes (e.g., if cognitive treatment produces greater improvement in cognitive measures than does social skills training).

Nine depressed women were assigned either matched, mismatched or package treatment, with three subjects in each treatment condition. Treatments delivered consisted of social skills treatment, pleasant events treatment, cognitive treatment, and a package treatment which was a combination of the above three. The subjects met with one of three therapists for eight hour-long sessions. The Beck Depression Inventory and an adjective checklist were completed by each subject weekly, and at 3-month and 1-year follow-up. Other instruments were also administered pre and post treatment to further assess level of depression, and to assess social skills levels, pleasant events difficulties, and irrational cognitions.

In analyzing their results, Nelson-Gray et al. (1989) concluded that their study had strengthened the hypothesis that matched treatment <u>is</u> effective in alleviating depression, <u>but</u> they further concluded that package treatment is even <u>more</u> effective. Additionally, even though

treatment matching produced a greater change in BDI measures of depression than treatment mismatching, the authors state that the logically-related response classes were not differentially affected by matched treatment (e.g., subjects treated with cognitive therapy alone, or as part of the package, did not show greater improvement in irrational cognitions than those who had not received cognitive therapy).

In this case, the package treatment was designed to utilize the same amount of treatment time as focused treatments, rather than cycling the patient through a successive number of specific focused treatments. The authors argue that this type of package treatment may be more efficient than matched treatments, as pre-matching assessment to determine the appropriate treatment may be unnecessary. In addition to their conclusion that package treatment was superior to matched treatment, they noted that in their study, and in McKnight et al. (1984), about half of the subjects screened for inclusion in the studies either had problems in none of the response classes assessed, or were deficient in all the response classes tested, making treatment matching under their protocol impossible.

Nelson-Gray et al. (1989) do suggest caution in the interpretation of their study, and cite the need for further research. The intern also feels a number of additional

comments regarding this study are of note: The study included only nine depressives. They were all females, as have been the subjects in many other studies in this area. The nine subjects are the survivors of a screening process which drew an initial 112 responses to a newspaper ad. In the matched treatment group, 2 of the 3 subjects showed deficits in 2 of the targeted response classes, but were only treated with 1 matched treatment. The third individual in the matched group received matched treatment, but no data was available for her at the one year follow-up. All three of those in the package treatment group were reported as depression-free at the one-year follow-up; however one of the three was taking antidepressant medication at the time of that follow-up. While the senior author of this study is a very well-known and respected contributor in this field, and has made this detail available in the report, the intern's point is that he agrees that additional study in this area is needed.

Conclusions:

The extensive screening (exclusion) of subjects which seems to be conducted in the majority of studies reviewed is far removed from the clinical realities faced by a psychologist meeting with a depressed individual seeking help. Studies which rely on group data, means and statistical formulas seem to lose sight of what is happening

with individual patients. As has been discussed thoroughly at an earlier point in this paper, clinicians need to make clinical decisions pertaining to specific individuals. It is not surprising that they may find little value in published research that is too far-removed from their everyday circumstances.

In summary, questions about the efficacy and desirability of matched treatment for depression are still unanswered. Since depression continues to be a major psychological problem, focused, reality-based investigations into what treatments work best for whom would seem to be of considerable importance. The intern's study, within the confines of a brief internship period, will explore this issue further.

Chapter 4

CASE STUDY RESEARCH ON THE EFFECTIVENESS OF TREATMENT MATCHING FOR DEPRESSED PATIENTS

The research component of the internship was designed to combine the further enhancement of the intern's clinical skills with an investigation into the efficacy of cognitive-behavioral treatment matching with depressed patients.

DEPRESSION

Depression has been referred to as the "common cold" of emotional disorders. Depression affects approximately 50% of the adult population (Gallant & Simpson, 1976) and accounts for up to 75% of all psychiatric admissions (Secunda, Katz, Friedman, & Schuyler, 1973). Seligman (1990) reports a virtual epidemic of depression, with young people today ten times more likely to develop depression than were their grandparents. Klerman (1987) talks of a new "age of melancholia", generated by a relative gap between rising hopes and the actual fulfilment of expectations, and manifested by increased depression and suicide attempts. It is estimated that 20% to 55% of all adults will experience unipolar depression (Antonuccio et al., 1989), and that up to 20% of the adult population is experiencing some depressive symptoms at any given time (Oliver & Simmons, 1985). No one knows how many additional depressives are

suffering on their own, not having sought treatment. Lehmann (1971) estimated that only one in five depressed persons seeks treatment, and that only one in 50 is hospitalized.

At its extreme, depression can lead to suicide, as hopelessness overwhelms the individual. In fact, 15% of depressives commit suicide (Kaplan & Sadock, 1991). Individuals who have not as yet elected this ultimate solution to their difficulties live lives commonly filled with unhappiness, despair and despondency. Their troubles do not stop at the boundaries of their person. Their families and friends are affected deeply, and often feel helpless themselves as their attempts to create a brighter outlook fail.

The sheer magnitude of the human suffering caused by this disorder makes research into alleviating this pain an endeavor worthy of sincere professional effort.

Further, the patient deserves relief from his/her symptoms as quickly and efficiently as is therapeutically possible. Finding more efficient and effective means of treating depression is both humane and prudent in an era of increasingly strained mental health resources.

CURRENT TREATMENTS

Pharmacotherapy: The primary treatment typically prescribed for patients suffering from clinical depression is pharmacotherapy. Unfortunately, 30-40% of depressives do not respond to standard antidepressant treatment (Kaplan & Sadock, 1991). Of those who do respond, there is serious doubt as to whether active medication produces effects which last beyond treatment cessation (Hollon & Beck, 1979).

Psychological treatments: One of the most successful psychological treatments for depression is cognitive therapy (CT). In a landmark study with severe depressives (Rush et al., 1977), cognitive therapy was shown to be significantly more effective than pharmacotherapy in decreasing depressive symptomatology, and in maintaining these results over time.

Cognitive therapy theorizes that affective responses are determined by the way individuals perceive their experiences, and that modification of the distorted perceptions a person holds about himself or herself, the present, and the future, is the key to alleviating symptoms of depression (eg, Beck, 1967; Beck et al., 1979).

Utilizing both verbal and behavioral techniques, cognitive therapists assist the patient to see the connections between cognition, affect, and behavior. Dysfunctional cognitions are recognized, disputed, and

replaced with more realistic thoughts. Homework assignments play an integral part in patient learning and application of cognitive therapy techniques.

Another popular approach to the treatment of depression has been "package treatments." The idea was that the more components included in a treatment program, the more effective the treatment might be. It made sense that if you delivered a wide array of treatments to each and every patient, the possibility of striking the correct combination of treatments for the individual patient would be greatly enhanced. Liberman (1981) stated, "One option for taking into account individual differences is to construct a comprehensive therapeutic package that incorporates key interventions aimed at remediating most problem areas" (p. 231). In practice, however, this approach risks being neither humane nor efficient. Patients can be exposed to treatments they do not need, while they wait for delivery of treatments they do need. Resources may be squandered, and patient relief is often delayed, while each and every patient receives each and every treatment. The delivery of unneeded treatments to depressed patients may not only delay recovery, but may even exacerbate their conditions (Persons, 1989). From the humanitarian, ethical, and economic perspectives, what is required is an application of the appropriate treatment which suits the particular

patient's needs.

While the cognitive restructuring technique used in cognitive therapy has been successful, some patients may not require intensive work in this area. Some patients may require other intervention components, such as anxiety management and assertive training, either in place of, or in addition, to cognitive restructuring.

Therefore, it would be important to assess several potential intervention components before prescribing treatment. In other words, each depressed patient should be thoroughly assessed to determine the required treatment. This approach to treatment is known as treatment matching.

The research component of the internship is a replication of the Williams et al. (1986) and Lake (1981) studies, with clinically depressed individuals. The study is also extended to include outcome measures, which were not provided by Williams et al. (1986). The study is limited to single case study discussions, however, due to time limitations of the internship, the limited availability of clinically depressed subjects during the time required, the impossibility of totally standardizing treatment delivery times due to variable patient needs, differences of intake times, and variable patient progress.

HYPOTHESES

1. Each patient treated will show a positive response to the "best fit" treatment.

2. Each subject will show a similar magnitude of response, as all patients will be prescribed matched treatment.

METHOD

Subjects: Five subjects were chosen from the inpatient and outpatient population of the Waterford Hospital according to the following criteria:

a. Each patient included in the study was diagnosed with unipolar depression by a referring medical doctor or psychiatrist.

b. Each patient in the study was screened for other psychopathology by the referring medical doctor or psychiatrist, and by the intern's field supervisor. Patients with other psychopathology were not included in the study.

c. In consultation with the field supervisor, it was determined that the research was part of the regular treatment of the subjects. The field supervisor presented the research proposal to the hospital Research Committee who approved it. Each subject participated in every aspect of the research freely and willingly.

Measures: Five separate self-report measures were utilized as assessment and outcome measures:

Beck Depression Inventory (a measure of clinical depression)

Beck Hopelessness Scale (a measure of suicidal ideation)

State-Trait Anxiety Inventory (a measure of trait and situational anxiety)

Assertion Questionnaire (measures assertiveness in terms of comfort and frequency)

Dysfunctional Attitude Scale (a measure of dysfunctional thinking or beliefs)

PROCEDURE

Idiographic profile: An idiographic profile was compiled for each subject. This profile consisted of the scores obtained on each of the above five instruments, and indicated the patient's strengths/weaknesses in the assessed areas.

Treatment matching: Cutoff scores were established for

each of the five instruments. Scores above criteria served as indicators that treatment designed to alleviate symptoms in this modality were warranted. Scores below cutoff level counterindicated treatment in the response class measured by the instrument.

The idiographic profile served as the basis for selection of the treatment(s) which best fit the patient's symptoms. In the event that more than one modality was indicated, treatment began with the component judged to be the most needy for the individual; for example, if a depressed patient was preoccupied with suicide, the initial component would consist of cognitive therapy.

Duration of treatment: An attempt was made to follow the short-term psychotherapy model, usually consisting of 10-12, one hour, individual treatment sessions, with homework assigned to the patient as warranted by the selected treatment modalities. Usually, these treatments consist of one session per week. Due to circumstances totally beyond the intern's control, this standardization was not possible to implement exactly as planned.

Outcome measures: There were two sets of outcome measures:

a. At the end of 10 - 12 sessions, the same five self-report instruments were planned to be readministered to each patient, and the pre - post scores compared. Reassessment

was possible after approximately ten sessions in three cases, upon patient termination after fewer sessions in one case, and was not possible for the fifth case.

b. As well, both patient and intern informal subjective evaluations of therapy will be reported in the individual case discussions to follow.

THE INSTRUMENTS: NATURE AND APPLICATION TO THE STUDY

Beck Depression Inventory (BDI)

The intern utilized the revised version of the BDI (Beck et al., 1979) in this study. The revised version replaces the original BDI (Beck, Ward, Mendelson, Mock, and Erbaugh, 1961), and consists of 21 self-report items designed to assess the severity of depression. It is a very widely known and accepted instrument, used both with psychiatric patients (Piotrowski, Sherry, and Keller, 1985) and with normal populations (Steer, Beck, & Garrison, 1985). It is considered a standard in its class, and is almost always used when self-report instruments are utilized in assessing depression (Rabkin & Klein, 1987).

The examiner directs the patient to choose one statement, in each of 21 groups of statements, that best represents the way he/she has been feeling for the past week. Upon completion, the questionnaire is scored, resulting in a numerical total between 0 and 63. The higher

the score, the greater is the depression.

The intern followed the general guidelines distributed by the Center for Cognitive Therapy of the University of Pennsylvania Medical School for cut-off scores, as stated in the BDI manual (Beck & Steer, 1987):

TABLE 4.1

BDI SCORE INTERPRETATION

SCORE	INTENSITY OF DEPRESSION
0-9	normal/asymptomatic
10-18	mild-moderate
19-29	moderate-severe
30-63	extremely severe

BECK HOPELESSNESS SCALE (BHS)

This 20-item true-false questionnaire assesses negative attitudes about the future, as perceived by the respondents. Originally developed by Aaron T. Beck and his colleagues (Beck, Weissman, Lester, & Trexler, 1974) at the Center for Cognitive Therapy at the University of Pennsylvania Medical School, Department of Psychiatry, the BHS is now widely used as an indirect indicator of suicidal risk in both psychiatric and normal populations (Beck & Steer, 1988).

In assessing the degree of negative expectancy about the immediate and long-range future, the instrument provides

information about the respondent's cognitive schemas which represent their hopelessness/hopefulness. Hopelessness is a critical cognitive factor mediating the relationship between depression and suicidality (Beck & Epstein, 1982), and the BHS has been found to be a sensitive measure of treatment outcome with depressed patients treated with cognitive therapy or antidepressant medication. (Rush, Beck, Kovacs, Weissenburger, & Hollon, 1982). Hopelessness has been shown to be a better predictor of suicidal intention than depression alone (Beck, 1986).

