CANADIAN THESES

THÈSES CANADIENNES

NOTICE

The quality of this microfiche is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this film is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30.

AVIS

La qualité de cette microfiche dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, examens publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de ce microfilm est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30.

THIS DISSERTATION HAS BEEN MICROFILMED EXACTLY AS RECEIVED

LA THÈSE A ÉTÉ MICROFILMÉE TELLE QUE NOUS L'AVONS REÇUE

THE UNIVERSITY OF ALBERTA

EFFICACY OF A HAPPINESS PROGRAM FOR CANCER PATIENTS

BY

JANICE L.C. KOWAL

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF EDUCATION

IN

COUNSELLING PSYCHOLOGY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

FALL, 1986

ISBN 0-315-32516-X

THE UNIVERSITY OF ALBERTA

RELEASE FORM

NAME OF AUTHOR: Janice L.C. Kowal

TITLE OF THESIS: Efficacy of a Happiness Program for Cancer Patients

DEGREE: Master of Education in Counselling Psychology

YEAR THIS DEGREE GRANTED: Fall, 1986

Permission is hereby granted to THE UNIVERSITY OF ALBERTA LIBRARY to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

.....Janice L.C. Kowal.....

9704 - 190 Street

Edmonton, Alberta

T5T 4C9

Date: September 22, 1986

Mind and Body

No argument is needed to show what transforming power the mind can exert. The energy set free by the magic agencies of hope, courage, desperation, fanaticism, or by the enthusiasm [redacted] a great cause, may reveal the possession of a force undreamed of, or so husband the resources of the body as to keep the flame of life burning for a time when the oil seems exhausted.

--James J. Putnam (1846-1918)

"The real voyage of discovery consists not in seeking new lands, but in seeing with new eyes."

-- Marcel Proust

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled Efficacy of a Happiness Program for Cancer Patients submitted by Janice L.C. Kowal in partial fulfilment of the requirements for the degree of Master of Education in Counselling Psychology.

.....
Supervisor

.....

.....

Date: Oct. 1, 1986

Abstract

Investigated was the efficacy, for use with cancer patients, of an audio-taped program supplemented by live workshop activities and discussion periods. The program was designed to increase felt personal happiness and life satisfaction. Subjects (n = 14) were cancer outpatient volunteers. A pre/post-test repeated measures design was used to test the hypothesis that cancer patients could become happier if they could modify their behaviours and attitudes to become more similar to the characteristics of happier people. It was also hypothesized that, following the program, the number, intensity and severity of cancer-related problems would decrease as would the frequency of occurrence of psychosomatic symptoms. Statistically significant happiness gains were found on two subscales of the Self Description Inventory -- one of four scales used to measure happiness. The subscales were: (1) Happy Personality and (2) Happiness Attitudes and Values. Such gains reflect changes in characteristics which may prove to be beneficial to cancer patients given the possibility of psychological precursors of cancer, psychological morbidity of cancer and cancer treatments, psychological impact of response to cancer in relation to progress and/or outcome, as well as evidence of a mind-body link based on psychobiological studies. Also noted, was a significant decrease in the frequency of occurrence of psychosomatic complaints. Such a decrease may be beneficial to cancer patients as well as to medical staff. All other mean differences, although in the predicted direction, were not significant. Individuals who presented exceptional cases were examined. In three cases, decreases in happiness levels were noted. These individuals could not be differentiated from other group members on the basis of record of absenteeism, demographic, or medical

data. The most useful fundamental was found to be "Stop Worrying" and suggestions were made for further adaptation of the Fourteen Fundamentals Program for use with cancer patients. In view of the tentative and conservative nature of the findings (based on univariate analysis and a sample size of 14), it was concluded that the program may be helpful to some, but not all, cancer patients wishing to increase emotional satisfaction and/or quality of life. Use of the program with cancer patients warrants further investigation.

Acknowledgements

I would like to thank the members of my committee, Dr. R. Jevne, Dr. J. Vargo and Dr. D. Sawatzky (Chairman).

In the beginning, there was Dr. Ronna Jevne who chaired monthly meetings with those of us from the Educational Psychology Department who were interested in psychosocial oncology. As a result of these meetings, I began to review psychosocial oncology literature and to explore ideas for potential thesis topics. Then, in the summer of 1984, I was hired to work as a psychosocial researcher. During that summer, I developed a number of educational modules for use by cancer patients. One of those modules, "Happiness Planning", became the basis of my thesis. Many sincere thanks to Ronna for giving me the opportunity to begin and the encouragement to proceed.

Throughout the thesis process, Dr. Jim Vargo was encouraging, supportive and thoughful. I offer heartfelt thanks to Dr. Vargo for his caring attitude as well as his immediate and constructive feedback.

Toward the end, when I was feeling particularly discouraged, there was Dr. Don Sawatzky who helped me to help myself set realistic deadlines. My sincere thanks to Don for his understanding and wisdom in responding to my needs.

Secondly, I would like to thank past and present staff/friends at the Centre for Study of Mental Retardation. Order of acknowledgement is dictated by order of involvement. I would like to thank Dr. Kar-La Shockman-Gates, Sandy Whithers and Barb Robertson for their encouragement and support. Dr.s Connie and Stanley Varnhagen and Dr. Das were invaluable supporters from personal (i.e., friends), practical (i.e., use of office equipment) and academic (i.e., consultants) perspectives and I would like to thank them for their assistance

throughout. I would also like to thank Fran Russell for her encouragement and support.

Next, I would like to thank Debbie Boddington, the Executive/Clinical Director of Group 5 Youth Counselling Centre -- the centre where I have worked since February, 1986. Debbie not only allowed me a great deal of flexibility regarding work hours but provided encouragement and sound advise regarding the completion of my thesis.

Finally, my husband, family and friends were of invaluable assistance throughout. I would like to thank my husband, Andrew Kowal, for his assistance, for growing with me and for loving me even though I made that difficult for him at times. I would like to thank my sisters, Dana Carew and Suzanne Williams, and my parents, Diane and Patrick Carew, for their love and encouragement. Special thanks goes to Suzanne for her editorial assistance and support; together, we met my deadline. Next, I would like to thank my very good friend and colleague, Dave Mensink, for his emotional and academic support. My heartfelt thanks also goes to Dr. Russell Savage, an outstanding teacher and a very special human being who gave of his time and energy to a near stranger/now friend. Finally, I would like to thank Dinner Club (Marg and Dave Mitsui, Sheila Livingstone, and Pete White) for their understanding and encouragement and for the opportunity to play.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1

Introduction

Context of the Problem

The reaction to cancer presents a notable mental health concern because of the large number of people affected (approximately 50,000 new cases per year in Canada, Statistics Canada, 1983). Due to advances in treatment, an increasing number of patients are being cured or are having extended remissions (Cancer facts and figures, 1983). Many research studies have documented the psychological distress caused by cancer and its treatments (c.f. Bukberg, Penman, Holland, & Greer, 1984; Craig & Abeloff, 1974; Meyerowitz, 1980; Peck, 1972; Pettet, 1979; Silberfarb & Greer, 1982; Weisman, 1979) even after treatment is complete and there is no further evidence of disease (Senescu, 1963). Some authors have suggested that the psychological trauma that results from the diagnosis and treatment of cancer can be as potentially damaging to the patient as the cancer itself (c.f. Bukberg et al., 1984; Cunningham, 1985; Harrell, 1972). Acknowledging the need for psychological intervention, Cunningham (1985) calls for controlled studies on the effects of psychotherapy. He argues that:

> Although epidemiological considerations suggest that the contribution of psychological factors to cancer onset is small (Fox, 1978, 1983) compared to purely biological and social factors (e.g., environmental carcinogens), no upper limit to what can be achieved by psychotherapy is necessarily thereby set: the relative influence of the psyche on outcome may be greatly expanded by such therapy, overriding the usual progression of disease. (Cunnningham, 1985, p.25)

Greer and Silberfarb (1982) concur. While noting that the primary aim of psychological intervention is to improve the quality of life of cancer patients, they surmise the following:

> Given...that psychological response to cancer may have an influence on outcome, it becomes conceivable that psychological

> therapy may help to prolong life in some cases, perhaps by modifying those attitudes and emotional disturbances which are seemingly associated with premature death. (Greer & Silberfarb, 1982, p.570)

The increasingly widespread use of psychotherapy directed against the physical disease, cancer, is not supported by any conclusive evidence for its efficacy or by an explicit theoretical base. To date, claims for the efficacy of psychological therapies are unjustified (Cunningham, 1985; Greer & Silberfarb, 1982; Stoll, 1979). However, there are several large-scale clinical reports suggesting a substantial prolongation of life through techniques of relaxation, meditation, mental imagery, and general counselling. The next logical step for researchers, then, is to conduct well-controlled clinical trials of psychotherapeutic approaches (Cunningham, 1985).

Statement of the Problem

The purpose of this study was to evaluate the efficacy of a psychological intervention program which, for a number of reasons (to be discussed in Chapter 2), has good potential for use with cancer patients. The program is entitled "The Fourteen Fundamentals Program for Increasing Personal Happiness" (Fordyce, 1977). The dependent variables of the study were: (1) subjective happiness and/or general well-being ratings; (2) cancer problem situations self-report inventory scores; (3) subjective somatic complaint scores; (4) demographic and medical variables; and (5) sessional and program evaluations.

Statement of Hypotheses and Questions

Based on previous research, it was predicted that following the program, cancer patients would experience increased levels of happiness and/or general well-being. Also predicted, was a decrease in the number and intensity of problem situations and psychosomatic symptoms. In

order to examine the possibility that the program was effective for certain cancer patients and not others, demographic information as well as medical information was obtained. One final objective was to obtain feedback about the Fourteen Fundamentals Program from cancer patients with a view to future adaptation of the program for use with cancer patients.

Significance of the Study

If it is true that The Fourteen Fundamentals Program can effect desirable changes in cancer patients, then the program can be used as an adjunct to counselling and therapy or as an educational tool. As such, implementation of the program could greatly increase the efficiency of psychologists by allowing them to help greater numbers of individuals with minimum guidance by relying, when deemed appropriate, on the individual's own ability for self-directed growth.

Definition of Terms

For purposes of the present study, happiness will be defined as "a longer-term, overall felt sense of emotional well-being and contentment with life -- a global index of life satisfaction" (Fordyce, 1983a, p.484). This definition is congruent with most in the psychology of happiness literature although writers and/or researchers tend to use one of the three following terms preferentially: (1) happiness; (2) well-being; or (3) life satisfaction. The terms "well-being" and "life satisfaction" are given preference in the cancer literature. When reviewing or discussing research findings and reporting inventory results, each researchers' terminology will be adhered to. Otherwise, preference will be given to the term "happiness" because the present study is based, primarily, on research findings from the psychology of happiness field.

Delimitations of the Study

The study was delimited to:

1. Cancer patient volunteers.
2. Subjective evaluations of patients' levels of happiness and problems.
3. Treatment involving a similar presentation of Fordyce's audio-cassette package of "The Fourteen Fundamentals Program to Increase Happiness". The presentation consisted of an edited version of Fordyce's tapes such that his lecture material remained fundamentally intact. Omitted from the tapes were introductions to each session by college students, reference to the relationship between health and happiness and offhand remarks made by Fordyce in a joking manner -- remarks appropriate for his college student audience but irrelevant to cancer patients. In addition, workshop activities were transcribed and then omitted from the tapes so that the investigator could conduct workshop activities live with the patients involved in the program. Group discussion focussing on the relevance of Fordyce's Fourteen Fundamentals for cancer patients was also incorporated into the program. For a more detailed description of program content, refer to Appendix A.

Stance of the Researcher

One advantage of becoming a participant in the program is that the researcher may gain insight into how it feels to be doing the work -- insight which would not be accessible to an outsider (c.f. Cusick, 1973; Shipman, Bolam, & Jenkins, 1974; Wolcott, 1975). In this study, the role of the researcher was one of observer-as-participant, perhaps better described as "involved observer" (Woods, 1979). The researcher's stance involved an interplay between that of the committed insider and that of the critical questioner. While attempting to understand the

participants' thoughts, feelings and behaviours, the researcher constantly queried the taken-for-granted meaning of information gleaned from group discussion.

Organization of the Thesis

Chapter One has described the nature of the problem and outlined the purposes of the present study. Chapter Two reviews the literature on happiness and cancer with specific reference to the research that is pertinent to the present study. A description of study participants, specific instruments utilized and rationale for their inclusion, as well as the design of the study, are described in Chapter Three. Chapter Four presents the research findings and Chapter Five explores the theoretical and therapeutic implications of the results.

CHAPTER 2

Literature Review

During the past ten years, two popular areas of research have been developing independently. The two broad areas being referred to are: happiness and cancer. At first glance, these two areas may appear to be mutually exclusive. The purpose of the literature review which follows, is to demonstrate how research findings from the psychology of happiness area are applicable, in a therapeutic sense, to cancer patients. Toward this end, an overview of pertinent research in the area of happiness leads into an overview of cancer research.

Happiness is an Important Concept to Study

Throughout history, philosophers have explored the idea that man exists in order to be happy. Some considered happiness to be the highest good and ultimate motivation for human action (Diener, 1984; Shin & Johnson, 1978). William James, for example, stated that "How to gain, how to keep, how to recover happiness is for most men at all times the secret motive of all they do and all they are willing to endure" (Kammann, Christie, Irwin, & Dixon, 1979). Austin (1968) claimed that being happy represents the highest assessment of man's total condition. Furthermore, in accordance with psychological theory, personal happiness is generally held to be the ultimate goal of all human endeavor (Fordyce, 1983a). Just what is this desirable quality (Diener, 1984) that people are striving for? What is meant by the term 'happiness'?

Definition of Personal Happiness

Studies conducted over the last twenty years yield an accumulation of knowledge about the nature of personal happiness and its apparent causes, as well as the attributes, personality characteristics, and objective situations of those individuals who have achieved high levels

of happiness.

In the present study, personal happiness is defined as "a longer-term, overall felt sense of emotional well-being and contentment with life -- a global index of life-satisfaction" (Fordyce, 1983a, p. 484). This overall sense of happiness is the result of numerous, complexly interacting factors in a person's life. Congruent with Fordyce's (1983a) point of view, individual perceptual and attitudinal sets are equally as important as basic temperament.

In terms of perceptual and attitudinal sets, personal happiness involves an appraisal of one's overall quality of experience (Benditt, 1974; Cameron, 1975). Kammann (1982) noted a cognitive bias to construe events either positively or negatively and called this effect "happiness set". He found that happy people have a stronger "Pollyanna effect" than unhappy people. Happiness, therefore, depends not so much on objective life circumstances as on the way in which these are subjectively interpreted and evaluated (Kammann, 1982; Lichter, Haye, & Kammann, 1980). Campbell, Converse and Rogers (19[illegible]) found that most objective life circumstances account for less than five percent of happiness variance, and even in combination do not account for more than ten percent of the variance. These factors include health (Brickman, Coates & Janoff-Bulman, 1977; Krupinski & MacKenzie, 1979; Campbell et al., 1976), individual demographic variables such as country or small town setting, income, type of work (Andrews & Withey, 1976; Diener, 1984), number of friends, disability, and intelligence (Kammann & Campbell, 1982). Such findings have been replicated by others (c.f. Andrews & Withey, 1976; Kammann, 1982, 1983). Happiness is primarily a product of the positive assessments of life situations -- the possession

of resources; the satisfaction of needs, wants and desires; participation in self-actualizing activities (Shin & Johnson, 1978) -- and favorable comparisons of these life situations with those of others and with past experiences (Crosby, 1976; Shin & Johnson, 1978). Being happy implies having a preponderance of positive affect over negative affect (Kammann & Flett, 1983b, Bradburn, 1969).

In terms of the basic temperament component of happiness, this quality can, to some extent, be considered as both a slowly changing state (Diener, 1984) as well as a trait (Larson, Diener, & Emmons, in press). According to Diener and Emmons (in press), positive and negative affect are negatively/inversely correlated in the short-term. This relationship describes the state component since positive and negative affect are unlikely to occur together within the same person at the same moment. The strongest negative correlation between positive and negative affect has been found to occur during emotional times (Diener & Emmons, in press). However, positive and negative affect are relatively independent in the long-term (periods of weeks or more). This relationship is possibly more trait related since how much people feel of positive affect is unrelated to how much they feel of negative affect. Furthermore, a trait is described as a predisposition to experience certain levels of affect. It has been estimated that the percentage of variance in happiness measures due to person factors ranges from 39 to 40; reliabilities point to some portion of happiness being due to personality, but also accentuate the importance of life circumstances (Diener & Larson, 1984). Two other dimensions of affect considered by Diener and Emmons to be important are frequency and intensity. Frequency may vary inversely, whereas intensity of affect may covary across persons; those who feel one type of affect strongly

may also experience more intense levels of the other affect (Diener, Larsen, Levin & Emmons, in press). Mean levels of the two types of affect do not correlate when longer time spans are considered because the influence of frequency and intensity cancel each other out. This model suggests that positive and negative affect may be controlled by the same processes but are structured in such a way that they are independent in expression across persons (Diener & Emmons, in press).

According to Simpson (1975), being happy means having a happy life, a life in which all of one's objectives form a harmonious whole. In making such a judgement about happiness, man takes into account various aspects of his condition and circumstances, as well as his feelings about them. Fletcher (1975) characterizes this concept of happiness as a sensitive commixture of mind and feeling (c.f. Goldstein, 1973). Thus, feelings of pleasure and pain can occur both in the context of a happy life and in the context of an unhappy life.

Based on a review of philosophical and theoretical literature, Shin and Johnson (1978) proposed a theoretical model of happiness, a model which incorporates many of the ideas mentioned above. Happiness is shown as depending primarily on the way in which a person perceives and evaluates particular needs of his existence and in which he compares his life situations. Needs assessment and comparison of life situations are, in turn, influenced by characteristics of the respondent and resources at his command, such as sex, age and income. These characteristics and resources are viewed as having a direct influence on happiness, as well as indirect effects through the assessment and comparison of particular situations. The processes of assessment and comparison are thought to be influential in evaluating the present state of happiness, each by mediating the effects of the other. This is

because the degree of fulfillment required to produce a sense of satisfaction depends on aspiration level. Aspiration level, in turn, is influenced by the particular standards of comparison used, such as past experience and comparisons with others. Also, the choice of particular standards for comparison is influenced by the given level of need-satisfaction. In summary, Shin and Johnsons' model proposes that happiness is a concept relative to individuals, their unique needs and resources and to the culture and environment in which they function as social beings.

The concept of happiness, being equivalent to both "global sense of well-being" and "satisfaction with life as a whole", is also viewed as a global assessment of a person's quality of life according to his own chosen criteria (Kammann & Flett, 1983b; Shin & Johnson, 1978; Andrews and Withey, 1976; Campbell, 1976; Campbell et al., 1976; Brenner, 1975).

Although the feeling of happiness has many names (eg., joy, contentment, fulfillment, peace of mind, self-satisfaction, etc.) each of which has a subtle situational connotation, happiness is the word most frequently understood for this emotional condition. Therefore, happiness is the term most often used by researchers who have studied it.

One of the researchers who has been conducting in depth studies of happiness over the past ten years is Dr. William Fordyce. Fordyce (1977) developed a program to increase levels of avowed happiness. Following is a summary of research pertinent to this area.

Increasing Levels of Avowed Happiness

An idea which has become popular is that concentrating on gaining happiness may be self-defeating. Despite the fact that this idea

appears frequently in the literature, it has not been rigorously formulated or empirically tested (Diener, 1984). According to this perspective, one needs only to concentrate on important activities and goals, and happiness will ensue. There is no evidence to substantiate this approach, however, there is some evidence that a person can give conscious direction to the affective associations in his or her life. Two experiments cited by Lichter et al. (1980) indicated that happiness can be improved either by a group discussion of beliefs and attitudes, or alternatively by daily rehearsal of positive feeling statement. In 1977, Fordyce offered evidence that a conscious attempt to reduce negative thoughts can increase happiness. Thus, explicit conscious attempts to avoid unhappy thoughts and to think of happy ones may, to some extent, increase happiness. Further studies conducted by Fordyce (1977, 1983a) also suggest that through conscious effort, levels of personal happiness can be increased. Further discussion of Fordyce's research follows.

Fordyce (1977) reported three studies in which a self-study program of happiness-increasing techniques was developed and used to successfully enhance the personal happiness of community college students. The program, called the "Fourteen Fundamentals for Increasing Happiness", was based on comprehensive reviews of happiness research studies. The aim of these reviews was to focus on happiness characteristics that might be amenable to the short-term control of average individuals. A number of consistently reported traits were isolated, and these were incorporated into several pilot programs for happiness training. In the original studies these programs were used with varying degrees of success, and eventually the most successful elements were combined to yield the present 14 fundamentals. What

resulted was a list of 14 characteristics highly typical of happy individuals -- characteristics that average individuals appear able to emulate. Briefly described, the 14 fundamentals are as follows: (1) keep busy and be more active; (2) spend more time socializing; (3) be productive at meaningful work; (4) get better organized and plan things out; (5) stop worrying; (6) lower your expectations and aspirations; (7) develop positive, optimistic thinking; (8) become present oriented; (9) work on a healthy personality; (10) develop an outgoing, social personality; (11) be yourself; (12) eliminate negative feelings and problems; (13) close relationships are the number one source of happiness; (14) put happiness as your most important priority (Fordyce 1983a). The basic "happiness principles" were incorporated in a course of study that included detailed explanations of each fundamental (with cognitive and behavioral techniques to actualize them), along with a general overview of the psychology of happiness. Together these elements constitute the Fourteen Fundamentals Program (Fordyce, 1983). Lichter et al. (1980) used a basic outline of the Fourteen Fundamentals Program (coupled with ideas from Dyer, 1977) to produce happiness increases in their studies. The informal use of the material by others also indicated a positive potential.

Fordyce (1983a) continued his research of the fundamentals -- research based on the hypothesis that "If average people can modify their actions, thinking patterns, and daily life-styles to better emulate the well-established characteristics of happier individuals, they too will become happier people" (p. 485). In four additional studies in which test sensitization effects were found to be nonsignificant, the pre/post-test period ranged from six to eleven weeks (Fordyce, 1983a). Fordyce found that individuals receiving instruction

in the fundamentals increased their happiness significantly more than control groups. Although this difference (as indexed by Happiness Measures scores) did not hold across all studies, individual's receiving the program grew significantly more than controls in their happiness life-style traits, achieved happiness, and total happiness characteristics (on versions of the Self Description Inventory). It was noted that the life-style fundamentals were the most immediately affected (considered, according to feedback, the easiest to implement) and that the other fundamentals had a slower effect. Also based on the data, was the finding that individuals receiving the program grew significantly more than controls in their inner-directedness (as measured by the Personal Orientation Inventory) while significantly reducing their anxiety and depression levels (as indexed by the Multiple Affect Adjective Checklist and the Depression Adjective Check List). Furthermore, responses (based on a 63% response rate) in a 9 to 18 month follow-up survey study gave a very positive rating of the lasting value of the fundamentals.

