

A Program to Increase Happiness: Further Studies

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In a continued effort to research a program to increase personal happiness, four new studies are reported. The studies are continuations (modified replicates) of Studies 1, 2, and 3 reported in Fordyce (1977). In Study 4 (the first of the present series), the complete program demonstrated largely statistically significant happiness increases over a control group receiving summary instruction in the program. In Study 5, the complete program showed slight statistical superiority over a control group receiving almost half the information. In Study 6, the full program was compared to groups receiving partial instruction from the program in their predetermined areas of "happiness weakness" and to a control receiving "placebo expectations" of greater happiness. All treatment groups demonstrated significant gains in happiness compared to controls, though no difference between the various treatments was apparent. Finally, Study 7 involved a 9-18 month follow-up of the program's effects on past participants, with the vast majority of anonymous respondents reporting continued happiness increases. The collected findings from all studies indicate that the program has a noticeable and perhaps long-lasting effect on happiness for the great majority of individuals exposed to it and that this effect is due to the content of the information, not merely the artifact of sensitization or expectations about happiness to which it was compared.

Happiness is the one thing everyone wants from life. In philosophy, in psychological theory, and for the average individual, personal happiness is generally held to be the ultimate aim of all human endeavor. Yet, the nature of happiness has always been viewed as elusive—its attainment even more mysterious—and most assume there is little in the way of scientific knowledge on the topic.

Psychological research, however, has come to dispute these assumptions, for studies over the last 20 years have developed a strong 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.

The volume of studies in the field is quite

sizeable (Diener & Griffin, Note 1, cited over 650 relevant articles in their recent benchmark bibliography of happiness studies), and the scope of many of the more important efforts is quite impressive (some involving data from thousands of individuals and hundreds of variables in representative national and international samples; e.g., Andrews & Withey, 1976; Bradburn, 1969; Bradburn & Caplovitz, 1965; Campbell, Converse, & Rodgers, 1976; Cantril, 1965; Gurin, Veroff, & Feld, 1960; Wessman & Ricks, 1966). The accumulated findings, therefore, are quite extensive and thus will only be briefly treated here. In addition, a number of adequate summaries and reviews of this material are available elsewhere (Fordyce, 1972, Robinson & Shaver, 1968; Wessman, 1957; Wessman & Ricks, 1966; Wilson, 1967; Fordyce, Note 2; Kammann, Note 3).

In the literature, happiness has come to be defined as something much broader in scope than a temporary mood state. Certainly, short-term moods of happiness occur and have often been the object of research study. But the bulk of studies have focused on happiness as the average individual intui-

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tively understands it: a longer-term, overall felt sense of emotional well-being and contentment with life—a global index of life-satisfaction.

This overall “sense of happiness”—as basic an experience as it is—is actually the result of numerous, complexly interacting factors in a person’s life. Some theorists, like Bradburn (1969), hypothesize it to be the resulting balance of all positive and negative emotional experiences over a period of time. Others have worked on the assumption that it is the collected sum of positive life-circumstances that are quite objective (e.g., Campbell, Converse, & Rodgers, 1976; Gurin, Veroff, & Feld, 1960). On the other hand, Kammann (Note 4) suggested that resultant happiness is based more on an individual’s subjective interpretations of objective criteria than on such circumstances per se. The present author favors a mixed theory that would include the above but would equally emphasize individual perceptual and attitudinal sets along with basic temperament.

As complex as the factors that contribute to happiness are, however, the resulting experience is simple and universally understood: an emotional sense of well-being. Although this feeling goes by many names (contentment, fulfillment, self-satisfaction, joy, peace of mind, etc.), each having its own subtle situational connotation, *happiness* is the word most commonly understood for this basic emotional condition, and therefore it is the term most often used by the researchers who have studied it.

As a result of continuing research, the current research understanding of personal happiness is substantive, reliable, and remarkably consistent. Particularly well developed is the research picture of happy individuals and their many, repeatedly found characteristics. However, until recently there has been one very important area of happiness research that has gone unstudied—attempts to increase personal happiness itself.

Using the known characteristics of happy individuals as a base, Fordyce (1977) reported a series of three studies in which a program of happiness-increasing techniques was developed and used to successfully enhance the personal happiness of normal

community college students. The program, called the “14 Fundamentals for Happiness,” was based on two thorough reviews of over 300 past happiness research studies and their subsequent compendiums (Fordyce, 1972, Note 2). Although it had long been established that a great variety of personality and objective characteristics of happier individuals existed, the majority were considered to be beyond the short-term control of most individuals (e.g., better health; higher income; heightened job status and satisfaction; sustained marital bliss; high social status; etc.). Thus, the review procedure focused on a search for 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 in 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 of the original programs were combined in the present 14 fundamentals—that is, 14 characteristics highly typical of happy individuals that average individuals appear able to emulate.

Briefly described, the 14 fundamentals are as follows: (a) keep busy and be more active; (b) spend more time socializing; (c) be productive at meaningful work; (d) get better organized and plan things out; (e) stop worrying; (f) lower your expectations and aspirations; (g) develop positive, optimistic thinking; (h) become present oriented; (i) work on a healthy personality; (j) develop an outgoing, social personality; (k) be yourself; (l) eliminate negative feelings and problems; (m) close relationships are the number one source of happiness; (n) put happiness as your most important priority. These 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 14 Fundamentals Program (Fordyce, 1981).¹

¹ The Fundamentals Happiness-Training Program is available from Michael W. Fordyce, Edison Community College, Ft. Myers, Florida 33907.

Following publication of the original studies, Lichter, Haye, and Kammann (1980) used a basic outline of the program (coupled with ideas from Dyer, 1977) to produce happiness increases in their studies; and the informal use of the material by others also indicated a positive potential. Though preliminary, the data from these various sources indicated the strong possibility that the personal happiness of average individuals can be elevated through appropriate training. If this is so, the obvious benefits for counselors, clinicians, helping professionals, and the general public are manifest.

The present series of studies was designed to continue investigating the possibility of increasing happiness with the 14 Fundamentals Program. The following experiments basically replicated the original For- dyce studies (1977) but attempted to improve those earlier designs with more stringent control conditions, a greater variety of criterion measurements, and follow-ups of progress over longer time periods.

Research on the fundamentals has centered on a simple hypothesis: 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. That hypothesis was supported in the studies reported in 1977 (which, for the sake of continuity, are referred to as Studies 1, 2, and 3), and that same basic hypothesis was central to the present investigations (which are called Studies 4, 5, 6, and 7).

Study 4

Training in the fundamentals has consisted of two general parts. Part 1 is introductory training: a review of past happiness literature for the layman; lectures on the meaning, definition, and importance of happiness; and a brief overview of the 14 fundamentals ("things you can do about your happiness"). Part 2 consists of a detailed elaboration of each of the 14 fundamentals individually (the research rationale behind each, insight into why they work for happy people, and specific behavioral and cognitive techniques to help achieve them).

In previous experiments with the fundamentals, experimental groups receiving full training were compared to "placebo controls" that were frequently given suggestions of greater happiness but no information about happiness or the fundamentals.