In the present study, assessing hopelessness provides valuable information about patient cognitive schemas, which may need to be addressed in cognitive therapy.

The intern used the guidelines of the Center for Cognitive Therapy , University of Pennsylvania Medical School, as stated in the BHS manual (Beck & Steer, 1988) for interpreting the results of the BHS:

TABLE 4.2

BHS SCORE INTERPRETATION

SCORE	HOPELESSNESS
0-3	normal/asymptomatic
4-8	mild
9-14	moderate
14-20	severe

STATE-TRAIT ANXIETY INVENTORY (FORM Y) (STAI)

This inventory, also called the "Self-Evaluation Questionnaire" (Speilberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983), measures two distinct types of anxiety: state anxiety and trait anxiety. State anxiety is considered to be a transitory phenomenon, a reaction to current stressors, and a reflection of worry, apprehension, tension, and nervousness. Trait anxiety is considered to be a more stable measure of individual anxiety-proneness, a tendency to perceive situations as dangerous, and react with higher levels of state anxiety.

The inventory is self-administered, and consists of 40 stimulus items, 20 for state anxiety, and 20 for trait anxiety. Each item presents the individual with 4 choices from which to choose, reflecting the intensity of how he/she feels "right now, at this moment," (state anxiety) or how he/she "generally" feels (trait anxiety).

The STAI has been used extensively in research and clinical practice, has been adapted in more than thirty languages, and by 1983, had already been used in over 2,000 studies (Speilberger et al., 1983).

For the purposes of this research, the intern utilized the norms in the STAI manual, converting the obtained raw scores into percentile ranks. It should be noted that the

method of converting raw scores to percentile ranks used in the STAI includes a 100th percentile, which includes all the raw scores above a certain level. Thus, it is possible to score at the 100th percentile on the STAI, achieve a raw score reduction on retest, and yet still be considered to be at the 100th percentile.

Subjects scoring in the top third of either state or trait anxiety percentile ranks were considered in need of treatment for anxiety.

Relaxation training was the designated treatment for individuals scoring above the cut-off criteria. The intern utilized a modified version of progressive muscle relaxation (Jacobson, 1938) taught him by his field supervisor, Dr. Alladin, when anxiety management techniques were indicated.

ASSERTION QUESTIONNAIRE (AQ)

Lack of assertiveness has been considered to be associated with depression for quite some time (Lazarus, 1968; Wolpe, 1971), and assertion tests are often given to depressed individuals (Lewinsohn & Rohde, 1987). Generally, depressed individuals are "less active, smile less, maintain less eye contact, report more discomfort in social interactions, and rate themselves as less socially skillfu Lewinsohn & Rohde, 1987, p. 252). It is hypothes. t cognitive and behavioral changes noted in

depressed individuals may be due in part to low rates of positive reinforcement from social interactions (Tapper, 1978). If this is the case for any given individual, then assertiveness training might ultimately increase social interactions and social reinforcement, thereby alleviating some depressive symptoms.

The Assertion Questionnaire, developed by Lewinsohn (1975) to measure assertiveness, assesses both frequency of social interactions and the subjective comfort level of individuals in social situations. Subjects rate both their "frequency" and "comfort level" on individual scales, in response to 42 stimulus items. Lewinsohn (1975) suggests that normal scores for Comfort are 102-137, and 61-81 for Frequency. Lower scores may indicate social anxiety and the need for assertiveness training. If indicated, the intern relied upon the cognitive-behavioral assertion training approach of Lange & Jakubowski (1976).

DYSFUNCTIONAL ATTITUDE SCALE (DAS)

This 35-item scale is an adaptation by Burns (1980) of a scale developed by his colleague, Dr. Arlene Weissman (1979). It is designed to measure the silent assumptions, or self-defeating attitudes and beliefs that predispose individuals to emotional disorders.

Subjects are asked to rate each of the 35 items by

putting a check mark in one of 5 locations along an "agree strongly " to "disagree very much" continuum. In each case, he/she is asked to indicate, through this marking, how he/she thinks most of the time.

The 35 response items are grouped into 7 basic attitudes: Approval, Love, Achievement, Perfectionism, Entitlement, Omnipotence, & Autonomy. Scoring provides a representative position for each attitude along a -10 to +10 continuum. The higher the score in the category, the greater the psychological strength; the lower the score, the more emotional vulnerability in that area. Scores above zero are strengths, while those below zero are vulnerabilities. Total scores may range from -70 (highly dysfunctional thinking) to +70 (highly functional thinking).

Use of this instrument in the study provided information on the patient's characteristic ways of thinking. If dysfunctional thinking was shown to be present, the intern could then address this issue with the patient in therapy through cognitive restructuring.

TREATMENT TECHNIQUES: NATURE AND APPLICATION TO THE STUDY

The treatment techniques used by the intern in treating the patients in the study were:

1. Attention Switching

This technique was employed to immediately address

a patient's stated difficulty of being unable to rid himself/herself of persistent bothersome thoughts. These thoughts can be quite disruptive to normal functioning, and often lead to strong affect and behavior problems.

The attention switching technique aims to help the patient break the ruminative cycle of dysfunctional thoughts and images, by teaching him/her how to "switch off" distressing thoughts, and replace them with pleasant thoughts.

The process involves:

a. Teaching the patient the difference between thoughts which are just "passing by" and rumination.

b. Creating a list of 10 specific, pleasant experiences which the patient has had.

c. Directing the patient to practice switching from one thought to the next while relaxed, with eyes closed. Each thought/image is held for 20 seconds. Then the eyes are opened, the individual "switches" to the next pleasant thought, and closes his/her eyes again. The patient is advised to practice this task 4 or 5 times daily.

d. Anytime that undesirable thoughts intrude on a patient and persist, he/she is advised to "switch" to one of the pleasant thoughts.

2. Relaxation Training

In this study, the intern used a modified form of progressive muscle relaxation, which focused on relaxing individual parts of the body in turn, without tensing these muscles beforehand.

The procedure was as follows:

a. Seat the patient in a recliner in a quiet spot.

b. Ask the patient to close his/her eyes, and breathe easily at their own comfortable pace.

c. Tell the patient not to try to do anything, or to think anything, just to let go. Patients are told that they will be aware of their thoughts, and of any noises, but to just let them pass on through their minds.

d. Progressive muscle relaxation, in which the patient is directed to focus on each area of his/her body, and to let those muscles go

"limp, loose, and slack" is then guided in the following order:

1. Face
2. Forehead
3. Neck
4. Shoulders
5. Arms - upper and lower
6. Buttocks
7. Legs - upper and lower
8. Ankles
9. Chest
10. Stomach
11. Abdomen

Throughout the muscle relaxation phase, some comforting suggestions of feeling relaxed, breathing easily, and feeling peaceful are inserted.

e. When all the muscles on the list have been covered, the patient is asked to just continue to relax and enjoy the peaceful feeling for a few minutes.

f. The patient is advised to open his/her eyes at

the count of 7, feeling wide-awake, not tired, and relaxed.

3. Cognitive Restructuring

The intern followed the procedures of Cognitive Therapy as outlined by Beck (Beck et al., 1979), modified and supplemented with material from Ellis (1962), and Burns (1980). This approach was taught to the intern by his field supervisor, who has utilized this particular formulation of cognitive therapy for many years with much success.

The procedure begins with a demonstration to the patient that perception, or thoughts about events, greatly influence subsequent emotions. The discussion between patient and therapist uses a number of practical examples designed to teach this relationship between thoughts and feelings to the patient.

The ABC model from Rational Emotive Therapy (RET) (Ellis, 1962) is then used to demonstrate this connection. A is the antecedent event which precedes the thinking about the event. B is the thinking itself. C is the consequence, which may be affective, behavioral, or both. Many patients believe that events (A) cause feelings (C) directly, and fail to recognize the importance of their own idiosyncratic interpretations (B) in determining their personal emotional and behavioral responses.

It is explained to the patient that these individual thinking patterns are learned, and that they become so automatic that they are usually unnoticed. Since these thinking patterns and beliefs are learned, however, they can be changed. Maladaptive thinking and beliefs, which lead to dysfunctional emotions and behaviors, can be altered by replacing these beliefs with more rational thinking.

In order for the patients to change these beliefs, they must be aware of what these beliefs are. To this end, patients are assigned CAB sheets (see Appendix A) to complete as written homework. The ABC format is changed to CAB for this exercise, as it is usually easier for patients to proceed in this manner:

(C) How am I <u>feeling</u>?

(A) What just happened? (<u>event</u>)

(B) What was I <u>thinking</u>?

Through this exercise, and subsequent discussion with the therapist, patients come to see the link between thoughts and feelings. In addition, patients are asked to rate both the thinking and emotions they record on their CAB sheets in terms of "subjective units of discomfort" (SUDS).

This personal rating scale, suggested by Wolpe (1990), gives both patient and therapist a yardstick by which to

measure patient-perceived changes in the strength of these thoughts and feelings. Each recorded thought and feeling is scored from 0 to 100 by the respondent, with 0 = nonexistent and 100 = maximum.

When the patient seems to have grasped the relationship between thoughts and feelings, disputation is introduced. This key element in the therapy involves teaching the patient to dispute or challenge dysfunctional thoughts and beliefs, and replace them with more rational, functional thinking.

The RET Worksheet (see Appendices B & C) is used as a major tool in this portion of the therapy. In it, the "ABC" is extended to include "ABCDE." D is disputation, or challenging of recorded thoughts, while E records the perceived effect of this challenging. On this sheet, C invites recording of emotional, physiological, behavioral, and cognitive consequences. SUDS are elicited for B, C, D, and E.

The RET Worksheet is used in session, and is assigned as homework. The patient's difficulties are examined using this model, and through a combination of collaborative empiricism and modelling by the therapist, the patient learns to challenge his/her maladaptive beliefs, and replace them with more rational thinking.

During this process, the patient is "coached" in

disputation through feedback on homework, by working through examples in session, and by assigned readings. Sections of Feeling Good: The New Mood Therapy (Burns, 1980) are assigned to be read, and often purchase of the book (paperback) is recommended. In particular, Burns' list of cognitive distortions is discussed with the patients as "ammunition" for their personal disputation exercises.

The amount of time spent in each stage of this process varies from patient to patient, and is dependent upon patient progress and therapist judgement. A collaborative relationship is stressed throughout, with the therapist and patient working together as "scientists" to uncover and correct the patient's difficulties.

If the process is successful, the patient becomes able to identify the maladaptive thinking which produces maladaptive emotions and/or behavior. He/she then is able to challenge the validity of these beliefs, and replace them with more rational thoughts. This new, altered perception of events then results in changed emotions and/or behavior, which are more adaptive in nature.

INDIVIDUAL CASE DISCUSSIONS

Each patient will be identified by a single capital letter. Essential background data will be provided for each patient, but will not be so specific as to reveal his/her

identity.

This research was carried out as part of the regular clinical work of the Psychology Department at the Waterford Hospital, and as such, conformed with all relevant professional, departmental, and hospital procedures.

PATIENT R

Patient R was a male in his mid-thirties who had been admitted to the hospital with depression and suicidal ideation. He also had a long history of chronic alcoholism. The intern encountered him initially while conducting a screening interview for the Psychology Department. R was underemployed as a handyman, divorced, and had been living with his current girlfriend for some years. His girlfriend had been psychiatrically diagnosed, and was being maintained with medications.

The intern administered the five assessment instruments chosen for this research. Results indicated mild-moderate depression, mild hopelessness, normal assertiveness, mild cognitive dysfunction, and very high state and trait anxiety. R advised the intern that he was being discharged the day after this assessment was conducted, but that he wished to see the intern as an outpatient. R stated that staff wished him to stay another few days, but that he was anxious to leave. The intern later learned that this is not

atypical in alcohol-related admissions.

R reported that he had been drinking since age 7, and that he felt he had an underlying depression and low self-esteem. He had been previously treated at the Waterford, and at other area facilities, for many years. He had a recent period of one and one-half years of sobriety, but had been drinking again for the last 8-10 months. He reported that he felt alcoholism was responsible for his admission, but that his biggest problem was jealousy. He said that he was obsessed with jealous thoughts about his girlfriend.