Based on the results of his investigations, Fordyce (1983a) concluded that the Fourteen Fundamentals Program appears to be an effective tool for happiness enhancement and affects other mental gains such as increased inner-directedness and decreased anxiety and depression. He argued that human happiness can be increased for many, if not most, individuals despite situational constraints or without fundamental changes in their economic status or social condition. Does this group of individuals, who may increase their happiness with the assistance of Fordyce's program, include those whose health is in jeopardy? It is this question that the literature review will now address.

Happiness and Health

Contrary to objective data (Campbell et al., 1976; Krupinski & MacKenzie, 1979), most people believe that happiness is strongly associated with good health (Kammann & Campbell, 1982). Kammann, Farry, and Herbison (1983) stated that there are, undoubtedly, circular loops in the mind-body system so that any assumption of one-way causation is bound to be inadequate. They also asserted that what needs to be doubted is the glib explanation that illness or disability directly leads to unhappiness. In support of their contention is the finding that paraplegics who had just recovered from car accidents were not reliably less happy than recent lottery winners with average winnings of nearly half a million dollars (Brickman et al., 1978).

As stated previously, the real causes of happiness appear to lie more in psychological factors, such as evaluations and expectations, than in environmental situations and personal advantages. In fact, a substantial number of studies show a relatively sizable relationship between self-rated health and subjective well-being and/or happiness (e.g., Edwards & Klemmack, 1973; Larson, 1978; Markides & Martin, 1979; Near, Rice, & Hunt, 1978; Ray, 1979; Riddick, 1980; Spreitzer & Snyder, 1974; Toseland & Rasch, 1979-1980; Wessman, 1957; Wilson, 1960; Zautra & Hempel, 1983; Zeglen, 1977), and this effect remains when other variables such as socioeconomic status and age are controlled (Clemente & Sauer, 1976; Freudiger, 1980; Larson, 1978). A meta-analysis of studies on health and subjective well-being revealed a consistent moderate correlation of about .32 between them, with virtually all findings being significant (Okun, Stock, Haring, & Winter, in press).

Sense of subjective well-being has also been linked with that class of bodily disturbances and discomforts traditionally called

"psychosomatic symptoms" and/or somatic complaints (Bradburn, 1969; Brenner, 1979; Kammann et al., 1983). High inverse correlations (-.35 to -.50) have been found between measures of global subjective well-being and small sets of psychosomatic symptoms. One explanation for such a link and for a mind/emotion-body link, in general, has been reported by Cunningham (1985). He noted that, in humans, mental factors can affect the function of the immune system, a pathway through which mind may influence cancer growth. He states that there is growing evidence that mental events can lead to profound therapeutic changes in the body. Cunningham cites such examples as the placebo effect (Benson & Epstein, 1975), psychological conditioning of immune responses (e.g., Ader & Cohen 1975) and research on mental imagery (Lang, 1979; McMahon & Hastrup, 1980).

Further testimony to a mind/emotion-body link is offered by Cousins (1979). He claimed that when he was severely ill, ten minutes of genuine belly laughter had an anesthetic effect and would give him at least two hours of pain free sleep. Weinstein (1982) found that an observational measure of smiling and laughing correlated substantially with a self-report measure of happiness. Together, these two findings suggest that positive emotions may have a positive effect on body chemistry. More specifically, Cousins stated that since the "cell-mediated immune" response probably plays an essential role in resistance to cancer, there is reason to believe that the patient's state of mind can effect the course of pathological processes that involve immunological reactions. Based on this assumption, those who may benefit from the Fourteen Fundamentals Program, include cancer patients. There are a number of other factors which suggest that cancer patients may benefit from increased levels of happiness. Prior to

reviewing these factors, discussion of a number of cautions is in order.

Research in the area of psychological aspects of cancer is fraught with methodological weaknesses such as inappropriate samples, uncoordinated and unreliable measuring instruments, inadequate comparison groups, retrospective as opposed to prospective data gathering, and a disregard for fitting the research work into any kind of conceptual or theoretical framework (Cooper, 1984). If, as in the case of many, the study was retrospective in nature, another drawback exists; one cannot be certain whether any psychological or, for that matter physiological abnormalities discovered are precursors or sequelae of cancer or are attributable to memory falsification (Greer, 1979). A review of the literature shows that evidence both supports and rejects the view that psychological factors and/or stress are related to increased risk of cancer incidence, relapse, and mortality in humans (Fox, 1983). The main obstacle to acceptance of a personality/cancer link based on the research, is the great variation between results of different groups. As Fox (1983) noted, different studies have often emphasized different mental qualities of patients, and when the same assessment instruments have been used across studies (e.g., MMPI), the subscales indicating significant effects may vary from study to study. Consequently, studies showing psychological factor differences between cancer patients and others, between those destined to get cancer and others, and between patients surviving a longer and shorter time, show results for psychological factors opposite to ones giving positive results (Fox, 1983). For any one of a number of psychosocial factors, there appears to be either meager or contradictory evidence (Cousins, 1985). In view of the various results and poor methodology, positions must be tentative, if not outright speculative (Fox, 1983). With this

caution in mind, four areas of research pertinent to the present study will now be addressed -- (1) psychological precursors of cancer; (2) psychological morbidity of cancer and cancer treatments; (3) psychological response to cancer in relation to progress and/or outcome; and (4) psychobiological studies.

Psychological Precursors of Cancer

An area of research which has attracted considerable attention in the past few years is the possibility of psychogenic effects on cancer. Fox (1983) states that:

> The total causal contribution of 100% comes from all the carcinogens -- hormones, radiation viruses, chemical carcinogens like smoke or chromium or nitrosamines, hereditary causes, IS [immune system] dysfunction, and possibly stress and personality, which are presumed to affect the immune system or hormones mostly....Now, we must add in all the other carcinogenic factors, that is, the environmental and the nonpsychological genetic ones. The total that might be attributable to PF [psychological factors] then becomes even smaller, and assuming that several PF might have effects, that which might be attributable to any single one becomes much smaller. (pp. 24-25)

A number of prospective studies have been published to supplement the large existing literature correlating psychosocial events and human personality traits with risk of developing the disease. Fox (1983) further noted that few prospective studies reported the same positive results (Grossarth-Maticek, 1980a; Hagnell, 1966; McCoy, 1976; Morrison, 1980; Shekelle et al., 1981; Thomas, 1976). Regarding positive results, a number of design difficulties found in many of the studies make one less confident in the findings, but are not cause to reject them (Crisp, 1970; Fox, 1978; Morrison & Paffenbarger, 1981). Cunningham (1985) in his review of prospective studies, concluded that although results are variable, "research suggests that people contracting cancer are not a psychologically random sample of the population" (p.18). In fact, many

prospective and retrospective studies have established significant positive correlations between human personality factors and risk of developing cancer. Research findings suggest that a number of features may predispose an individual to cancer. Those features which may be amenable to change through participation in The Fourteen Fundamentals Program (Fordyce, 1977) include the following:

(1) depression, both clinical (Buckberg, Penman & Holland, 1984; Coppen & Metcalfe, 1963; Kerr, Shapira & Roth, 1969; Layne, Heitkemper, Roehrig, & Speer, 1985; Massie & Holland, 1984; Siskind, 1979) and nonclinical (Bieliauskus & Garron, 1982; Bukberg et al., 1984; Cassilith, 1984; Cunningham, 1985; Greer, 1983; Kowal, 1955; Greer & Silberfarb, 1982; Grossarth-Maticek, 1980a; LeShan, 1959; LeShan & Worthington, 1956; Massie & Holland, 1984; Shekelle et al., 1981);

(2) dependency (Abse et al., 1974; Greenberg & Dattore, 1981);

(3) emotional repression (Abse et al., 1974; Bahnson, 1980, 1981; Brown, 1966; Crisp, 1970; Cunningham, 1985; Dattore, Shontz, & Coyne, 1980; Greer, 1979; Grossarth-Maticek, Kanazir, Velter, & Jankovic, 1983a; Kissen, 1963, 1964, 1966a; Kissen & Eysenk, 1962; Kissen & Rao, 1969; Perrin & Pierce, 1974) and/or suppression/denial (Abse et al., 1974; Bahnson, 1980, 1981; Dattore, Shontz, & Coyne, 1980; Greer, 1979; Greer & Morris, 1975) and/or inhibition (Greer, 1983; Greer & Morris, 1975; Kissen & Eysenk, 1962)

(4) impairment of self-awareness and introspection (Abse et al., 1974);

(5) ambivalent, avoidant, and controlled responses (Cunningham, 1985; Graves & Thomas, 1981) and/or impaired ability to express hostile feelings (Abse et al., 1974; Brown, 1966; Cox, 1982; Crisp, 1970; LeShan, 1966; LeShan & Worthington, 1956; Perrin & Pierce, 1959);

(6) submissiveness, non-aggressiveness, and self-dislike/low self-esteem

(Abse et al., 1974; Brown, 1966; Crisp, 1970; Grossarth-Maticek, 1980; Grossarth-Maticek, Kanazir & Schmidt, 1982; LeShan, 1959, 1966; Perrin & Pierce, 1959);

(7) a tendency to self-sacrifice and self-blame (Abse et al., 1974);

(8) lowered closeness and/or impaired ability to relate to others, especially parents (Abse, Wilkins, et al., 1974; Cox & Mackay, 1982; Cunningham, 1985; LeShan, 1966; Thomas, Duszynski, & Shaffer, 1979; Thomas & Greenstreet, 1973);

(9) rigidity and conventionality (Abse et al., 1974; Brown, 1966; Crisp, 1970; Perrin & Pierce, 1959);

(10) relatively high degree of self-reported stress (Funch & Marshall, 1983; Greer, 1983; Horne & Piccard, 1979; LeShan, 1959; LeShan & Worthington, 1956) and anxiety (Cassileth, 1984);

(11) a predisposition for experiencing hopelessness and despair (Abse et al., 1974; Grossarth-Maticek, 1980a; Grossarth-Maticek et al., 1983a; LeShan, 1959; Schmale & Iker, 1966).

There has been a greater prominence of psychological factors in younger patients (Abse et al., 1974; Bacon, Renneker, & Cutler, 1952; Becker, 1979; Funch & Marshall, 1983; Greer, 1979). This finding tends to confirm the validity of research findings pertaining to correlations between psychological factors and cancer. Psychic influences are, at most, only one of a number of contributors to cancer, and their relative impact would be expected to decline as intrinsically biological controls fail with increasing age. However, the question of whether there is a cancer prone personality has not been answered conclusively (Fox, 1978).

Biebauskas (1983), in a review of the etiology of cancer, contends that a chronic state of distress coupled with an ineffective coping style (particularly helplessness) increase the risk for cancer. Bahnson

(1981) notes that the evidence for a possible relationship between maturational experiences and the later development of cancer suggests a subtle and unstable link between cancer and early experiences of depletion and loss, reawakened by losses and depression in later life. Kissen (1966a) has argued that adverse life events and loss of a love object can lead to cancer through the psychological mechanisms of "despair, depression and hopelessness". Haney (1977) argues that personality predispositions may not be directly linked to cancer, but will help to determine "the psychic and somatic insults to which the individual will be exposed and the meaning these exposures will have for the individual". He adds that there is likely to be a psycho-carcinogenic process in operation, which works in such a way that the stressor and bodily predispositions interact and co-vary in the direction of an ultimate carcinoma, one feeding the other. However, not all writers agree. Fox (1983) states that the evidence supporting psychosocial factors in cancer incidence is not clear and that "one cannot trust any of the results...merely on the basis of reported findings" (p.25). He adds that present evidence, including demographic data, suggests that if psychological factors and stress do have an effect on incidence of cancer in the human, it is small. Zander (1983), in a review of literature in molecular research and genetics, concluded that only a minor part of the incidence rate of human cancer can be explained by psychogenesis. Despite criticisms of methodologies and contradictory findings, Cooper (1984) finds the area of stressful life events as "potentially fruitful" and an area which "must be taken seriously" (p.10). He states that although the exact bodily and psychological mechanisms are still not entirely clear, the

evidence is mounting that there is some link between personality and psychosocial factors and certain forms of cancer.

The case is still open on the psychogenic etiology of cancer. One cannot in all scientific conscience take a confident position; the present position must be tentative, if not outright speculative.

Psychological/Psychosociological Morbidity of Cancer and Cancer Treatments

The diagnosis of cancer can create a psychological disturbance in some people (c.f. Meyerowitz, 1980; Meyerowitz, Heinrich, & Schag, 1983; Peck, 1972; Pettet, 1979; Weisman, 1979). Responses include: shock and disbelief (denial); anxiety; anger and/or guilt; and sadness (Greer & Silberfarb, 1982). Often, cancer patients experience reactive depression (Greer & Silberfarb, 1982; Keltikangas-Jarvisen & Lovin, 1983; Meyerowitz et al. 1983; Petrucci & Harwick, 1984; Petty & Noyes, 1981) as well as depression which can occur as a side effect of treatment (Fras, Litin, & Pearson, 1967; Maguire, 1979; Plumb & Holland, 1977). Regarding the former, it has been suggested (Layne et al., 1985) that cancer precipitates an adjustment reaction with depressed mood because many patients believe that they will die. Some symptoms exhibited by cancer patients may be manifestations of negative beliefs rather than physical impairments. Patel, Sinha, & Gawadia (1980) found a high percentage of subjects to be suffering from the intense and disabling effects of anxiety, tension, insecurity in the face of impending death, and depression. Silberfarb & Greer (1982) stated that psychological responses to cancer fall into four general categories: sadness and hopelessness, anxiety, anger and/or guilt, and a stance of avoidance or denial.

Cancer survivors have been compared to a matched control group and

significant differences have been found. Cancer patients, as a group, reported a significantly lower sense of self-control and/or less self-confidence and more general health worries and/or aches and pains than the healthy control group (Schmale, 1980; Schmale et al., 1983). This psychological and physical vulnerability persists years after a cancer experience. Others (c.f. Meyerowitz et al., 1983; Redd & Hendler, 1983) also noted physical symptomatology including psychosomatic disturbances/complaints.

Other differences which have been found between groups of cancer patients and controls include: sense of hopelessness; lack of self-acceptance, covert hostility (Petrucci & Harwick, 1984); body image disruptions, hypochondria, and hostility (Keltikangas-Jarvisen & Lovin, 1983); anxiety and/or anger (Meyerowitz et al., 1983).

A strong interpersonal support system has been found to be a psychosocial asset for cancer patients (Clark, 1983).

Psychological Response to Cancer in Relation to Progress and/or Outcome

It is probably impossible to design a completely unambiguous study in this field: critics can always claim that uncontrolled factors other than the personality variables under study were responsible for the differential growth of cancer. However, to date it appears that psychosocial factors and stress have more effect on prognosis than incidence (Bernard, 1983).

A small number of published studies have cited correlations of personality characteristics with rate of progression of cancer. Conclusions suggest that patients whose disease has progressed relatively slowly ("slow progressors") and/or those who have a longer survival time (e.g., five years without mestastases) have been found to

possess some characteristics, relative to "fast progressors", which may be modifiable using the Fourteen Fundamentals Program. These characteristics include: (1) closer interpersonal relationships (Weisman & Worden, 1975); (2) greater ability to retain emotional control (Stavraky, 1968) and/or less emotional distress (Weisman & Worden, 1975); (3) good acceptance of medical and emotional support (Weisman & Worden, 1975); (4) better coping with illness-related problems (Weisman & Worden, 1975); (5) high ego strength (Achterberg, Mathews-Simonton & Simonton 1977; Ikemi, Nakagawa, Nakagawa, & Sugita, 1975; Kennedy, Telligen, Kennedy, & Haverick, 1976; Weinstock, 1977); (6) will to live coupled with acceptance of some responsibility for one's own healing and a belief that it can occur (Achterberg et al., 1977; Ikemi et al., 1975; Kennedy et al., 1976; Weinstock, 1977); (7) increased sense of purpose or meaning in life, frequently associated with spiritual or religious commitment or with a favorable change in the human environment (Achterberg et al., 1977; Ikemi et al., 1975; Kennedy et al., 1976; Weinstock, 1977); and (8) adoption of healthy changes in lifestyle (Achterberg et al., 1977; Ikemi et al., 1975; Kennedy et al., 1976; Weinstock, 1977).

Weisman and Worden (1975) found that long term survivors had closer personal relationships, were less emotionally distressed, regarded their physicians as more helpful, complained less and coped better with illness-related problems than was the case among short term survivors. Greer (1983) and colleagues (1979) found a more favorable outcome (recurrence-free survival) among mastectomy patients whose initial responses had been fighting spirit or denial than those who showed either stoic acceptance or a helpless/hopeless response.

Blumberg, West and Ellis (1954) concluded that an unaggressive,

acquiescent personality may experience more rapid disease progression. They also found "fast progressors" to be defensive, anxious, depressed, and to have poor acting-out ability compared with "slow progressors". In addition, Cunningham (1985) in his review of research, noted a relationship between degree of depression and risk of cancer death. Depression was found by Petty and Noyes (1981) to hasten decline and/or contribute to the rapid progression of cancer. In addition, Grossarth-Maticek (1980) found that a disturbed attitude on the part of the patient toward the environment and himself/herself can adversely influence the development of cancer.

In summary, there are indications that psychological characteristics can influence the course of cancer.

Psychobiological Studies

The most dramatic examples of good 'progress' in cancer are the rare cases of "spontaneous remission" in which treatment is not considered sufficient to have caused an observed regression of tumours (c.f. Cole, 1976; Everson & Cole, 1966; Weinstock, 1977; Klopfer, 1957; Ikemi, et al., 1975, Stoll, 1979). The multifocal regression of cancer indicates systemic control of its growth by the host, and thus opens up the possibility of mental influence. If psychological factors are, indeed, found to influence outcome, such influence is mediated through biological pathways -- probably the neuroendocrine and immune systems. Reviews of research findings (c.f. Ader, 1981; Bahnson, 1980, 1981; Borysenko & Borysenko, 1982; Cox, 1982; Fox, 1978, 1983; Greer, 1979; Greer & Silberfarb, 1982; Holden, 1978; Jemmott & Locke, 1984; Loyd, 1984; Locke & Hornig-Rohan, 1983; Scurry & Levin, 1979; Stein, Keller, & Schleifer, 1979; Wellesch & Yager, 1983) have cited evidence that psychological disturbance can affect endocrine and immune functions and

that hormonal and immunological factors play a part in the development and course of certain kinds of cancer. Weinstock (1984) concluded that psychologically induced stress, perhaps resulting from depression and lost hope (Fox, 1983), raises corticosteriods, inhibits cellular immunity, and apparently permits cancer development and its spread. It is likely that physical and emotional conditions interrelate so that worsening of the emotional component has a direct effect on the patient's illness, and vice versa (Hall & Beresford, 1983).

What is being postulated is not that psychological factors constitute a necessary or sufficient cause of cancer, but that these factors can, through their influence on homeostatic controls and behaviour, contribute to cancer susceptibility in certain individuals (Greer, 1979).

Overall there is now convincing evidence that the mind may influence the immune system and, in many instances, growth of cancer. The primary difficulty with this area of research is that the complexity of these biochemical pathways makes it difficult to discriminate between possible effects and those that are important in vivo, although it is likely that well-established neurochemical and hormonal intermediaries are involved (Cunningham, 1985).

To date, Dr. Selye's Institute of Stress has collected over a hundred well-documented scientific articles concerning the curative effects of patients' attitudes in cancer cases (Selye, 1976).

In summarizing findings from the cancer research cited above, two considerations emerge: (1) the fact that, due to advances in treatment modalities, cancer patients are surviving for longer periods of time, living years beyond what is generally considered to be the acute phase of the disease and (2) it is possible that psychological/psychosocial

factors may be involved in the incidence, progression, and longevity of cancer. Consequently, consideration is now being given to the quality, as well as quantity, of cancer patients' lives (Devlin, Plant, & Griffin, 1971; Greer, 1984; Jeter, 1982). This subject is the topic of the next session.

Quality of Life of Cancer Patients

One important factor influencing the potential quality of life of cancer patients appears to be the amount of pain they experience. Stacham, Reinhardt, Raubertas, and Cleeland (1983) investigated the correlation between cancer pain severity and mood states. Their results, based on both inter- and intraindividual analysis, showed small but significant correlations between pain measures and negative mood states as well as inverse correlations between pain and positive mood states. Depression was correlated with some pain ratings of cancer patients, a finding supported by Woodeford and Fielding (1970) who found that cancer patients who have prolonged pain appear to have higher levels of depression than patients who do not have pain.

Hinton (1975) noted a significant relationship between aspects of quality of life and premorbid personality.

Massie & Holland (1984) maintain that supportive care includes concern for the patient's well-being and quality of life. They add that such treatment can enhance the patient's ability to adapt to the disease and tolerate its treatments.

A number of researchers (cf. Johnson & Blumberg, 1984; Tarnower, 1984) have concluded that patient education can do much to enhance the quality of life of cancer patients and that future research should focus on the development of effective educational methods and the implementations of viable programs.

One program which may assist cancer patients to improve their quality of life/general well-being is Fordyce's Fourteen Fundamentals Program for Increasing Personal Happiness (Fordyce, 1977). Following is a discussion of the applicability of this program.

A Happiness Program for Cancer Patients?

Fordyce's Fourteen Fundamentals Program for Increasing Personal Happiness (Fordyce, 1977) addresses many of the personality characteristics linked to cancer and promotes many of the characteristics correlated with longer survival time. The Fourteen Fundamentals program, which has been administered to community college students, has been found to increase their awareness of and sensitivity to happiness as well as to increase their happiness levels for as long as 18 months following the program (Fordyce, 1977, 1983a). In addition to being able to create, maintain, and enhance happy moods, Fordyce (1983a) has found that a variety of cognitive and/or behavioral changes have taken place among those who have participated. Notably, individuals reported that they developed the ability to prevent or cope well with unhappy moods. Fordyce (1983a) also found that students' levels of anxiety and depression decreased following participation in the Fundamentals Program. Furthermore, inner-directedness of these subjects increased as did their happiness characteristics and life-style traits.

Further support for use of a happiness increasing program with cancer patients comes from Barrow (1980). Barrow reports that happiness has been significantly correlated with such characteristics as self-esteem, successful involvement with other people and social adjustment. It is likely, therefore, that these characteristics could be further developed by individuals whose level of happiness increase.

Following is a summary of the literature.

Summary

In summary, four conclusions about happiness, health, and cancer may be stated on the basis of empirical research studies:

(1) good health is not a necessary condition for happiness;

(2) personal happiness can be increased;

(3) features accompanying increased happiness are positively correlated with "slow progression" of cancer and increased survival potential;

(4) increased happiness has been negatively correlated with features suggested to predispose an individual to cancer and/or contribute to "fast progression" of the disease.

