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Clinical psychologists' attitudes towards primary prevention in mental health

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City University of New York, 1991

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CLINICAL PSYCHOLOGISTS' ATTITUDES TOWARDS PRIMARY PREVENTION IN MENTAL HEALTH

by

SUSAN M. HUGHES-MOSS

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

1991

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

12/10/90
Date

Chair of Examining Committee

December 10, 1990
Date

Executive Officer

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Professor Vera Paster

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Abstract

ATTITUDES OF CLINICAL PSYCHOLOGISTS TOWARDS
PRIMARY PREVENTION IN MENTAL HEALTH

by

Susan M. Hughes-Moss

Adviser: Professor Paul Wachtel

The purpose of this study was to develop a profile of clinical psychologists' attitudes towards prevention. The study used a survey research correlational design implemented by a questionnaire incorporating a section which polled specific viewpoints, an Overall Attitude Scale (OAS) and a descriptive data section.

The subjects were 248 graduates from five clinical psychology doctoral programs. Theoretical orientation (psychodynamic/behavioral) and geographic locale (urban/suburban) were the specific criteria used for the selection of the training programs. In addition, one university provided an opportunity to look at both Ph.D. and Psy.D. programs.

SPSS was used to analyze data with Pearson Product-Moment correlations, T-tests, discriminant function analysis, and stepwise multiple regression analyses. The majority of psychologists in the study indicated strong support for prevention; few had received training in prevention; and most felt that prevention should be integrated into the training

of future clinical psychologists.

The following were associated with more positive attitudes towards prevention: the perception that colleagues have had work experience in prevention; exposure to prevention coursework in training; gender; ethnicity; and geographic locale of training program.

The following were predictive of more positive attitudes towards prevention: interest in practicing prevention at graduation from training; ethnicity (Black/Hispanic); and training programs geographic locale (urban). The following were predictive of work experience in prevention: interest in practicing prevention at graduation from training; the perception that colleagues have prevention work experience; ethnicity (Black/Hispanic); and training programs geographic locale (urban).

The findings were discussed in terms of a proactive futuristic approach for clinical psychology leadership to reassess curricula and initiate an integration of prevention into doctoral training. Recommendations were developed for clinical psychology practitioners, program directors, faculty, and future research.

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Finally, to my family, the most wonderful family in existence; my patient husband, Kevin, grandmother, Marie, father, Lewis, mother, mentor, and friend, Louise, and brothers, Randall, Brian, and Michael. Words cannot express my appreciation of your love, encouragement, active support, and belief in me. I thank you and love you all so much!

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INTRODUCTION

It is important that the field of clinical psychology take seriously the evidence from research that prevention is both a cost-effective and humane approach. Our nation is faced with a wide array of mental health problems. By some estimates, between one-sixth and one-fifth of the population suffer from mental health and substance abuse problems (Price, Cowen, Lorion & McKay, 1988). These figures are significantly higher among the disadvantaged. Clearly there exists a need and demand for treatment services, yet presently our mental health delivery system (mental hospitals, clinics, individual practitioners) see only 20 - 25% of those individuals in need. In 1978 it was found that 15% of the American adult population suffered from some kind of psychological disorder or distress. Of this 32 million, approximately 7 million receive no care at all (Reiger, Goldberg, & Taube, 1978; Bloom, 1981). In 1984 the National Institute of Mental Health reported that 19% (43 million) of American adults have a diagnosable mental illness (Reiger, Myers, Kramer, Robins, Blazer, Hough, Eaton, & Locke, 1984; Albee, 1986; Price, Cowen, Lorion, & Ramos-McKay, 1988). An estimated 25% of the total school population is comprised of emotionally disturbed children (Albee, 1986). At least 12% (7.5 million) of the children in the United States suffer from problems that warrant mental health treatment

(Dougherty, 1988). In addition, the 22 million children who are either neglected or abused, living in poverty or with alcoholic parents are at high risk of developing mental health problems (Dougherty, 1988). Of these only 20 - 30% may be getting appropriate services.

The cost of mental health care continues to increase. In 1980 these costs were approximately 18 billion dollars (Frank & Kamlet, 1984). In 1983 Harwood, Napolitan, Kristiansen, & Collins (1984) reported that the cost of mental health treatment for people of all ages was $33 billion. Senator Orrin Hatch (1982) noted that in 1975 the cost to society of mental illness was $49.4 billion and the cost of drug abuse was $16.4 billion. Lifetime costs of children born in one year with fetal alcohol syndrome or alcohol-related birth defects equalled about $1.5 billion. Job stress has been reported to cost American industry between $75 and $100 billion each year (Cohen, 1985). These figures include costs due to absenteeism, diminished productivity, increased health insurance charges, and direct health related charges.