Since R presented jealousy to the intern as his number one cause of concern, the intern gave this problem priority in treatment. He consulted a recent journal article on morbid jealousy (Tarrier, Beckett, Harwood, & Bishay, 1990) suggested by his field supervisor, Dr. Alladin, which discussed the application of cognitive therapy techniques to cases of jealousy. In consultation with his field supervisor, the intern designed a treatment package for R consisting of three elements, to be introduced in the following order:

1. Attention switching
2. Relaxation training
3. Cognitive restructuring

After an initial period of noncompliance, patient R

reported considerable success with "attention switching." He stated that he was quickly able to switch to thoughts and images of pleasant events on his list over 50% of the time. As an example of the personal adaptations which seem to occur in an atmosphere of collaborative empiricism, R started carrying his "list" in his shirt pocket, with the upper portion of the paper protruding out of the pocket. He reported that when he was bothered by thoughts of jealousy, he simply glanced down at his pocket, and seeing his list cued him into switching to thoughts of a pleasant event.

R was also started on relaxation training. After an in vivo session, the intern recorded a personalized relaxation tape for him, which he was instructed to listen to twice daily at home. At the same time, R started doing some informal cognitive restructuring on his own. R began to recognize, on his own, that some of his thinking was quite irrational, and to challenge it in session. While the intern had not formally introduced this aspect of R's treatment, he had alluded to it in discussing the rationale for treatment, the results of the pretests, and the cognitive model of emotional difficulties. He had also given R a copy of the journal article on premorbid jealousy to read.

Immediately following these rather positive events for both patient and intern, events took a turn for R. His

girlfriend had a psychiatric relapse, and was admitted to hospital. Soon thereafter, the intern received a phone call from R. He had been drinking for several days, and was in a very upset emotional state. A relative brought him to the Waterford, where the intern met him in the Outpatient Department and accompanied him through the admission procedure. He stayed overnight, and discharged himself the next day.

He had lost his job due to his drinking, and asked that the intern discuss his efforts at treatment with his employer, which the intern did. At the time scheduled for his next outpatient appointment, R phoned the intern to say that he had a number of outstanding legal judgements against him, including a conviction for driving while intoxicated. He stated that he was going to have to serve some time in jail for this and other convictions. He was unable to pay any fines, and thus would have to choose time in jail. He said he didn't know how long he would be in jail, and that he would call the intern upon his release. Prior to the end of the internship, R had not called, and there was no answer at his telephone number.

R had reported some success with attention switching, and seemed excited and pleased that it was working for him. In his in vivo relaxation session, he appeared to relax well, and stated that he did also. He started doing

cognitive restructuring on his own. It appeared to the intern that R was off to a good start in therapy. However, R's alcoholic relapse and his jail sentence interrupted, and effectively terminated, his therapy. His girlfriend's illness and the loss of his job also contributed to his difficulties.

It was impossible to administer any post tests to R. He was simply unavailable. While his time in therapy was limited, he did attend several sessions, and he reported some success with interventions he was learning in collaboration with the intern. It is hoped that this learning will be of help to R in the future as he struggles with a number of difficulties.

TABLE 4.3

PRE - POST RESULTS

PATIENT R

PRETEST		POSTTEST
14	Beck Depression Inventory	-
5	Beck Hopelessness Scale	-
54 (94%ile)	State Anxiety-STAI	-
57 (98%ile)	Trait Anxiety-STAI	-
77	Assertion - Frequency	-
115	Assertion - Comfort	-
-2	Dysfunctional Attitudes - Total	-
-2	Approval	-
-2	Love	-
+4	Achievement	-
+3	Perfectionism	-
-1	Entitlement	-
-6	Omnipotence	-
+2	Autonomy	-

NOTE: Patient R was given the pretests as an inpatient on the day prior to discharge. He was seen 4 times as an outpatient, prior to dropping out of treatment. Just prior to dropping out, he had a one-day admission to the hospital. During his admissions, R was treated with medication by unit staff. R reported taking no medications after discharge.

PATIENT P

P was a recently-divorced female in her early forties who was referred to the Cognitive Therapy for Depression Clinic by her family physician. She had a long history of chronic depression and chronic anxiety, and described herself as an alcoholic and drug addict as well. She had started coming off antidepressant medications after a number of years of steady usage, and was experiencing a broad array of withdrawal symptoms. Her sleep and appetite were poor. She stated that she felt lonely, rejected, paranoid, and angry.

P described her father as an alcoholic, and her mother as a drug addict. She expressed a strong need for approval, and said that she had been sad since early childhood. She had been prescribed many antianxiety and antidepressant medications over the years, and resented her treatment ("All I ever got from doctors was drugs."). She was unemployed, living on social assistance payments, and described herself as a failure.

On the plus side, P was motivated, had sought out treatment at the Psychology Department, and had great hopes for her future.

P's pretests suggested she was severely depressed, but only mildly hopeless. She scored very high on both state and trait anxiety. Assertiveness did not seem to be a

notable factor, but P's testing showed pervasive irrational thinking.

In consultation with his field supervisor, the intern started P on a treatment package consisting of 1) cognitive restructuring and 2) relaxation training.

P proved to be a very quick study in cognitive restructuring. She did a lot of writing in between sessions, and her homework was complete and very well done. She had read a number of self-help books, and had some familiarity with the basic rationale the intern was using. She was given one session of in vivo relaxation training, and the intern recorded a personalized audio tape for her to use in practicing relaxation techniques at home.

The time between P's sessions was irregular, as she reported many physical difficulties due to drug withdrawal, and sometimes cancelled scheduled appointments because she did not feel well. At the commencement of therapy, transportation to and from her apartment was provided to her, as she felt too unsteady to walk any distance, and could not afford a taxi on a regular basis.

Just prior to administration of the posttests, P advised the intern that she felt she had gotten everything out of her therapy that she had wanted, and that she now wished to concentrate her time and energies in other areas.

The posttests showed that P's depression had decreased

to the mild range and her hopelessness now registered asymptomatic. Her comfort level in being assertive had risen dramatically, and she also showed a marked increase in rational thinking. While there was some reduction in her anxiety levels, it was not nearly as striking as the results in other areas. It is noteworthy, however, that relaxation training was introduced only after a few sessions of cognitive restructuring. As well, P did not have a tape recorder with which to practice, and was trying to borrow one from time to time until she could buy her own.

In six sessions, P showed remarkable improvement. Not only did all of her test scores improve, but she also improved in gait, appearance, and demeanor. Her shuffling gait and reliance on the intern to steady her had been replaced with a springier step and a seemingly increased steadiness. Her rather flat affect had been replaced by a smile, and she seemed to be exuding a greater degree of self-confidence. By any measure, this woman had certainly improved over the course of therapy.

At termination, P advised the intern that she had now begun doing some extensive work in an Alcoholics Anonymous program, and planned to devote her time to working on this project.

TABLE 4.4

PRE - POST RESULTS

PATIENT P

PRETEST		POSTTEST
27	Beck Depression Inventory	12
6	Beck Hopelessness Scale	0
53 (91%ile)	State Anxiety-STAI	39 (71%ile)
64 (100%ile)	Trait Anxiety-STAI	42 (76%ile)
90	Assertion - Frequency	83
107	Assertion - Comfort	162
-34	Dysfunctional Attitudes - Total	+55
-5	Approval	+5
-8	Love	+7
-4	Achievement	+9
-4	Perfectionism	+10
-5	Entitlement	+5
-5	Omnipotence	+9
-3	Autonomy	+10

NOTE: Patient P was seen for 6 one-hour sessions, all as an outpatient. Time between sessions - 14 days, 2 days, 5 days, 7 days, 17 days. P reported taking no medications during her treatment sessions with the intern. She was, however, experiencing prescription drug withdrawal symptoms during this time period.

PATIENT I

I was a divorced male in his early 50's who was admitted to the Waterford Hospital with depression and suicidal ideation, after a relapse of alcoholism. He had left Newfoundland, and his family, over 20 years earlier and had gone to the mainland to work. He had been steadily employed in truck driving, factory, and warehouse work until early 1991, when he was laid off due to the economic recession. Unable to make ends meet in a major Canadian city, he decided to return to his home community in Newfoundland. His mother and some other members of his family still lived in the community, and the family owned a vacant house which he assumed would be his.

Things did not work out between I and his family. He lived on social assistance while waiting for his unemployment insurance, and tried to work on the house. He was cold and hungry. When the family told him he couldn't have the house he had counted on, he started drinking. Feeling depressed and suicidal, he called the RCMP, who took him to the area hospital. He was then transferred to the Waterford Hospital for treatment.

I had a long-standing drinking problem, and had been admitted to psychiatric wards several times on the mainland. He had been admitted to alcohol rehabilitation programs as well, and was quite knowledgeable of treatment for

alcoholism. He did not drink constantly, but had binges which were separated by long periods of abstinence. It appeared he had been "dry" for several years prior to this incident.

I was considered a "high risk" for suicide. He was in his 50's, single, alcoholic, and had almost no friends here. The intern first encountered him on an admissions unit in the hospital.

At pretest, I scored at the bottom boundary of the "extremely severely" depressed range, but was only mildly hopeless. He was highly anxious, and his thinking showed little in the way of psychological strengths. While his frequency of assertive interactions was slightly depressed, it seemed that he had not had much opportunity for these types of interactions recently due to his situation.

In consultation with his field supervisor, the intern started I on matched treatment consisting of 1) cognitive restructuring and 2) relaxation training. As he was an inpatient, and it was impossible to find a quiet spot on the ward, the intern instituted cognitive restructuring first. Initially, I found it a bit difficult to grasp the relationship between thoughts and feelings, but he was eager to learn, and didn't give up. He grasped the fundamentals, which were delivered in concentrated fashion in a few days on the ward. This turned out to be very fortuitous for I,

for his post-discharge plans fell apart, and unknown to the intern, he spent several days cold, hungry, and broke. He managed to get through this very trying time without drinking, however, and credited his success to what he had learned from the intern while in the hospital.

Over the following weeks, I encountered many frustrations with institutions in trying to get his tax refunds and unemployment insurance payments straightened out. He managed to handle all these problems in exemplary fashion, and reported that staff he dealt with complimented him on his demeanor. The boarding house he was living in was also not without problems, and he surmounted them all. Throughout his entire treatment period, I would often say, "It works!" and recount instances where he had been applying what he had learned. He purchased, read, and often referred to Burns' Feeling Good, giving the intern the impression that he found the book very valuable to him.

I was also given one session of relaxation training in vivo, and started listening twice daily to the personalized tape the intern recorded for him. He appeared to relax in vivo, and reported that the tape was effective when he used it at home.

I did a considerable amount of written homework, and eventually developed the habit of carrying a small notebook around with him to write in. He also began to write out his

thoughts and feelings in a more narrative manner, once he had mastered the ABCDEF format. In effect, he developed his own personal adaptation of cognitive restructuring, and found therapeutic value in examining his thoughts and putting them on paper. He became very involved in the techniques he was learning, and even "tested" himself by putting himself in a personally hazardous situation (a bar), letting his thoughts run, and then intervening with his "new knowledge." His conclusion -- "It works!"

At posttest, I was no longer depressed, scoring well within the asymptomatic range. His hopelessness remained mild, and there was a fair reduction in his anxiety. His assertion measures stayed about the same, again seeming to reflect lack of opportunity, for his expressed comfort level was normal at both testings. I's thinking was substantially improved, now solidly in the "psychological strengths" area in all categories.

The intern found it very gratifying working with this man. He worked hard, withstood some very significant stressors, was successful, and was proud of his accomplishments. He gave the intern a glimpse of what is possible, and it was a truly rewarding experience to observe this man's "glee" in handling his difficulties in a new, effective way.

I began to remark regularly about how good he felt, and

how much he was enjoying life. He sought work regularly, and while not successful at obtaining a job during the internship, he handled this fact with his new, "That's OK" attitude. He began to do volunteer work, and regularly shared his successful experiences at applying his new knowledge with the intern.

I's depression improved dramatically over the course of his therapy. He applied the new techniques he learned in his treatment, and now appears much better equipped to handle future difficulties. He changed from a rather dour, matter-of-fact individual to a vibrant, optimistic man with a realistic and rational attitude towards himself, the world, and the future.

TABLE 4.5

PRE - POST RESULTS

PATIENT I

PRETEST		POSTTEST
31	Beck Depression Inventory	4
5	Beck Hopelessness Scale	6
51 (94%ile)	State Anxiety-STAI	39 (72%ile)
61 (100%ile)	Trait Anxiety-STAI	43 (86%ile)
59	Assertion - Frequency	52
130	Assertion - Comfort	127
+9	Dysfunctional Attitudes - Total	+43
+6	Approval	+9
+6	Love	+7
-2	Achievement	+5
+2	Perfectionism	+3
-6	Entitlement	+5
+1	Omnipotence	+9
+2	Autonomy	+5

NOTE: Patient I was seen for 11 one-hour sessions. The first three sessions were as an inpatient, and were conducted within a one week period. The remaining 8 sessions were as an outpatient, and the time between sessions was as follows: 2 days, 7 days, 7 days, 7 days, 7 days, 7 days, 7 days. While an inpatient, I was treated with medication by hospital staff. After discharge, I reported taking no medications.