Given these observations, the Fourteen Fundamentals Program for increasing happiness has considerable potential as a psychotherapeutic approach for use with cancer patients and warrants investigation. Following are the hypotheses that were investigated in the present study.

Formal Statement of Hypotheses

Hypothesis 1: It was predicted that happiness levels would increase following a program which incorporated the Fourteen Fundamentals. Happiness was operationally defined in the study by a number of measures: (1) Affectometer 2; (2) General Well-Being Schedule; (3) Happiness Measures; and (4) Self Description Inventory.

Hypothesis 2: It was predicted that problem levels would decrease following a program which has incorporated the Fourteen Fundamentals. Problems were operationally defined in the study by two measures: (1) Cancer Inventory of Problem Situations and (2) Health Questionnaire.

CHAPTER 3

Method

Subjects

Letters introducing the Fourteen Fundamentals Happiness Increasing Program were mailed to eighty-eight members of either the Edmonton chapter of Cansurmount or Reach for Recovery; two volunteer support groups for people who have or have had cancer (see Appendix B for letter). Follow-up telephone calls were made one week after the letters were mailed. Nineteen people were recruited in this way. One additional participant volunteered after hearing about the program on a word-of-mouth basis. Thus, a total of twenty people volunteered to participate in the study. Accounting for experimental mortality, fourteen subjects; ten females and four males, participated in the study. Four people withdrew due to personal time constraints, one individual did not feel that she would benefit through participating and one individual became ill and was hospitalized. The study sample was White, Protestant, and primarily female, married, averaging 42 years of age (ranged between 23 and 58 years), and nonprofessional. In terms of support, all subjects rated family members, relatives, and friends as being supportive following the diagnosis of cancer. Specific demographic data are presented in Table 1.

Table 1

Demographic Data for Patients

Demographic variables	N	%
Sex		
Males	4	29
Females	10	71
Marital status		
Married	8	57
Single	4	29
Divorced	2	14
Employment		
Working	10	71
Not working	4	29

Medical data were obtained from patients' physicians who completed Medical Summary Forms (refer to Appendix C for covering letter sent to doctors). Complete medical information was available for 13 of the 14 participants in the study (one patient's doctor had died and her current physician was unable to provide complete information). The site of participants' cancer varied; 5 had breast cancer, 3 had cancer of the testes, 1 had vaginal cancer, 1 had cancer of the kidney, 1 had brain cancer, 1 had cancer of the endometrium, 1 had lymphoma (immunoblastic sarcoma), and 1 had plasmacytoma of T-5. Time elapsing from primary cancer diagnosis ranged from 7 months to 16 years, with a mean of 6 years, 5 months. Based on information provided by doctors, 11 people

had no active disease and were not receiving treatment aimed at eliminating malignant cells; one person was receiving adjuvant care (i.e., had been receiving chemotherapy for eight months); and one person had active but not widespread disease. Only one person had not had an operation for cancer; six patients had undergone one operation for cancer; and six patients had undergone two or more operations for cancer. One participant had experienced a major depressive episode for which he had been hospitalized. Two patients had histories of drug and alcohol abuse but no impairment had incurred. No other illnesses such as diabetes, cardiovascular disease, and hypertension were experienced by group members. All subjects were outpatients at the time the study took place. Karnofsky rating of performance status revealed that 11 people were rated by their medical doctors at a score of 100 (normal, no complaints; no evidence of disease) and two people were rated at 90 (normal activity; minor signs or symptoms of disease). Doctors' goals for treatment were rated as curative in 11 cases, palliative in one case, and supportive care (no treatment) in one case.

Measures

Ciampi, Silberfeld and Till (1983) maintain that there is "...no truly comprehensive, multipurpose, global measure of quality of survival suitable for use in oncology" (p.4). For most intervention studies there is a need for new measures of psychologic well-being with a defensible basis in psychological theory (Fotopoulus, Dintruff, Costello, & Cook, 1981). The concept of levels of adjustment and quality of life are two of the areas which lack standardized instruments designed specifically for the cancer patient. Therefore, a decision was made, in the present study, to use standardized instrumentation versus measures specific to cancer. This choice was based on the fact that the

standardized measures are psychometrically superior because internal validity and reliability were known. In addition, information obtained would add to accumulated knowledge and the ability to generalize findings.

Inventories, besides being selected on the basis of high validity and reliability, were screened on the basis of time for completion. Since all instruments were being administered during one session, it was important to ensure that the total time required to complete all instruments did not exceed approximately ninety minutes. The time limit was important because fatigue effects reduce reliability of inventory scores.

One further stipulation, for expediency purposes (i.e., group administration of instruments), was that each instrument be self-administering.

What follows is an account of the instruments used in the present study.

Happiness Inventories

Prior to describing, discussing the reliability and validity, and commenting on the rationale for inclusion of each instrument, a general comment about the selection criteria for the happiness inventories used in the present study is warranted.

All happiness inventories used were self-report measures. It is a working assumption that how happy a person claims to be by verbal report is the best available measure of that person's happiness and is also a logically necessary measure of it (Bradburn, 1969; Barrow, 1980). Fordyce (1983b), after an extensive review of the literature, concluded that self-reports of happiness are the most valid indices. Empirical data show that reliable and meaningful self-reports of subjective

well-being are entirely possible and relatively free from response artifacts (Andrews & Withey, 1976; Campbell et al., 1976; Kammann et al., 1979). Self-report measures have been found by Irwin, Kammann, & Dixon (1979) to be more reliable than judgements by others such as flatmates, friends, or relatives. Fordyce (1983a) concurs with this finding and adds that other alternatives such as behavioral or gestural observation, physiological indices, and ratings by professionals rarely demonstrate validity as high as that obtained with self-reports. Further support for the use of self-report measures comes from Irwin et al. (1979) who found interjudge reliability to be low; self-rating reliability was found to be high ($r = .98$). In his recent major review of the literature, Diener (1984) noted that for a full and adequate measurement of subjective well-being, both frequency and intensity of happiness affect are necessary. Furthermore, Kammann and Flett (1983) found that each index carries a small "test method effect" that reflects its particular format of instructions, items, and response choices. To overcome such a bias, the present researcher used more than one well-being scale.

There is evidence that momentary mood influences subjects' responses to subjective well-being questions (Schwarz & Clore, 1983). Momentary affective states (e.g., those produced by the weather) have been found to influence happiness and satisfaction judgements. Despite the influence that current mood can have on subjective well-being measures, Kammann (1983) and Kammann et al. (1979) presented evidence indicating that multi-item scores are not substantially distorted by this effect. The substantial temporal reliabilities of the multi-item subjective well-being measures indicate that they are not greatly influenced by the mood at the moment of responding. Taken together, the

data of Schwartz and Clore (1983) and the long-term reliability data suggest that both current mood and long-term affect are reflected in subjective well-being measures.

Larson, Diener and Emmons (in press) reviewed many subjective well-being scales. Their findings suggested that individual well-being scales share substantial common variance. They also found no significant differences between males and females on any of the well-being measures, a finding which is consistent with other recent findings (Diener, 1983). Furthermore, Larson and collegues (in press) and Kammann and Flett (1983) concluded that researchers of subjective well-being need not be overly concerned with social desirability bias nor response acquiescence/biases. Mean levels of responding tended to be both highly stable and consistent (Diener & Larsen, 1984).

Following the general information given above is a detailed description of each happiness inventory used in the present study. A detailed description is in order as most of the instruments are not well-known.

Affectometer 2 . Affectometer 2, developed by Kammann and Flett (1983), is a 5-minute inventory of general happiness or sense of well-being. The self-report scale is based on measuring the balance of positive and negative feelings in recent experience. Affectometer 2 has 40-items; 20 positive affect (PA) items and 20 negative affect (NA) items. The authors imposed the following 10 "qualities of happiness" categories on the items: Confluence, Optimism, Self Esteem, Self Efficacy, Social Support, Social Interest, Freedom, Energy, Cheerfulness, and Thought Clarity. For each of the categories, four items were included, one each from positive sentences, negative sentences, positive adjectives and negative adjectives. Affectometer 2

asks the subject how often, over the past few weeks, each feeling was present. Subjects respond on a graded response scale: not-at-all/occasionally/some of the time/often/all the time. The overall level of well-being is conceptualized as the extent to which good feelings predominate over bad feelings, and this is reflected in the balance formula for calculating the total "Net All" score: PA - NA / 20. The scoring range for the Net All score is -4.00 to +4.00. The scoring range for mean positive affect (PA) is 0.00 to 4.00. The scoring range for mean negative affect (NA) is 0.00 to -4.00.

Kammann and Flett (1983) report that Affectometer 2 consists mainly of items taken from the Affectometer 1 so psychometric data on the former are directly applicable to the latter. They found the instrument to have the following statistical properties: high reliability (alpha of .95); high test-retest reliability over a seven week period (estimated r = .769) -- a finding somewhat supported by Corwin and Teigue (1984) who found Affectometer 2 to have an acceptable test-retest reliability over a two week period (r = .64); high validity (Affectometer 1 correlated r = .63 to r = .75 with six leading well-being scales taking the highest loading on the general well-being factor and r = -.62 with an ad hoc list of somatic complaints); and slight contamination by current mood and social desirability. In addition, findings by Kammann and Flett (1983) support the use of Affectometer 2 in the evaluation of treatment programs. The sensitivity of the instrument to changes in the overall balance of positive and negative feelings over a short period of time has been noted (e.g., Lichter et al., 1980) and cannot be discounted as mere effects of retesting (Kammann & Flett, 1983).

Well-being scales have been found to correlate highly and inversely

with self-reported neuroticism, depression, anxiety, and somatic complaints (Kammann, Farry, & Herbison, unpublished manuscript; Kammann & Flett, 1983).

Affectometer 2 was used in the present study because the definition of happiness was operationalized as the amount of positive affect versus negative affect -- a definition different from that in other measures used.

General Well-Being Schedule (GWBS). The General Well-Being Schedule, a self-administered form which takes about 8 to 15 minutes to complete, was developed by Dupuy (1979). The schedule measures self representations of affective states reflecting a sense of subjective well-being or distress. Questions and response options were formulated to provide indications of the presence, severity, or frequency of some symptoms that are generally considered important in clinical assessments of subjective well-being and distress. GWBS is divided into two parts: the Psychological General Well-being (PGWB) index consisting of 22 items; and the Mental Health Section consisting of 15 items.

Most research has been conducted on the first section of the GWBS, the PGWB index. Six intra-personal states were constructed for the index: anxiety; depressed mood; positive well-being; self-control; general health; and vitality. The subscales used to measure these six states have three to five items each. Each item has six response options that are scored 0 to 5 for the intensity or frequency of the affective experience. A value of 0 is given for the most negative option continuing to a value of 5 for the most positive option; GWBS is scored in a positive direction such that a high score reflects a self-representation of well-being. The score range for the PGWB is 0 to 110. The range for the subscales varies from 0 to 15 or 20 or 25. Thus

the 22 items can provide six subscale scores without overlapping items and one overall PGWB index score.

Descriptive statistics of several psychometric properties were obtained from 1,209 American residents 14 to 75 years of age with family incomes of $25,000 or less (Dupuy, 1978). The data indicate that: (1) there is a wide range of individual differences on the PGWB index; the items in the subscales are internally consistent and hence can be used as subscales, at least for group comparisons and (2) the 22 items forming the PGWB index show a very high internal consistency reliability ($r = .94$) and can be used as an overall index score. Dupuy concluded that the PGWB index measures a fairly stable attribute over a [illegible] to three week period (i.e., test-retest reliability coefficient for period of two to four months had an $r = .66$), and suggests that the index is sensitive to changes in an individual's psychological general well-being. Fazio (1977) found the PGWB index to be correlated with a depression rating obtained through structured interview ($r = .468$). In terms of discriminant validity, Dupuy (1978) found differences between the PGWB index means of non-mental health and mental health clients living in the same community to be statistically significant ($p = .01$).

The second section of the GWBS, the Mental Health Section, contains 15 items that ask about felt need and utilization of mental health services (including one item on social-emotional support). A National Health Examination study conducted from April 1971 - October 1975 with 6,913 American adults found PGWB index scores to be significantly correlated with each of the 15 items for males and females separately (Fazio, 1977). Three of these items (psychological problems, felt near a nervous breakdown, and social-emotional support), when combined into a

summated index (PSI), had an r = .64 with the PGWB index. An index (SOMA) having seven medical history items (a self-rating of general health, taking medicine for nerves, taking medicine for headaches, having pains in the stomach, constipation or diarrhea, pains in the neck, and shortness of breath) had an r = .54 with the PGWB index. The PSI plus SOMA indexes had a multiple correlation of .725 (52.6% of the variance) with the PGWB index.

The PGWB index was found by Kammann and Flett (1983) to correlate (r = .74) with the Affectometer.

Three scores from the GWBS were used in the present study: the PGWB index score; the Mental Health score; and a sum total of these two scores. Subscale scores were not used because they were not as reliable as composite scores; some subscale scores consisted of only three items.

The GWBS was used in the present study because it met time-to-completion and psychometric criteria and has been used effectively in the past in pre/post-test designs to determine the effects of an intervention procedure on one's sense of subjective well-being and/or quality of life (Dupuy, 1978). A new research edition of the GWBS has been developed by Dupuy (1980). The revised instrument was not used in the present study due to time requirement for completion (the inventory has 68 items) and paucity of psychometric data.

Happiness Measures (HM). The Happiness Measures, developed by Fordyce (1983b), is a sixty second index of emotional well-being and mental health. Fordyce (1977) has used the instrument to measure emotional morale for specific time periods such as, "last month" and "this week". The HM consists of two self-report measures of emotional morale: (1) an eleven-point scale where 0 indicates the response, "Extremely unhappy (utterly depressed, completely down)" and 10

indicates the response, "Extremely happy (feeling ecstatic, joyous, fantastic!)"; and (2) a question that asks the respondent to determine the percent of time spent in happy, unhappy, and neutral moods. In the first case, the subject checks the point that is closest to his/her perceived quality of happiness; in the second case, a more quantitative index of happiness is indicated.

The scale and the percentage estimates produce the four HM scores. In addition, a combination score, derived by combining the happy scale with the happy percentage estimate in equal weights, can be calculated and has generally shown the strongest validity and reliability coefficients.

The reliability of the HM is good. Fordyce (1983b) reported test-retest reliabilities for the combination score over several time periods: $r = .86$ over a two week period ($n = 105$, $p < .01$), a finding replicated by Corwin and Teigue (1984) with a sample of 26 female and 20 male psychology students; $r = .81$ over a one month period ($n = 57$; $p < .01$); $r = .67$ ($n = 27$; $p < .01$) and $r = .62$ ($n = 71$; $p < .01$) over a four month interval; and an average correlation of .85 in a series of four repeated testings one and a half weeks apart ($n = 19$, $p < .01$). Coefficients for the other HM scores were similar. HM has also been found to have high across-sample consistency, indicating a strong reliability of measurement (Fordyce, 1983b).

The construct or face validity of the HM is obvious as HM deals directly with happiness itself by using the term "happiness" throughout. In an ongoing series of correlational studies, Fordyce (1983b) has found strong, significant, and steady coefficients with mood and emotional morale indices such as: the Depression Adjective Checklists (Forms A, B, C, and D), the Multiple Affect Adjective checklist; the Profile of

Mood States, the Self-Description Inventory, and a variety of other personality inventories (many of which contain subscales of an affective nature). HM has also been found by Fordyce (1983b) to demonstrate regular and significant relationships with measures of personality characteristics that have been long established in past happiness research. People who scored happily on the HM had a profile on other tests that indicate a higher level of extroversion and spontaneity; a lower level of fear, tension, guilt, hostility, depression, and other negative emotions; a healthier level of self-actualization, mental health and emotional stability; a higher level of energy and activity; and a higher level of other qualities like self-esteem, leadership, and social orientation. In terms of convergent validity, Kammann et al. (1981) obtained a "net time happy" score by subtracting the unhappy percent estimate from the happy percent estimate and found that this HM score intercorrelated with 12 other measures of well-being and showed significant correlations ($p < .01$) with the following: Kammann's Affectometer (1981) and "7 step happiness scale" (1981); Campbell et al.'s (1976) Index of Affect and "Stress" scale; Andrews and Withey's (1976) "Circles" Delighted-terrible scale, Sum of Satisfactions, and "Faces"; Bradburn's "Affect Balance Scale" (1969); Eysenck and Eysenck's Personality Inventory Neuroticism Scale (1964); Gurin, Veroff, and Felds' 3 step happiness question (1960); and Wessman and Ricks' 10-point elation-depression scale (1966). In addition, Diener, Larson, Levine, and Emmons (in press) stated that HM showed the strongest correlation with daily affect and with life satisfaction of any of the 20 happiness and well-being measures they assessed. They also found the percentage of positive and negative frequency estimates to provide convergent, construct and criteria validities that are equal to, or superior to,

those found for the Bradburn scale (1969), the original measure of affect frequency in the field. A final line of validity evidence for the HM was offered by Fordyce (1977, 1983a) who utilized personal reports and private interviews obtained from subjects participating in experiments where attempts were made toward increasing happiness. The objective data from those studies, using the Happiness Measures as a criterion, showed significant increments in HM scores over the experimental procedures used. To confirm the validity of the observed HM data changes, a variety of post experimental feedback devices were employed: privately submitted, open-ended questionnaire; individual and group interviews; and unsolicited reports. It was found that scores on the HM were indicative of truly felt changes in the subjective feelings of happiness experienced by the subjects.

Fordyce (1983b) found the HM to be relatively free of response bias. He also concluded that the HM appears free of sensitization effects, and thus has value in pre/post-test and time-series designs.

Larson, Diener and Emmons (in press), in a comprehensive instrumentation review, found HM to be the strongest single item measure.

HM was included in the present study as a psychometrically strong additional measure of happiness -- one that has demonstrated significant increments in personal levels of happiness following participation in Fordyce's (1977) Fourteen Fundamentals Program.

Self Description Inventory (SDI). The SDI, developed by Fordyce (1980), is a multi-scale test which measures happiness and its concomitants. The SDI was also specifically designed as a diagnostic and prescriptive instrument for use with the Fourteen Fundamentals Program (Fordyce, 1977, 1983a). The Self Description Inventory comes in

two sets of two highly correlated, equivalent forms (Set A & B and Set C & D). Each form consists of 80 items and within each set there are no repeated items on the alternate, equivalent form. Set C and D is a reworded version of Set A and B and was revised to produce a greater range of response in the upper (i.e., "happier") scores of each scale and to further minimize the potential susceptibity of the test to "good-faking". Item rewording focussed on creating a more positive extreme for the "happily" scored alternative, while writing the more "unhappily" scored alternative to appear more socially normative. Given these advantages, the more recent version was used in the present study. SDI items consist of two forced choice statements, each sampling a characteristic known to distinguish happy from unhappy people. Items are written in non-threatening language. All forms of the SDI produce five scores for interpretation and data analysis. The four major subscales (the achieved happiness scale, the happy personality scale, the happy attitudes and values scale, and the happiness life-style scale) yield scores which are added to create the total score for the test. The subscales were conceptually derived. Following is a brief description of the four subscales:

(1) The Achieved Personal Happiness Scale (H-ach). This scale has 16 items which tap the amount of fulfillment, satisfaction, and happiness people derive from their lives. High scorers are individuals who are very satisfied with the way their lives are going, derive great happiness from living, gain many rewarding feelings from the major aspects of their life, show vitality and good health, and have a disposition that is generally quite content and happy. In contrast, low scorers have dispositions that are rarely happy, and live lives that are not going as well as they would like. They are not at all content with

their lives, experience many stressors in their important life areas, have many felt personal dissatisfactions, and consequently feel unhappy and unsuccessful.

(2) The Happy Personality Scale. This scale has 24 items which tap personality characteristics typical of happier individuals. Individuals who score high on this scale tend to have many personality characteristics in common with happy people; those who score low have personalities that are more in common with unhappy individuals. Happy scorers test high on items measuring an extroverted, spontaneously friendly, and outgoing social personality; a concern for others, and an ability to be a trusting, accepting friend; a healthy, positive self-image; good self-knowledge and self acceptance; a high degree of autonomy and self-sufficiency; a lack of negative tensions and problems; a certainty of values; internal direction; and a high degree of organization and direction toward goals. Low, unhappy scorers tend to lack these traits.

(3) The Happiness Attitudes and Values Scale. This scale is comprised of 19 items which compare values and attitudes of the test taker to those of the happiest people. High scorers tend to share and live by the values of happy people; low scorers hold attitudes and outlooks more typical of unhappy, dissatisfied people. Individuals scoring high on this scale have a highly optimistic outlook on life; mostly positive thought patterns; a more modest level of ambition and expectation; a more realistic (than idealistic) approach to life and goal-setting; a value focus on the present (they enjoy living for today and are not unduly preoccupied with past hurts or future apprehensions); a very low level of everyday worry; and a strong value commitment to their own personal happiness. Individuals scoring low on this scale are

the opposite: they consider happiness to be unimportant, overidealize their goals, think pessimistically, worry excessively, interpret events negatively, and are unduly preoccupied with past and/or future problems.

(4) The Happiness Life-Style Scale. The 21 item scale compares the life-style of the testee to the way happier individuals live their lives. Individuals scoring well on this scale live an involved, exciting, and robust life. They display a high level of social interaction, socializing, and organizational participation; have close, rewarding ties with acquaintances, co-workers, friends, and family; live lives that are highly active and busy; spend the majority of time in activities that are enjoyable, fun and exciting; are involved with work or avocations that are meaningful, significant, and rewarding; have broad interests; and are currently involved in a satisfying love-relationship. Low scoring individuals are caught in lives that are much less active, rewarding, social, or enjoyable. Since each of the forced-choice items on the tests has a happy as well as unhappy alternative, a total score for the test can be calculated. This score is a combination, obtained through addition, of all the subscales, which provides an overall index of the subjects' entire test performance. Because the total score involves all 80 test items, it varies much more than the other scores and is, therefore, the most sensitive and discriminative measure of all the happiness characteristics sampled in the inventory.

Most individuals take from 10 to 20 minutes to complete any one form of the SDI and have no difficulty understanding or completing the test.

Over many testings comparing the relationships between the SDI forms and outside criteria, inter-form and intra-form statistics,

reliabilities, concurrent and convergent validities; and other characteristics, all forms have shown remarkable similarity (Fordyce, 1980). One way in which the Sets differ is in their means; Set C & D generates substantially lower scores and thus provides a much wider range of response in the "happier" end of the scales. Inter-form correlations over intervals ranging from hours to one week have been impressive. Reliability coefficients for Set C & D have consistently ranged between .87 and .95 over all short-term intervals for the total score (Fordyce, 1980; Corwin & Teigue, 1984). Subscale correlations between Forms have shown equal similarity across studies, their magnitudes being slightly lower.