In the United States, mental health treatment services receive only about 10% of all health care funds and, of that 10%, a significantly smaller proportion is allocated to psychology (Hatch, 1982). Dougherty (1988) reported that the total NIMH prevention research budget was approximately 20 million dollars in fiscal year 1988. In addition, it is reported that in the mental health professions only 1-2% of

the total funding from federal, state, and local governments is devoted to prevention (Leitenberg, 1987; Cohen, 1985).

It is in light of the high incidence of emotional disorder, exorbitant costs, and limited fiscal and professional resources in this country that clinical psychology and related mental health disciplines have been encouraged to increase their attention to primary prevention of psychopathology (Bloom, 1981; Hatch, 1982; Cohen, 1985). The long-standing dilemma of limited resources and ever-growing needs has led to a call for research and program development that is geared toward the prevention of mental health problems. U.S. Senator William S. Cohen (1985) states:

> "There is an ever expanding body of evidence, much of it from the behavioral and social sciences that shows that investments in health promotion and prevention offers returns not only in reduced health care bills, but in longer life, increased productivity, and an enhanced ability to deal with the pressures of modern life." (p.214)

Investigators who have examined medical history (Bower, 1963; Bloom, 1977, 1979) note that preventive interventions have been more effective than treatment interventions in reducing the prevalence of most infectious and nutritional diseases. Over the past twenty years investigators have applied a public health model of prevention to develop viable and effective preventive intervention in the mental health arena. A recent publication of the APA's Task Force on Promotion, Prevention, and Intervention Alternatives in

Psychology highlights several model primary prevention programs presently being implemented in this country (Price et al., 1988). In addition, federal, state, and local governments and public service organizations have increased attention to and funding for programs aimed at preventing such conditions as substance abuse,child abuse, teen pregnancy, juvenile delinquency, and AIDS as well as other societal problems with mental health sequela.

Clinical psychologists see a wide array of disorders and problems every day in clinical practices, community mental health centers and psychiatric hospitals around this country. Over twenty years ago Sanford (1965) advocated that clinical psychology should increase its focus upon the prevention of mental illness. Since that time, Murphy & Frank (1979) have provided a broad review of the relationship between prevention and the clinical psychologist. Others have suggested that psychologists take a leadership role not only in encouraging that primary prevention become a viable theme incorporated into a national health policy agenda (Hatch, 1982; Heffernan & Albee, 1985) but also in urging that clinical psychology training curricula increase their focus upon health promotion, disease prevention and community mental health problems (APA, 1959 cited in Hansen, 1981; Brandt, 1982). It has also been suggested that practitioners increase their communication of the benefits of primary prevention and mental health promotion with their patients (Brandt, 1982), the public, and public officials (Cohen, 1985).

The problem that sparked this research was the observed discrepancy between the pressing need for preventive intervention in mental health and the relative lack of attention paid to this area by the clinical psychology profession. Despite the logic and evidence supporting the potential effectiveness of prevention, neither clinical psychology training nor the practice of clinical psychologists presently emphasizes notions of the prevention of psychopathology. Instead, both training and practice focus primarily upon the psychotherapeutic role and the treatment aspects of mental health problems. Research has shown that clinical psychologists give prevention tasks a very low ranking in terms of both time spent and importance to their practice (Crowe, Grogan, Jacobs, Lindsay, and Mark, 1985).

Given the relatively low emphasis placed upon concepts of prevention in clinical psychology training and practice, one might conclude that clinical psychologists do not actively embrace the concepts, activities, and roles endorsed by the prevention movement. This conclusion could be erroneous since the same professionals might describe prevention as an important domain for society and for the profession as a body. Crowe et al. (1965) suggest that clinical psychologists examine the low ratings and take steps to enhance the status of prevention. Before concrete steps can be taken toward the enhancement of prevention's status, it is vital to actually develop a profile of the attitudes

and practices of clinical psychologists in the area of preventive intervention in the mental health arena.

This exploratory study gathered information for such a profile which can provide insight into the observed discrepancy between need and practice. Although a large scale study of the profession will be needed to thoroughly investigate the profession's attitude about prevention, this exploratory study of a selected group of clinical psychologists will help ascertain if more expensive study is justified and provide a data base that can stimulate directions for further research. This insight can aid in the refinement of professional priorities for clinical psychology training and practice as well as provide a current data base for stimulating future research. In the present study, a questionnaire was used to tap specific views toward prevention and to obtain an Overall Attitude Score (OAS).