PATIENT T

T was a single male in his mid-thirties with a long history of depression, alcohol abuse, and drug abuse. He was referred to the Psychology Department by his psychiatrist, who is on staff at the Waterford. T lived alone in a subsidized apartment in St. John's, and worked in a special work program for ex-psychiatric patients. After a "dry" period of approximately 18 months, T had started drinking again. According to T, he confronted his psychiatrist, and asked for help in dealing with "the issues," which resulted in the referral to Psychology.

T reported that he started drinking in his early teens, and that when his father died a couple of years later, he continued to drink since "this is what men did." He also had been involved with various street drugs, including heroin, cocaine, and LSD. He had recently had an HIV test, since a relative he had shared IV drugs with had recently died. He had served jail time for armed robbery and break and entry offenses. He had several admissions to local hospitals for drug/alcohol abuse, depression, and situational crises. He was said to have a dependent personality by some individuals who had treated him.

He had been treated for alcoholic hepatitis about 5 years prior, and the condition of his liver was a constant worry to him. Approximately 3 years prior, he had been in a

fight with a relative while drunk, and was rushed to the hospital with seizures. He was operated on for a subdural haematoma, and developed pneumonia and renal failure post-operatively. He was currently taking anti-convulsant medication as a result of this incident, and expected to be taking this medication for the rest of his life.

Upon first meeting T in the Outpatient Department, he presented the intern with a list of 11 problem areas he wanted to work on. He seemed quite anxious, and expressed his pleasure that someone was going to work with him. He related that he also attended the Addictions Group run by the Social Work Department at the Waterford, and that he occasionally went to Alcoholics Anonymous. His psychiatrist had noted that T was insecure and had low self-esteem, and this seemed to fit with both the intern's observations of T, and with the list of problems T presented to the intern.

At pretest, T scored near the top of the "moderate-severe" range on depression, but his hopelessness barely crept into the "mild" category. He was indeed very anxious, and while he reported the frequency of his assertive encounters within the normal range, his comfort level was quite low. Irrational thinking was evidenced in all categories measured.

T's treatment would consist of 1) relaxation training to help in managing the anxiety evidenced in the measures,

as well as clinically; and 2) cognitive restructuring to deal with irrational thinking across a broad spectrum, including the area of self-esteem.

During the approximately 6 weeks between T's pretests and posttests, he was admitted to the Waterford Hospital twice. These admissions were of 1 1/2 and 2 weeks duration, the first admission being 9 days after the pretests, and after T missing his first scheduled treatment appointment with the intern. Therefore, most of T's treatment was carried out in a concentrated fashion while he was an inpatient. The first admission was after an alcoholic binge. The second admission was much more serious. T had been drinking, became very depressed and suicidal, and took a large overdose of his prescription medications. He was rushed to hospital in an ambulance, and transferred to the Waterford the following day. This suicide attempt was made approximately 3 weeks after T scored nearly asymptomatic on hopelessness, which underscores the major effects alcohol or other drugs can have on an individual's outlook.

T's situation in hospital was such that the intern was able to start his treatment with relaxation training. T had a private room on admission, and his unit was relatively quiet. His room was also equipped with an electrical outlet, and the intern was able to lend him a tape recorder. The intern conducted one in vivo relaxation session with T,

and then supplied him with a personalized audio tape to play at least twice daily. T was very anxious during his admissions, and reported using his relaxation tape a lot to relax, and to help him get to sleep. Although he was medicated, he was also undergoing some withdrawal symptoms, and he reported that the relaxation tape helped him with these symptoms.

The intern also introduced T to cognitive restructuring, hoping that he would gain enough during his admissions to help him through his next crisis. The intern visited T daily when possible, and attempted to teach T the rudiments. T's concentration was not completely adequate during all of this time, and he sometimes found it hard to focus and comprehend. However, due to his recent serious abuses, the intern felt it mandatory to work as intensively as possible while T was available to him. Unfortunately, since there was little time between sessions, and since T was not that well, little homework was accomplished between sessions, though the intern suggested that T do whatever he possibly could.

At posttest, T's depression declined from the high end of the "moderate-severe" range to the high end of the "mild-moderate" range, while his hopelessness remained unchanged at very mild (while not under the influence of drugs or alcohol). His anxiety declined modestly, but still remained

very high. However, he reported an increase in both frequency and comfort level of assertions, which may reflect a decrease in social anxiety. T's thinking showed modest, but broad improvement, as 5 of the 7 value systems measured moved from the "emotional vulnerabilities" category to the "psychological strengths" category.

T's treatment was far from ideal. His mental and physical condition, and the short time between sessions, made reflection, insight, and homework difficult for him. Nevertheless, he showed modest improvement on all measures. This pleased T immensely, and he stated that he felt he was finally "on his way" since he had made broad improvements in such a short time. He speculated aloud that with more time and work on his part, he would probably make much greater gains, since he had made gains in such a short time. T had hope as a result of this experience, which was encouraging for the intern. T was excited over the possibilities for the future, his possibilities. He was almost amazed with himself.

It is somewhat difficult for the intern to discuss clinical changes observed in T, for he went into an alcohol-related crisis almost immediately after being seen by the intern for the first time, followed by an alcohol and drug-induced crisis. At posttest, T did seem more relaxed and confident than before, but many earlier observations are

clouded by the effects of drugs and alcohol (sweating, tremors, insecurity). The intern can only hope that the skills he tried to teach T will assist him, and that he will continue to listen to his relaxation tape.

TABLE 4.6

PRE - POST RESULTS

PATIENT T

PRETEST		POSTTEST
28	Beck Depression Inventory	17
4	Beck Hopelessness Scale	4
60 (98%ile)	State Anxiety-STAI	47 (85%ile)
71 (100%ile)	Trait Anxiety-STAI	64(100%ile)
64	Assertion - Frequency	83
63	Assertion - Comfort	87
-21	Dysfunctional Attitudes - Total	+2
-2	Approval	-3
-7	Love	-3
-2	Achievement	+2
-4	Perfectionism	+3
-2	Entitlement	0
-3	Omnipotence	+2
-1	Autonomy	+1

NOTE: Patient T was seen for 11 one-hour sessions. Of these sessions, 3 were as an outpatient. The patient was seen as an outpatient initially, followed by 8 concentrated inpatient sessions (patient was admitted and discharged from hospital twice after first session). Prior to post test, patient was given 2 additional sessions as an outpatient. Time between sessions: 24 days, 1 day, 3 days, 1 day, 1 day, 1 day, 1 day, 3 days, 3 days, 5 days. T was being treated with medications during all of his treatment sessions with the intern.

PATIENT W

W was a divorced female in her early 40s. She was referred to the Psychology Department's Cognitive Therapy for Depression Clinic by her general practitioner. She was screened as an outpatient by the intern, and then assigned to him for treatment.

W reported that she had been depressed since she was a small child. She reported being really bothered by depression and low energy for at least 20 years. She said that she was in excellent health physically, but that she had no motivation to do anything, and that she was "just hiding away from life." W hadn't left home, in another community in Newfoundland, until she was in her 30s. She described herself as having no self-esteem, and said that she avoided all social situations.

W said that 5 or 6 years ago she had slept 20 hours a day. She described herself as "defective," "stupid," and "not able to get anything right." She was living with a relative in town temporarily, babysitting this person's child.

W's view of life was that it was "drudgery," "unfair," and "full of suffering." She generally hated men, and felt that women were weak and oppressed. She felt that people would only take advantage of you, and were not to be trusted. She found work boring, and only worked enough to

make ends meet and qualify for unemployment insurance. She found the world "a scary, rotten place to be."

W had seen many people in the health care system over the years, including 2 local psychiatrists, each of whom she had seen for 2 years. She was still looking for something to grab onto.

There had been paternal alcoholism and physical abuse at home growing up, and W felt a strong sense of responsibility toward her mother and her siblings, many of whom she described as emotionally troubled.

The intern actually found W to be highly intelligent, and very well read. While she described herself as depressed, she was also very intense and impatient, and seemed very committed to high ideals. She seemed dissatisfied with everything, including herself. She was an attractive woman, was familiar with all the mainstream psychologists and their approaches, and was desperately seeking some small bit of hope. She stated that she thought the problem was in her thinking, and that she thought cognitive therapy would help her.

At pretest, W was shown to be "extremely severely" depressed. She was also severely hopeless, obtaining the highest score possible. She was at the 100th percentile on trait anxiety, but scored extremely low on state anxiety. She told the intern that she was very relaxed with him, that

he was a professional, and that she was not anxious at her sessions with him. This was borne out by her "at this moment" (state) anxiety scores. Assertion scores were low on both frequency and comfort, underscoring her expressed social anxiety. W scored extremely low across all 7 value systems measuring her cognitions, indicating marked and pervasive irrational thinking.

In consultation with his advisor, the intern decided that W was right. Her problem was in her thinking, as supported by her testing. Relaxation training would not be part of W's matched treatment, since she had shown her state anxiety could be very low. It appeared the source of W's trait anxiety was likely her dysfunctional thinking. W's treatment would consist of 1) cognitive restructuring, and 2) a focus on assertion as a part of the restructuring, after it was well underway.

W appeared to be very sincere, and met all her appointments. She tried hard, and the intern tried hard. Both of them struggled. At posttest, W's depression had dropped from the lower range of the "extremely severe" category to the lower range of the "moderate-severe" category. While an improvement, W would still be considered clinically depressed with this score. W's hopelessness dropped from the maximum obtainable score to a score solidly within the "mild" category, which was a very significant

improvement. Changes in measured anxiety were minimal. W seemed a bit more comfortable with assertion, but her reported frequency of assertiveness remained essentially unchanged. W's irrational thinking, however, had actually become slightly worse! At best, it was still very pervasive. When the results of the posttest were discussed with W, she stated that she "knew" how she should answer for healthier thinking, but that she just didn't think that way. As of yet, she just did not believe in thinking that way.

After discussing the results of the posttest, W advised the intern that she was about to start group therapy with a group that was utilizing the "John Bradshaw" approach. The intern encouraged her to give it a try, and suggested that based on what he knew of it, it might be just what she was looking for.

W was a real challenge. While she improved in depression and hopelessness, her matched treatment addressed her dysfunctional thinking directly, as the primary cause of her difficulty. This matched treatment, cognitive restructuring, did not improve W's thinking. In fact, it was slightly worse at posttest. W's beliefs were simply too deeply entrenched, and cognitive therapy was not effective for this woman. It appeared that W intellectualized the process, and while she undoubtedly understood the concepts very well, she just couldn't apply them in her situation.

It seems that patients with deeply ingrained beliefs, resistant to cognitive therapy, may need a more experiential, "right brain" approach.

While W did improve in depression and hopelessness, this improvement would seem to be due to "nonspecific" factors. Her improvement was most certainly not due to the effectiveness of the matched treatment.

TABLE 4.7

PRE - POST RESULTS

PATIENT W

PRETEST		POSTTEST
36	Beck Depression Inventory	21
20	Beck Hopelessness Scale	7
27 (22%ile)	State Anxiety-STAI	25 (16%ile)
75 (100%ile)	Trait Anxiety-STAI	69(100%ile)
52	Assertion - Frequency	53
71	Assertion - Comfort	81
-51	Dysfunctional Attitudes - Total	-54
-9	Approval	-7
-6	Love	-8
-7	Achievement	-8
-7	Perfectionism	-6
-6	Entitlement	-10
-10	Omnipotence	-9
-6	Autonomy	-6

NOTE: Patient W was seen for 11 one-hour sessions, all as an outpatient. Time between sessions was: 5 days, 7 days, 7 days, 7 days, 7 days, 7 days, 7 days, 14 days, 7 days, 7 days. W reported taking no medications of any kind during her treatment sessions with the intern.

DISCUSSION

This study, which served the dual purpose of enhancing the intern's clinical skills, as well as investigating the efficacy of matched treatment for depressed patients, has raised many questions.

It seems to make intuitive good sense to "fix what's broken" and leave the rest alone, from the point of treatment efficacy. Few would argue with an effective "targeted" approach, rather than a "shotgun" approach which delivers unnecessary treatments and may delay recovery. This research was an attempt to provide and evaluate (on a single subject design basis) "best fit" treatment in a clinical setting, utilizing a number of self-report instruments to both select, and evaluate specific treatments.

Of the 4 patients who were given both the pretest and the posttest, all four scored lower on the Beck Depression Inventory at posttest:

TABLE 4.8

BECK DEPRESSION INVENTORY RESULTS

Patient	Pretest	Posttest	Difference
P	27	12	-15
I	31	4	-27
T	28	17	11
W	36	21	-15

(Also see Appendices D & E for a pictorial representation of these differences.)