In the present study, the control group was even more stringent: Instead of no "happiness information," the control group received Part 1 training in the fundamentals (along with suggestions of greater happiness). The experimental group received complete instruction in the program. It was hypothesized that the experimental group would increase their happiness significantly more than the stringent control.

Method

Subjects

Three intact classes of adult community college students enrolled in an adjustment psychology course were given information and instruction in the 14 fundamentals as a part of normal class lectures. Of the original 112 students, 98 completed the semester and were used as the basis of analysis² (38 males, 60 females; mean age = 24.5; age range = 16-72). Two classes received complete instruction (the experimental group, $n = 64$), and one class received Part 1 information only (the control group, $n = 34$).

Design and Procedure

The participants in both groups were presented with lecture materials sensitizing them to the nature, definition, and importance of personal happiness—as well as a basic review of the objective characteristics of happy individuals according to the research. They were also presented with a brief overview of the 14 fundamentals, which, though not elaborated in detail, gave them the basic ideas incorporated in the program. Individuals in the experimental group, however, received more training: They were given detailed instruction in each of the 14 fundamentals. This con-

² During this study as well as Studies 5 and 6, a number of individuals withdrew from the college and from the experiment. This attrition (quite normal at the college) appeared to have no biasing effects on the experiment, since (a) subjects dropped for a variety of personal reasons unrelated to the experiment; (b) attrition fell proportionally across groups; (c) subjects were unaware an experiment was taking place; (d) group equality was based on covariance procedures rather than randomizing, thus remaining unaffected, and (e) review of pretest scores showed no systematic differences between those who withdrew and those who remained.

sisted of an elaboration of each principle, a statement of the theoretical and research background behind each, and instruction in a variety of behavioral techniques and cognitive frameworks to help realize the principles. (For example, to "stop worrying," participants were instructed to keep a daily record of worries that occurred to them, analyze the amount of daily time spent worrying, determine how many worries actually came true, and use thought-substitution techniques to avert worried thoughts; to "be more active," participants were instructed in how to schedule additional, enjoyable activities into their daily routine; and to "get better organized," instruction was given in goal and priority setting and in the use of positive reinforcement to eliminate procrastination.) These are only a few examples of the many such techniques provided to the experimental subjects during their instruction. A complete replication of the treatment is available to the interested researcher (Fordyce, 1981; cf. footnote 1).

As in past studies, the experimental design used classes, intact, as the basis for groups. This allowed an optimal situation for experimentation and testing to be introduced unobtrusively (since these adjustment psychology classes normally include numerous exercises, assignments, and tests designed to help students understand their personalities and adjustment status). Thus, the students perceived the experimental presentations and testing as simply a part of expected classwork. Indeed, until debriefing sessions (after all procedures were concluded), none of the participants were aware that any experiment had been taking place, nor had they become aware that differing content had been presented to other classes. All apparently assumed it had simply been a "normal" class.

Materials on the fundamentals were presented as "new information on happiness self-help, developed through recent research." There was the implicit indication throughout the presentations that working with such materials might have positive benefits, and students were encouraged to experiment with the information, on their own, to see if anything resulted. Actual work with the fundamentals, however, was neither required nor monitored in any way; and subjects were under no obligation to record, or even pay mind to, the lectures.

Essentially, the experimental procedure was *exposure* to the material. Adherence to it was left to the individual. This take-it-or-leave-it strategy, experimentally speaking, provided several advantages: It made the experimental manipulation as unobtrusive as possible; it provided the opportunity to determine, indirectly, the natural appeal of the information (as indicated by the percentage of individuals who might choose to consider and apply the information when no other incentive than potential happiness improvement was offered); and it gave the chance to find out how people would use such information when it is presented in a suggested, rather than required manner (a manner more typical of most counseling settings, where prescriptions are generally more recommendatory than mandatory).

To control for initial group differences in happiness levels, an analysis of covariance statistical treatment of pre- and posttest measures (with a Solomon design to control for pretest sensitization effects) was selected. Eleven weeks elapsed between pre- and posttesting,

between which the fundamentals information was presented in full or in part to the two treatment groups. None of the participants refused to participate in testing; all received complete pre- and posttesting.

Although the essential independent variable in this study was simply exposure to the fundamentals information, per se, and no hypothesis was made concerning the degree to which the information was accepted or practiced, it is of interest to report exactly what participants in the experimental group did during the study. Feedback on this was obtained from an anonymously submitted postexperiment debriefing questionnaire given to the participants. According to the reports, the vast majority (93%) of individuals exposed to the information used it to some degree: 18% worked with the specific techniques of the program on a daily basis, practicing and thinking about the fundamentals as completely as is recommended in the program; 25% thought about the information daily and practiced some of the recommended techniques several times a week; 28% practiced the techniques less often but spent a great deal of time reflecting on the information from time to time and acted upon it as seemed appropriate. The remaining 7% reported they had dismissed the information as unimportant to them, and gave it no further thought or action after exposure to it.

Measurement

Three tests of emotional morale were used as criteria of happiness change: the Happiness Measures, the Depression Adjective Check List, and the Self Description Inventory.

Happiness Measures (HM). This is a quick scaling device that measures happiness in the fashion traditional to happiness research (Fordyce, 1972, 1977, Note 5). It has been used extensively and is one of the better validated measures of happiness. It shows (a) good test-retest reliability (e.g., for the main, overall score: .86 over a 2-week interval; .67 over a 4-month interval, $p < .01$); (b) significant validity coefficients with measures of personality characteristics long associated with happiness (sampled by some 15 popularly used inventories); (c) nonsignificant correlations with measures of social desirability bias; and most important (d) significant validity coefficients with many published measures of mood and emotional morale.

Depression Adjective Check List (DACL). The DACL is a widely used measure of clinical depression (Form A was used in the present investigation) considered by Goodstein (cited in Buros, 1972) "the most psychometrically sound . . . measure of depression now available."

Self Description Inventory (SDI). The SDI is a new test, currently being developed (Fordyce, Note 6). It is the first multiple-scale inventory measure of happiness and its established concomitants. The SDI comes in two sets of equivalent forms (A and B; C and D), each consisting of 80 nonrepeated items. The forms are highly correlated (average interform $r = .93$). Items are based on past findings, and each item demonstrates significant correlations with other happiness measures. Five scores are produced: the *achieved happiness score* (the level of felt happiness and emotional satisfaction with life); the *attitudes and values score* (a measure of

one's adherence to the attitude patterns of happy people); the *happy personality* (a measure of how closely one's own personality characteristics coincide with those of the happiest individuals); the *happy life-style score* (how closely one's daily living pattern matches the life-style of happy individuals); and the *total score* (an overall evaluation, based upon all 80 test items). These five subscales were derived conceptually, items being clustered according to similar themes for scoring purposes.