Longer term reliability also appears to be good with total score correlations between equivalent forms taken three and a half months apart being .78 for Forms C & D ($n = 71$, $p < .01$). Further support for the reliability of the SDI comes from its internal consistency; scale means, variances, inter-scale and inter-form correlations have been found to be remarkably similar across samples, across years, and across forms. Such stable statistics suggest that the SDI continues to measure the same properties, to the same degree, over time, and samples. With respect to samples, Salazar et al. (1984) found the SDI useful in measuring the happiness of individuals from a wide variety of educational, economic, and employment backgrounds. Their analysis showed a remarkable consistency in patterns of the 10 subscores derived from the SDI and another of Fordyce's measures: Happiness Measures.

The concurrent and convergent validities of the SDI appear strong and have remained reliable over numerous investigations. To obtain these validities, the SDI has been compared to several happiness

measures, and a wide variety of mood and personality tests including the Depression Adjective Checklist, Lubin and Zuckerman's Multiple Affect Adjective Checklist, Fordyce's Happiness Measures, the Comrey Personality Scales, Shostrom's Personal Orientation Inventory, McNair et al.'s Profile of Mood States, the Eysenck Personality Questionnaire, and Cattel's Sixteen Personality Factor Questionnaire. The correlations indicate that the SDI has quite acceptable validity as a measure of happiness and as an inventory of the established characteristics of happy people (Fordyce, 1977; 1983b). According to the correlations obtained, it would appear that high scoring individuals on the SDI could be described from their other personality-test profiles as having the following characteristics: a high degree of personal happiness; a lower degree of depression, hostility, tension, anxiety, guilt, and a variety of other negative emotions; a higher level of energy, vitality and activity; a generally self-actualized, healthy, and emotionally stable personality; and a personality that is outgoing, spontaneous, extraverted, and socially oriented. The general profile provided by these other instruments concurs with the qualities the SDI purports to measure. Further support for such findings comes from Friedman (1983) who found significant correlations between the SDI and the Personal Orientation Inventory, the Tennessee Self Concept Scales, and his own measure of Self-Expansiveness. The results indicated that happier scorers on the SDI tended to be quite present-oriented and mentally healthy. Furthermore, Dillman (1979) found happiness, as measured by the SDI, to be strongly and significantly correlated with measures of actualizing, healthy, conflict-free relationship styles. Based on these findings, Fordyce (1980) concluded that high scorers on the SDI tend to have personality qualities that enable them to enjoy deeper, more

intimate, and healthier close relationships, as is suggested in the literature.

Another line of validity support for the SDI has come from a series of recent studies (Fordyce, 1980) in which objective changes noted in SDI data agreed with subjective increases in happiness reported during interviews as well as in anonymously submitted questionnaires.

Further validity support for the SDI was obtained by Salazar et al. (1984) who found that the SDI, as well as the HM, had a high degree of discriminative validity. Analysis of the 10 individual sub-scores derived from the SDI and HM revealed a variety of significant differences between groups (e.g., hospitalized depressed patients versus college professors) in terms of their levels of happiness.

Overall, the subscale profiles provided by comparisons with tests other than the SDI correspond to the characteristics these subscales were designed to measure (cf. Fordyce, 1980). Evidence for the validity of the subscales is thereby provided. In addition to their shared correlations with numerous outside criteria, the SDI scales are strongly interrelated. This suggests that each of the item domains sampled by the Inventory contributes in a significant and interactive fashion to the production of personal happiness for most individuals.

The SDI has been compared to a number of measures of faking and "social desirability" bias. In most studies the correlations between these measures and the SDI have been nonsignificant, in others they have been significant at low levels (Fordyce, 1980). Fordyce (1980) did not find sex or age group differences on SDI scores.

The SDI was used in the present study because it corresponds directly to the "Fourteen Fundamentals Program" -- the program evaluated in the present study being evaluated for use with cancer patients. The

SDI has been found by Fordyce (1980) to be feasible, valid, and productive when used in its alternate forms to monitor or follow-up eventual progress with the course. In addition, the SDI not only measures the traditional felt-dimension of happiness, but also its many, consistently found, concomitants.

Problem Inventories

Cancer Inventory of Problem Situations (CIPS). The CIPS was developed by Schag, Heinrich, and Ganz (1983) to assess the type and severity of physical and psychosocial problems confronted, on a day-to-day basis, by cancer patients. The questionnaire surveys the symptoms of the disease and its treatment, as well as daily life experiences when patients come into contact with medical staff, friends, family, and employers. The instrument represents an attempt to move away from assessing cancer's impact in terms of emotional distress and toward assessing more specific components of behavior affected by cancer and its treatment. The current version of the CIPS includes 131 problem statements. The problem statements are grouped into 27 categories which may be listed under four headings: Personal Care, Medical Situations, Interpersonal Interactions, and Miscellaneous. The categories under their respective headings are: (1) Personal Care: Sleeping, Eating, Changes in physical appearance (body image), Physical ability, Activities, Transportation, Domestic work, Self-care; (2) Medical Situations: Communication with medical staff, Control in medical situations, Anxiety in medical/stressful situations, Pain, Side effects of treatment, Prosthetic appliance; (3) Interpersonal Interactions: Communication with spouse, Interaction with spouse, Affection with spouse, Interaction with family and friends, Sexuality with spouse, Care provided by spouse, Dating for singles, Sexuality for singles; (4)

Miscellaneous: Employment, Finances, Worry, Cognitive changes.

The problem statements within a category are quite specific and assess different components of larger categories of problems. For example, the "Significant relationships" category is divided into problems involving communication, sexuality, expression of affection, and interaction. All patients complete 92 statements; the remaining 39 statements apply either to patients who are married or have a significant relationship or to patients who are single and do not have a significant relationship. Patients are instructed to read each statement and to decide on the degree to which each statement applies to their situation within the past month. They rate each response on a five-point scale ranging from a score of 0 (indicating "not at all") to a score of 4 (indicating "very much"). Patients are provided with one additional response option, "X", indicating "unable to rate".

Three total scores can be obtained to evaluate a patient's overall level of difficulty. The first total scale score, Total Severity Rating, is a summation of the severity ratings of each problem indicated. The second, Total Number of Problems, is a summation of all problems given a rating of one or higher. The third total score, Average Intensity Rating, is the Total Severity Rating divided by the Total Number of Problems.

To evaluate the psychometric properties of the CIPS, Schag et al. (1983) conducted a study involving a heterogeneous sample of 306 cancer patients (mean age 60 years). They concluded that the CIPS has the following psychometric properties: (1) excellent content and face validity; (2) excellent internal consistency of problem categories; (3) excellent test-retest reliability over a one week period (mean for reliability coefficients, $r = .89$) on both the number and severity of

problems reported; (4) good concurrent validity evidenced in a high correlation (r = .69) with the SCL-90-r, an index of psychological distress; (5) excellent agreement in the types of problems identified by the CIPS and a trained interviewer. In addition, patients found that the CIPS was inoffensive and was relevant to their experiences. Furthermore, they found that the instrument was easily understood and were able to complete it in an average time of 18 minutes.

CIPS was included in the present study to determine whether participation in the Fourteen Fundamentals Happiness Program affected the number, severity, and/or intensity of cancer-related problems -- problems which have important implications for the psychological well-being of patients and for their ability to tolerate the toxic effects of therapy.

Because further norming of the CIPS is now in progress, the present writer was given permission to use the CIPS provided that two other forms were administered in conjunction with it and that all results were forwarded to Schag upon completion of the present study. One of the forms, entitled "Background Information", was completed by each patient and tapped demographic information such as age, sex, and socioeconomic status. The other form, entitled "Medical Summary", was distributed by each patient to his/her physician in order that relevant medical information, including diagnostic data and current treatment regimens could be obtained.

Health Questionnaire (HQ). The Health Questionnaire was based on an instrument of the same name developed by Kammann (1983). Kammann surveyed a variety of sources listing psychosomatic symptoms and generated a list of 24 somatic complaints supplemented by two complaints specific to men, and one complaint specific to women. The resulting

items were then structured into a Health Questionnaire grouped in areas of bodily function such as lungs, heart, blood, skin, and so on. Sentence stems for each item were reported by Kammann et al. (1984) and were made into complete sentences. For each somatic complaint listed, the respondent was asked to rate the frequency of occurrence by circling one of four responses: never (scored 1 point); rarely (scored 2 points); sometimes (scored 3 points); often (scored 4 points). The scale has a possible range of scores from 25 (females) or 26 (males) to 100 (females) or 104 (males). Low scores indicate fewer somatic complaints than high scores. The HQ takes about 5 to 10 minutes to complete. A total of the ratings on Kammann's questionnaire yielded a somatic complaint score which correlated at -0.62 with Affectometer 1 and -0.68 with GWBS (Kammann et al., 1983, 1984).

The HQ was included in the present study to assess the effect of participation in the Fourteen Fundamentals Program on the frequency of occurrence of psychosomatic complaints reported by the cancer outpatients who participated in the present study. It was expected that, if well-being increased following the Program, somatic complaints would decrease. This prediction was based on the finding that well-being is highly and inversely related to somatic complaints (Kammann & Flett, 1983).

Evaluation Instruments

Sessional Evaluation Form. The form was developed for purposes of the present study. It consisted of six questions tapping subjects' likes and dislikes regarding the session, what they found helpful or unhelpful about the session, what could be changed to improve the session, an overall rating of the session from 1 (terrible) to 5 (excellent), and a space to make any other comments concerning the

session. (Refer to Appendix C for a copy of the form).

Follow-up Questionnaire. The follow-up questionnaire was that used by Fordyce (1977, 1983a) to determine exactly what group participants did during the study.

Design and Procedure

Cancer patients belonging to Cansurmount and/or Reach for Recovery were each sent a letter introducing the study and urging their participation in the study. In addition to receiving the letter, patients also received a response form and a stamped, self-addressed envelope with which to reply. Refer to Appendix B for a copy of the letter and response form. With the exception of one volunteer who heard about the program through word-of-mouth, initial contact was made through the mail. One week from the day that the letters were mailed, follow-up phone calls were made by the present researcher and the co-ordinator of the Edmonton Chapter of Cansurmount. Those who volunteered to participate in the study were given information concerning the time and date of the first meeting and any questions they had concerning the study were answered with a view toward providing limited information concerning the Fourteen Fundamentals Program. This somewhat conservative approach was used to avoid biasing subjects' responses to inventory questions.

The study took place over a seven week period and was conducted in a large conference room in the Canadian Cancer Society facility in Edmonton, Canada. The Fourteen Fundamentals Program, itself, took place once a week on Wednesday evenings from 7:00 pm. to 10:00 pm. for a total of five weeks. Prior to the first treatment session, volunteers took part in a two hour pre-session in which they completed forms and inventories. They were then given a brief introduction to the program.

Following the last treatment session (session 5) cancer patient volunteers met for one more session. During the post-session, participants returned post-tests and Follow-up Questionnaires which they had completed at home during the previous week. The group then socialized prior to disbanding. A more detailed description of each meeting follows.

Upon arrival at the Pre-Session meeting, each subject was given an envelope containing forms and inventories to be completed. Once all participants had arrived, they were thanked for their participation in the study. They were then asked to open their envelopes and withdraw the contents. In all cases the first document was a schedule for subsequent group meetings (refer to Appendix D). The importance of attending each meeting was stressed and participants were asked to inform the researcher as soon as possible should they be unable to attend. When a patient was unable to attend a treatment session, Fordyce's audio-taped version of the material covered in that session was given to be reviewed at home. After the brief administrative announcement, subjects were asked to complete the forms in their envelopes. They began by signing both the Consent Form (refer to Appendix E) and the covering letter (refer to Appendix F). Patients were then asked to give covering letters (with signatures of consent to release information) along with Medical Summary Forms to their doctors to complete and return to the researcher in the stamped, self-addressed envelopes attached. Next, each patient completed the Background Information Form. Finally, participants were asked to complete the remainder of the forms in their envelopes in the order in which they appeared. The remainder of the forms -- Affectometer 2, CIPS, GWBS, HM, HQ, and SDI-Form C -- were presented in an order which had been

randomized using a Table of Random Numbers. The time required to complete all the forms ranged from sixty to ninety minutes. Participants experienced little difficulty in completing all forms and such questions that arose (e.g., "Which of my doctors should I send this form to?" and "What time frame are we supposed to use for this test?") were answered by the researcher. Approximately mid-way through the completion of the forms, subjects were asked to take a break to participate in an energizer/icebreaker exercise. The exercise required that the person to the left of the researcher state his/her name, followed by the next person who stated the first person's name as well as their own, and so on until all group members had been introduced. The exercise served a number of functions: (1) an "icebreaker exercise to facilitate eye contact among group members and learning of each others' names; (2) an energizer to give participants a break from filling in forms and to raise their energy levels; and (3) an introduction to group participation which played an important role in the workshop activities in the weeks that followed. Following completion of all forms and/or inventories, a brief introduction to the nature of Fordyce's Fourteen Fundamentals Program was given. Essentially, subjects were told that Fordyce's program was primarily educational in nature and used cognitive and behavioral techniques to increase personal levels of happiness. Volunteers were also told that Fordyce had conducted seven studies. From the results, he concluded that his program was successful in raising the happiness levels of college students in the United States. The present investigation, they were informed, was designed to determine whether participation in a slightly modified version of Fordyce's audio-taped program (whereby lecture material remained intact on tape and workshop material was

transcribed and conducted live) would increase the happiness levels of cancer patients. Such a program, if found to be successful in increasing positive attitudes and ability to cope with the cancer experience and perhaps even longevity itself, could become an important part of treatment programs for cancer patients.

A summary of treatment session content is now discussed. For a more indepth description of content, refer to Appendix A.

Session 1 consisted of a general introduction to the Fourteen Fundamentals Program. Participants were presented with lecture and workshop material prepared by Fordyce to sensitize them to the nature, definition, and importance of personal happiness. At the end of the session, and all other treatment sessions, participants were asked to complete sessional Feedback Forms (refer to Appendix C).

In the sessions which followed, outpatients were given detailed instruction, on tape, in each of the 14 fundamentals. This consisted of an elaboration and a statement of theoretical and research background behind each principle. The instructor/researcher, through conducting workshop activities and discussion periods, provided instruction in a variety of behavioral techniques and cognitive frameworks to help participants realize each principle.

Session 2 dealt with Fundamentals 1 to 4: (1) "Be More Active"; (2) "Spend More Time Socializing"; (3) "Be Productive at Meaningful Work"; and (4) "Get Better-Organized and Plan Things Out".

In Session 3, fundamentals 5 and 6 were dealt with: (5) "Stop Worrying" and (6) "Lower Your Expectations and Aspirations".

Fundamentals 7 to 9, comprising topics for Session 4, were: (7) "Develop Positive, Optimistic Thinking"; (8) "Get Present Oriented"; and (9) "Work on a Healthy Personality".

The final treatment session, Session 5, consisted of lecture and discussion material dealing with Fundamentals 10 to 14: (10) "Develop an Outgoing, Social Personality"; (11) "Be Yourself"; (12) "Eliminate Negative Feelings and Problems"; (13) Close Relationships are Number One"; and (14) "VALHAP" - The 'Secret' Fundamental'". At the end of the session, envelopes containing post-tests in an order which had been randomized, were handed out. Tests were taken home to be completed and returned at the next meeting, one week later. The tests were the same as those administered prior to the initiation of the program except that Form D of the SDI was administered in lieu of Form C. In addition to the post-tests, the envelope contained a Follow-up Questionnaire developed by Fordyce to obtain feedback from participants regarding their experience with the Fourteen Fundamentals Program. Respondents were advised to take a break between completion of the tests and completion of the feedback form. The request was made with a view to minimizing bias which could occur following 60 to 90 minutes of test taking.

Session 7, the session following the treatment program, entailed the return of post-test packages as well as "wrap-up" activities, such as thanking volunteers for their participation and socializing, prior to the group disbanding.

CHAPTER 4

Results

Examination of the attendance record of participants in the Fourteen Fundamentals Program revealed that the number of treatment sessions attended ranged from two to five (all treatment sessions attended). The average number of sessions attended was 4.2. Individuals who did not attend group sessions, made up sessions by working through an unedited version of those of Fordyce's tapes covering the material missed. Upon completion of post-tests, all subjects had completed the program in its entirety.

In summation of Chapter 4, Hypothesis 1 was tentatively confirmed and will be discussed under the heading of "Happiness Inventory Data". Tentative confirmation of Hypothesis 2 was also given by results which are reported under the heading of "Problems Inventory Data". Following discussion of results relating to the two hypotheses, results pertaining to the questions will be addressed under the headings: Extreme Scorers; Directionally Unpredicted, Norm Deviating, Scorers; and Descriptive and Behavioural Data Analysis. A summary of the Fourteen Fundamentals feedback data is then presented.

Following is a report of pre- versus post-test results based on mean scores (n = 14) from: (1) happiness inventories and (2) problem inventories. The pre- and post-test scores were compared using correlated *t* test procedures. Means and standard deviations are found in Table 2.

Table 2

Pre- and Post-Test Means and Standard Deviations of Happiness and Problem Inventories

Instrument/Subscales	Test Condition	
	Pre	Post
Happiness Inventories		
1. Affectometer 2		
Net All Score		
M	1.89	2.19
SD	1.05	1.36
Recent Happiness		
M	5.71	5.93
SD	1.38	1.21
2. General Well-Being Schedule		
Psychological General Well-Being Index		
M	79.29	83.21
SD	17.83	17.60
Mental Health Score		
M	36.57	36.79
SD	2.62	3.07
Total		
M	115.86	120.00
SD	19.10	19.62
3. Happiness Measures		
Degree of Happiness		
M	7.57	7.50
SD	1.40	1.35
Percent Time Happy		
M	56.57	58.21
SD	18.43	18.77
Percent Time Unhappy		
M	21.14	18.57
SD	15.49	15.37
Percent Time Neutral		
M	21.50	21.79
SD	11.71	12.95
Combination Score		
M	66.29	66.79
SD	14.56	14.81
4. Self Description Inventory		
Achieved Happiness		
M	7.93	9.50
SD	3.89	5.07

Table 2 (continued)

Instrument/Subscales	Test Condition	
	Pre	Post
Personality		
M	13.29	16.86**
SD	3.52	3.44
Attitudes and Values		
M	11.00	13.79*
SD	3.62	3.77
Life Style		
M	11.00	13.21
SD	3.94	4.93
Total Score		
M	43.21	50.50
SD	12.24	17.37
Problem Inventories		
1. Cancer Inventory of Problem Situations		
Total Severity Rating		
M	45.64	36.29
SD	29.28	22.45
Total Number of Problems		
M	30.64	25.21
SD	18.97	14.57
Average Intensity Rating		
M	1.50	1.45
SD	.40	.46
2. Health Questionnaire		
Frequency of Occurrence of Somatic Complaints		
M	48.36	43.50*
SD	7.08	7.41

*$p < .05$ **$p < .001$

Happiness Inventory Data

In accordance with Hypothesis 1, cancer outpatients' reported (based on the SDI Happy Personality Scale) a significantly greater number of personality characteristics typical of happier individuals following the Fourteen Fundamentals Program ($M = 16.85$) than before the program ($M = 13.29$), $t(13) = 4.08$, $p < .001$. Also predicted was

the finding (on responses to the SDI Happiness Attitudes and Values Scale items) of a significantly greater tendency to share and live by the values of happy people following the program (M = 13.79) than prior to the program (M = 11.00), $t(13) = 2.58$, $p < .021$.

All other findings based on t test comparisons of pre- and post-test mean scores of happiness inventories (i.e., Affectometer 2, General Well-Being Schedule and Happiness Measures), although not significant, were in the predicted direction; happiness scores increased following the program.

Problems Inventory Data

In accordance with Hypothesis 2, analysis of HQ data revealed that cancer outpatients reported significantly fewer psychosomatic complaints/symptoms following the program (M = 43.50) than before the program (M = 48.36), $t(13) = 2.48$, $p < .026$.

Mean sores from the Cancer Inventory of Problem Situations (i.e., Total Severity Rating, Total Number of Problems, and Average Intensity Rating) decreased from pre- to post-test, as predicted, but mean differences were not significant.

In order to more closely examine individualized effects of the treatment program, subjects' scores were examined in two ways. First, inter-individual differences were examined through the identification of extreme scorers -- those individuals whose scores were greater than two standard deviations above, or less than two standard deviations below scale score means -- were identified. Second, inter-individual differences were examined by noting the direction of individual scale score change from pre- to post-tests. Both analyses were conducted to identify those individuals whose scores generally did not conform to the norm. Noted was the direction and extent to which extreme scorers

differed from the norm. Data were then examined to determine whether these differences were correlated with demographic and/or medical data. In addition, attendance records and Fourteen Fundamentals Short-Term Follow-Up Questionnaire responses were examined to determine whether nonconformists could be differentiated from the remainder in the group on the basis of these two criteria.

Nonconformists, as defined above, will now be discussed in case study format under two category headings: (1) Extreme Scorers and (2) Directionally Unpredicted, Norm Deviating Scorers.

Extreme Scorers

Three individuals had four or more scores greater than two standard deviations above, and less than two standard deviations below, scale score means: Mrs. D, Ms. J, and Mr. E. Mrs. D will be discussed first because four of her scores were significantly above scale score means. Ms. J and Mr. E will then be discussed because both had five scores which differed significantly from scale score means, most being less than two standard deviations below scale score means.

Case 1: Mrs. D. Three of Mrs. D's pre-test SDI scale scores were above their respective means: (1) the Happy Personality Scale (P); (2) the Happiness Life-Style Scale (LS); and (3) the SDI Total of scale scores. The first score, P, remained substantially above the mean at post-testing and, in fact, increased by a further two points. The other two scores -- LS and Total -- increased from pre- to post-test but were not substantially above the mean (regression toward the mean?). These results concur with Mrs. D's responses on the Fourteen Fundamentals Short-Term Follow-Up Questionnaire where she stated that she thinks she has always been a "happy" person. Furthermore, Mrs. D added that the Fundamentals may have helped her to be somewhat happier and that now if

she is ever unhappy, she knows how to analyze the situation and remedy it by coping better with stress. At the time she completed the questionnaire, Mrs. D did not feel in need of help from the Fundamentals because, as she stated, "... things are going exceptionally well for me now -- job, family, health -- so I have been exceptionally happy lately". Mrs. D noted that she read and completed assignments. She also reflected on the Fundamentals from time to time. The Fundamental she found to be most useful was "Get better organized and plan things out". Overall, she stated that she enjoyed the program and felt that she benefitted through participating.