Clinical realities prevented the delivery of equal numbers of treatment sessions to all patients, and the time between sessions varied dramatically. Therefore, statistical comparisons between subjects were not conducted, as treatment across subjects was far from standardized in any respect.

The constraints of the internship and the realities of the setting limited both the available time for the study, as well as the availability of clinically depressed patients, and therefore the research was limited to the study of single cases.

Hypothesis 1, that each patient would show a positive response to best fit treatment was borne out by the BDI.

Hypothesis 2, that there would be no difference in

magnitude of response changes, was not borne out. Not only did number of treatment sessions and between-session times vary, but posttest measures showed a wide range of response magnitude variability among the patients.

Cognitive restructuring: As determined by pretest targeting, cognitive restructuring was a designated treatment for each of the patients in the study. Posttest results showed a wide response variation. Patient W, for whom cognitive restructuring was the primary matched treatment, actually showed a small increase in dysfunctional thinking at the end of treatment. Patient P's cognitions improved markedly in only a few sessions. Patient I's cognitions improved more modestly in almost twice the number of sessions, but his deficit at pretest was also much more modest. Patient T also improved modestly in cognitions, but his treatment was delivered in a very concentrated manner.

Hopelessness: Patient W showed a marked decrease in hopelessness. Patient P scored zero on hopelessness at posttest, but had been only mildly hopeless at pretest. Patient I and patient T started mildly hopeless, and remained so.

State/Trait Anxiety: Modest improvements in both state and trait anxiety were shown by patient P and patient I. While each received the matched treatments of relaxation training, patient P had almost no practice due to lack of a

tape recorder and early termination of her treatment program. Patient I's relaxation practice was fairly regular, according to his report. Patient T showed some gains, and listened to a tape extensively within a short time frame, according to his report. Patient W showed very little change in anxiety, and did not receive relaxation training. While these results (no effect for W, some effect for the others) might suggest that the matched treatment of relaxation training had an effect on anxiety, no conclusions are possible. The short treatment times, widely variable practice sessions, modest levels of improvement, and many other factors preclude any further judgements about the results.

Assertiveness: Assertiveness was not a primary matched treatment for any subject in the study, but some changes in assertiveness were nevertheless noted at posttest. Patient P's self-report showed her to be much more comfortable asserting herself than was the case at pretest. Patient I showed little change. Patient T reported both higher frequency of assertive contacts, and more comfort with being assertive. Patient W showed a modest increase in comfort only.

LIMITATIONS OF THE STUDY

Such clinical studies typically present several limitations, all of which must be considered when interpreting the results:

1. Small number of subjects. Four subjects were available for pretest, treatment, and posttest, and one patient for pretest only. While they were part of the normal patient population at the Waterford Hospital, there is no way of knowing whether they are representative of depressive persons in general.

2. Expectancy. Simply coming into contact with the intern to receive treatment may generate some expectancy for improvement on the part of the patients. As Frank (1973) has noted, the very fact that a patient feels treatment may be helpful may account for a great deal of therapeutic effects.

3. Reactivity. The subjects were assessed on self-report measures. The pretest may have sensitized them in such a way that they responded differently, both on the test, and thereafter. Similarly, the posttest may have sensitized them to the prior treatment they received. The mere act of responding to self-report assessments may alter behavior.

4. Lack of baseline measures. Only one set of measurements was taken prior to treatment. These measures

were all given at each patient's first session with the intern. Whether these measurements are representative of each patient's general characteristics is unknown.

5. No follow-up measures. The short length of the internship did not permit follow-up measures. This leaves questions regarding the durability of the treatment results unanswered.

6. No control or comparison groups. There were no comparisons made with individuals who concurrently received no treatment, placebo treatment, or alternate treatments. Whether the same results would have occurred spontaneously, or through generalized treatment effects, is unknown. Such single subject designs are becoming more common and accepted, of course. The subject serves as his/her own control.

7. Use of a single therapist. Since the intern delivered all treatments to all subjects in the study, effectiveness of specific techniques is confounded with the intern's unique personality and delivery style.

8. Co-existing alcohol/drug abuse problems. Four of the five subjects had concurrent difficulties with alcohol or drug abuse. All three of the men were having ongoing problems with alcohol, and one of the women reported prescription drug withdrawal symptoms. The remaining female stated that she was an alcoholic, although she also related

she had not drunk for years.

9. Concurrent treatments. All four of those who took the posttest were also involved in other treatments from other individuals. The two men both sometimes attended a one-hour weekly Addictions Group run by the Social Work Department at the Waterford Hospital, and one made some visits to Alcoholics Anonymous meetings. Both women were involved in Alcoholics Anonymous and Narcotics Anonymous meetings. This situation was, however, unavoidable, as the intern's subjects represented five of the six patients diagnosed with depression that were available during the intern's "window of opportunity." This limitation is, of course, common to most forms of human research treatment designs. It should be noted that the clients did report satisfaction with the treatments under study.

10. Experimenter bias. Even though the intern attempted to be as objective as possible, he had a vested interest in the success of matched treatment. He was also not functioning "blind" to any aspects of the study or the patients. Verbally and/or nonverbally, he may have influenced the responses of the subjects on the self-report instruments and in interview.

11. Nonstandardized treatment delivery. Treatment delivery times varied widely due to uncontrollable circumstances, and time between sessions differed

substantially between patients. Though the intern attempted to standardize treatment techniques, there is no doubt that there were at least subtle differences in delivery between patients.

12. Treatment credibility not formally assessed.

Although the intern attempted to work in a collaborative manner with the subjects, often asked the subjects if the rationale offered for the treatments and techniques "made sense," and asked for general feedback on the session at the end of many sessions, he did not formally assess patient satisfaction at each session.

STRENGTHS OF THE STUDY

Despite its limitations, the intern's study had a number of positive attributes. Among them are:

1. Clinical focus. The intern's research was neither contrived nor analogue. It investigated real-life clinical application questions with actual patients seeking help in a clinical setting.

2. Case studies. As has been discussed, in previous years case study research has been much maligned by more quantitative-oriented researchers; however, the intensive study of the individual is now being rediscovered as a rich source of applicable data in the search to provide effective relief for patients. The intern's research has

contributed to that knowledge.

3. Clinical significance. The task of a psychologist in a clinical setting is to provide effective treatment for individual patients. It matters whether the results are significant for the individual patient, not whether they are statistically significant as compared to group norms. The focus on individual cases, treatment matching, and the individual analysis of results is an attempt to discover how to best effect change that is clinically significant to the individual patient.

4. Replication. Conducting a series of five case studies (four completed) adds to the accumulation of knowledge essential for clinical decision-making, investigates both generality and individuality of results, and serves as a source of new clinical hypotheses.

5. Qualitative focus. Discussion of each individual case in depth brings out individual circumstances and subjective realities which are integral parts of human existence, and, hence, are important in understanding individuals, their problems, and their individual solutions.

6. Quantitative focus. To provide an empirical basis for selecting treatment and evaluating outcomes, self-report instruments were administered. This numerical data provides evidence detailing where change has and has not occurred, as reported by each individual.

7. Widely-used measures. The self-report measures used are well-known in clinical circles, have good validity and reliability, and are regularly used by psychologists at the internship site in their work with patients. Self-report instruments were used, rather than clinician scales, as the approach used in this investigation stresses the importance of the individual's perspective.

8. Regular clinical patients. The study was carried out as part of the intern's regular clinical work during his internship. The patients in the study were "random" in the sense that they happened to come into contact with the Psychology Department at the Waterford Hospital during the very limited time period in which the intern had to begin his research. The intern did not have the luxury of an extensive screening process. While this fact undoubtedly added variables, these were the bona fide patients seeking help at that time.

9. Skill-enhancing. The research provided an opportunity for the intern to further develop his clinical skills through the supervised treatment of patients in the study.

10. Therapeutic for patients. As measured by the Beck Depression Inventory, each of the four patients who took the posttest were less depressed after a period of short-term therapy with the intern. While a multitude of

alternative explanations for their improvement cannot be positively ruled out, the intern treated four individuals (2 male, 2 female) with matched treatment in a variety of treatment delivery situations. They all reported being less depressed after treatment.

CONCLUSIONS

Results of the study suggest that matched treatment is effective in reducing depression. Replication of the effects four times with four different patients adds to the evidence for this position. Heiby (1986), McKnight et al. (1984), and Nelson-Gray et al. (1989) also showed matched treatment to be effective in reducing depression.

Magnitude of response in the alleviation of depression was found to be variable across subjects.

As well, while not specifically addressed by the study, it was noted that responses in specific targeted deficit areas were highly variable. Measured responses in some non-targeted areas sometimes improved. Nelson-Gray (1989) noted similar results, and suggested that problematic response class behaviors tend to covary, with a change in one likely to cause a change in another.

Reduction in depression was not necessarily accompanied by improvements in the targeted response class. Rude (1986) noted similar results, and suggests that this questions

whether skill improvement in deficit areas is actually the active ingredient in therapy.

The study did not disprove that each patient might have improved without any intervention, or that each might have improved equally or better with alternate treatment. Alternate treatment or control conditions were not feasible in this situation. However, both cognitive therapy (e.g., Dobson, 1989) and matched treatment (e.g., McKnight et al., 1984) have been shown to be effective in treating depression.

SUMMARY AND RECOMMENDATIONS

In this series of case studies, treatment matched to assessed deficits in depressed patients was shown to be effective in alleviating depression.

Replications of this study might serve to further elucidate the value of matched treatment for depression.

Replications would seem to benefit from:

1. More subjects
2. Availability of a longer time period for treatment and follow-up.
3. Repeated measures between the pretest and posttest.
4. Measures of patient satisfaction with treatment after each session.

Further studies utilizing control conditions and/or

alternate treatments in single subject treatment designs would also likely contribute to knowledge in this area.

The intern would suggest that further study of the efficacy of matched treatment for depression is properly conducted at the level of the individual. Group data obscures potentially important individual differences which may greatly affect treatment response. It is only through the accumulation of data from individual subjects that we will generate the new theories and hypotheses which will lead to better treatments.

Further, analysis of the clinical significance of change to the individual seems to be of most importance in these investigations. The differences that count are the differences that are meaningful to the patients, whether or not they are mathematically significant.

It is also recommended that further investigations into the effectiveness of matched treatment be carried out, where possible, in clinical settings, with minimal screening. While this, no doubt, introduces many variables into analysis, this is the clinician's reality. Finding out what works for the ten per cent of subjects remaining after the screening process is better than nothing, but what about the other ninety per cent? It would seem that the majority of individuals who seek treatment for psychological problems do not have the luxury of being <u>just</u> depressed. A great number

seem to have other concurrent psychological problems, or problems with alcohol, drugs, or medications. To screen all of these people out is to screen out most of the individuals a clinician sees.

In summary, the intern's series of case studies has added to the evidence that matched treatment is effective in alleviating depression. Whether or not matched treatment is more effective than other treatment options, whether it is faster, or more durable than other treatments are questions to be answered in the future. The ideas which lead to the answers to these questions are likely to be found in the study of individuals.

References

American Psychiatric Association. (1987). Diagnostic and statistical manual of mental disorders (3rd ed. revised). Washington, DC: Author.

Antonuccio, D.O., Ward, C.H., & Tearnan, B.H. (1989). The behavioral treatment of unipolar depression in adult outpatients. In M. Hersen, R.M. Eisler, & P.M. Miller (Eds.), Progress in behavior modification, vol. 24 (pp. 152-191). Newbury Park, CA: Sage.

Ball, V.C. (1961). The moment of truth: Probability theory and standards of proof. Vanderbilt Law Review, 14, 807-830.

Beck, A.T. (1967). Depression: Causes and treatment. Philadelphia, PA: University of Pennsylvania Press.

Beck, A.T. (1976). Cognitive therapy and the emotional disorders. New York: International Universities Press.

Beck, A.T. (1986). Hopelessness as a predictor of eventual suicide. In J.J. Mann & M. Stanley (Eds.), Psychobiology (pp. 90-96). New York: Academy of Sciences.

Beck, A.T., & Epstein, M. (1982). Cognitions, attitudes, and personality dimensions in depression. Paper presented at the annual meeting of the Society for Psychotherapy Research, Smugglers Notch, VT.

Beck, A.T., Freeman, A., & Associates. (1990). Cognitive therapy of personality disorders. New York: Guilford Press.

Beck, A.T., Hollon, S.D., Young, J.E., Bedrosian, R.C., & Budenz, D. (1985). Treatment of depression with cognitive therapy and amitriptyline. Archives of General Psychiatry, 42, 141-148.

Beck, A.T., Rush, A.J., Shaw, B.F., & Emery, G. (1979). Cognitive therapy of depression. New York: Guilford.

Beck, A.T., & Steer, R.A. (1987). Beck Depression Inventory manual. San Antonio: The Psychological Corporation.