In 7 years of extensive testing with over 3,000 normal adults the SDI has demonstrated (a) significant validity coefficients with measures of happiness and emotional morale (e.g., the HM, all forms of the DACL, the Multiple Affect Adjective Checklist, and the Profile of Mood States); (b) significant correlations with numerous measures of personality traits (associated with happiness) on the Personal Orientation Inventory, Comrey Personality Scales, Cattell Sixteen Personality Factor Questionnaire, Eysenck Personality Questionnaire, Tennessee Self Concept Scale, and Pair Attraction Inventory; and (c) strong interform and test-retest correlations (ranging from .89 to .97 in 12 studies, average $n = 100$). The SDI is not only designed to be a general-purpose inventory of happiness but is also designed as a diagnostic and prescriptive supplement to the 14 fundamentals (since items and scoring relate directly to an evaluation of strengths and weaknesses on the 14 principles incorporated in the program).

The three tests provided some 10 different indexes of happiness change over the experimental period: 4 from the HM, 1 from the DACL, and 5 from the SDI (only forms A and B were given). Collectively, they provided a greater number of criterion measures than had been used in previous studies, and the assumption was that this increased variety of criteria would provide greater conclusiveness and reliability to subsequent results (and thus overcome an inherent weakness of the previous three studies, where only one device was used).

In addition to these more objective measures, an anonymous questionnaire was given to individuals in the experimental group at the conclusion of the study to gain their subjective evaluations of the procedure.

Analysis

The resultant 10 measures of happiness change were treated through analysis of covariance (ANCOVA) to determine the experimental outcomes. In addition, a Solomon four-group design was used (wherein a randomly selected half of subjects received pretesting with the HM and DACL; the other half did not) to test sensitization effects of pre- on-posttesting. (Since the SDI comes in nonrepeated equivalent forms, no testing for presensitization was deemed necessary.)

The initial analysis showed nonsignificant sensitization effects, allowing a valid ANCOVA to be reformed on all measures.

Results

The results tended to support the hypothesis that the more information subjects

Table 1
Posttest Mean Comparisons and F Ratios
Between Experimental and Control Groups

Measure	Control ^a		Experimental ^b		F ^c
	M	SD	M	SD	
Self Description Inventory					
Achieved					
Happiness	11.1	3.7	12.4	3.3	4.52*
Personality	18.3	3.7	19.6	3.4	5.33*
Attitudes and Values	13.4	2.7	14.5	2.7	4.15*
Life-Style	14.3	3.9	15.5	3.4	4.26*
Total score	56.9	11.4	62.0	10.2	10.39**
Happiness measures					
Combination score	64.7	16.3	72.2	15.0	5.62*
Scale	7.5	1.3	7.9	1.2	3.02
Happy %	55.2	23.0	64.4	21.2	4.28*
Unhappy %	17.4	12.9	16.3	12.9	.18
Depression Adjective Checklist					
Score	7.1	4.6	5.8	4.2	2.35

^a $n = 39$. ^b $n = 64$. ^c $df = 1, 98$ for Self Description Inventory; $df = 1, 49$ for Happiness Measures and Depression Adjective Check List.

* $p < .05$. ** $p < .01$.

had on the fundamentals, the greater happiness gain they would demonstrate. Analysis showed that the group that received full instruction in the 14 fundamentals boosted their happiness to significantly higher levels on 7 of the 10 comparisons, compared to the control group that only received Part 1 instruction. As Table 1 shows, 1 of the comparisons was significant at the .01 level, 6 at the .05 level, and 3 were nonsignificant, though in the predicted direction.

Discussion

The statistical data favored the interpretation that the fundamentals, taken in their entirety, have enough inherent information to aid many normal individuals in boosting their happiness. In the past studies, such gains were significantly higher than those of control groups that received nothing more than strong suggestions of greater happiness—and those significant differences were attributed to the content of the fundamen-

tals (rather than the more obvious "suggestion effect" that was controlled). Here, it appears, the indication went one step further: It seems that exposure to specific techniques and principles embodied in the fundamentals produced greater and more significant results than did exposure to a general, informational background in the nature of personal happiness and a mere outlining of the 14 fundamentals alone.

Subjective impressions, provided anonymously by participants in postexperiment questionnaires and debriefing sessions, supported the statistical outcome.³

As reported in an earlier section, a surprisingly high 93% of the subjects voluntarily (with no extrinsic reward apparent to them) chose to use and act upon the fundamentals materials. Seemingly, the vast majority of individuals exposed to a happiness education opt to take advantage of it.

Those that did reported a variety of effects: 81% of all participants claimed actual increases in their happiness as a result of their learnings; 86% reported a variety of cognitive and/or behavioral changes as resultant effects; 89% indicated the fundamentals had helped to more quickly end, cope with, or stave off unhappy moods; 70% found the program helped create, maintain, and enhance happy moods; and practically all, 97%, felt the information had been of some positive educational value.

Information regarding actual happiness increases showed the following: 6% claimed "extreme" happiness increases due to the fundamentals; 30% reported "much greater" happiness; 39% felt their happiness had improved "somewhat"; 6% noticed "slight" increments; 17% reported no effect; and 2% claimed happiness decreases as a result. Thus 81% actually felt some degree of happiness benefits from their instruction. However, the lack of gains in the remaining 19% were not necessarily due to the program itself. Indeed, only two individuals cited the information as failing them: one tried many of the recommendations with no result, and another felt that exposure to the information had made him more keenly aware of how unhappy he was, thus reducing his happiness. The remaining individuals fell somewhat evenly into two groups. One group of respondents said they were very happy to

begin with, and though they learned a lot about their happiness through the program, increasing their already high happiness level (not surprisingly) did not occur. The other group consisted of individuals who largely chose to ignore or dismiss the information. As the information was presented on a take-it-or-leave-it basis, these individuals apparently left it, reporting that they had given little thought to the material outside of class and had not attempted to modify their life or behavior in any way because of it.

Among the 14 fundamentals, the three cited as being the most helpful by respondents were "stop worrying," "be yourself," and "develop positive, optimistic thinking."

Study 5

Based on the positive results of Study 4, in which the group receiving full instruction in the fundamentals appeared to increase happiness better than the group that received only introductory information about the program, Study 5 went one step further. Here, a full-instruction group was compared to a group receiving introductory information *plus* specific instruction in several of the fundamentals themselves. This latter group served as the most stringent control used in any previous study (for, in effect, they received nearly half of all the information given to the experimental, full-instruction group).

In addition to stricter control, Study 5 also expanded the scope of measurement to include more than just happiness indexes. Added to the testing procedures were the Multiple Affect Adjective Checklist (MAACL) and the Personal Orientation Inventory (POI). These instruments provided a variety of mental health indicators that went beyond the unidimensional testing of happiness used in the past. The addition of these other measures was based upon

³ In Studies 4 and 5 the debriefing questionnaires were only given to experimental group subjects (not to controls), since the focus on interest was on participant reaction to the *full* program. It would, however, have been of interest to compare these responses to those of subjects who received partial information (and this was subsequently arranged in Study 6).

the strong relationship, consistently shown in the literature, between happiness and mental health. It was hypothesized that the increase in happiness demonstrated by the fundamentals before might show comparable increases in general mental health as well.