Case 2: Ms. J. Ms. J's HM Degree of Happiness score was significantly below the mean before the Fourteen Fundamentals Program. There was no change in this score following the program, and the score remained significantly below the post-test scale score mean. Supporting this observation was the finding that another score -- HM Percent Time Unhappy -- was significantly above average before the program, further increasing following the program while remaining significantly above the post-test scale score mean. Also following the program, Ms. J's Affectometer 2 Net All score (Net All = Positive Affect - Negative Affect / 20) was found to decrease relative to her pre-test score and was also significantly below the post-test scale score mean. Further support for these findings comes from Ms. J's responses to the Fourteen Fundamentals Short-Term Follow-Up Questionnaire. Ms. J stated that "The Fundamentals made me aware that it is not enough to be happy with good health, social interchange, beautiful sunrises, etc.; but that for me, at least, to be successful not only in my own eyes but those of my colleagues is crucial i.e. essential for happiness. I cannot see that I am (or am perceived to be) adequate let alone successful in any endeavor

I have ever undertaken whether career, hobby or personal relationship. Time is running out." In response to whether or not she thought the Fundamentals made her any happier, Ms. J replied "Basically less happy because, whereas I seem to have most of the characteristics of a 'happy' person, I am not happy in the sense of feeling any sense of achievement." She reported that learning about happiness tended to make her feel more unhappy. Ms. J's responses also indicated that she had been depressed most of the time during the weeks prior to completing the questionnaire. She apparently experienced greatest difficulty setting goals. When she tried to plan for the future she realized that she had nothing to plan for because she was unlikely to achieve success "having failed right down the line up to age 53". Nor did she find that Fundamental 6: Lower your expectations and aspirations was helpful. Ms. J stated that she was just as unsuccessful at typing, housework, weaving, and volunteer work as she was at being a professional musician or university graduate student. She did find, however, that a couple of things concerning the Fundamentals were worth thinking about. These included the idea that "Happiness is a way to travel" as she cannot foresee any improvement in her future happiness. Aspects of the fundamental, "Be Yourself", were found to be worthwhile because Ms. J felt encouraged not to ingratiate herself with the "wrong" people only to be hurt when they failed to appreciate her. Ms. J also found that learning about her happiness, in an educational sense, was valuable. Most valuable was the "bad news" that happy people are often rich, lucky, healthy, successful, etc., which confirmed her feelings about the matter. In describing her participation in the program, Ms. J admitted that she did not actually do many of the assignments. Although she thought about them almost constantly, for the most part they made her

aware of counter-examples in her own life. Also, during the program, Ms. J became very discouraged listening to everyone's "success" stories about beating cancer, coping with adversity, etc. She stated that she admired these people greatly, but they didn't help her -- they just made her realize that she was incapable of doing what they had done. In response to whether she had changed her life, or herself, in any way since learning about the Fundamentals, Ms. J responded, "I have been trying to either cope with the fact that my life is basically over or disabuse myself of the opinion -frankly I can't see any future at all -that is probably why I was happier when I had cancer -at that time one lives in the present totally". In terms of her overall impression of the Fundamentals, Ms. J thought that they were much over-simplified and believed they were slightly better than most "pop" psychology, in that they are reality-based. She concluded that, "For most people they should be useful -- they may even be useful to me at some point". In addition to returning the follow-up questionnaire, Ms. J included an informal note. In it she asked that the researcher not think that she was suicidal. She admitted to feelings of inadequacy and failure and appeared to suffer from low self-esteem and poor self-concept possibly due to an external locus of control.

Case 3: Mr. E. Three of Mr. E's scale scores were significantly below average prior to the program: (1) Affectometer 2, Recent Happiness; (2) GWBS, Psychological General Well-Being; and (3) GWBS Total. Following the program, two different extreme scores were noted. Mr. E's SDI Happiness Life-Style score decreased to a level significantly below the scale score mean. In addition, his HM Percent Time Neutral score increased to a level significantly above average following the program. In support of these findings, are the few short

responses to the Fourteen Fundamentals Short-Term Follow-Up Questionnaire. Mr. E noted that the Fundamentals had no effect on him that he had noticed but found that when he was depressed, the Fundamentals "... helped a little". In terms of how he went about working with the Fundamentals, Mr. E stated that he had other tapes ("The Master Key Tape Series") that helped him more and were easier to listen to. The implication that he did not work on the Fundamentals was further supported by his comment that he hardly ever thought about the Fundamentals. Overall, Mr. E found that the tapes were of poor quality and that learning about the Fundamentals had no effect on him.

Directionally Unpredicted, Norm Deviating, Scorers

Two cancer outpatients -- Mr. E (who was also an extreme scorer) and Mrs. R -- had the greatest number of scores which deviated from the norm in an unpredicted direction. Both had thirteen scores which changed from pre- to post-tests in an unpredicted direction which opposed the norm. Noteworthy, is the fact that these two individuals were the only ones in the group (n = 14) who contacted the present researcher/instructor/counsellor for personal counselling following the program. Case 4: Mr. E (again) will be discussed first, followed by Case 5: Mrs. R.

Case 4: Mr.E (again). Mr. E's directionally unpredicted anormative scores were noted in the following subscales: (1) Affectometer 2 Net All scores; (2) GWBS Mental Health Score; (3) HM Degree of Happiness, Percent Time Happy and Combination scores; (4) SDI Happy Personality Scale, Happiness Attitudes and Values Scale, Happiness Life-Style Scale, and the Total of all scale scores; (5) CIPS Total Severity Rating and Total Number of Problems scores; and (6) HQ Total Frequency of Occurrence of Somatic Complaints score. It is apparent,

based on this information, that Mr. E's level of happiness, as reflected by subscale scores of all happiness inventories, decreased following the Fourteen Fundamentals Program. In addition, the number and severity of cancer related problems increased along with an increase in psychosomatic complaints. These findings concur with information provided by Mr. E when he requested counselling (in addition to that which he was, at the time, receiving from a psychologist) following the program. Mr. E, approximately one month following the program, informed that the problems in his relationship with his girlfriend had intensified over the course of the program. When he spoke to the present writer, he was on the verge of making a decision to continue or to end his relationship with his girlfriend. During the session, the present writer employed active listening techniques in an attempt to assist Mr. E in further clarifying his feelings and expectations concerning his relationship with his girlfriend and her children from a previous marriage. About one month following this meeting, a change of address card was received from Mr. E who had moved to Vancouver -- a move which he had been contemplating for more than a year according to what was said during group meetings as well as on a one-to-one basis.

Case 5: Mrs. R. Mrs. R's directionally unpredicted anormative scores were noted in the following subscales: (1) Affectometer 2 Net All and Recent Happiness scales; (2) GWBS Psychological General Well-Being Index, Mental Health Score, and Total Score; (3) HM Percent Time Happy, Percent Time Unhappy and Combination Score (10 x scale score + Percent Time Happy / 2); (4) SDI Achieved Happiness, Life-Style and Total of all SDI subscale scores; and (5) CIPS Total Severity Rating and Total Number of Problems. As in the case of Mr. E, subscale scores of all happiness inventories decreased while scores from the CIPS increased

from pre- to post-tests. In other words, Mrs. R's level of happiness decreased following the Fourteen Fundamentals Program while the number and severity of her cancer-related problems increased. These findings concur with Mrs. R's responses on the Fourteen Fundamentals Short-Term Follow-Up Questionnaire as well as with information provided by Mrs. R when she requested personal counselling following the program. In responding to questions on the follow-up questionnaire, Mrs. R stated that "The tapes started me thinking of my own personal happiness (and how unhappy I have been lately). I'm trying to keep the fundamentals in mind and hope to implement a few when I'm 'down'. On a more positive note, I think they may help me to help others. So many people come to me with their problems, worries, etc., and I will be able to impart the Fourteen Fundamentals to them." She found that learning about the Fundamentals tended to make her feel more unhappy and stated that during the last weeks of the program she had been tired and depressed by family and marital problems as well as the stress of her job. In terms of learning about her happiness in an educational sense, Mrs. R stated that she found the Fourteen Fundamentals to be thought provoking; they offered her insight into reasons why she had had certain feelings and suggested ways in which she could change negative to positive feelings if she worked on them. In working with the Fundamentals, Mrs. R found herself to be trying to analyze why she was happy or unhappy based on what she had learned about the Fundamentals. Certain Fundamentals apparently came to mind at the time she was experiencing difficulty. Mrs. R found that learning about the Fundamentals changed her life. At the end of the course she was very depressed. For the first time in her twenty-three year marriage, she approached her husband openly regarding her concerns about their sexual relationship. By bringing her concerns

into the open; she stated that they began talking and problem solving. Mrs. R hoped for continued improvement in her relationship with her husband. She was encouraged to seek professional help. In terms of an overall assessment of the Fourteen Fundamentals, Mrs. R stated that she thought they were "basic (like the Ten Commandments)". "If we lived by them", she said, "we could be far happier". Furthermore, she enjoyed meeting others in the group, and especially enjoyed the shared feelings at group meetings.

Additional information was provided by Mrs. R when she requested personal counselling following the program. Mrs. R, at that time, stated that she was extremely upset by a number of family concerns. Although her teenage daughter had run away from home, Mrs. R's relationship with her daughter was improving. Mrs. R's greatest concern was her relationship with her husband. She had, since the outset of their marriage, been dissatisfied with their sexual relationship, stating that her husband was uninterested in her as a sexual partner. Mrs. R's dissatisfaction apparently increased during the final session of the program when she learned of the important role a close loving relationship plays in the attainment of increased happiness. About one week following her initial contact, Mrs. R called again to inform that she had discussed, with her husband, her concerns about their sexual relationship and that in her estimation, their relationship had improved. The present writer has not heard from her since.

In order to determine whether the individuals comprising the exceptional cases described above differed in any systematic way from others whose scores conformed to group means, an examination of descriptive and behavioral data was conducted. Results follow.

Descriptive and Behavioural Data Analysis

Examination of demographic and medical data of those individuals comprising the cases described above, revealed no consistent differences between their data and those of the others in the group. In addition, examination of the program attendance record of all volunteers involved in the program revealed that those found to be exceptional cases could not be differentiated from other participants in the group on the basis of the number of group sessions they attended.

At this point, statistical findings pertaining to subjects' scores on happiness and problem inventories have been reported in addition to the identification and description of exceptional cases based on statistical analyses, observational data, and response to the Fourteen Fundamentals Short-Term Follow-Up Questionnaire. Now, additional data summarizing feedback based on program evaluation instruments completed by the ten individuals in the group who were not identified as exceptional cases, will be addressed.

Summary of Fourteen Fundamentals Feedback Data

Nine of the ten individuals thought that learning the Fundamentals had a positive effect on them. Descriptions of these positive effects varied somewhat. One individual noted that the Fundamentals were a good beginning when it came to improving our lives (we need also consider such areas as eating habits and spiritual guidance). Other individuals found that the Fundamentals inspired new and refreshing ideas and suggestions, such as, the idea that happiness is attainable and is something one can work toward achieving. Certain areas which had previously been underestimated in terms of their effect on personal happiness were identified as being useful, particularly Fundamentals 7, 9, and 11 ("Stop Worrying", "Develop Positive, Optimistic Thinking",

"Work on a Healthy Personality", and "Be Yourself", respectively). The individual who did not find that the Fundamentals had much of an effect on her reported that she had learned the Fundamentals in other classes and that change was most substantial when she was first introduced to the principles.

In response to the question "Do you think the Fundamentals have made you any happier, or not?", five of the ten people, felt that the Fundamentals helped them to be somewhat happier; three people reported that the Fundamentals helped them become much happier than they were; and two people reported that the Fundamentals helped only a little, having no noticeable effect on them.

Seven of ten members of the group failed to answer a question concerning whether or not they had been depressed during the weeks prior to completing the questionnaire. Of the three who did respond to the question, one person reported that he knew how to "snap out of depression" before the Fundamentals were introduced to him. The other two individuals stated that the Fundamental entitled "Stop Worrying" helped them to avoid becoming depressed.

Three individuals did not respond to a question concerning whether or not they had experienced any exceptionally happy periods during the past weeks. Five of those who did responded affirmatively, stating that the fundamentals were a contributing factor. One individual informed that the Fundamentals came to mind only when she was feeling depressed. Another individual reported that although he had experienced no exceptional feelings of happiness, his general condition had improved.

Six people found that the Fundamentals helped them to stay out of bad moods and/or to cope better with them. The most useful fundamental in this regard was "Stop Worrying". One person stated that his bad

moods were caused by physical exhaustion, a condition which he professed to be amenable to change if he could follow Fundamental 6 "Lower Your Expectations and Aspirations". However, he experienced difficulty following this principle. One person stated that she had experienced no bad moods in the past weeks so was unable to determine whether or not the Fundamentals could help her to cope better with them. Two individuals did not respond to the question.

In response to the question "Has working with or thinking about the Fundamentals been a part of creating any good moods for you?", seven of the ten people replied affirmatively. By lowering his expectations and aspirations with regard to work, one individual found that his family and social life improved. Another person found that she had a more positive approach to decision-making. In addition, one women felt that the Fundamentals helped her to accept the fact that she had epilepsy and another found that she took time to do what she wanted in addition to undertaking normal chores on her days off work. Two individuals did not respond to the question and one individual indicated that working with or thinking about the Fundamentals was not a part of creating any good moods for her. She did not elaborate.

In terms of educational value, learning about happiness was found to be valuable by eight of the ten people. More specifically, several people found that learning the Fundamentals gave them a new, more optimistic perspective on life. Knowing that their levels of happiness were within their control was useful information for two people. One person found that he began to appreciate more things which he had previously taken for granted and another stressed the importance of practicing the Fundamental skills. One individual did not find that learning about her happiness, in an educational sense, had value for

her. Another person did not respond to the question.

People in the group worked with the Fundamentals in different ways. The amount of time and energy expended ranged, from spending virtually no time or energy on the Fundamentals to spending much time and effort. Regarding the latter, some people read and reviewed on a biweekly basis, the booklet entitled "Brief Version of the Fourteen Fundamentals" (Fordyce, 1978) as well as course notes, thought about the Fundamentals on a daily basis, and applied specific fundamentals thought to be relevant in certain situations. Thinking and/or working with the Fundamentals from time to time, especially when feeling upset, was the predominant mode.

The fundamental thought to be among those most helpful to six individuals in the group was Fundamental 5; "Stop Worrying". Four individuals indicated that Fundamental 6; "Lower Your Expectations and Aspirations", was among the most helpful to them. Other Fundamentals considered by individuals to be among those most helpful were: (1) Be More Active and Keep Busy; (4) Get Better-Organized; (7) Develop Positive, Optimistic Thinking; (8) Get Present-Oriented; (9) WOAHP -- Like, Accept, Know and Help Yourself; (10) Be Yourself; (11) Eliminate the Negative; and (12) Close Relationships are Number One. Four Fundamentals were not indicated by anyone to have been most helpful. These were: (2) Spend More Time Socializing; (3) Be Productive at Meaningful Work; (10) Develop an Outgoing, Social Personality; and (14) VALHAP -- Value Happiness.

In responding to a question concerning whether or not their lives had been changed after learning about the Fundamentals, six individuals replied that they had changed. More specifically, responses indicated that one individual had learned to be more confident and secure in

herself, another felt that she had more strength, another did not worry as much, one person set some realistic goals, and another took more time to enjoy herself. One person indicated that she had not changed but found herself thinking about Fundamental 5 -- Stop Worrying -- on occasion. Three individuals did not respond to the question.

Although two group members did not respond, the remaining eight people indicated that learning about the Fundamentals did not have any negative side-effects for them.

The final question on the feedback form provided the opportunity for cancer outpatients to make general comments concerning the Fourteen Fundamentals Program. The feedback was generally positive, including such comments as "interesting", "straight forward", "good therapy", "great guidelines for living", "enjoyable course", and "helpful advice". Somewhat negative comments, given in conjunction with positive feedback, included: "Dr. Fordyce oversimplifies certain problems by offering off-the-shelf solutions" and "I was not pleased with his (Dr. Fordyce's) attitude at times: he came on as a know-it-all, a wizard of happiness who had this secret chart".

CHAPTER 5

Discussion

Due to the small sample size (n = 14), univariate analyses were conducted. Given both the small sample size and the nature of the analysis, there was an increased probability of making a Type 1 error. That is, the probability of a false positive result -- incorrectly rejecting a true null hypothesis and concluding that there was a significant pre/post-test difference when, in fact, there was none -- was increased. Results, therefore, need to be interpreted conservatively. In this context, findings will now be discussed. Discussion of results begins with an examination of the tentative support given to Hypothesis 1 by results of happiness inventory data. The discussion then turns to an examination of the tentative support given to Hypothesis 2 by results of problems inventory data. Next is a discussion of data suggesting that the Fourteen Fundamentals Program is effective for certain cancer outpatients and not others. Discussion of these results falls under the topical headings of: extreme scorers; interim summary; and directionally unpredicted, norm deviating scorers. Finally, discussion of the summary of Fourteen Fundamentals feedback data, limitations of the study and suggestions for future research will take place.

Happiness Inventory Data

Significant pre/post-test mean differences were found in two Self Description Inventory scales: (1) The Happy Personality Scale and (2) The Happiness Attitudes and Values Scale. These two findings will be discussed separately.

Happy Personality Scale Data. The increase in Happy Personality scale means from pre- to post-test suggests that cancer outpatients

developed, through participation in the group program, many personality characteristics typical of happier individuals. These characteristics and their implications for cancer patients will now be discussed.

"Happy scorers", according to Fordyce's (1980) findings, test high on items measuring an extroverted, spontanteously friendly, and outgoing social personality. Such characteristics are likely to be beneficial to cancer patients who, it has been suggested, are emotionally repressed (Abse et al., 1974; Bahnson, 1980, 1981; Brown, 1966; Crisp, 1970; Cunningham, 1985; Dattore et al., 1980; Greer, 1979; Grossarth-Maticek et al., 1983a; Kissen, 1963, 1964, 1966a; Kissen & Eysenk, 1962; Kissen & Rao, 1969; Perrin & Pierce, 1974) and/or inhibited (cf. Greer, 1983; Greer & Morris, 1975; Kissen & Eysenk, 1962), may experience ambivalent, avoidant, and controlled responses (Cunningham, 1985; Graves & Thomas, 1981), and may be rigid and conventional (Abse et al., 1974; Brown, 1966; Crisp, 1970; Perrin & Pierce, 1959).

Those participants found by Fordyce (1980) to have relatively high scores on the Happy Personality scale also demonstrated concern for others and an ability to be a trusting, accepting friend. Such an ability may prove to be an asset to cancer patients who have generally been found to have lowered closeness and/or impaired ability to relate to others (c.f. Abse et al., 1974; Cox & Mackay, 1982; Cunningham, 1985; LeShan, 1966; Thomas et al., 1979; Thomas & Greenstreet, 1973). Rate of progression of cancer has also been found to be slower among those who have closer interpersonal relationships (Bahnson & Worden, 1975).

In addition, "Happy scorers" were found, by Fordyce (1980), to have a healthy, positive self-image and self acceptance -- possible advantages for cancer patients who have been found to have a lack of

self-acceptance (Petrucci & Harwick, 1984) and/or low self-esteem (Abse et al., 1974; Cox & Mackay, 1982; Cunningham, 1985; LeShan, 1966; Thomas et al., 1979; Thomas & Greenstreet, 1973), a tendency to self-sacrifice and self-blame (Abse et al., 1974), and body image disruptions (Keltikangas-Jarvisen & Lovin, 1983). In addition, a healthy, positive self-image and self-acceptance may be an asset to cancer patients, given that those whose disease has progressed relatively slowly, have been found to have high ego strength (Achterberg et al., 1977; Ikemi et al., 1975; Kennedy et al., 1976; Weinstock, 1977).

People whose scores were relatively high on the Happy Personality scale of the SDI have been found to have good self-knowledge (Fordyce, 1980), another advantage to cancer patients who have been found to have an impairment of self-awareness and introspection (Abse et al., 1974).

A high degree of autonomy, self-sufficiency, and internal direction are other characteristics of those who have been found to be "happy scorers" (Fordyce, 1980). Developing these characteristics may be beneficial to cancer survivors since, as a group, they have reported a significantly lower sense of self-control and/or less self-confidence than a healthy control group (Schmale, 1980; Schmale et al., 1983) and have been found to be dependent (Abse et al., 1974; Greenberg & Dattore, 1981).

The lack of negative tensions and problems noted in "happy scorers" (Fordyce, 1980) may also prove to be beneficial to cancer patients who have been found to experience a relatively high degree of self-reported stress (Funch & Marshall, 1983; Greer, 1983; Horne & Piccard, 1979; LeShan, 1959; LeShan & Worthington, 1956) and anxiety/tension (Cassileth, 1984; Patel et al., 1980; Meyerowitz et al.,

1983; Silberfarb & Greer, 1982) and whose disease has progressed relatively slowly, given less emotional distress (Weisman & Worden, 1975).

Finally, those whose scores were relatively high on the Happy Personality scale were found to have a certainty of values and a high degree of organization and direction toward goals (Fordyce, 1980). Becoming more goal-directed, may assist cancer patients who have been found to have a predisposition for experiencing hopelessness and despair (Abse et al., 1974; Grossarth-Maticek, 1980a; Grossarth-Maticek et al., 1983a; LeShan, 1959; Schmale & Iker, 1966).

Happiness Attitudes and Values Scale Data

The significant mean increase in the Happiness Attitudes and Values Scale following the program, suggests that cancer outpatients learned to share and live by the values of happy people. These values and their implications for cancer patients will be discussed in the following paragraphs.

Fordyce's (1980) findings suggest that individuals scoring high on the Happiness Attitude and Value scale have a highly optimistic outlook on life and mostly positive thought patterns -- features which may assist cancer patients who have been found to be hopeless (Patel et al., 1980; Petrucci & Harwick, 1984) as well as depressed, both prior to the onset of cancer (Bieliauskus & Garron, 1982; Bukberg et al., 1984; Cassilith, 1984; Cunningham, 1985; Greer, 1983; Greer & Silberfarb, 1982; Grossarth-Maticek, 1980a; Kowal, 1955; LeShan, 1959; LeShan & Worthington, 1956; Massie & Holland, 1984; Shekelle et al., 1981), and following diagnosis (Blumberg et al., 1954; Cunningham, 1985; Greer & Silberfarb, 1982; Keltikangas-Jarvisen & Lovin, 1983; Meyerowitz et al.,

1983; Petrucci & Harwick, 1984; Petty & Noyes, 1981). Negative beliefs (Layne et al., 1985), emotional distress (Weisman & Worden, 1975) and covert hostility (Keltikangas-Jarvisen & Lovin, 1983) have also been found to follow diagnosis of cancer (Layne et al., 1985). It is conceivable that such reactions may be ameliorated, to some extent, by the increase in positive thought patterns which occurred following the Fourteen Fundamentals Program. Furthermore, positive thoughts may increase cancer patients' will to live, coupled with an acceptance of some responsibility for their own healing and a belief that it can occur. These factors have been linked with a slower rate of progression of cancer (Achterberg et al., 1977; Ikemi et al., 1975; Kennedy et al., 1976; Weinstock, 1977).