Beck, A.T., & Steer, R.A. (1988). Beck Hopelessness Scale manual. San Antonio: The Psychological Corporation.

Beck, A.T., Ward, C.H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. Archives of General Psychiatry, 4, 561-571.

Beck, A.T., Weissman, A. Lester, D., & Trexler, L. (1974). The measurement of pessimism: The Hopelessness Scale. Journal of Consulting and Clinical Psychology, 42, 861-865.

Bergin, A.E., & Strupp, H.H. (Eds.). (1972). Changing frontiers in the science of psychotherapy. Chicago: Aldine-Atherton.

Beutler, L.E., & Clarkin, J.F. (1990). Systematic treatment selection: Toward targeted therapeutic interventions. New York: Brunner/Mazel.

Blackburn, I.M., Bishop, S., Glen, A.I.M., Whalley, L.J., & Christie, J.E, (1981). The efficacy of cognitive therapy in depression: A treatment trial using cognitive therapy and pharmacotherapy, each alone and in combination. British Journal of Psychiatry,139, 181-189.

Blackburn, I.M., Eunson, K.M., & Bishop, S. (1986). A two-year naturalistic follow-up of depressed patients treated with cognitive therapy, pharmacotherapy and a combination of both. Journal of Affective Disorders, 10, 67-75.

Burns, D.D. (1980). Feeling good: The new mood therapy. New York: William Morrow.

Campbell, D.T. (1979). "Degrees of freedom" and the case study. In T.D. Cook and C.S. Reichert (Eds.), Qualitative and quantitative methods in evaluation research (pp. 49-67), Beverly Hills, CA: Sage.

Canadian Psychological Association (1986). A Canadian code of ethics for psychologists. Old Chelsea, PQ : Author.

Cantwell, T. (1991). Introduction to, review and summary of the clinical operations and the clinical organization of the Waterford Hospital. Prepared for the survey by the Canadian Council on Hospital Accreditation. Unpublished manuscript.

Craighead, W.E. (1980). Away from a unitary model of depression. Behavior Therapy, 11, 122-128.

Dar, R. (1987). Another look at Meehl, Lakatos, and the scientific practices of psychologists. American Psychologist, 42(2), 145-151.

Dobson, K.S. (1989). A meta-analysis of the efficacy of cognitive therapy for depression. Journal of Consulting and Clinical Psychology, 57(3), 414-419.

Elkin, I., Shea, T., Watkins, J.T., Imber, S.D., Sotsky, S.M., Collins, J.F., Glass, D.R., Pilkonis, P.A., Leber, W.R., Docherty, J.P., Fiester, S.J., Parloff, M.B. (1989). National institute of mental health treatment of depression collaborative research program: General effectiveness of treatments. Archives of General Psychiatry, 46, 971-982.

Ellis, A. (1962). Reason and emotion in psychotherapy. New York: Lyle Stuart.

Frank, J.D. (1973). Persuasion and healing: A comparative study of psychotherapy (2nd ed.). Baltimore: John Hopkins University Press.

Gallant, D.M., & Simpson, G.M. (1976) Preface. In D.M. Gallant & G.M. Simpson, Depression: Behavioral, biochemical, diagnostic and treatment concepts. New York: Spectrum.

Gaston, L, & Marmar, C.R. (1989). Quantitative and qualitative analyses for psychotherapy research: integration through time-series designs. Psychotherapy, 26(2), 169-176.

Goldman, L. (1982). Defining non-traditional research. The Counseling Psychologist, 10(4), 87-89.

Goldman, L. (1989). Moving counseling research into the 21st century. The Counseling Psychologist, 17(1), 81-85.

Hayes, S.C. (1983). The role of the individual case in the production and consumption of clinical knowledge. In M. Hersen, A.E. Kazdin, & A.S. Bellack,(Eds.), (pp. 181-195). The clinical psychology handbook New York: Pergamon.

Hayes, S.C., Nelson, R.O., & Jarrett, R.B. (1987). The treatment utility of assessment: A functional approach to evaluating assessment quality. American Psychologist, 42(11), 963-974.

Haynes, S.N. (1988). Causal models and the assessment-treatment relationship in behavior therapy. Journal of Psychopathology and Behavioral Assessment, 10(2), 171-183.

Heiby, E.M. (1986). Social versus self-control skills deficits in four cases of depression. Behavior Therapy, 17, 158-169.

Hermans, H.J.M. (1988). On the integration of nomothetic and idiographic research methods in the study of personal meaning. Journal of Personality, 56(4), 785-812.

Hollender, M.H., & Ford, C.V. (1990). Dynamic psychotherapy: An introductory approach. Washington, DC: American Psychiatric Press.

Hollon, S.D., & Beck, A.T. (1979). Cognitive therapy of depression. In P.C. Kendall & S.D. Hollon (Eds.), Cognitive-behavioral interventions: Theory, research, and procedures (pp. 153-203). New York: Academic.

Hoshmand, L.L.S.T. (1989). Alternate research paradigms: A review and teaching proposal. The Counseling Psychologist, 17(1), 3-79.

Howard, G.S. (1983). Toward methodological pluralism. Journal of Counseling Psychology, 30, 19-21.

Huber, C.H., & Backlund, B.A. (1991). The twenty minute counselor: Transforming brief conversations into effective helping experiences. New York: Continuum.

Jacobson, E. (1938). Progressive relaxation. Chicago: University of Chicago Press.

Jacobson, N.S., Follette, W.C., & Revenstorf, D. (1984). Psychotherapy outcome research: Methods for reporting variability and evaluating clinical significance. Behavior Therapy, 15, 336-352.

Kadden, R.M., Cooney, N.L., Getter, H., & Litt, M.D. (1989). Matching alcoholics to coping skills or interactional therapies: Posttreatment results. Journal of Consulting and Clinical Psychology, 57(6), 698-704.

Kaplan, H.I., & Sadock, B.J. (1991). Synopsis of Psychiatry (6th ed.). Baltimore: Williams & Wilkins.

Karasu, T.B. (1977). Psychotherapies: An overview. American Journal of Psychiatry, 134, 851-863.

Kazdin, A E. (1980). Research design in clinical psychology. New York: Harper & Row.

Kazdin, A.E. (1983). Treatment research: The investigation and evaluation of psychotherapy. In M. Hersen, A.E. Kazdin, & A.S. Bellack, (Eds.), The clinical psychology Handbook (pp. 265-284). New York: Pergamon.

Kleinmuntz, B. (1990). Why we still use our heads instead of formulas: Toward an integrative approach. Psychological Bulletin, 107(3), 296-310.

Klerman, G.L., (1987). The nature of depression: Mood, symptom, disorder. In A.J. Marsella, R.M.A. Hirschfeld, & M.M. Katz, (Eds.), The measurement of depression (pp. 3-19). New York: Guilford.

Kovacs, M., Rush, A.J., Beck, A.T., & Hollon, S.D. (1981). Depressed outpatients treated with cognitive therapy or pharmacotherapy. A one year follow-up. Archives of General Psychiatry, 38, 33-39.

Kratochwill, T. R., Mott, S.E., & Dodson, C.L. (1984). Case study and single-case research in clinical and applied psychology. In A.S. Bellack & M. Hersen (Eds.), Research methods in clinical psychology (pp. 55-99). New York: Pergamon.

Krauskopf, C.J. (1982). Science and evaluation research. The Counseling Psychologist, 10(4), 71-72.

Lake, A.E. III (1981). Behavioral assessment considerations in the management of headache. Headache, 21, 170-178.

Lange, A.J., & Jakubowski, P. (1976). Responsible assertive behavior. Champaign, IL: Research Press.

Lazarus, A.A. (1968). Learning theory and the treatment of depression. Behavior Research and Therapy, 6, 83-89.

Lazarus, A.A. (Ed.). (1976). Multimodal behavior therapy. New York: Springer.

Lehmann, H. (1971). Epidemiology of depressive disorders. In R.R. Fieve (Ed.), Depression in the seventies. Princeton: Exerpta Medica.

Lewinsohn, P.M. (1975). The behavioral study and the treatment of depression. In M. Hersen, R. Eisler, & P. Miller (Eds.), Progress in behavior modification, vol. 1 (pp. 19-64). New York: Academic.

Lewinsohn, P.M., & Rohde, P. (1987). Psychological measurement of depression: Overview and conclusions. In A.J.Marsella, R.M.A. Hirschfield, & M.M. Katz (Eds.), The measurement of depression (pp. 240-266). New York: Guilford.

Liberman, R.P. (1981). A model for individualizing treatment. In L.P. Rehm (Ed.) Behavior therapy for depression (pp. 231-253). New York: Academic.

Mahoney, M.J. (1991). Human change processes: The scientific foundations of psychotherapy. New York: Basic Books.

McKnight, D.L., Nelson, R.O., Hayes, S.C., & Jarrett, R.B. (1984). Importance of treating individually assessed response classes in the amelioration of depression. Behavior Therapy, 15, 315-335.

Meehl, P.E. (1978). Theoretical risks and tabular asterisks: Sir Karl, Sir Ronald, and the slow progress of soft psychology. Journal of Consulting and Clinical Psychology, 46(4), 806-834.

Meehl, P.E. (1986). Causes and effects of my disturbing little book. Journal of Personality Assessment, 50, 370-375.

Miller, W.R. (1989). Matching individuals with interventions. In R.K. Hester & W.R. Miller (Eds.), Handbook of alcoholism treatment approaches: Effective alternatives (pp. 261-271). New York : Pergamon.

Murphy, G.E. (1989). Cognitive therapy: A review. In J.G. Howells (Ed.), Modern perspectives in the psychiatry of the neuroses (pp. 260 - 285). New York: Brunner/Mazel.

Murphy, G.E., Simons, A.D., Wetzel, R.D., & Lustman, P.J. (1984). Cognitive therapy and pharmacotherapy. Singly and together in the treatment of depression. Archives of General Psychiatry,41, 33-41.

Neimeyer, G., & Resnikoff, A. (1982). Qualitative strategies in counseling research. The Counseling Psychologist, 10(4), 75-85.

Nelson, R.O. (1988). Relationships between assessment and treatment within a behavioral perspective. Journal of Psychopathology and Behavioral Assessment, 10(2), 155-170.

Nelson-Gray, R.O., Herbert, J.D., Herbert, D.L., Sigmon, S.T., & Brannon, S.E. (1989). Effectiveness of matched, mismatched, and package treatments of depression. Journal of Behavior Therapy & Experimental Psychiatry, 20(4), 281-294.

O'Donohue, W., Fisher, J.E., Plaud, J.J., & Curtis, S.D. (1990). Treatment decisions: Their nature and justification. Psychotherapy, 27(3), 421-427.

Oakley, M.E., & Padesky, C.A. (1990). Cognitive therapy for anxiety disorders. In M. Hersen, R.M. Eisler, & P.M. Miller (Eds.), Progress in behavior modification, vol. 25 (pp. 11-46). Newbury Park, CA: Sage.

Oetting, E.R. (1982). Program evaluation, scientific inquiry, and counseling psychology. The Counseling Psychologist, 10(4), 61-70.

Oliver, J.M., & Simmons, M.E. (1985). Affective disorders and depression as measured by the diagnostic interview schedule and the Beck Depression Inventory in an unselected adult population. Journal of Clinical Psychology, 41, 469-477.

Paul, G.L. (1969). Behavior modification research: Design and tactics. In C.M. Franks (Ed.), Behavior therapy: Appraisal and status (pp. 29-62). New York: McGraw-Hill.

Persons, J.B. (1989). Cognitive therapy in practice: A case formulation approach. New York: W.W. Norton.

Piotrowski, C., Sherry, D., & Keller, J.W. (1985). Psychodiagnostic test usage: A survey of the Society for Personality Assessment. Journal of Personality Assessment, 49, 115-119.

Rabkin, J.G., & Klein, D.F. (1987). The clinical measurement of depressive disorders. In A.J. Marsella, R.M.A. Hirschfeld, & M.M. Katz (Eds.), The measurement of depression (pp. 30-83). New York: Guilford.

Rehm, L.P., Kaslow, N.J., & Rabin, A.S. (1987). Cognitive and behavioral targets in a self-control therapy program for depression. Journal of Consulting and Clinical Psychology, 55(1), 60-67.

Rude, S.S. (1986). Relative benefits of assertion or cognitive self-control treatment for depression as a function of proficiency in each domain. Journal of Consulting and Clinical Psychology, 54(3), 390-394.

Runyan, W. M. (1977). How should treatment recommendations be made? Three studies in the logical and empirical bases of clinical decision making. Journal of Consulting and Clinical Psychology, 45(4), 552-558.

Runyan, W.M. (1983). Idiographic goals & methods in the study of lives. Journal of Personality, 51(3), 413-437.