Method

Subjects

Three intact psychology classes of adult community college students participated in the study. From an original enrollment of 82, 71 students completed the course after normal attrition (cf. footnote 2) and were the basis of analysis (34 males, 37 females; mean age = 23.3; age range = 17-44).

Design and Procedure

Two classes received full instruction in the fundamentals ($n = 50$); the remaining class ($n = 21$) served as the control, receiving Part 1 instruction (as in Study 4) plus specific training in four of the fundamentals. The four fundamentals were "spend more time socializing," "be more active," "be productive at meaningful work," and "get better organized" (selected because they are typically the first fundamentals to be discussed in normal presentations and because they have shown to be the easiest for individuals to employ). Use of the information, as before, was not required, although everyone was encouraged to take advantage of the material.

Instruction for both groups took place over a period 2½ months. The design employed in past studies was replicated: intact classes to assure unobtrusiveness of testing and experimental manipulations and pre- and posttesting on all instruments, used in an ANCOVA to control for initial class differences and to determine statistical outcomes.

Measurement

In the present study, happiness was measured with the HM and the SDI—both previously described. And, as mentioned above, the MAACL and the POI were used to sample other mental health variables.

The MAACL is a widely researched measure of three affective states: anxiety, depression, and hostility. The instrument has demonstrated high reliability and acceptable validity (cf. Buros, 1972). The POI is an extremely popular inventory of self-actualization. It yields 2 major scales and 10 minor subscales that measure a variety of optimal mental health criteria. It is widely used in research, and appears to possess good reliability and strong validity (Buros, 1972). (In the present study, only the two major POI scales were used in the analysis.)

Pretesting involved the HM, MAACL, POI, and Forms A and D of the SDI; posttesting repeated all measures (with the alternate SDI pairs B and C given).

Anonymous evaluation questionnaires were also given to the experimental group at the conclusion of the study to gain subjective feedback on the experiment. No refusals occurred; all subjects completed all inventories.

Results

Statistical outcomes provided some support for the hypothesis, though this evidence was not conclusive. The trend was positive: All of the posttest differences between the groups were in the predicted direction (with two-thirds of the statistics beyond the .10 level). However, only 6 of the 19 comparisons achieved significant values ($p < .05$). Table 2 shows the data.

Discussion

From the data, it appears that individuals receiving the complete program grew significantly more than controls in their inner-directedness (as measured by the POI), happiness life-style traits, achieved happiness, and total happiness characteristics (on versions of the SDI) while significantly reducing their anxiety and depression levels (as indexed by the MAACL). In other areas, though, differences were not significant. However, as in Study 4, individuals in the partial information condition did not remain static (as one might expect of a normal control group); rather they demonstrated increases over the experiment on all measures. This would indicate, naturally enough, that they profited some from their partial information. In light of this, it is not surprising that the differences between the groups were slight. It is also of interest to note that the effects of the fundamentals went beyond boosting happiness: It appears as if other aspects of healthy adjustment were developed as secondary gains.

As in all past studies, participants' subjective reports, incorporated in anonymously submitted posttesting questionnaires, were very favorable (see footnote 3). What individuals did with the information presented to them showed that a surprisingly high number chose, on their own, to work with it (96% of the subjects decided to use it: 16% used it rigorously, as intended; 27% practiced it regularly; 33% reflected upon it often; 20% thought about it from time to time; 4% gave

Table 2
*Posttest Mean Comparisons and F Ratios
 Between the Experimental and Control
 Groups^a*

Measure	Control ^b		Experi- mental ^c		F
	M	SD	M	SD	
Personal Orientation Inventory					
Time competence	16.9	3.3	17.5	3.7	.87
Inner-directedness	86.1	14.0	91.6	12.4	6.70*
Multiple Affect Adjective Checklist					
Anxiety ^d	8.36	4.3	5.5	3.9	8.44**
Depression ^d	14.3	8.1	10.2	6.4	5.40*
Hostility ^d	9.0	4.7	8.0	4.5	.73
Happiness measures					
Combination score	67.2	17.8	71.2	19.2	1.01
Scale	7.4	1.6	7.7	1.8	.78
Happy %	60.7	21.9	64.9	22.7	.79
Unhappy % ^d	20.3	13.4	14.4	12.3	3.62
Self Description Inventory					
Set A & B ^e					
Achieved Happiness	10.6	3.7	11.9	3.4	3.87
Personality	18.4	4.2	19.0	4.3	.04
Attitudes and Values	13.8	3.7	15.0	3.2	2.65
Life-Style	12.6	4.9	14.4	4.3	4.74*
Total score	55.4	14.9	60.2	13.3	3.63
Set C & D ^e					
Achieved Happiness	8.1	4.8	9.9	4.4	3.99*
Personality	15.5	4.7	17.1	4.4	3.09
Attitudes and Values	11.5	3.5	12.9	3.5	3.85
Life-Style	12.1	4.4	12.8	4.4	.06
Total score	47.4	16.0	52.7	14.8	4.01*

^a Means are adjusted from the analysis of covariance ($df = 1, 69$). ^b $n = 21$. ^c $n = 50$. ^d These scores are negative (the higher the score the unhappier the interpretation). ^e Subjects received both sets of the Self Description Inventory. Form A, from the first set, was given in pretesting, Form B in posttesting. Form D from the other set was given in pretesting, with its mate, Form C, in posttesting.
 * $p < .05$. ** $p < .01$.

little thought to it, choosing instead to dismiss the information).

In terms of happiness increments, 82% of the subjects reported the program had helped increase their happiness to some degree (4% felt the information had made them extremely happy; 26% felt it had made them

much happier; 42% thought it made them somewhat happier; 10% indicated it had made them a little happier). Of those remaining, 4% reported being happier but were not sure the program had accounted for the increase; 9% thought they were "too happy to begin with" (but still credited the program with a better understanding of "why" they were so happy), and 4% noticed no effect at all (but blamed this on the fact that they had chosen to ignore the information). No one claimed (though the option was provided on the questionnaire) that they had worked regularly with the program and it had failed them; and only one individual indicated a counterproductive effect (i.e., learning about "happiness" had made them more aware of how unhappy they really were).

As in previous studies, participants identified two major avenues in which the fundamentals created their positive effects. About half suggested the overall effects of the program were educational (it provided a greater understanding and better insight into the nature and causes of happiness in their own lives), whereas the other half reported the fundamentals had prompted a variety of behavior and attitude changes that led to greater happiness.

As to the specific elements of the program, each of the 14 fundamentals was mentioned by at least one subject as the "most helpful of all." However, the most often cited (in this study) were "stop worrying," "be yourself," and "spend more time socializing."