In addition, an increase in Happiness Attitudes and Values Scale scores was found, by Fordyce (1980), to reflect a relatively modest level of ambition and expectation in conjunction with a more realistic (than idealistic) approach to life and goal-setting. Both of these features would be an asset to cancer patients who, as a group, have been found to demonstrate ambivalent, avoidant, and controlled responses (Cunningham, 1985; Graves & Thomas, 1981) and whose progression of cancer has been relatively slow, given good acceptance of medical and emotional support (Weisman & Worden, 1975).

Another characteristic of people with high Happiness Attitudes and Values Scale scores was found, by Fordyce (1980), to be a value focus on the present (they enjoy living for today and are not unduly preoccupied with past hurts or future apprehensions). Such a focus may prove beneficial to cancer patients in helping them to deal with the belief that they may die (Layne et al., 1985).

Fordyce (1980) also found that "happy scorers" had a very low level of everyday worry. Cancer patients who, as a group, have a relatively high degree of self-reported stress (Funch & Marshall, 1983; Greer, 1983; Horne & Piccard, 1979; LeShan, 1959; LeShan & Worthington, 1956) would likely benefit from low levels of everyday worry. One further finding noted by Fordyce (1980) regarding people who have relatively high scores on the Happiness Attitudes and Values scale, was a strong value commitment to their own personal happiness. Such commitment may prove to be an asset to cancer patients who have been found to be depressed and to have a predisposition for experiencing hopelessness and despair (references cited above). In addition, patients whose disease has progressed relatively slowly, have been found to have an increased sense of purpose or meaning in life (Achterberg et al., 1977; Ikemi et al., 1975; Kennedy et al., 1976; Weinstock, 1977) -- purpose which may be enhanced by a commitment to personal happiness.

The significant increases in happiness noted, weakens the environmental explanation that happiness must be correlated with favorable life circumstances. Increases do, however, suggest that the program may have an effect on "happiness set" as described by Kammann (1982).

In addition to pre/post-test increases on the SDI Happy Personality and Happiness Attitudes and Values Scales, increases were expected on other SDI subscales, particularly on the Happiness Life-Style Scale. Such a finding would have been of importance to patients whose progression of cancer may be slowed by the adoption of healthy changes in lifestyle (Achterberg et al., 1977; Ikemi et al., 1975; Kennedy et al., 1976; Weinstock, 1977). Pre/post-test mean differences on the SDI

Life-Style Scale and Total Score Scale, however, approached significance ($p < .086$ and $p < .077$, respectively) but did not reach acceptable levels. These findings give some support to Fordyce (1983a). He found that college students receiving the program grew significantly more than controls in their happiness life-style traits. Given the conservative nature of the findings in the present study, some support is given for the generalization of Fordyce's findings. Fordyce also noted that the life-style fundamentals were the most immediately affected (considered, according to feedback, the easiest to implement) and that the other fundamentals had a slower effect. This finding was tentatively confirmed in the present study involving cancer patients. No support was given the finding of increases in achieved happiness and total happiness characteristics (on versions of the SDI).

Because the SDI was specifically designed as a diagnostic and prescriptive instrument for use with the Fourteen Fundamentals Program (Fordyce, 1977, 1983a), it could be expected that, of all happiness inventories, mean differences of SDI scale scores would be significant.

All other scale score means on happiness inventories generally increased from pre- to post-tests. The nonsignificance of these findings may be a reflection of low sample size. Regardless, the Fourteen Fundamentals Program continues to show promise as an effective tool for happiness enhancement for use with some cancer patients.

Problems Inventory Data

Cancer outpatients, following the Fourteen Fundamentals Program, reported significantly fewer pschosomatic complaints/symptoms. Minimizing psychosomatic complaints experienced by cancer patients,

would free medical staff to spend more time dealing with physical symptomatology.

The finding of fewer psychosomatic complaints following the happiness program supports findings by others (c.f. Bradburn, 1969; Brenner, 1979; Kammann et al., 1983) of high inverse correlations between global sense of subjective well-being and psychosomatic symptoms. Further support is also given to the possibility of a mind/body link as noted by Cunningham (1985), Cousins (1979) and others.

Although nonsignificant, mean differences were noted in all CIPS subscales such that the severity, number, and intensity of cancer-related problem situations decreased following the Fourteen Fundamentals Program. Once again, differences may be found to be significant given a larger sample size.

Overall, the Fourteen Fundamentals Program continues to show promise as a tool for decreasing some of the problems experienced by cancer outpatients.

Extreme Scorers

Case 1: Mrs. D. The case of Mrs. D was one in which a happy person became even happier following participation in the Fourteen Fundamentals Program. This finding appears to offer support for Fordyce's (1983) contention that most people can, with training, increase their levels of happiness. However, a cautionary note is advised; Diener, Larsen and Emmons (1984) found that subjects rated as having high levels of subjective well-being reported higher positive affect and overestimated their positive affect while accurately estimating their negative affect.

In the event that Mrs. D did experience a boost in happiness

following the program, one explanation for her success is the way in which she worked through the program; she read handouts, completed assignments and reflected on the Fundamentals from time to time.

Case 2: Ms. J. Ms. J's degree of happiness was significantly below average before the program and did not change following the program. In addition, the percentage of time spent by Ms. J in an unhappy mood was significantly above average before the program and further increased following the program. Consistent with this finding was the fact that the amount of negative affect overwhelmed the amount of positive affect experienced by Ms. J following the program. Fordyce (1977, 1983a) also received reports from subjects who had not experienced boosts in happiness. Such subjects, he claimed, had coincidentally experienced unusually bad situations and events during the test weeks -- experiences which counteracted any possible gains. He also found that following the Fourteen Fundamentals Program, some students were more keenly aware of how unhappy they were -- an awareness that further reduced their levels of happiness. These students stated that prior to participating in the program, they did not realize how unhappy they really were. The latter explanation may be applicable to the case of Ms. J.

Once again, a cautionary note regarding these findings is offered by Diener and colleagues (1984). They found that subjects tested with low levels of well-being overestimated their negative affect. It may be the case, therefore, that Ms. J's rating of her level of unhappiness was exaggerated. However, the fact that subjects low in well-being were able to accurately estimate their positive affect, suggests that Ms. J's low rating of her happiness level was accurate.

Although she did not do many of the assignments, Ms. J reported that she thought about the fundamentals constantly. Ms. J did, however, have low self-esteem and appeared to regard most information in the program in such a way as to highlight her own short-comings. One other difference between Ms. J and other group members was that she experienced an increased level of happiness while being treated for cancer. During one group session, Ms. J explained that, while she was receiving treatment for cancer, other people did everything for her and she was relieved of all responsibilities.

Case 3: Mr. E. Happiness scale scores obtained by Mr. E suggest that prior to the program, Mr. E's level of happiness and/or general well-being was significantly below that of the group. Following completion of pre-tests, Mr. E approached the present writer to state that his scores might not be truly representative of his general sense of well-being/happiness because, at the time, he was suffering from difficulties stemming from his relationship with his girlfriend. In addition, Mr. E informed that he was receiving treatment from a psychologist for depression. Over the course of the program, Mr. E became stronger in his assertion that he did not like living in Edmonton and wanted to move. This observation may account for the significant decrease noted in Mr. E's Happiness Life-Style score following the program. Also following the program, Mr. E reported that he spent more time feeling neutral versus feeling happy or unhappy. It is impossible to know how much of this effect (and others) was attributable to Mr. E's participation in the Fourteen Fundamentals Program and/or to the counselling he was receiving throughout the program. According to Mr. E's responses on a follow-up q[illegible] the program was of little

use to him. He did not work on the Fundamentals nor did he think about them. Fordyce (1983a) also noted that some individuals largely chose to ignore or dismiss the information.

Interim Summary

Based on the findings of extreme scorers, it would appear that one factor which may differentiate those whose scores placed them significantly above the group's mean level of happiness from those below it, was the approach used to work through the program. Mrs. D began the program with a happiness level generally exceeding that of the group. She reported that she had put a great deal of effort into the program by attending all sessions, reading handouts, and completing exercises. In addition, the present writer is aware that she shared what she learned in the program with fellow staff members at the school where she taught. Ms. J, whose happiness level was significantly below average before the program and decreased further following it, interacted with the information in such a way as to construe most facts as highlighting personal failings. Mr. E did not work on the Fundamentals and experienced a shift, relative to the group, from low levels of happiness to feeling neutral.

Directionally Unpredicted, Norm Deviating, Scorers

Case 4: Mr. E (again) and Case 5: Mrs. R. Both Mr. E and Mrs. R experienced a general decrease in their personal levels of happiness following the Fourteen Fundamentals Program. In addition, the total number and severity of cancer-related problems increased following the program. In the case of Mr. E whose happiness level was significantly below average prior to the program and who was under the care of a psychologist, an increase in the frequency of occurrence of

psychosomatic complaints was also experienced.

Based on findings in the present study, the Fourteen Fundamentals Program does not assist some individuals in increasing their levels of happiness. In fact, in some cases, cancer outpatients experienced decreased happiness and more cancer-related problems following the program. Neither the amount of attendance at program sessions nor demographic and medical data examined, assisted in the identification of those who benefitted versus those who did not. However, it would appear that for some (e.g., Mr. E and Mrs. R), participation in the program may have initiated positive disintegration (c.f. Dabrowski, 1972) resulting in a search for assistance from a counsellor (or, in the case of Mr. E, another counsellor).

Having examined effects of the program on a group as well as individual basis, feedback data pertaining to the Fourteen Fundamentals program is now addressed.

Summary of Fourteen Fundamentals Feedback Data

Overall, individuals found the Fourteen Fundamentals Program, particularly Fundamental 5, " Stop Worrying", to be beneficial to them from both an educational and a personal growth perspective. This finding suggests that the program has potential as a tool for use with some cancer patients. Based on feedback data from cancer outpatients, the program could be improved by live (versus taped) presentation. Participants experienced difficulty listening to and concentrating on taped material. Moreover, educational material, it was advised, would be best presented for a period of time approximating thirty minutes. These sessions could then be followed by lengthier open-ended discussion periods.

Through participation as group leader, the present investigator concluded that it would be advantageous to have a good deal of experience in group therapy, when conducting the Fourteen Fundamentals Program. Experienced co-leaders may prove to be an asset.

Upon revision of the program for use with cancer patients, retitling is recommended. A title consistent with terminology used in the cancer literature is the "Life Satisfaction Program for Cancer Patients".

While the results of this study were encouraging, a number of limitations require discussion.

Limitations of the Study

1. Although the study was delimited by using volunteers, it was also limited by the fact that conclusions may not be applicable to cancer patients who do not actively volunteer to participate in activities. There is a possibility of self-selection bias in that individuals who have a strong sense of internal control and need for mastery over events may be more likely to join self-help groups in the first place. Because information-seeking has been found to have a positive effect on adjustment (Felton and Revenson, 1984), those who participated in the study may have been better able to cope than those who did not become involved. It may be that individuals experiencing less distress are the ones who join groups (perhaps because they feel they can help others as was the case with a minority of subjects in the present study). Alternatively, it may be that volunteers' counterparts are experiencing higher levels of distress and are either seeking more intensive forms of assistance such as individual psychotherapy or are not functioning well enough to be able to search for forms of assistance, like self-help groups.

2. Although the study was delimited by using a small sample size, it was also limited by the fact that only fourteen subjects participated. Conclusions based on study findings must be viewed as tentative at best.

3. One systematic source of bias in the present study was the within-subject research design. The relatively small number of subjects who volunteered to participate, allowed no possibility for a suggestion and/or placebo control group. The study was, therefore, further limited by lack of control for such factors as suggestion, group effects, history, and testing effects. Consequently, group support and/or discussion effects may have precipitated change.

4. Another limitation resulting from the pre/post-test design was that subjects may have been sensitized to instruments following pre-testing -- an effect which may have influenced post-test scores. As Bumberg, Kerns and Lewis (1983) note, any evaluation measure may be influenced by how, when, and where it is used. For example, scores may be influenced by: the patient's physical or mental condition; an unpleasant event that precedes or follows the measure; the presence of family or staff and the nature of interactions with them before or during the measure; and the patient's desire to please the caregiver by giving a positive answer. In addition, it could be argued that there were no real changes in feelings, but only changes in verbal behavior on the self-report scales.

5. The study was limited by the fact that the researcher participated as a group leader thereby introducing the possibility of unintentional bias in favour of the success of the program.

6. Limitation of the study further arose due to the researcher's relative inexperience in conducting groups. Some treatment sessions may

not have been as productive as possible given that certain individuals dominated group discussion primarily focussing, in a redundant way, on their individual needs and concerns.

Based on the limitations noted in the present study, I have a number of suggestions for future research. These suggestions follow.

Suggestions For Future Research

1. Revise the Fourteen Fundamentals Program as discussed above such that it is more applicable to cancer patients.

2. Alter research design such that another cancer patient group is incorporated to control for such non-specific processes as placebo demand characteristic, experimenter suggestion, or group support effect. It is notable that group treatment of cancer has been found, by Singer (1983), to be especially effective. Effectiveness of group treatment is likely attributable to certain curative factors intrinsic to the group experience, such as instillation of hope, universality, and cohesiveness, which allow the group members to lower their defensiveness and deal more adaptively with their emotional and environmental stresses.

3. Increase the sample size and include cancer patients with lower Karnofsky ratings (e.g., those who are hospitalized) as well as those who have little support from others.

4. Administer the program to couples concurrently as well as to individuals. The program could be presented live or audio-taped for home use.

5. Decrease the number of dependent measures using, if available, instruments currently in their formative stages which have been designed to measure happiness/overall life satisfaction/global sense of

well-being/quality of life, preferably, of cancer patients. Appropriate instruments should have high face validity for cancer patients and have a low "mystical" quality -- patients should not feel they are being assessed for underlying or subconscious motives. Furthermore, acceptable instruments should assume normal functioning but permit extreme responses, especially those considered socially undesirable. Examples of instruments which may be useful after they have undergone more extensive reliability and validity checks, include: The Satisfaction With Life Scale (Diener, Emmons, Larsen, and Griffin, in press); the Cancer Patient Behavior Scale (Bloom and Ross, 1982); the Quality of Life Index (Padilla, 1983); The Anamnestic Comparative Self-Assessment (Bernheim & Buyse, 1983).

6. Determine what elements of the treatment are effective, and for what patients. Conduct qualitative research to further examine factors such as demographic and medical variables which may be predictive of those who are likely to benefit and those who are not.

7. Conduct follow-up studies to determine potential longer-term effects of the program.

References

Abse, D.W., Wilkins, M.M., Van de Castle, R.L., Buxton, L.D., Demars, J.P., Brown, R.S., & Kirschner, L.G. (1974). Personality and behavioural characteristics of lung cancer patients. Journal of Psychosomatic Research, 18, 101-113.

Achterberg, J., Mathews-Simonton, S., & Simonton, O.C. (1977). Psychology of the exceptional cancer patient: A description of patients who outlive predicted life expectancies. Psychotherapy: Theory, Research and Practice, 14, 416-422.

Ader, R. (Ed.). (1981). Psychoneuroimmunology. New York: Academic Press.

Ader, R., & Cohen, N. (1975). Behaviorally conditioned immunosuppression. Psychosomatic Medicine, 37, 333-340.

American Psychological Association Task Force on Health Research. (1976). Contributions of psychology to health research: Patterns, problems and potentials. American Psychologist, 31, 263-274.

Andrews, F.M., & Withey, S.B. (1976). Social indicators of well-being. New York: Plenum Press.

Austin, J. (1968). Pleasure and happiness. Philosophy, 43, 51-62.

Bacon, C.L., Renneker, R., & Cutler, M. (1952). A psychosomatic survey of cancer of the breast. Psychosomatic Medicine, 14, 453-460.

Bahnson, C.B. (1980). Stress and cancer: The state of the art. Part 1. Psychosomatics, 21, 975-981.

Bahnson, C.B. (1981). Stress and cancer: The state of the art. Part 2. Psychosomatics, 22, 207-220.

Barrow, R. (1980). Happiness. Oxford: Martin Robertson & Company Ltd.

Becker, H. (1979). Psychodynamic aspects of breast cancer: Differences in young and older patients. Psychotherapy and Psychosomatics, 32, 287-296.

Beneditt, R. (1974). Happiness. Philosophical Studies, 25, 1-20.

Benson, H., & Epstein, M.D. (1975). The placebo effect. A neglected asset in the care of patients. Journal of American Medical Association, 232, 1225-1227.

Bernard, H. (1983). Current theory of psychogenic effects on cancer incidence and prognosis. Journal of Psychosocial Oncology, 1(1), 17-31.

Bernheim, J.L., & Buyse, M. (1983). The Anamnestic Comparative Self-Assessment for measuring the subjective quality of life of cancer patients. Journal of Psychosocial Oncology, 1(4), 25-38.

Bieliauskas, L.A. (1983). Considerations of depression and stress in the etiology of cancer. Behavioral Medicine Update, 5(2-3), 23-26.

Bieliauskas, L.A., & Garron, D.C. (1982). Psychological depression and cancer. General Hospital Psychiatry, 4(3), 187-195.

Bloom, J.R., & Ross, R.D. (1982). Measurement of the psychosocial aspects of cancer: Sources of bias. In J. Cohen, Cullen, & Martin (Eds.), Psychosocial Aspects of Cancer, Chapter 22. New York: Raven Press.

Blumberg, B.D., Kerns, P.R., & Lewis, M.J. (1983). Adult cancer patient education: An overview. Journal of Psychosocial Oncology, 1(2), 19-39.

Blumberg, E.M., West, P., & Ellis, F. (1954). A possible relationship between psychological factors and human cancer. Psychosomatic Medicine, 16, 277-286.

Borysenko, M., & Borysenko, J. (1982). Stress, behavior and immunity: Animal models and mediating mechanisms. General Hospital Psychiatry, 4, 59-67.

Bradburn, N.M. (1969). The structure of psychological well-being. Chicago: Aldine.

Brenner, B. (1975). Quality of affect and self-evaluated happiness. Social Indicators Research, 2, 315-332.

Brenner, B. (1979). Depressed affect as a cause of associated somatic problems. Psychological Medicine, 9, 737-746.

Brickman, P., Coates, D., & Janoff-Bulman, R. (1978). Lottery winners and accident victims: Is happiness relative? Journal of Personality and Social Psychology, 36, 917-927.

Brown, F. (1966). The relationship between cancer and personality. Annals of the New York Academy of Sciences, 123, 865-873.

Bukberg, J., Penman, D., & Holland, J.C. (1984). Depression in hospitalized cancer patients. Psychosomatic Medicine, 46(3), 199-212.

Cameron, P. (1975). Mood as an indicant of happiness: Age, sex, social class and situation differences. Journal of Gerontology, 30, 216-224.

Campbell, A. (1976). Subjective measures of well-being. American Psychologist, 31, 117-124.

Campbell, A., Converse, P., & Rogers, W.L. (1976). The quality of American life. New York: Russell Sage Foundation.

Cancer facts and figures (1983). New York: American Cancer Society.

Cassileth, B.R. (1984). Concordance of depression and anxiety in patients with cancer. Psychological Reports, 54(2), 588-590.

Ciampi, A., Silberfeld, M., & Till, J.E. (1983). Health status indices: Some approaches and their limitations for oncology. Ontario Psychologist, 15(1), 4-14.

Clark, E. (1983). The role of the social environment in adaptation to cancer. Social Work Research and Abstracts, 19(3), 32-33.

Clemente, F., & Sauer, W.J. (1976). Life satisfaction in the United States. Social Forces, 54, 621-631.

Cole, W.H. (1976). Spontaneous regression of cancer and the importance of finding its cause. National Cancer Institute Monographs, 44, 5-9.

Cooper, C.L. (1984). The social-psychological precursors to cancer. Journal of Human Stress, 10(1), 4-11.

Coppen, A., & Metcalfe, M. (1963). Cancer and extroversion. British Medical Journal, 2, 18-19.

Corwin & Teigie. (1984). In Fordyce, M.W. Supplements: Recent studies on the HM and SDI. Unpublished Manuscript, Edison Community College, Fort Myers, Fl.

Cousins, N. (1979). Anatomy of an illness as perceived by the patient. Toronto: George McLeod Limited.

Cousins, N. (1985, August). New dimensions in healing. Paper presented at the 93rd Annual Convention of the American Psychological Association, Los Angeles, California.

Cox, T., & Mackay, C. (1982). Psychosocial factors and psychophysiological mechanisms in the etiology and development of cancers. Social Science & Medicine, 16(4), 381-396.

Craig, T.J., & Abeloff, M.D. (1974). Psychiatric symptomatology among hospitalized cancer patients. American Journal of Psychiatry, 131, 1323-1327.

Crisp, A.H. (1970). Some psychosomatic aspects of neoplasia. British Journal of Medical Psychology, 43, 313-331.

Crosby, F. (1976). A model of egotistical relative deprivation. Psychological Review, 83, 85-90.

Cunningham, A.J. (1985). The influence of mind on cancer. Canadian Psychology, 26(1), 18-29.

Cusick, P.A. (1973). Inside high school. New York: Holt, Rinehart and Winston.

Dabrowski, K. (1972, December). The theory of positive disintegration. Paper presented at the 2nd International Conference on positive disintegration, Montreal, Que.

Dattore, P.J., Shontz, F.C., & Coyne, L. (1980). Premorbid personality differentiation of cancer and non-cancer groups: A test of the hypothesis of cancer proneness. Journal of Consulting Clinical Psychology, 48, 388-394.

Devlin, H.B., Plant, J.A., & Griffin, M. (1971). Aftermath of surgery for anorectal cancer. British Medical Journal, iii, 413-418.

Diener, E. (1984). Subjective well-being. Psychological Bulletin, 95(1), 542-575.

Diener, E., & Emmons, R.A. (in press). The independence of positive and negative affect. Journal of Personality and Social Psychology.

Diener, E., Emmons, R.A., Larsen, R.J., & Griffin, S. (in press). The satisfaction with life scale. Personality Assessment.

Diener, E., & Larsen, R.J. (in press). Temporal stability and cross-situational consistency of positive and negative affect. Journal of Personality and Social Psychology.

Diener, E., Larsen, R.J., & Emmons, R.A. (1984, August). Bias in mood recall in happy and unhappy persons. Paper delivered at the 92nd Annual Meeting of the American Psychological Association, Toronto, Ontario.

Diener, E., Larsen, R.J., Levine, S., & Emmons, R.A. (in press). Intensity and frequency: Dimensions underlying positive and negative affect. Journal of Personality and Social Psychology.

Dillman, B. (1979). Relationship styles and individual happiness. Unpublished study.

Dupuy, H.J. (1970). Developmental rationale, substantive derivative, and conceptual relevance of the General Well-Being Schedule. Unpublished manuscript, National Center for Health Statistics, Vesuvius, VA.

Dupuy, H.J. (1978). The Psychological General Well-Being (PGWB) index. Unpublished manuscript, National Center for Health Statistics, Vesuvius, VA.