Rush, A.J., Beck, A.T., Kovacs, M., & Hollon, S. (1977). Comparative efficacy of cognitive therapy and pharmacotherapy in the treatment of depressed outpatients. Cognitive Therapy and Research, 1, 17-37.

Rush, A.J., Beck, A.T., Kovacs, M., Weissenberger, J., & Hollon, S.D. (1982). Comparison of effects of cognitive therapy and pharmacotherapy on hopelessness and self-concept. American Journal of Psychiatry, 139, 862-866.

Rush, A.J., & Giles, D.E. (1982) Cognitive therapy: Theory and research. In A. J. Rush (Ed.), Short-term psychotherapies for depression. Behavioral, interpersonal, cognitive, and psychodynamic approaches (pp. 143-181). New York: Guilford.

Sechrest, L. (1982). Program evaluation: The independent and dependent variables. The Counseling Psychologist, 10(4), 73-74.

Secunda, S.K., Katz, M.M., Freidman, R.J., & Schuyler, D. (1973). Special report: 1973--The depressive disorders. Washington, DC: U.S. Government Printing Office.

Seligman, M.E.P. (1990). Learned Optimism. New York: Alfred A. Knopf.

Shontz, F.C. (1982). To study persons: Reactions to "Qualitative strategies in counseling research." The Counseling Psychologist, 10(4), 91-93.

Simons, A.D., Murphy, G.E., Levine, J.L., & Wetzel, R.D. (1986). Cognitive therapy and pharmacotherapy of depression: Sustained improvement over one year. Archives of General Psychiatry, 43, 43-48.

Spielberger, C.D., Gorsuch, R.L., Lushene, R., Vagg, P.R., & Jacobs, G.A. (1983). Manual for the State-Trait Anxiety Inventory (Form Y) ("Self-Evaluation Questionnaire") Palo Alto: Consulting Psychologists Press.

Steer, R.A., Beck, A.T., & Garrison, B. (1985). Applications of the Beck Depression Inventory. In N. Sartorius & T.A. Ban (eds.), Assessment of depression, (pp. 121-142). New York: Springer-Verlag.

Tapper, B.J. (1978). Assertion training with suicidal and depressed clients. In J.M. Whiteley & J.V. Flowers (Eds.), Approaches to assertion training (pp. 119-140). Monterey, CA: Brooks/Cole.

Tarrier, N., Beckett, R., Harwood, S., & Bishay, N. (1990). Morbid jealousy: A review and cognitive-behavioural formulation. British Journal of Psychiatry, 157, 319-326.

Teasdale, J.D., Fennell, M.J.V., Hibbert, G.A., & Amies, P.L. (1984). Cognitive therapy for major depressive disorder in primary care. British Journal of Psychiatry, 144, 400-406.

Trower, P., Yardley, K., Bryant, B.M., & Shaw, P. (1978). The treatment of social failure: A comparison of anxiety reduction and skills-acquisition procedures on two social problems. Behavior Modification, 2, 41-60.

Turkat, I.D. (1988). Issues in the relationship between assessment and treatment. Journal of Psychopathology and Behavioral Assessment, 10(2), 185-197.

Turkat, I.D., & Maisto, S.A. (1985). Personality disorders: Application of the experimental method to the formulation and modification of personality disorders. In D.H. Barlow (Ed.), Clinical handbook of psychological disorders: A step-by-step treatment manual (pp. 502-570). New York: Guilford.

Waterford Hospital Board of Trustees (1988). Waterford Hospital by-laws. Unpublished manuscript.

Waterford Hospital Psychology Department (1991). Policy and procedure manual. Unpublished manuscript.

Weissman, A.N. (1979). The Dysfunctional Attitude Scale: A validation study (Doctoral dissertation, University of Pennsylvania, 1979). Dissertation Abstracts International, 40, 1389B-1390B.

Wetzel, J.W. (1984). Clinical handbook of depression. New York: Gardner.

Williams, D.E., Thompson, Haber, J.D., & Raczynski, J.M. (1986). MMPI and headache: A special focus on differential diagnosis, prediction of treatment outcome, and patient-treatment matching. Pain, 24, 143-158.

Wolpe, J. (1971). Neurotic depression: Experimental analog, clinical syndromes, and treatment. American Journal of Psychotherapy, 25, 362-368.

Wolpe, J. (1990). The practice of behavior therapy (4th ed.). New York: Pergamon.

Zeiss, A.M., Lewinsohn, P.M., & Munoz, R.F. (1979). Nonspecific improvement effects in depression using interpersonal skills training, pleasant activity schedules, or cognitive training. Journal of Consulting and Clinical Psychology, 47(3), 427-439.

APPENDICES

CAB FORM FOR MONITORING IRRATIONAL BELIEFS/THOUGHTS/IMAGES/DAYDREAMS RELATED TO EVENTS/SITUATIONS

DATE	C = EMOTIONS 1. Specify sad/anxious/angry, etc. 2. Rate degree of emotion 0 - 100	A = FACTS OR EVENTS Describe:- 1. Actual event that activated unpleasant emotion/reaction 2. Images, daydreams, recollection leading to unpleasant emotion	B = AUTOMATIC THOUGHTS ABOUT A 1. Write automatic thoughts that preceded emotions/reactions 2. Rate belief in automatic thoughts 0 - 100%
10.3.87	Depressed (75) Unhappy (100) Miserable (90)	Thinking of going to grandson's Christening party tomorrow	I won't enjoy it (100) I can't cope with it (100) Everyone will hate me (90) I will spoil it for everyone(90) I can never be happy again (100)

Completed RET Work-Sheet

DATE	A ACTIVATING EVENT Describe actual event, stream of thoughts, daydream, etc. leading to unpleasant feelings.	B IRRATIONAL BELIEFS Write automatic thoughts and images that came in your mind. Rate beliefs or images 0 - 100	C CONSEQUENCES 1. Emotion: specify sad, anxious or angry. Rate feelings 1 -100- 2. Physiological: Palpitations, pain, dizzy, sweat, etc. 3. Behavioural: Avoidance, in bed. 4. Cognitive: Reaching conclusions.
10.7.87	A worked example: Thinking of going to grandson's christening party	1. I won't enjoy it (100) 2. I can't cope with it (90) 3. Everyone will hate me (90) 4. I will spoil it (100) 5. I can never be happy (100)	1. Depressed (75), unhappy (100), miserable (90) 2. Weak, tired, head heavy 3. Don't want to go, prefer staying in bed 4. I will never be able to enjoy myself again

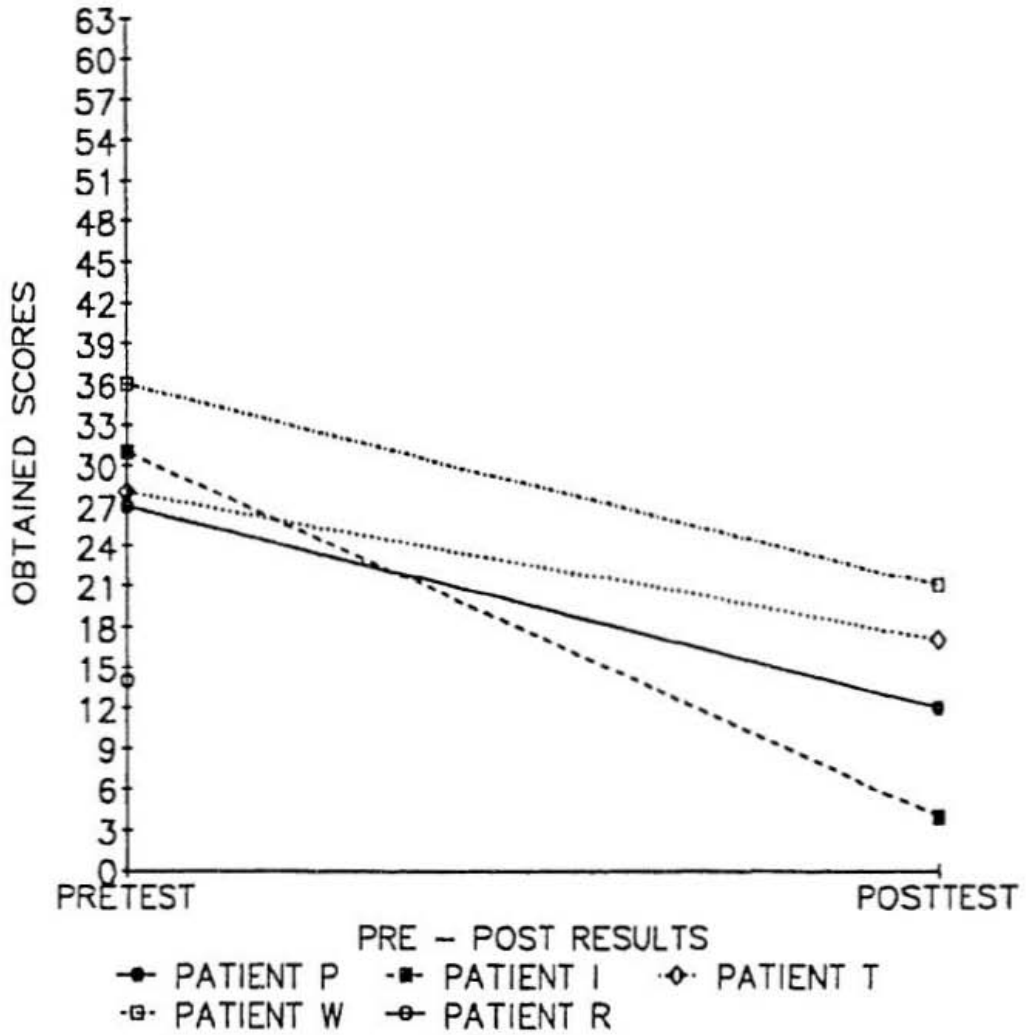
D DISPUTATION Challenge the automatic thoughts and images. Rate belief in rational response/image (0-100	E EFFECT OF DISPUTATION 1. Emotion: re-rate your emotion 1-100 2. Physiological: Changes in bodily reactions (i.e. less shaking, less tense, etc.) 3. Behavioural: Action taken after disputation. 4. Cognitive: Reappraise your conclusion and initial decision. Future beliefs in similar situation.
1. How do I know I won't enjoy it? The chances are I may like it being in company (60) 2. I may still feel depressed, but I can cope with it. Nothing bad will happen (80) 3. No one hates you when you feel down, it's just my wrong belief (50) 4. I may be quiet but not spoil it for all (90) 5. I've felt this way in the past, but has always recovered/come on top (100)	1. Less depressed (20), not too unhappy (30), no longer feeling miserable (0) 2. Still feeling tired and weak but head feels light, and feels like making a move 3. Out of bed, ironing clothes for the party tomorrow, wish to be present at party 4. Even if I feel depressed, I can make myself happy by going out to social functions

RET WORK-SHEET

DATE	A ACTIVATING EVENT Describe actual event, stream of thoughts, daydream, etc. leading to unpleasant feelings.	B IRRATIONAL BELIEFS Write automatic thoughts and images that came in your mind. Rate beliefs or images 0 - 100%.	C CONSEQUENCES 1. Emotion: specify sad, anxious or angry. Rate feelings 1 -100% 2. Physiological: Palpitations, pain, dizzy, sweat, etc. 3. Behavioural: Avoidance, in bed. 4. Cognitive: Reaching conclusions.