Study 6

From the two previous studies, it had become obvious that the control groups used had perhaps been too stringent to fairly test the effectiveness of the full program—largely because it appeared as if partial information on the fundamentals was somewhat effective by itself. To learn more about the effects of such partial information and to achieve a fairer form of control, the design of Study 6 employed five groups. One group received complete instruction in the fundamentals. Three other groups received partial training—each instructed in a different third of the complete program. A final group served as the "placebo" control group. (As

in Studies 1 and 2, group members got no information at all about happiness yet were led to expect that "their happiness would probably increase.") The object of the design was threefold: first, to see if differences again occurred between full and partial instruction; second, to see which third of the 14 fundamentals, if any, was relatively more effective; and third, to determine if all aspects of the program, as well as the full program itself, would show significant happiness increases compared to "expectation" controls.

In addition to these design features, Study 6 employed, for the first time, time-series testing to monitor happiness changes at several points during the experiment. Also, the study provided an opportunity to use the diagnostic and prescriptive elements of the SDI (which was designed as an adjunct to the fundamentals).

Method

Subjects

Three intact psychology classes of adult community college students ($n = 57$ after normal attrition [cf. footnote 2]; 21 males, 36 females; mean age = 25.2; age range = 18-64) were used for the three basic conditions of the experiment (full instruction condition, $n = 14$; one-third instruction condition, $n = 30$; control condition, $n = 13$).

Design and Procedure

On the basis of pretest scores on the SDI, the one-third instruction group was subdivided into three final treatment groups, each receiving instruction in just one-third of the fundamentals in small work groups. In subdividing this latter group, scores from the three diagnostic scales of the SDI were used (the Personality Scale, Attitude and Values Scale, and Life-Style Scale). As the SDI was originally designed in conjunction with the fundamentals, test items were written to assess an individual's progress in each of the 14 "happiness principles." However, instead of 14 different scales, related items were combined in the inventory under three broader categories: the Life-Style Scale (Fundamentals 1, 2, 3, 4, and 13); the Attitudes and Values Scales (Fundamentals 5, 6, 7, 8, and 13); and the Personality Scale (Fundamentals 9, 10, 11, and 12). Individuals were assigned to the three final treatment groups on the basis of their lowest score (i.e., their weakest areas). Low scores fell about equally in all scales, producing three relatively equal groups (life-style, $n = 8$; attitudes and values, $n = 12$; personality, $n = 10$).

Time-Series Measurement

Happiness was measured during the experiment at the beginning (prior to any treatment) and every 2 weeks thereafter. Criterion measures used were the previously described HM and alternating forms of the DACL (both instruments were shown to be relatively unbiased by repeated use). Data from each testing were used in an ANCOVA, with pretest scores to control for initial happiness differences between the intact groups and to determine experimental outcomes. Additionally, varying forms of the SDI were given to subjects in the experimental groups to view differences in happiness change among these groups at the halfway point and at the end of the experimental period. As in the past, people in the experimental groups also provided anonymous posttest debriefing questionnaires regarding their subjective opinions of the procedure. No subjects refused to participate in the testing. All other procedures were the same as in Studies 4 and 5.

Results

The general hypothesis, that individuals receiving information in the fundamentals would increase their happiness more than "suggestion" controls, was confirmed for all experimental groups. A survey of the time-series data showed the happiness levels of all experimental groups uniformly rose on all measures during the experimental period. The four criterion scores used (i.e., the HM scale, happy and unhappy percent scores, along with the DACL score) have been combined into one overall composite index and plotted in Figure 1. (This has been done for the sake of brevity and because the individual plots of these scores were so similar.) As can be seen, at the 2-week point (after the bulk of instruction was nearing completion), all group happiness levels remained close to the baseline (with the exception of an initial jump in the experimental group receiving the "life style" fundamentals—considered, according to past feedback, the easiest to implement). At this point no significant differences were apparent. By the 4-week testing, all experimental groups had increased their happiness level over the baseline, and in half of the 16 statistical comparisons, significant differences were observed between these groups and the control ($p < .01$). At the end of the experiment, all 16 of the statistical comparisons between experimental and control groups were significant (14 indexes, $p < .01$;

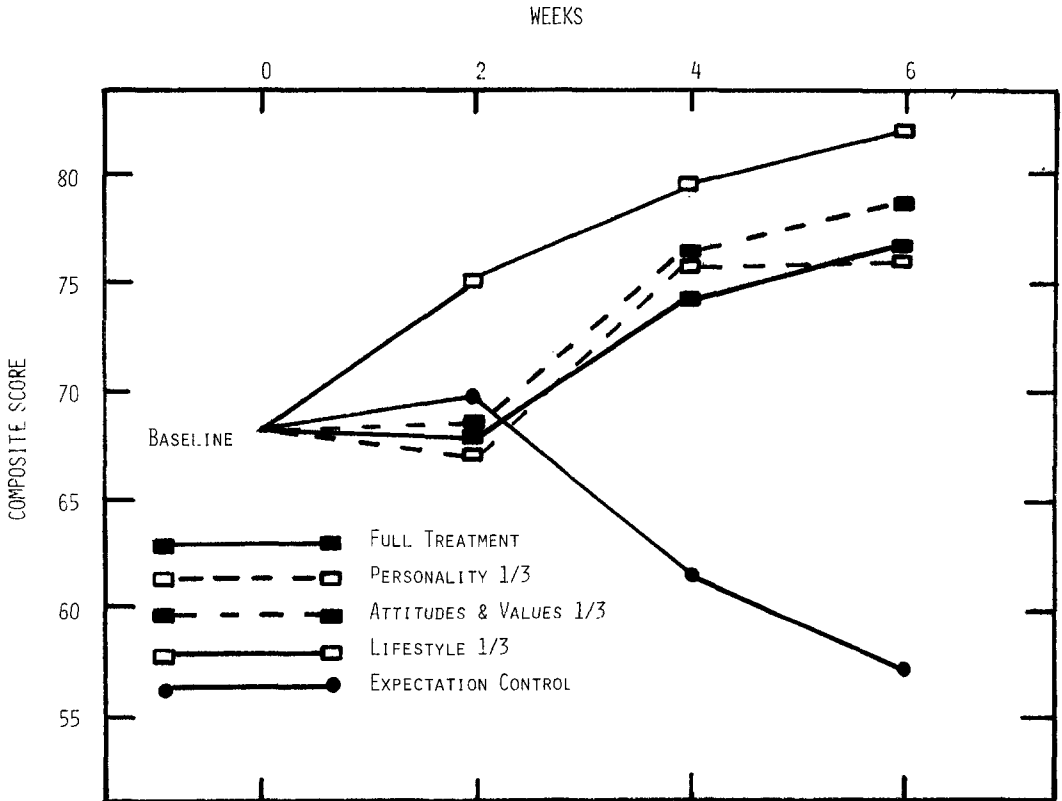


Figure 1. Group changes in happiness level over the experimental period (composite index).

2 indexes, $p < .05$). Table 3 provides the data.

Although the data indicated strongly that instruction in the various presentations of the fundamentals appeared to have led to a significantly greater increase in happiness compared to the control group, data *between* the various experimental treatments proved much more equivocal. Although three instruments (the HM, DACL, and the SDI) providing some nine measures of happy morale were given at various points to the experimental groups, none of the dozens of statistical comparisons proved significant. Apparently, all treatments worked—and to an approximately equal degree. If there were any differences between parts of the program, the observed data would indicate that the life-style fundamentals were the most immediately effective, whereas the remaining fundamentals grew more slowly in their effect.