Dupuy, H.J. (1980). The Research Edition of the General Psychological Well-Being Schedule. Unpublished manuscript, National Center for Health Statistics, Vesuvius, VA.

Dyer, W.W. (1977). Your erroneous zones. London, England: Sphere Books.

Edwards, N.J., & Klemmack, D.L. (1973). Correlates of life satisfaction: A re-examination. Journal of Gerontology, 28, 497-502.

Everson, T.C., & Cole, W.H. (1966). Spontaneous regression of cancer. Philadelphia: W.B. Saunders.

Eysenck, H.J., & Eysenck, S.B.G. (1964). Manual of the Eysenck Personality Inventory. University of London Press: London.

Fazio, A.F. (1977). A concurrent validation study of the NCHS General Well-Being Schedule. Vital and health statistics: Data evaluation and methods research; Series 2- No.73. DHEW publication No. (HRA) 78-1347.

Felton, B.J., & Revenson, T.A. (1984). Coping with chronic illness: A study of illness controlability and the influence of coping strategies on psychological adjustment. Journal of Consulting and Clinical Psychology, 52(3), 343-353.

Fletcher, J. (1975). Being happy, being human. The Humanist, 35, 13-15.

Fordyce, M.W. (1977). Development of a program to increase personal happiness. Journal of Counselling Psychology, 24(6), 511-521.

Fordyce, M.W. (1978). The psychology of happiness. A brief version of the fourteen fundamentals. Fort Myers, Fl: Cypress Lake media.

Fordyce, M.W. (1980). The Self Description Inventory: A multi-scale test of happiness and its concomitants. Unpublished manuscript, Edison Community College, Fort Myers.

Fordyce, M.W. (Speaker). (1981). The Fourteen Fundamentals self-study program to increase happiness (An Audio-Cassette Package). Fort Myers, Fl: Cypress Lake Media.

Fordyce, M.W. (1983a). A program to increase happiness: Further studies. Journal of Counselling Psychology, 30(4), 483-498.

Fordyce, M.W. (1983b). The Happiness Measures: A sixty-second index of emotional well-being and mental health. Fort Myers, Edison Community College.

Fotopoulus, S.S., Dintruff, D.L., Costello, K.B., & Cook, M.R. (1981). In P. Ahmed (Ed.), Living and dying with cancer. New York: Elsevier North Holland.

Fox, B.H. (1978). Premorbid psychological factors as related to cancer incidence. Journal of Behavioral Medicine, 1, 45-133.

Fox, B.H. (1983). Current theory of psychogenic effects on cancer incidence and prognosis. Journal of Psychosocial Oncology, 1(1), 17-31.

Fras, I., Litin, E.M., & Pearson, J.S. (1967). Comparison of psychiatric symptoms in carcinoma of the pancreas with those of some other intra-abdominal neoplasms. American Journal of Psychiatry, 123, 1553-1562.

Friedman, H.L. (1983). The self expansiveness level form: A conceptualization and measurement of a transpersonal construct. Journal of Transpersonal Psychology, 15(1), 37-50.

Freudiger, P.T. (1980). Life satisfaction among American women. (Doctoral dissertation, North Texas State University, 1979). Dissertation Abstracts International, 40, 6438A. (University Microfilms No. 80-12.882).

Funch, D.P., & Marshall, J. (1983). The role of stress, social support and age in survival from breast cancer. Journal of Psychosomatic Research, 27, 77-83.

Goldstein, L. (1973). Happiness: The role of non-hedonic criteria in its evaluation. International Studies Quarterly, 14, 523-534.

Graves, P.L., & Thomas, C.B. (1981). Themes of interaction in medical students' Rorschach responses as predictors of mid-life health or disease. Psychosomatic Medicine, 43, 215-225.

Greenberg, R.P., & Dattore, P.J. (1981). The relationship between dependency and the development of cancer. Psychosomatic Medicine, 43, 35-43.

Greer, S. (1979). Psychological enquiry: A contribution to cancer research. Psychological Medicine, 9, 81-89.

Greer, S. (1983). Cancer and the mind. British Journal of Psychiatry, 143, 553-543.

Greer, S. (1984). The psychological dimension of cancer treatment. Social Science and Medicine, 18(4), 345-349.

Greer, S., & Morris, T. (1975). Psychological attributes of women who develop breast cancer: A controlled study. Journal of Psychosomatic Research, 19, 147-153.

Greer, S., Morris, T., & Pettingale, K.W. (1979). Psychological response to breast cancer: Effect on outcome. Lancet, 2, 785-787.

Greer, S., & Silberjarb, P.M. (1982). Psychological concommitants of cancer: Current state of research. Psychological Medicine, 12(3), 565-573.

Grossarth-Maticek, R. (1980a). Psychosocial predictors of cancer and internal diseases. An overview. Psychotherapy and Psychosomatics, 33(3), 122-128.

Grossarth-Maticek, R. (1980b). Social psychotrherapy and course of the disease: First experiences with cancer patients. Psychotherapy and Psychosomatics, 33(3), 129-138.

Grossarth-Maticek, R., Kanazir, D.T., Schmidt, P., & Vetter, I. (1982). Isomatic factors in the process of carcinogenesis: Theoretical models and empirical results. Therapy and Isomatics, 38,(1-4), 284-302.

Grossarth-Maticek, R., Kanazir, D.T., Vetter, H., & Schmidt, P. (1983a). Psychosomatic factors involved in the process of carcinogenesis: Preliminary results of the Yugoslav prospective study. Psychotherapy and Psychosomatics, 40(1-4), 191-210.

Grossarth-Maticek, R., Siegrist, J., & Vetter, H. (1982). Interpersonal repression as a predictor of cancer. Social Science and Medicine, 16, 493-498.

Gurin, G., Veroff, J., & Feld, S. (1960). Americans view their mental health. New York: Basic Books.

Hagnell, O. (1966). The premorbid personalities of persons who develop cancer in a total population investigated in 1947 and 1957. Annals of the New York Academy of Sciences, 125, 846-855.

Hall, R.C., & Beresford, T.P. (1983). The psychosocial aspect of medicine. Psychiatric Medicine, 1(2), 111-119.

Haney, C.A. (1977). Illness behaviour and psychosocial correlates of cancer. Journal of Social Science and Medicine, 11(4), 223-228.

Harrell, H.C. (1972). To lose a breast. American Journal of Nursing, 72, 676-677.

Hinton, J. (1975). The influence of previous personality on reactions to having terminal cancer. Omega, 6, 95-111.

Holden, C. (1978). Cancer and the mind: How are they connected? Science, 200, 1363-1369.

Horne, R.L., & Picard, R.S. (1979). Psychosocial risk factors for lung cancer. Psychosomatic Medicine, 41, 503-514.

Ikemi, Y., Nakagawa, S., Nakagawa, T., & Sugita, M. (1975). Psychosomatic consideration of cancer patients who have made a narrow escape from death. Dynamische Psychiatrie, 8, 77-91.

Irwin, R., Kammann, R., & Dixon, G. (1979). If you want to know how happy I am, you'll have to ask me. New Zealand Psychologist, 8, 10-12.

Jemmott, J.B., & Locke, S.E. (1984). Psychosocial factors immunologic mediation, and human susceptibility to infectious diseases: How much do we know? Psychological Bulletin, 95, 78-108.

Jeter, K.F. (1982). Sex and the cystectomized male: A lack of communication, a need for education. Sexuality and Disability, 5(2), 89-97.

Johnson, J.B., & Blumberg, B.D. (1984). A commentary on cancer patient education. Health Education Quarterly, 10 (Special Supplement), 7-18.

Kammann, R. (1981). Affectometer 2: A rapid inventory of subjective well-being. Why Not? Foundation, Dunedin, N.Z.

Kammann, R. (1982). Personal circumstances and life events as poor predictors of happiness. Paper presented at the meeting of the American Psychological Association, Washington, D.C.

Kammann, R. (1983). Objective circumstances, life satisfactions, and sense of well-being: Consistencies across time and place. New Zealand Journal of Psychology, 12, 14-22.

Kammann, R., & Campbell, K. (1982). Illusory correlation in popular beliefs about the causes of happiness. New Zealand Psychologist, 11, 52-62.

Kammann, R., Christie, D., Irwin, R., & Dixon, G. (1979). Properties of an inventory to measure happiness (and psychological health). New Zealand Psychologist, 8, 1-12.

Kammann, R., Farry, M., & Herbison, P. (1983). The analysis and measurement of happiness as a sense of well-being. Social Indicators Research, 15, 91-115.

Kammann, R., & Flett, R. (1983a). Affectometer 2: A scale to measure current level of general happiness. Australian Journal of Psychology, 35(2), 259-265.

Kammann, R. & Flett, R. (1983b). Sourcebook for measuring well-being with Affectometer 2. Why Not? Foundation, Dunedin, New Zealand.

Keltikanagas-Jarvinin, L., & Loven, E.L. (1983). Stability of personality dimensions related to cancer and colitis ulcerosa: Preliminary report. Psychological Reports, 52(3), 961-962.

Kennedy, B.J., Tellegen, A., Kennedy, S., & Havernick, N. (1976). Psychological response of patients cured of advanced cancer. Cancer, 38, 2184-2191.

Kerr, T.A., Shapira, K., & Roth, M. (1969). The relationship between premature death and affective disorders. British Journal of Psychiatry, 115, 1277-1282.

Kissen, D.M. (1963). Personality characteristics in males conducive to lung cancer. British Journal of Medical Psychology, 36, 27-36.

Kissen, D.M. (1964). Lung cancer, inhalation and personality. In Psychosomatic Aspects of Neoplastic Disease, Ed. Kissen, D.M. and LeShan, L.L., Pitman.

Kissen, D.M. (1966a). Psychosocial factors, personality and prevention in lung cancer. Medical Officer, 166, 135-138.

Kissen, D.M. (1966b). The significance of personality in lung cancer in man. Annals of New York Academy of Science, 125, 820-826.

Kissen, D.M., & Eysenick, H.J. (1962). Personality in male lung cancer patients. Journal of Psychosomatic Research, 6, 123-127.

Kissen, D.M., & Rao, L.G.S. (1969). Steroid excretion patterns and personality in lung cancer patients. Annals of the New York Academy of Sciences, 164(2), 476-482.

Klopfer, B. (1957). Psychological variables in human cancer. Journal of Projective Techniques, 21, 331-340.

Kowal, S.J. (1955). Emotions as a cause of cancer. Psychoanalytic Review, 42, 217-227.

Krupinski, J., & Mackenzie, A. (1979). The health and social survey of the north west region of Melbourne (Special Publication No. 17). Melbourne, Australia: Institute of Mental Research and Postgraduate Training. Health Commision of Victoria.

Lang, P.J. (1979). A bioinformational theory of emotional imagery. Psychophysiology, 16, 495-512.

Larsen, R. (1978). Thirty years of research on the subjective well-being of older Americans. Journal of Gerontology, 33, 109-125.

Larsen, R.J., Diener, E., & Emmons, R.A. (1985). An evaluation of subjective well-being measures. Unpublished manuscript. University of Illinois, Champaign, Il.

Layne, C., Heitkemper, T., Roehrig, R.A., & Speer, T.K. (1985). Motivational deficit in depressed cancer patients. Journal of Clinical Psychology, 41(2), 139-144.

LeShan, L. (1959). Psychological states as factors in the development of malignant disease: A critical review. Journal of the National Cancer Institute, 22, 1-18.

LeShan, L. (1966). An emotional life-history pattern associated with neoplastic disease. Annals of New York Academy of Science, 125, 780-793.

LeShan, L., & Worthington, R.E. (1956). Some recurrent life history patterns observed in patients with malignant disease. Journal of Nervous and Mental Disorders, 124, 460-465.

Lichter, S., Haye, K., & Kammann, R. (1980). Increasing happiness through cognitive retraining. New Zealand Psychologist, 9, 57-64.

Lloyd, R. (1984). Mechanisms of psychoimmunological response. In B.H. Fox and B.H. Newberry (Eds.), Impact of psychoendocrine systems in cancer and immunity (pp. 1-57). New York: C.J. Hogrefe.

Locke, S.E., & Hornig-Rohan, M. (1983). Mind and immunity: Behavioural immunology. New York: Institute for Advancement of Health.

Maguire, P. (1979). The will to live in the cancer patient. In Mind and cancer prognosis (Ed. B.A. Stoll), pp. 169-182. John Wiley: Chichester.

Markides, K.S., & Martin, H.W. (1979). A causal model of life satisfaction among the elderly. Journal of Gerontology, 34, 86-93.

Marsie, M.J., & Holland, J.C. (1984). Diagnosis and treatment of depression in the cancer patient. Journal of Clinical Psychiatry, 45(3, Section 2), 25-29.

McCoy, J.W. (1976). Psychological variables and the onset of cancer. Unpublished doctoral dissertation, Oklahoma State University, Stillwater, O.K.

McMahon, C.E., & Hastrup, J.L. (1980). The role of imagination in the disease process: Post-Cartesian medical history. Journal of Behavioural Medicine, 3, 205-217.

Meyerowitz, B.E. (1980). Psychosocial correlates of breast cancer and its treatments. Psychological Bulletin, 87, 108-131.

Meyerowitz, B.E., Heinrich, R.L., & Schag, C.C. (1983). A competency-based approach to coping with cancer. In T.G. Burish and L.A. Bradley (Eds.), Coping with chronic ilness. Research and applications. New York: Academic Press.

Morrison, F.R. (1980). Psychosocial factors in the etiology of cancer. Unpublished doctoral dissertation, University of California at Berkeley, C.A.

Morrison, F.R., & Paffenbarger, R.S. (1981). Epidemiological aspects of biobehaviour in the etiology of cancer: A critical review. In Weiss, S.M., Herd, J.A., & Fox, B.H. (Eds.), Perspectives on behavioural medicine. New York: Academic Press.

Near, J.P., Rice, R.W., & Hunt, R.G. (1978). Work and extra-work correlates of life and job satisfaction. Academy of Management Journal, 21, 248-264.

Okun, M.A., Stock, W.A., Haring, M.J., & Winter, R.A. (in press). Health and subjective well-being. A meta-analysis. Journal of Aging and Human Development.

Padilla, G.V. et al. (1983). Quality of life index for patients with cancer. Research in Nursing and Health, 6(3), 117-126.

Patel, M.J., Sinha, B.K., & Gawadia, M.L. (1980). Psychological

manifestation in cancer patients: Preliminary study. Indian Journal of Clinical Psychology, 7(2), 147-150.

Peck, A. (1972). Emotional reactions to having cancer. Cancer, 22, 284-299.

Perrin, G.W., & Pierce, I.R. (1959). Psychossomatic aspects of cancer: A review. Psychosomatic Medicine, 5, 397-421.

Petrucci, R.J., & Harwick, R.D. (1984). Role of the psychologist on a radical head and neck surgical service team. Professional Psychology: Research and Practice, 15(4), 538-543.

Pettet, J.R. (1979). Depression in cancer patients. Journal of the American Medical Association, 241, 1487-1489.

Petty, F., & Noyes, R. (1981). Depression secondary to cancer. Biological Psychiatry, 16(12), 1203-1220.

Plumb, M.M., & Holland, J. (1977). Comparitive studies of psychological functions in patients with advanced cancer. Psychosomatic Medicine, 39, 264-276.

Ray, R.O. (1979). Life satisfaction and activity involvement: Implications for leisure service. Journal of Leisure Research, 11, 112-119.

Red, W.H., & Hendler, C.S. (1983). Behavioral medicine in comprehensive cancer treatment. Journal of Psychosocial Oncology, 1,(2), 3-17.

Riddick, C.C. (1980). The life satisfaction of retired and employed older women: A re-examination of the disengagement theory. (Doctoral dissertation, Pennsylvania State University, 1980). Dissertation Abstracts International, 41, 2327A. (University Microfilms No. 80-24.483).

Salazar and collegues (1984). In Fordyce, M.W. Supplement: Recent studies on the HM and SDF. Unpublished manuscript, Edison Community College, Fort Myers, Fl.

Schag, C.C., Heinrich, R.L., & Ganz, P.A. (1983). Cancer inventory of problem situations: An instrument for assessing cancer patients rehabilitation needs. Journal of Psychosocial Oncology, 1(4), 11-24.

Schmale, A.H. (1980). Clinical trials in psychosocial medicine: Methodological and statistical considerations. Part 1. Introduction: Cancer Treatment Reports, 64(2-3), 441-443.

Schmale, A.M., & Iker, H.P. (1966). The affect of hopelessness and the development of cancer. I. Identification of uterine cervical cancer in women with atypical cytology. Psychosomatic Medicine, 28, 714-721.

Schmale, A.H., Morrow, G.R., Schmitt, M.H., Adler, L.M., Enelolw, A., Murawski, B.J., & Gates, C. (1983). Well-being of cancer survivors. Psychosomatic Medicine, 45(2), 163-169.

Schwartz, N., & Clore, G.L. (1983). Mood, misattribution, and judgements of well-being: Informative and directive functions of affective states. Journal of Personality and Social Psychology, 45, 513-523.

Scurry, M.T., & Levin, E.M. (1978-79). Psychosocial factors related to the incidence of cancer. International Journal of Psychiatry in Medicine, 9, 159-177.

Selye, H. (1976). Stress in health and disease. Butterworth, Ontario.

Senescu, R.A. (1963). The development of emotional complications in the patient with cancer. Journal of Chronic Disabilities, 16, 813-832.

Shacham, S., Reinhart, L.C., Raubertas, R.F., & Cleeland, C.S. (1983). Emotional states and pain: Intraindividual and interindividual measures of association. Journal of Behavioral Medicine, 6(4), 405-419.

Shekelle, R.B., Raynor, W.J., Ostfeld, A.M., Garron, D.C., Bieliauskas, L.A., Liu, C., Maliza, C., & Ogelsby, P. (1981). Psychological depression and 17-year risk of death from cancer. Psychosomatic Medicine, 43, 117-125.

Shin, D.C., & Johnson, D.M. (1978). Avowed happiness as an overall assessment of the quality of life. Social Indicators Research, 5, 475-492.

Shipman, M.D., Bolam, D., & Jenkins, D.R. (1974). Inside a curriculum project. London: Methuen and Co. Ltd.

Silberfarb, P.M., & Greer, S. (1982). Psychological concomitants of cancer: Clinical aspects. American Journal of Psychotherapy, 36(4), 470-478.

Simpson, R. (1975). Happiness. American Philosophical Quarterly, 12, 169-176.

Singer, B.A. (1983). Psychosocial trauma, defense strategies and treatment considerations in cancer patients and their families. American Journal of Family Therapy, 11(3), 15-21.

Spreitzer, E., & Snyder, E.E. (1974). Correlates of life satisfaction among the aged. Journal of Gerontology, 29, 454-458.

Statistics Canada. (1983). Cancer in Canada. Ottawa: Supply and Services Canada.

Stavraky, K.M. (1968). Psychological factors in the outcome of human cancer. Journal of Psychosomatic Research, 12, 251-259.

Stein, M., Keller,S., & Schleifer, S. (1979). Role of the hypothalamus in mediating stress effects on the immune systems. In Mind and cancer prognosis (Ed. B.A. Stoll), pp. 85-101. John Wiley: Chichester.

Stoll, B.A. (1979). Restraint of growth and spontaneous regression of cancer. In B.A. Stoll (Ed.), Mind and cancer prognosis (pp. 19-29). New York: John Wiley.

Thomas, C.B. (1976). Precursors of premature death and disease: The protective potential of habits and family attitudes. Annals of Internal Medicine, 85, 653-658.

Thomas, C.B., & Duszynski, K.R. (1974). Closeness to parents and the family

constellation in a prospective study of five disease states: Suicide, mental illness, malignant tumor, hypertension and coronary heart disease. Johns Hopkins Medical Journal, 134, 251-270.

Thomas, C.B., Duszynski, K.R., & Shaffer, J.W. (1979). Family attitudes reported in youth as potential predictors of cancer. Psychosomatic Medicine, 41, 287-302.

Thomas, C.B., & Greenstreet, R.L. (1973). Psychobiological characteristics in youth as predictors of five disease states: Suicide, mental illness, hypertension, coronary heart disease and tumor. Johns Hopkins Medical Journal, 132, 16-43.

Toseland, R., & Rusch, J. (1979-80). Correlates of life satisfaction: An AID analysis. International Journal of Aging and Human Development, 10, 203-211.

Weinstein, L. (1982). Positive contrast as due to happiness. Bulletin of the Psychonomic Society, 9, 111-121.

Weinstock, C. (1977). Notes on "spontaneous" regression of cancer. Journal of American Society of Psychosomatic Dentistry and Medicine, 24, 106-110.

Weinstock, C. (1984). Further evidence on psychobiological aspects of cancer. International Journal of Psychosomatics, 31(1), 20-22.

Weisman, A.D. (1979). Coping with cancer. New York: McGraw-Hill.

Weisman, A.D. & Worden, J.W. (1975). Psychosocial analysis of cancer deaths. Omega, 6, 61-75.

Wellisch, D.K., & Yager, J. (1983). Is there a cancer prone personality? CA-A Cancer Journal for Clinicians, 33, 145-153.

Wessman, A.E. (1957). A psychological inquiry into satisfactions and happiness. (Doctoral dissertation, Princeton University, 1956). Dissertation Abstracts International, 17, 1384. (University

Microfilms No. 00-20.168).

Wessman, A.E., & Ricks, D.F. (1966). Mood and personality. New York: Holt, Rinehart and Winston.

Wilson, W.R. (1960). An attempt to determine some corrletates and dimensions of hedonic tone (Doctoral dissertation Northwestern University, 1960). Dissertation Abstracts, 22, 2814. (University Microfilms No. 60-6588).

Wolcott, H. (1975). Criteria for an ethnographic approach to research in schools. Human Organization, 34(2), 111-127.

Woodeforde, J.M., & Fielding, J.R. (1970). Pain and cancer. Journal of Psychosomatic Research, 14, 365-370.

Woods, P. (1979). The divided school. London : Routledge and Kegan Paul.

Zander, E. (1983). Das carcinom - Eine psychosomatische erkrankung?/ Carcinoma: A psychosomatic disease? (German). Zeitschrift fur Psychosomatische Medizin und Psychoanalyse, 29(4), 363-379.

Zautra, A., & Hempel, A. (1983). Subjective well-being and physical health: A review of literature and some suggestions about future research. Manuscript submitted for publication. Arizona State University.

Zeglen, M.E. (1977). The impact of primary relationships on life satisfaction of the elderly. (Doctoral dissertation, Washington State University, 1976). Dissertation Abstracts International, 37, 5372A. (University Microfilms No. 77-2892).

Appendix A

Outline of Fordyce's "Psychology of Happiness: Fourteen Fundamentals" Course -- Tape Guide and Workshop Content(*)

SESSION 1

* Introductory comments

Side 1: Introduction -- Happiness is the Most Important Thing in Life.