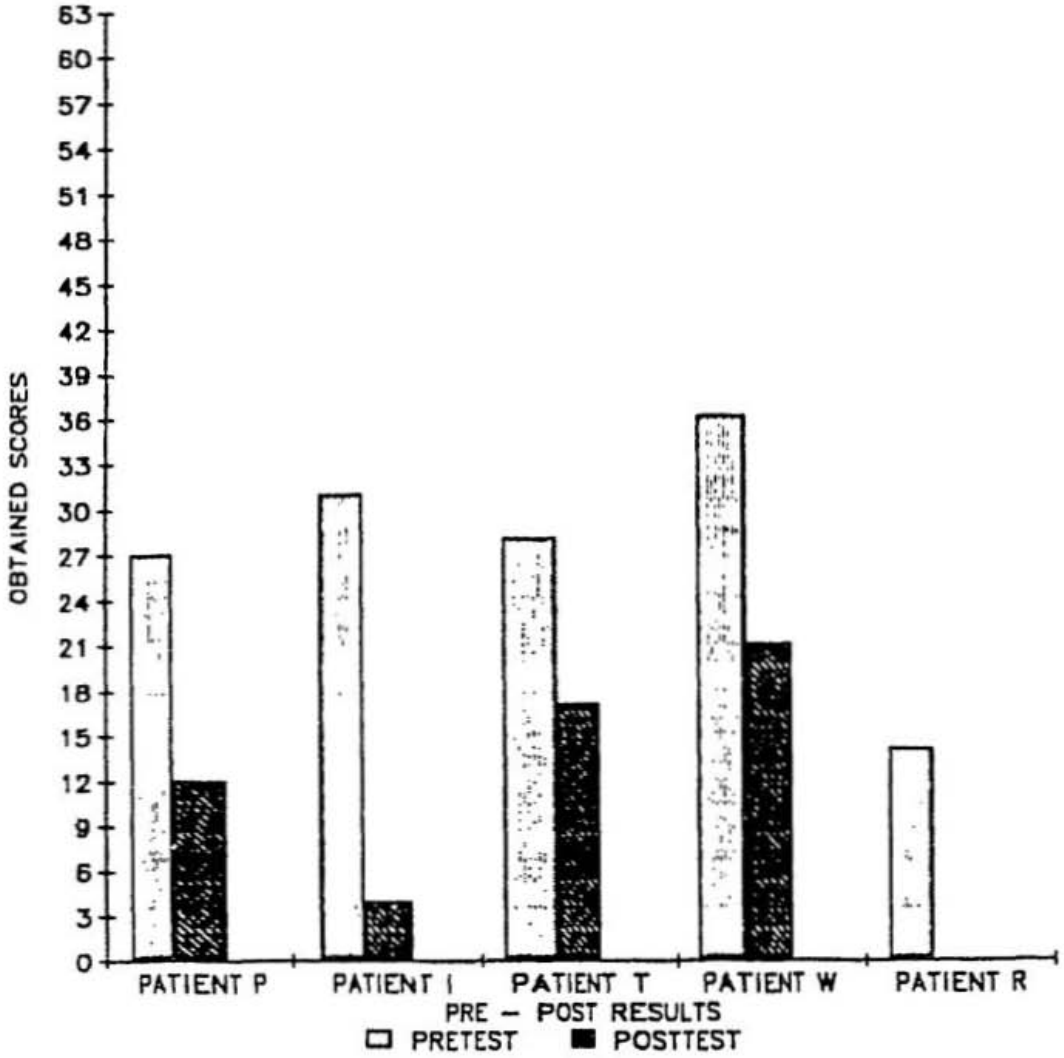
D DISPUTATION Challenge the automatic thoughts and images. Rate belief in rational response/image 0—100%	E EFFECT OF DISPUTATION 1. Emotion: Re-rate your emotion 1-100% 2. Physiological: Changes in bodily reactions (i.e. less shaking, less tense, etc.) 3. Behavioural: Action taken after disputation. 4. Cognitive: Reappraise your conclusion and initial decision. Future beliefs in similar situation.

APPENDIX D
BDI RESULTS – LINE GRAPH



APPENDIX E

BDI RESULTS - BAR GRAPH



APPENDIX F
Readings on Suicide

The following publications related to suicide and parasuicide were read by the intern during the internship period:

Chiles, J.A., Strosahl, K.D., McMurtray, L., & Linehan, M.M. (1985). Modeling effects on suicidal behavior. The Journal of Nervous and Mental Disease, 173(8), 477-481.

Funderburk, J.R., & Archer, J., Jr. (1989). The campus cares: A suicide prevention project. Journal of College Student Development, 30, 277-279.

Jacobs, J. (1984). The suicidal teenager: Assessment and prevention. Canadian Paediatric Society News Bulletin Supplement, 15(4), 1-4.

Leibenluft, E., Gardner, D.L., & Cowdry, R.W. (1987). The inner experience of the borderline self-mutilator. Journal of Personality Disorders, 1(4), 317-324.

Lesse, S. (Ed.). (1988). What we know about suicidal behavior and how to treat it. Northvale, NJ: Jason Aronson.

Linehan, M.M. (1987). Dialectical behavior therapy: A cognitive behavioral approach to parasuicide. Journal of Personality Disorders, 1(4), 328-333.

Linehan, M.M. (1988). Perspectives on the interpersonal relationship in behavior therapy. Journal of Integrative and Eclectic Psychotherapy, 7(3), 278-290.

Linehan, M.M., Camper, P., Chiles, J.A., Strosahl, K., & Shearin, E. (1987). Interpersonal problem solving and parasuicide. Cognitive Therapy and Research, 11(1), 1-12.

Linehan, M.M., Chiles, J.A., Egan, K.J., Devine, R.H., & Laffaw, J.A. (1986). Presenting problems of parasuicides versus suicide ideators and nonsuicidal psychiatric patients. Journal of Consulting and Clinical Psychology, 54(6), 880-881.

Linehan, M.M., Goodstein, J.L., Nielsen, S.L., & Chiles, J.A. ((1983). Reasons for staying alive when you are thinking of killing yourself: The reasons for living inventory. Journal of Consulting and Clinical Psychology, 51(2), 276-286.

Linehan, M.M., & Laffaw, J.A. (1982). Suicidal behavior among clients at an outpatient psychology clinic versus the general population. Suicide and Life Threatening Behavior, 12(4), 234-239.

Linehan, M.M., & Nielsen, S.L. (1983). Social desirability: Its relevance to the measurement of hopelessness and suicidal behavior. Journal of Consulting and Clinical Psychology, 51(1), 141-143.

Strosahl, K.P., Linehan, M.M., & Chiles, J.A. (1984). Will the real social desirability please stand up? Hopelessness, depression, social desirability, and the prediction of suicidal behavior. Journal of Consulting and Clinical Psychology, 3, 449-457.

Turgay, A. (1989). Child and adolescent suicide: Prevention, assessment, and treatment. The Canadian Journal of Pediatrics, Fall, 7-15.

Wodarski, J.S., & Harris, P. (1987). Adolescent suicide: A review of influences and the means for prevention. Social Work, Nov-Dec, 477-484.

APPENDIX G
Readings in Neuropsychology

The following publications were read in conjunction with the intern's work in Education G6855. The intern attended this Memorial University graduate course in Neuropsychology during Summer Session, 1991, concurrently with his internship placement. Lectures were held in the evening, and thus did not interrupt the intern's day work.

Works preceded by an asterisk (*) were not read in their entirety, but were consulted and read in part.

*Adams, R.D., & Victor, M. (1989). Principles of neurology (4th ed.). New York: McGraw Hill.

Bennett, A.E. (1977). Alcoholism and the brain. New York: Stratton Intercontinental.

Bigby, J. (1987). The nervous system. In H.N. Barnes, M.D. Aronson, & T.L. Delbanco (Eds.), Alcoholism: A guide for the primary care physician (pp. 111-118). New York: Springer Verlag.

Bowden, S.C. (1990). Separating cognitive impairment in neurologically asymptomatic alcoholism from Wernicke-Korsakoff's syndrome: Is the neuropsychological distinction justified? Psychological Bulletin, 107(3), 355-366.

Bowden, S.C., & Ritter, A.J. (1991). The clinical heterogeneity of Wernicke-Korsakoff syndrome. Journal of Clinical and Experimental Neuropsychology, 13(1), 112. [From abstracts of 19th Annual International Neuropsychological Society Meeting]

Butters, N. & Cermak, L.S. (1980). Alcoholic Korsakoff's syndrome: An information processing approach to amnesia. New York: Academic Press.

Brust, J.C.M. (1989). Alcoholism. In L.P. Rowland (Ed.), Merritt's textbook of neurology (pp. 899-909). Philadelphia: Lea & Febiger.

*Chadwick, D., Cartlidge, N. & Bates, D. (1989). Medical neurology. Edinburg: Churchill Livingstone.

Christie, J.E., Kean, D.M., Douglas, R.H.B., Engleman, H.M., St.Clair, D., & Blackburn, I.M. (1988). Magnetic resonance imagery in pre-senile dementia of the Alzheimer-type, multi-infarct dementia and Korsakoff's syndrome. Psychological Medicine, 18(2), 319-329.

Crossen, B. (1986). On localization versus systemic effects in alcoholic Korsakoff's syndrome: A comment on Butters (1985). Journal of Clinical and Experimental Neuropsychology, 8(6), 744-748.

*DeArmond, S.J., Frisco, M.M., & Dewey, M.M. (1974). Structure of the human brain: A photographic atlas. New York: Oxford University Press.

Dreyfus, P.M. (1985/86). Wernicke's encephalopathy. In R.T. Johnson (Ed.), Current theory in neurologic disease (pp. 335-337). Philadelphia: B.C. Decker.

Dudai, Y. (1989). The neurobiology of memory: Concepts, findings, trends. Oxford: Oxford University Press.

Engel, P.A., Grunnet, M., & Jacobs, B. (1991). Wernicke-Korsakoff syndrome complicating T-cell lymphoma: Unusual or unrecognized? Southern Medical Journal, 84(2), 253-256.

Frances, R.J., & Franklin, J.E., Jr., (1987). Alcohol induced organic mental disorders. In R.E. Hales & S.C. Yudofsky (Eds.), Textbook of neuropsychiatry (pp. 141-156), Washington, DC: American Psychiatric Press.

Hunter, R. (1990). Frontal metabolic deficits in Korsakoff's syndrome. British Journal of Psychiatry, 157, 454-455.

Jacobson, R.R., Acker, C.F., & Lishman, W.A. (1990). Patterns of neuropsychological deficit in alcoholic Korsakoff's syndrome. Psychological Medicine, 20, 321-334.

Jacobson, R.R., & Lishman, W.A. (1990). Cortical and diencephalic lesions in Korsakoff's syndrome: A clinical and CT scan study. Psychological Medicine, 20, 63-75.

*Kinney, J., & Leaton, G. (1987). Loosening the grip: A handbook of alcohol information. St. Louis: Times Mirror/ Mosby College Publishing.

*Kolb, B. & Whishaw, I.Q. (1990). Fundamentals of human neuropsychology (3rd ed.). New York: W.H. Freeman.

Kopelman, M.D. (1991). Frontal dysfunction and memory deficits in the alcoholic Korsakoff syndrome and Alzheimer-type dementia. Brain, 114, 117-137.

Leng, N.R.C., & Parkin, A.J. (1988). Amnesic patients can benefit from instructions to use imagery: Evidence against the cognitive mediation hypothesis. Cortex, 24(1), 33-39.

Lishman, W.A. (1990). Alcohol and the brain. British Journal of Psychiatry, 156, 635-644.

McEntee, W.J., & Mair, R.G. (1990). The Korsakoff syndrome: A neurological perspective. Trends in Neurosciences, 13(8), 340-344.

Mayes, A.R., Meudell, P.R., Mann, D., & Pickering, A. (1988). Location of lesions in Korsakoff's syndrome: Neuropsychological and neuropathological data on two patients. Cortex, 24(3), 367-388.

*Okazaki, H. (1989). Fundamentals of neuropathology: Morphologic basis of neurologic disorders. New York: Igaku-Shoin.

Parkin, A.J., Bell, W.P., and Leng, N.R.C. (1988). A study of metamemory in amnesic and normal adults. Cortex, 24(1), 143-148.

Segal, R., & Sisson, B.V. (1985). Medical complications associated with alcohol use and the assessment of risk of physical damage. In T.E. Bratter & G.G. Forrest (Eds.), Alcoholism and substance abuse: Strategies for clinical intervention (pp. 137-175). New York: The Free Press.

*Simon, R.P., Aminoff, M.J., & Greenburg, D.A. (1989). Clinical neurology. Norwalk, CT: Appleton & Lange.

Smith, J.W. (1986). Neurologic disorders in alcoholism. In N.J. Estes & M.E. Heinemann (Eds.), Alcoholism: Development, consequences, and interventions (3rd ed.) (pp. 153-175). St. Louis: C.V. Mosby.

*Strub, R.L., & Black, F.W. (1988). Neurobehavioral disorders: A clinical approach. Philadelphia: F.A. Davis.

Summers, J.A., Pullan, P.T., Kril, J.J., & Harper, C.G. (1991). Increased central immunoreactive beta-endorphin content in patients with Wernicke-Korsakoff syndrome in alcoholics. Journal of Clinical Pathology, 44(2), 126-129.

Tarter, R.E., Aria, A.M., & VanThiel, D.H. (1989). Neurobehavioral disorders associated with chronic alcohol abuse. In H.W. Goedde & D.P. Agarwal (Eds.), Alcoholism: Biomedical and genetic aspects (pp. 113-128). New York: Pergamon.

Umphred, D.A., & Appley, M.B. (1990). Limbic system: Influence over motor control and learning. In D.A. Umphred (Ed.), Neurological rehabilitation (2nd. ed.) (pp. 53-77). St. Louis: C.V.Mosby.

Victor, M., Adam, R.D., & Collins, G.H. (1989). The Wernicke-Korsakoff syndrome and related neurologic disorders due to alcoholism and malnutrition (2nd ed.). Philadelphia: F.A. Davis.

*Walton, J. (1985). Brain's diseases of the nervous system (9th ed.). Oxford: Oxford University Press.