Tabulations from the anonymous post-experiment questionnaires confirmed the

statistical data. Percentages from all four experimental groups were fairly equivalent. In each group, the majority had worked with the information in some fashion (89% average), either through actual practice with the recommended techniques (32%) or through frequent time spent thinking about the material (57%), and in each group a quite similar pattern of positive effects was reported. Collectively, 91% of the participants reported positive effects from their happiness education, with 74% claiming increases in happiness as a result (4% extremely happy; 22% much happier; 36% somewhat happier; 12% a little happier). Of those who noticed no happiness increases, 15% claimed to be too happy to begin with, and 10% felt no effect (though most of these had not attempted to use the information). Only one individual felt the information had created a deeper sense of unhappiness.

Generally, the effectiveness of the program came through educational insight (96% of the respondents indicated this had oc-

curred) and actual changes in attitude and life-style (72% reporting such modifications). The fundamentals helped 67% cope better

with or prevent bad moods and 51% create good moods. In the group that had all fundamentals to select from, "be yourself" was more often mentioned as "the most helpful fundamental"; six others shared a close second place.

Table 3
Adjusted Mean Changes on all Measures Over the 6-Week Experiment^a

Group	Happiness indexes				
	Happiness measures			DACL	CI ^b
	Scale	% happy	% un-happy		
Initial testing					
Full treatment	6.77	54.3	23.0	8.5	68.4
Personality 1/3	6.77	54.3	23.0	8.5	68.4
Attitude and values 1/3	6.77	54.3	23.0	8.5	68.4
Life-style 1/3	6.77	54.3	23.0	8.5	68.4
Control	6.77	54.3	23.0	8.5	68.4
Second testing					
Full treatment	6.53	52.6	18.0	8.9	68.3
Personality 1/3	6.59	53.5	21.4	9.3	67.6
Attitude and values 1/3	6.69	53.0	22.9	7.7	68.5
Life-style 1/3	6.88	65.3	12.3	6.9	75.3
Control	6.49	57.2	16.5	9.3	69.4
Third testing					
Full treatment	7.51**	63.0**	20.6	7.2	74.0
Personality 1/3	7.64**	66.8**	13.7	8.5	76.0
Attitude and values 1/3	7.55**	65.6**	14.6	7.2	76.2
Life-style 1/3	7.86**	73.8**	14.5	6.8	79.4
Control	5.69	43.9	24.6	9.9	61.7
Final testing					
Full treatment	7.55**	64.9**	14.0**	6.6**	76.7
Personality 1/3	7.39**	67.5**	16.2**	6.8*	76.2
Attitudes and values 1/3	7.94**	68.6**	14.1**	6.8*	78.4
Life-style 1/3	8.01**	74.0**	9.5**	5.2**	82.3
Control	5.39	36.9	31.5	10.2	57.2

Note. DA CL = Depression Adjective Check List. CI = composite index.

^a All means are adjusted posttest means from the analysis of covariance, Week 1 means are adjusted to provide an equivalent baseline.

^b Composite index is an equally weighted average of other scores on a 100-point positive scale (not used in statistical comparisons, but used for brevity in Figure 1 above).

* *F* ratio between this mean and control mean significant beyond the .05 level.

** *F* ratio between this mean and the control group mean significant beyond the .01 level.

Discussion

The data, taken as a whole, showed all treatments effective. Yet, contrary to the hypothesis, full, general instruction in the fundamentals was neither better nor worse at increasing happiness than concentration on specifics from the program, aimed at an individual's weakest areas. In retrospect, though, this lack of difference is not surprising. Evidence from past studies has indicated that individuals always use the entire program in a selective way. Even though they have the complete information to work with, feedback indicates that people naturally focus their work on the fundamentals they perceive as their weak points. In this light, the hypothesis that the full treatment would surpass partial concentrations was improperly founded. Perhaps if the "third" had been selected at random (as had been done in Study 5), rather than assigned by the weak-point strategy used here, the hypothesis would have been appropriate.

On the positive side, however, the data clearly indicate that all major subdivisions of the program have validity (i.e., no superfluous materials are incorporated in the complete program) and that diagnosis of specific "happiness weakness," as done with the SDI, can make the program more selectively useful and efficient.

Study 7

In the 6 previous studies, experiments with the fundamentals had demonstrated happiness changes, but in all cases this effectiveness had only been created in short time frames (from 2 weeks to 4 months) and in situations where participants were captive and continuously reminded of the material. Though these attempts to increase happiness had appeared consistently successful, a question remained: How long-lasting were such positive effects, especially if no moni-

toring occurred? To answer this question, a survey study was conducted.

Method

From the past records, a list was made of 150 randomly selected individuals who had received complete information on the 14 fundamentals program, 9–18 months previously. These individuals had received their instruction on a “take it or leave it” basis as part of college psychology courses and public workshops, so it was unknown if any of the individuals had considered or applied the information, either when they had learned about it or in the months that followed their learning about it.

The individuals were sent an extensive open-response questionnaire regarding their long-term experience with the fundamentals, a stamped return envelope, and a letter that explained the research. The questionnaires asked for a variety of long-term reactions to the fundamentals and stressed that only honest feedback (“whether positive, negative, or neutral”) was desired. To ensure candid responses, the questionnaires asked for no names (all were anonymously returned). Returns were subjected to a content analysis. An initial reading of the returns by a panel consisting of the author and two assistants was used to develop basic response categories in order to codify returns. Three judges then scored the returns independently, using the developed codification system. Agreement in codifying responses averaged 91% among judges.

Results

Of the 150 mailings, 40 were returned by the postal service as undeliverable, and 69 questionnaires were received completed (18 men; 51 women; mean age = 25.6; age range = 19–65). Assuming all deliverable mailings were indeed received by the proper persons, this represents a 63% response (no further attempt was made to gain returns from the nonrespondents).

The responses gave a very positive rating of the lasting value of the fundamentals. The vast majority of respondents, 96%, not only recalled the information well but also continued to think about and use the information. To a question as to how often the fundamentals still came to mind, 39% actually reported that the material occurred to them very often, almost daily; 28% thought about it sometimes; 20% only when they hit “down times”; 8% rarely; and 5% never. Likewise, as far as continuing to use the fundamentals, 30% said they still actually practiced many techniques; 35% thought about the principles regularly; and another 11% felt the fundamentals had become more

or less unconsciously incorporated in their personality. Of the remaining 24%, half had worked with the fundamentals at first, but as time had passed, they had forgotten them; the other half had dismissed the information to begin with.