* What is the most important thing in life? What one thing is more important than anything else to you? Take a moment to think about your answer without saying anything aloud.

(a) Now, number off from one to four so that we can split up into groups of five. Each group is to decide on one answer to this question. You will have about five minutes to come up with an answer which one of you will report to the other groups.

(b) What did each of you decide on your own? Report individual answers to class.

NB. Answers for both (a) and (b) are to be written on a flip chart.

"The Big Board in the Sky": What ingredients would you include in a menu for the perfect and/or dream life? (assume that you have all the basic needs such as food, clothing, money? and so on)

NB. Answers to this question will be written on a flip chart for future reference.

(1) Introduction by Steve McDermott to the "Fourteen Fundamentals of

Happiness Program"

(2) Fordyce's answer to: "What is the most important thing in life?"

(3) Definition of "happiness".

(4) Outline of the program specifying goals and objectives

Side 2: "The Big Board in the Sky" -- Discussion of Past Research on Happy People

(1) Importance of having a good social life including loved ones and friends

(2) Personal success

(3) Social Economic Status (SES)

(4) Education

(5) Competence

(6) Intelligence

(7) Religion

(8) Fun/entertainment

(9) Mental health

(10) "The bad news" (many of the things that could make you happier are simply up to luck)

* Group discussion concerning reaction to taped material followed by discussion of the following issues: health and happiness; cancer and happiness; pain and happiness; and how attitude and illness/cancer inter-relate.

Side 3: "The Fourteen Fundamentals Program" -- An Overview of the Happiness Training Techniques and How to Make Them Work.

(1) The "good news"

(2) List of the Fourteen Fundamentals along with a brief description of each

*Completion of Sessional Evaluation Forms.

SESSION 2

*Introductory Comments

* Hand out cards entitled "Fourteen Fundamentals" and booklets entitled "A Brief Version of the Fourteen Fundamentals".

Side 4: The Life-Style Fundamentals -- "Be More Active (Fundamental #1)", "Spend More Time Socializing (Fundamental #2)", and "Be Productive at Meaningful Work (Fundamental #3)".

(1) List of life-style fundamentals

* Pleasure Analysis (an awareness exercise):

You will need a sheet of paper and pen or pencil. We're going to work in pairs for this exercise. Please find a partner and when you're ready take turns listing all of the things that you really enjoy doing, things that give you pleasure, things that you have fun doing. While one of

you is listing, the other will write down all the activities, situations, and events that consistently bring you pleasure or that make you happy whenever you do them. Write down as many things as you can think of that you really enjoy doing. The longer the list, the better it will be for you. Now spend about five minutes on your list, or until you have at least fifteen items.

After each of you have had turns talking and writing, keep the list you thought up as you'll need it later. After a pause for people to begin their lists, someone will be asked to read their list of pleasures to give others more ideas. Then other peoples' lists will be read aloud.

(2) Fundamental #1: "Be more active". How to.../techniques

* Pleasure Analysis (continued)

(a) Put a "$" (dollar sign) beside each of the activities which will cost you more than three or four dollars to do. How many of you have found that you have more expensive pleasures than free ones? If your list is a true indication of the kinds of things you enjoy, the lesson you've learned is that your life will have to include the kind of income that can support your tastes. However, the rest of you found that most of your pleasures were free ones, right? Once again, this group has found what most groups find -- apparantly the best things in life are free. In other words, the kinds of activities that really make you happy don't really require that much money. This may lead you to think that a life of unending work to accumulate material wealth has little to do with what really makes you happy. Perhaps most of us have put our priorities in the wrong place. If happy people are any example, we

might be better off spending more of our time on the inexpensive pleasures available to us now, than to unhappily work excessively for the expensive pleasures in the future -- which, according to your lists, are not as plentiful.

(b) Put a "P" beside any of those things that require planning and organization. Many people find that a lot of their pleasurable activities are spontaneous ones, and if you do -- so much the better. It's nice to know that your enjoyment is so readily available -- but, the question might be, "Why don't you do such things more often?" On the other hand, everyone has things on their list that require pre-planning to enjoy, and if you find a majority of such activities, the implication is that for you to enjoy life more, a bit of organization will be required. You, therefore, could well benefit from another Fundamental we'll talk about later: "Get better organized and plan things out".

(c) Put an "S" beside any of the activities that are basically social in nature, that is, those activities that involve someone else -- at least one other person -- in order for you to enjoy the activities. What most people find is that the things that give you pleasure in life do so primarily because they involve some sort of a social activity with friends, family, or someone special. Without others involved, the activity itself is a pretty empty experience.

Now, a number of you may find that you have most of your activities in the solitary category. Generally this kind of list tends to be more typical of unhappy individuals, however, it is not necessarily a bad thing to have. Apparently, you're the kind of person who can have enjoyment in life without others always being involved -- and, to some degree, that is an asset for you. However, it is likely in this group

as in other groups that for most people, happy times involve other people. Most of life's pelasure are social pleasures, as you've discovered, and as you continue your study of the Fundamentals you'll find this insight will grow.

If the list you made represented your daily agenda, do you think that you would be happy? Your only chore would be to select things off that list to keep you occupied each day. Wouldn't that be great? Wouldn't life be a pretty enjoyable, happy experience? No other responsibilities, pressures, worry, or work -- just what's on your list. I see most of you think that would be a pretty happy life-style. And, that's exactly the point I'm leading up to. What you've got there on your paper is the cornerstone of the happy life. These are the kinds of things happy people find more time to do. Hopefully, we can work out a way for you to do more of these things, too.

(d) Put a "*" (star) beside things that you don't have a chance to do very often, that is, things that you don't do more that twice per week.

(e) Develop a master list including :

1 -things that are economic, enjoyable, and exciting: things that every time you do them you have a lot of fun

2 -things that can be done infrequently (like the items on your list that have a star). This includes things you haven't done in a while, things you just can't find the time to do generally, and things you've never tried before that you think you might get a kick out of.

3 -things that can be done regularly -- things that you could probably do almost any day of the week (or at least over a weekend), if you want to. Add these things to your daily routine. Continue to add enjoyable activities to your list to make it as long as possible. To do this, you may want to consider the things you like about your life these days.

You may also want to analyze some of the "best times" of your life. If you study them and think about them, there may be certain keys to those times that made you happy -- things you might do again now! As time progresses your activities list will mature, but for the time being, your present list should give you enough to get started.

To become more active and keep busy, pick three things off your list each day you participate in the program. Do these three things in addition to whatever else you normally do. People who have done this have noticed an increase in their happiness level only two weeks following the time that they began to follow these instructions. — Research has shown an increase in happiness in individuals who do this. Some people who have done this exercise have found that some of their regular responsibilities went undone for awhile. However, most people who have done this exercise have been able to add one or two new fun things to their daily routine as well as keep up with their responsiblities. Happy people are able to do this.

* Discussion of "How to be more active and spend more time socializing" when you're single, divorced, or married and feel tied down.

(4) Fundamental #2: "Spend more time socializing". How to.../techniques

(5) Fundamental #3: "Be more productive at meaningful work". How to.../techniques

Side 5: The Happy Personality Fundamentals --"Get Better-Organized and Plan Things Out (Fundamental #4)".

(1) Strategies to get better organized (BO)

(2) Long term (goals)

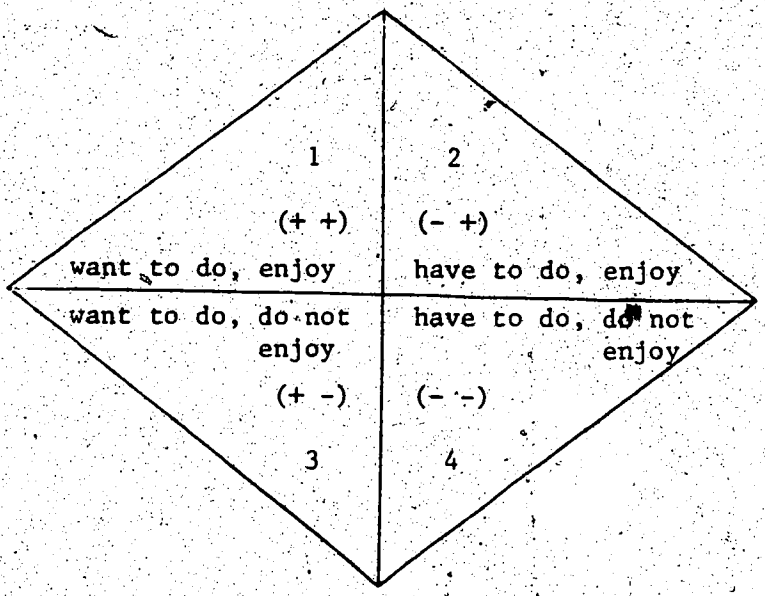
* Working in pairs as we have done before, while one person is writing the other will be answering the question: "What are your goals?" Each of you will list your long term and short term goals. What do you want in life? You may want to keep a journal to explore this.

(3) Short term -- How to avoid procrastination

* Step 1: Again, working in pairs, make four lists as follows:
List 1 -What do you enjoy doing? What do you like to do?
List 2 -What things do you want to or hope to accomplish in your life?
List 3 -What things do you have to do?
List 4 (Do Do List) -What things do you do from day to day?
Is there any relationship between List 4 and Lists 1 to 3?

Step 2: Set your priorities. If you have problems assigning numbers to the items on your lists, you can do something called matched-comparison. To do this, put the items from your four lists on cards or small pieces of paper. Put these in a box. Pull out two cards and decide which is the most important to you. Keep that one and put the other aside. Continue to do this until you have no cards left in the box. The card that has remained in your hand is your first priority. Continue to do this until you've numbered all the cards.

Step 3: Draw a diamond that looks like the one below.



Put each of your items in one of the boxes. The items in Box 1 are self-motivated. They are things that you want to do because you enjoy doing them. The items in Box 4 are those things that you have to do but don't enjoy doing. You can use any of three strategies to deal with items in Box 4. One strategy is to ask yourself, "Do I really need to do this?" You may decide that you don't HAVE TO do certain things and then not do them. Another option is to decide that you don't HAVE TO do something but that you WANT TO do it. You could move such items from Box 4 to Box 2. A third alternative is to do the activity and you may find that you begin to enjoy it. In fact you can learn to like some activities which you may not have found enjoyable to begin with. Here's how:

Treat Analysis (analysis of treats and goodies that you reward yourself with). Write a list of little treats. Note what goodies you give yourself and when you give them to yourself. Some people give themselves treats for lazy behaviour and this leads to procrastination. See when you reinforce yourself. Then take advantage of these little

reinforcers by rewarding yourself after doing what you HAVE TO do. Give yourself treats for doing the right thing. Items from Box 1 can be used as treats for doing items in Boxes 2, 3, and 4.

Keeping a daily list of accomplishments may also prove to be helpful to you. Focus on high priority items -- in other words, items you consider to be most important. Begin with a manageable list (a light load that you think you can accomplish in a day). Treat yourself to a minor reinforcement after each item. Once you've completed your entire list, give yourself a special treat (e.g., permit yourself to watch your favourite T.V. show). You want to be successful, especially to begin with. Give yourself an extra-special reward on the weekend if you've been successful during the week. By coupling a pleasant activity with an unpleasant activity, you'll find that you actually come to enjoy what you used to dislike. You'll feel good about your accomplishments and will no longer need to reinforce yourself.

(4) Conclusion

* Discussion concerning how short term and long term goals are affected by having cancer.

SESSION 3

* Introductory comments
* Brief small groups discussion of the ways in which people became more active and spent more time socializing the previous week.
* Handout reviewing Fundamental 4: "Get Better Organized and Plan Things Out"

Side 6: "Stop Worrying (Fundamental #5)"

(1) Worry

(2) Worry journal

(3) Uncontrollable worries

(4) Controllable worries

(5) Thought switching

* Insight Technique: Begin by keeping a "Worry Journal". This could take the form of a pad that you carry with you all the time. In it, list every worry that occurs to you. As often as a worried thought occurs to you, write it down. You may be suprised at how much you worry. Keep a Worry Journal for a week. Go back over your entries and see how many of your worries actually come true. Check these off. Research shows that 90% of peoples' worries never come true. Do you think that this is true for cancer patients? As a result of doing this exercise, you may find that you spend a lot of time worrying and that most of what you worry about never comes true. As you look over your list of worries, classify them according to the following categories: (1) Uncontrollable worry -- things which you have little or no personal control over (e.g., worries about the state of the economy, worries about nuclear war). You can't do anything about such things so it's a waste to worry about them; (2) Controllable Worry -- those things that you have some personal control over (e.g., your car is not running well). Ask yourself, "Is there anything I can do today to do something about my worry?" If the answer is "yes" (e.g., "I can have my car fixed before it breaks down"), then do it. If your answer is "no", then stop

worrying until you can do something about it; (3) Don't worry after you've acted on a decision because it's out of your control then (e.g., if you worry after you've bought a new car, chances are that you can't do much about it so it's best to do your worrying beforehand).

Thought Switching

Thought switching will help you to think more positively. The idea is to substitute positive thoughts for negative (worrisome) thoughts. You have some control over what you're thinking (what's on your mind). Think about "children" (pause), think about "summer" (pause), think about "holidays" (pause). You can control your thoughts just like I did by training yourself to think more positively. Here's how: Choose a "main thought" which you find pleasant to think about. For example, you could choose a nature scene that you find natural, pleasant and calming. Whatever the image is, remember it as it will be your practice thought. Write cards that say "Thought Check" and post these in a number of places that you frequent. Everytime you see a "Thought Check" reminder examine your thoughts. If you find that you're worried, switch your thought to your positive scene and concentrate by picturing your scene for about fifteen seconds. After a week, you will find that you will spend more time thinking positively.

Side 7: "Lower Your Expectations and Aspirations (Fundamental #6)".

(1) Definition of expectations

(2) Definition of aspirations

(3) Felt Happiness (FH)

Actual Event (AE) or What Really Happened (WRH)

(4) The problem with high expectations and/or why we should lower our unrealistically high expectations

(5) The problem with high aspirations and/or why we should lower our unrealistically high aspirations

(6) Magic Margin

* Sometime within the next week, take time to examine your own goals. Are they realistic? Are they within the Magic Margin that Dr. Fordyce talked about?

SESSION 4

*Introductory comments

Side 8: "Develop Positive, Optimistic Thinking (Fundamental #7)".

(1) Background information

(2) Optimism

(3) Positive thinking

* Make a list of positive thoughts. Write each of these thoughts on a card so that you have a number of cards each with a different positive thought. Look at these cards when you sit down to relax. Spend about fifteen seconds thinking about each of the pleasant thoughts you have writen on your cards.

Side 9: "Get Present Oriented (Fundamental #8)".

(1) What "present oriented" means

(2) Past positive, past negative, future negative, future positive, and present-oriented personalities

(3) How to "get present-oriented" -- review of pertinent fundamentals and "return to infancy" technique

* Split into pairs and share with each other where you spend most of your time when you are thinking.

Side 10: "WOAHP - Work on a Healthy Personality (Fundamental #9)".

(1) Know yourself

(2) Like yourself

(3) Accept yourself

(4) Help yourself

(5) Trust yourself

* Pair up with someone else in the class. While one person is talking, the other will write. First of all, make a list of things you like about yourself.

SESSION 5

Side 11: "Develop an Outgoing, Social Personality (Fundamental #10) and "Be Yourself (Fundamental #11)"

(1) Commentary by Steve McDermott

Fundamental #10

(2) Why be extroverted?

(3) Facial expressions (smile more)

(4) Acknowledge people (say hi)

(5) Talk to people (one new person/day)

Fundamental #11

(6) Be spontaneous

(7) A's and B's (A and B personalities)

(8) Some people interact better with certain types of people than with others

Side 12: "Eliminate Negative Feelings and Problems (Fundamental #12)".

(1) Faucet and bottle analogy

(2) Emotional stress

(3) Mental health

(4) Physical health

(5) Physical manifestations of emotional stress

(6) Mental/emotional illness

(7) How to handle emotional stress

(8) Express your feelings

(9) Talk things out

Side 13: "Close Relationdships are Number One (Fundamental #13)" and

"VALHAP - The 'Secret' Fundamental (Fundamental #14)".

(1) Introduction by Steve McDermott

Fundamental #13

(2) How Fundamental #13 ties into the other fundamentals

Fundamental #14

(3) VALue HAPpiness

(4) Know what happiness is and how to obtain it -- happiness awareness and pursuit of happiness

(5) Closing comments

* Discussion and wrap-up

* Handouts

Appendix B

Letter of Introduction for Subject Recruitment

CanSurmount/Reach for Recovery
11810 Kingsway Avenue
Edmonton, Alta. T5G 0X5
PHONE: 455-7181

March 22nd, 1985

Dear CanSurmount/Reach for Recovery Friends:

As you know, the mission of the CanSurmount/Reach for Recovery program is to help cancer patients better understand and cope with the disease of cancer. Toward meeting the objective: to provide education and nurturing for members; cancer patients are being invited to participate in a life satisfaction program.

Your participation in this study may be beneficial to you as well as to other cancer patients. If you wish to participate, you will be asked to spend about one-and-a-half hours answering questions which may increase your self-awareness of how you are coping with the cancer experience.

You may also be involved in a program which will require ten to fifteen hours of your time. The program involves listening to taped lectures, group discussion, workshop activities and individual practice of self help skills.

Those people who are selected for the program will meet with Janice Kowal. Janice is currently completing her masters degree in educational psychology (counselling) and will be offering the program as a research project to complete her masters.

Meetings will take place at the Canadian Cancer Society in the board room. The first meeting involving all those participating in the study will take place on Wednesday, April 17 from 7:00 P.M. to 9:00 P.M.

The following meetings, involving only those selected for the program will be held every Wednesday from 7:00 - 10:00 P.M. for a five week period beginning April 24th (April 24th - May 22nd). A final meeting involving all those who participated in the study will be held May 27th. One further requirement will be to complete one or two forms on July 17th as a follow-up to the study.

All information obtained in the study will be held strictly confidential. While findings may be published in scientific journals, there will be no identification of you personally in these papers.

Due to the type of program, the study will be limited to 40 participants. Therefore it is very important to know how many people are interested in participating in the study. If we do not receive your

reply by Tuesday, April 2nd, you will be contacted by phone. As enrollment will be limited, affirmative responses will be accepted on a first come - first serve basis. Accepted participants will be contacted by phone.

For your convenience a stamped, self-addressed envelope is enclosed. If you have any questions please contact Janice Kowal at 432 - 4505 (work).

Thank you for your cooperation.

Sincerely,

Ellen Johnson
CanSurmount Coordinator
Edmonton Unit

Janice Kowal
Student Clinician
University of Alberta

Name: _____

Phone: _____

I am interested in participating in the life satisfaction study.

YES ___ NO ___

Please check only one box and mail this section back in the enclosed envelope.

Appendix C

Sessional Evaluation Form

Session Number:_____

(1) What (if anything) did you like about the session?

---

(2) What (if anything) did you dislike about the session?

---

(3) What (if anything) did you find:

INTERESTING-

HELPFUL (in what ways?)-

UNHELPFUL (in what ways?)-

---

(4) What (if anything) would you change about the session in order to improve it?

---

(5) Would you like to make any other comments?

---

(6) Overall, how would you rate this session? (please circle a number)

1----------2----------3----------4----------5

Terrible Excellent

Appendix D

Schedule of Dates and Times for the Fourteen Fundamentals Program

Wednesday, April 17, 1985 (7:00-9:00 pm): pre-session involving completion of forms, transportation arrangements, and a brief introduction to program format

Wednesday, April 24, 1985 (7:00-10:00 pm): session 1 of program

Wednesday, May 1, 1985 (7:00-10:00 pm): session 2 of program

Tuesday, May 7, 1985 (7:00-10:00 pm): session 3 of program

Wednesday, May 15, 1985 (7:00-10:00 pm): session 4 of program

Wednesday, May 22, 1985 (7:00-10:00 pm): session 5 of program

Wednesday, May 29, 1985 (7:00-9:00 pm): post-session involving wrap-up and return of completed forms.

*Please note: Since each session builds on the one before, it is very important for you to attend all sessions. If for some reason you are absolutely unable to attend a session, please let me know as soon as possible so that we can make alternate arrangements. Weekdays, I can be reached at 432-5100 or 432-4505. Most evenings, I can be reached at 486-1758. Thank-you for volunteering to participate in the Life Satisfaction Program. My hope is that you will find the program enjoyable as well as educational.

Sincerely,

Janice L.C. Kowal

Appendix E

Consent Form

I, _____, freely and voluntarily and without undue inducement or any element of coercion consent to be a participant in this research project. The procedures to be followed, and their purposes, have been explained to me. As I understand it, the study is concerned with life satisfaction. In order to assist in obtaining this information I will be requested, on three occassions, to complete several questionnaires. On each occasion, this will require a total of about one-and-a-half hours of my time. I will also be asked to participate in a happiness planning program. This will take place in the upper conference room at the Canadian Cancer Society office and will require approximately ten to fifteen hours of my time over a five week period (three hours on one weekday for five weeks).

I understand that this consent and data collected on me may be withdrawn at any time without prejudice. I also realize that all information obtained is strictly confidential. While findings may be published in scientific journals, there will be no identification of me personally in these papers. All information will remain strictly anonymous.

I have been given the right to ask and have received answers on inquiry concerning the research. Questions, if any, have been answered to my satisfaction. I have read and understood the foregoing.

_____ _____

Witness Research Participant

I, Janice Kowal, certify that I have explained to the above mentioned patient the nature of the research study, and that the patient has the option of withdrawing from the study at any time.

(signed) _____

Appendix F

Covering Letter Sent to Doctors Given Medical Summary Forms

Janice Kowal
9704 - 190 Street
Edmonton, Alberta
Canada T5T 4C9

Dear Dr.

I am writing to ask that you complete the Medical Summary form attached. The information requested is a necessary part of two research studies. The first study is being conducted by myself through the Educational Psychology Department at the University of Alberta. My study deals with the efficacy of a Life Satisfaction Program for cancer patients. The second study is being conducted by Doctors Schag and Heinrich at the Behavioral Rehabilitation Research Lab, Veterans Administration Medical Center, Sepulveda, California. Their study deals with the norming of an instrument known as the Cancer Inventory of Problem Situations (CIPS).

Below you will find a consent form signed by your patient authorizing release of the medical information requested.

Please feel free to call me if you have additional questions. I can be reached at (403) 432-5100 or 432-4505.

Thank you for taking the time to respond to my request.

Sincerely,

Janice L.C. Kowal
Student Clinician, University of Alberta

I, ..., consent to the release, by my medical doctor, of all information requested on the Medical Summary form attached. I understand that this information will be held in strict confidentiality and am authorizing you to send the completed form to:

Janice L.C. Kowal
9704 - 190 St.
Edmonton, Alberta
Canada, T5T 4C9