As to happiness changes, 23% of the respondents felt the information had made them somewhat happier in the long term; 25% felt they had become a good deal happier; and 24% claimed the fundamentals had helped them extremely, making them far more happy than they might have been. The remaining 28% fell into four categories: 11% said the material had helped their happiness at first, but they had subsequently forgotten it; 8% felt they had always been too happy to achieve any greater increase; 8% claimed no long-term effects because they had dismissed or ignored the information to begin with; and only one individual claimed to have worked with the program but to have gained no happiness. On a subjective 100-point scale, the average respondent rated his or her current happiness 12 points higher than it would have been without the education. The specific fundamentals most often mentioned as the most helpful were “spend more time socializing,” “stop worrying,” “lower your expectations and aspirations,” “be yourself,” and “develop positive, optimistic thinking.”

Discussion

A subjective reading of the returned questionnaires leads unquestionably to the conclusion that for many people, the education about happiness, incorporated in the fundamentals, holds a reasonably long-term and valued effect. Certainly the rather high response rate of 63% (by survey-research standards), is indicative of positive reactions to the information that goes beyond the results reported herein. Even if for the sake of argument we assume *all* nonrespondents actually received their questionnaires and refused to return them because they were disappointed with the program and its effects, a remaining figure of 45% still claim sustained happiness gains. Considering the passage of time and the simple “take it or leave it” method of presentation, even this figure would seem to indicate that the fun-

damentals have an effect that may be rather permanent. Of course, longer term research with the program would give clearer implications, and such was attempted as part of the present study. A like amount of the same questionnaires ($n = 150$) were mailed to the last known address of individuals exposed to the fundamentals 2-4 years previously. The returns, unfortunately, were minimal (20% response—largely due to student transience) and thus were not reliable enough to base solid conclusions upon. Returns received, however, showed the same positive indications seen in the 9-18 month group: 96% of those responding said they still thought about the information from time to time; 79% claimed the information had a lasting effect in increasing their happiness; and 59% still practiced many of the techniques. Though not conclusive, these data suggest that an even longer term effect for happiness training may eventually be demonstrated.

General Discussion

Taken collectively, the results of the present investigations, coupled with the findings of the original studies, argue that human happiness can be increased for many, if not most, individuals—given the proper information.

The 14 fundamentals provide this information in a format designed for average persons. The program appears to be effective as a tool for short-term happiness enhancement, and there is evidence that its effectiveness may well be long-lasting and its impact more global (in terms of other mental gains).

In the seven studies conducted with the fundamentals, a variety of strategies have been employed. The program has been compared to placebo programs (where suggestions and expectations of happiness were created); it has been compared to itself (in designs where half the information was tested against the whole); those working diligently with the program have been compared to those who ignored it; data on the program have been gathered from individuals using it from as little as 2 weeks to as much as a year or more; a wide variety of criterion measures have been used; and ad-

herence to the program has been required in some studies and optional in most others. In each case, the statistical data seem to indicate that the fundamentals indeed help individuals become happier and that this increase in happiness is due largely to the information and techniques involved in the program, and is not just a product of heightened sensitization to happiness or expectations and suggestions of greater happiness.

In addition to the objective data, there is subjective testimony of the participants themselves, provided by their anonymous reports. Since in the final analysis happiness is a totally subjective, privately experienced phenomenon—truly known only to the individual—these personal avowals have received strong consideration. Throughout the studies, the feedback provided by the subjects shows that the gains observed in the objective data were indeed experienced as real, on a subjective, personal level. Averaged together (over all seven investigations), 81% of the individuals receiving the program claimed happiness gains (38% reporting that the information had made them “much happier” or “extremely happy”). Specific effects ranged from the development of new behaviors and attitudes, changes in life-style, new insights and understandings, better copings with bad moods, enhancement of happy moods, to a better awareness of happiness itself—and virtually all (96%) suggest the program is worthwhile educationally.

From this consistently positive feedback, and from the positive statistical trends observed in the objective data, it would appear that the fundamentals program does increase happiness.

However, caution is in order, for even in these further studies a number of shortcomings exist that possibly attenuate this positive conclusion.

Adequate measurement, for one, has always been a concern in happiness research. In the present studies, self-reporting instruments were used to measure happiness. This is typical in happiness studies, since other measurement modalities (e.g., peer reports, behavioral observations, physiological indexes, etc.) are, according to past research, sorely invalid. The method of choice has always been self-reporting de-

vices, yet unfortunately for the field, no established standard of measurement has come to the fore, nor has any method been used consistently across studies. Efforts have been underway by the author (Fordyce, Note 5, Note 6), Kammann, Christie, Irwin, & Dixon (1979), and others (cf. Campbell, 1976) to rectify this problem, and soon, perhaps, research in the area can profit from instruments of sounder psychometrics and standard usage.

Given the state of the art, the present studies incorporated the best available strategy, using two of the most thoroughly tested measures of happiness currently developed (the HM and the SDI) and bolstering them with a variety of other, better recognized tests of clinical depression and mental health. The use of these numerous criteria seemed prerequisite to convincingly determine statistical outcomes (especially since the lack of multiple criteria was a major criticism of the 1977 studies). The fact that these numerous indexes all demonstrated such highly similar statistical patterns, on one hand, seems a plus to these studies. It adds much greater confidence in the findings than would have been the case if a single measure had been used alone. On the other hand, however, it is an appropriate precaution to note that because the measures used were intercorrelated to a degree, and because only univariate comparisons of the data were employed, a possibility of Type I error exists. This may weaken these conclusions, although the author is inclined to feel that the possibility is not a large one.

Another concern in the present studies lies in the presentation of the fundamentals information itself. In all seven studies, materials were presented to the various groups by the same instructor, in verbal lecture form. Therefore, it is obvious that the actual treatments were not precisely identical in every case. This method was used to create treatments that were presented to the subjects as unobtrusively and "normally" as possible, but it lacks the generalizability necessary for further study.

For research to continue, the program needs to be in a standard form for replication. This form is now available, in a package of recorded and written materials that

provides a complete course in the fundamentals (Fordyce, 1981). (The bulk of these materials, incidentally, were transcribed during training sessions of the present studies and thus provide an actual replication of the studies.) Future studies here will rely on this standardized presentation as the experimental variable, and the package is available from the author for those interested in similar research (see footnote 1).

A final concern also involves the manner of presentation employed in these studies. Since all information was presented by the experimenter, there is the possibility that the presenter's enthusiasm and ability to motivate may account for the demonstrated increases more than the techniques themselves. Throughout the seven studies, a variety of strategies and designs were developed to control for this possibility. But the issue can only be unequivocally resolved in designs employing a variety of presenters—or, as addressed above, through the use of a standardized method of presentation that remains uniform. The independent, positive results of Lichter, Haye, and Kammann (1980), who successfully used the fundamentals information in their program, provide some evidence that presenter bias may not be a problem.

Ultimately, the issues involved with presenter bias, measurement, and uniform presentation can only be fully addressed through the objective research efforts of others. In candor, the author would be remiss in not acknowledging the possibility that as developer, presenter, and experimenter of the present program he may have inadvertently injected bias into these happiness studies. Yet it has not been the objective of the seven studies necessarily to confirm the 14 fundamentals; it has only been to develop them to the point that others would have a basic foundation to build upon.

The fundamentals are seen only as a beginning, and they are merely offered as such. Far more research will be needed before the true merits of the program are determined, and the possible directions for such study can only be outlined here. Some obvious studies come to mind: (a) comparisons be-

tween the 14 fundamentals and other self-help programs of study; (b) replications of the present studies using the standardized 14 Fundamentals Package now available; (c) replications of the present studies using different presenters; (d) studies with different normal and clinical populations; (e) research wherein the program is used as an adjunct to—or possibly in lieu of—other counseling procedures; (f) studies that further scrutinize the contents of the program that might enhance effective portions and eliminate noneffective portions; and (g) studies that might use the fundamentals as a basis of comparison to develop newly conceived programs aimed at happiness and mental health increment.

The placing of these seven studies in the context of other research is somewhat problematical. In a narrow sense, they can be viewed as pioneering efforts in a new area of psychological research. To the author's knowledge this series represents the only attempt to date (except for the Lichter et al., 1980, study) designed to study programatically the potential increment of average people's *overall* happiness as a research topic. Yet, in a broad sense, these studies are certainly in line with—and have relied heavily upon—the bulk of literature and resultant techniques in such fields as marriage and family counseling, psychotherapy, self-help, behavior modification, job satisfaction, self-actualization, and orthopsychology. Indeed, on a larger scale, these studies have a close bond with all psychological research effort. For the implicit aim, it would seem, of all psychological study is the ultimate increment of human happiness through better understanding of human behavior.

So what is so different here? It is primarily a difference in focus. The present studies focus on happiness directly and explicitly, whereas other psychological effort focuses on topics that only indirectly and implicitly contribute to eventual happiness. It is a matter of putting the cart before the horse. Instead of focusing on the myriad of problems and satisfactions one encounters in day-to-day living that aid or hinder eventual happiness, the fundamentals program addresses the topic of happiness itself.

It appears that this focus works, for it helps individuals place the means of their everyday living in perspective with one of its most important ends: happiness.

In the original studies (Fordyce, 1977), it was concluded that such "perspective" was one of the most pronounced effects of the fundamentals program. Participants reported that through their exposure to the materials, they had developed a much greater appreciation and understanding of their own happiness, and of its importance as a personal goal. This heightened awareness apparently helped direct their efforts toward greater happiness. Participants in the present studies reported the same phenomenon. It seems that focusing on happiness directly can have quite successful results. And indeed, this focus is at the very heart of the 14th fundamental: "Put happiness as your most important priority." Contrary to the oft-quoted folk wisdom that "pursuing happiness directly is the surest way to lose it," the 14th fundamental suggests (and the results of these studies show) that thinking about one's happiness regularly, pursuing it actively, and placing it as a top priority are some of the main ways to increase it.

As stated in the outset of this article, people see happiness as the ultimate end of human existence; yet as important as happiness is, most know nothing about it. Commonly, happiness is seen as an ephemeral, illusory, and intangible phenomenon—not a thing to be understood, studied, or worked upon. And perhaps until the recent focus of psychological research in this area, this perception was true. But now there exists a growing, research-based knowledge of happiness. Furthermore, it appears that this knowledge can be used to help individuals better realize their pursuit of happiness. Knowledge in any field can be enlightening and useful, and it appears that knowledge about human happiness is no different: Those who understand happiness have the best chance of attaining it.

Reference Notes

1. Diener, E., & Griffin, S. *Subjective well-being: Happiness, life satisfaction and morale* (Compre-

- hensive bibliography). Unpublished manuscript, University of Illinois at Urbana-Champaign, Department of Psychology, 1982.
2. Fordyce, M. W. *Human happiness: The findings of psychological research* (chaps. 2-4). Unpublished manuscript, 1974. (Available from M. W. Fordyce, Edison Community College, Fort Myers, Fla. 33907.)
 3. Kammann, R. *Psychological well-being: A synopsis of three research texts*. Unpublished manuscript, University of Otago, New Zealand, Department of Psychology, 1977.
 4. Kammann, R. *Objective circumstances, life satisfactions, and general well-being: Consistencies hopping across time and place*. Unpublished manuscript, University of Otago, New Zealand, Department of Psychology, 1980.
 5. Fordyce, M. W. *The happiness measures: A thirty second index of emotional well-being and mental health*. Unpublished manuscript, 1977. (Available from M. W. Fordyce, Edison Community College, Fort Myers, Fla. 33907.)
 6. Fordyce, M. W. *The self description inventory: A test to measure happiness and its concomitants*. Unpublished manuscript, 1980. (Available from M. W. Fordyce, Edison Community College, Fort Myers, Fla. 33907.)

References

- Andrews, F., & Withey, S. R. *Social indicators of well-being*. New York: Plenum Press, 1976.
- Bradburn, N. *The structure of psychological well-being*. Chicago: Aldine, 1969.
- Bradburn, N., & Caplovitz, D. *Reports on happiness*. Chicago: Aldine, 1965.
- Buros, O. K. (Ed). *The seventh mental measurements yearbook*. Highland Park, Ill.: Gryphon Press, 1972.
- Campbell, A. Subjective measures of well-being. *American Psychologist*, 1976, 31, 117-124.
- Campbell, A., Converse, P., & Rogers, W. L. *The quality of American life*. New York: Russell Sage Foundation, 1976.
- Cantril, H. *The pattern of human concerns*. New Brunswick, N.J.: Rutgers University Press, 1965.
- Dyer, W. W. *Your erroneous zones*. London, England: Sphere Books, 1977.
- Fordyce, M. W. Happiness, its daily variation and its relation to values. (Doctoral dissertation, United States International University, 1972). *Dissertation Abstracts International*, 33, 1266B. (University Microfilms No. 72-23,491)
- Fordyce, M. W. Development of a program to increase personal happiness. *Journal of Counseling Psychology*, 1977, 24, 511-521.
- Fordyce, M. W. *The psychology of happiness: Fourteen fundamentals*. Fort Myers, Fla.: Cypress Lake Media, 1981. (Also available from the author, Edison Community College, Fort Myers, Fla. 33907.)
- Gurin, G., Veroff, J., & Feld, S. *Americans view their mental health*. New York: Basic Books, 1960.
- Kammann, R., Christie, D., Irwin, R., & Dixon, G. Properties of an inventory to measure happiness (and psychological health). *New Zealand Psychologist*, 1979, 8, 1-12.
- Lichter, S., Haye, K., & Kammann, R. Increasing happiness through cognitive retraining. *New Zealand Psychologist*, 1980, 9, 57-64.
- Robinson, J., & Shaver, P. *Measures of social psychological attitudes*. Ann Arbor, Mich.: Survey Research Center, Institute for Social Research, 1968.
- Wessman, A. E. *A psychological inquiry into satisfaction and happiness*. Unpublished doctoral dissertation, Princeton University, 1957.
- Wessman, A. E., & Ricks, D. F. *Mood and personality*. New York: Holt, Rinehart & Winston, 1966.
- Wilson, W. R. Correlates of avowed happiness. *Journal of Clinical Psychology*, 1967, 23, 295-305.

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