CHAPTER TWO

REVIEW OF THE LITERATURE

Primary Prevention In Mental Health: An Overview

Definitions and Key Concepts

A review of prevention literature reveals little consensus about how to define the concept of primary prevention. In general, primary prevention aims to promote or strengthen psychological health and/or reduce the incidence of new cases of disorder (Seidman, 1987). The Presidential Task Panel on Prevention (Albee, 1978) described primary prevention as a "network of strategies" that are proactive, concerned about total populations, make use of education and social engineering strategies, and assume that the fostering of personal and developmental resources for coping is the best way to avoid mental health problems. Finally, Cowen (1980) describes primary prevention in mental health as:

> "Programs that engineer structures, processes, situations, and events that maximally benefit in scope and temporal stability the psychological adjustment, effectiveness, happiness, and coping skills of many (as yet unaffected) individuals." (p.264)

Other comprehensive descriptions are to be found in the first volume of the Primary Prevention of Psychopathology Series (Albee & Joffe, 1977) and in Martin Bloom's (1980) annotated bibliography of primary prevention definitions.

Prevention in mental health has been conceptualized on three distinct levels previously identified by public health professionals (Leavell & Clark, 1965; Broskowski & Baker, 1974; Goldston, 1977; Bloom, 1977). Broskowski & Baker (1974) described primary prevention as "that which reduces the incidence (i.e., new occurrences); while secondary prevention reduces the duration, tertiary prevention reduces the degree of permanent disability" (p. 709).

The public health field provides three additional relevant concepts (Bloom, 1977, 1979). These are: prevalence, or the number of cases at a specific moment in time; incidence, or the number of new cases diagnosed during a specific period of time; and duration, or the time between the initial diagnosis and the termination of the disease. Prevalence is determined independently by incidence and duration. Bloom (1977) points out that primary prevention attempts to reduce prevalence by reducing incidence whereas secondary and tertiary prevention aim to lower prevalence by shortening the duration of illness.

The practice of including secondary and tertiary intervention under the scope of prevention has been the target of criticism (Cowen, 1983; Gordon, 1987; Seidman, 1987). These labels are seen as merely altered terminology

for traditional treatment practices. It has been suggested that the term prevention should be reserved for primary prevention alone (Bloom, 1979; Cowen, 1982; Kessler & Albee, 1975; Lorion, 1987; Seidman, 1987).

A review of the literature illustrates a wide array of primary prevention proposals. Different levels of intervention are described. Effective intervention can be applied to individuals and families, organizations and larger social systems (Bloom, 1979). The goal of all preventive intervention is to avoid maladaptation and to promote the health of individuals. It has been suggested that interventions aimed at altering settings (e.g., family, workplace, school, organizations) and the mesosystem (e.g., the connections and relationships between people, settings, and systems) have the greatest "potential for mass-oriented prevention" even though the manifestations of effects at these levels are delayed (Seidman, 1987, p. 9). Seidman (1987) notes that policy makers and funding sources often require researchers to document a rapid reduction in the occurrence of psychopathology among individuals to qualify for and justify grant renewals. Therefore, current prevention research has primarily targeted specific high risk populations (e.g., children of substance abusing parents) rather than social system intervention.

In addition, all different points across the lifespan are receptive to preventive intervention (Price, Cowen, Lorion, & Ramos-McKay, 1988). Strategies for primary

prevention in mental health include crisis intervention (Bloom, 1977; Garfield, 1983), competence building (Laosa, 1979; Masten & Ferrese; Shure & Spivak, 1979; Danish & D'Augelli, 1980; Sarason & Sarason, 1981; Samuels, 1981; and Durlak, 1983), mental health consultation (Bloom, 1977; Goldston, 1977; Garfield, 1983), mental health education (Kessler & Albee, 1975; DeWild, 1981; Smith, 1981). These strategies have been directed towards high risk groups (Bloom, 1977; Erlenmeyer-Kimling & Venables, 1977; Mednick & Witkin-Lanoil, 1977; DeWild, 1981; O'Gorman, 1981; and Garmezy, 1975, 1987), toward individuals or groups experiencing a life crisis (Auerbach & Kilman, 1977; Bloom, 1978; Bolman & Bolman, 1979; Malone, 1979; Felner, Norton, Cowen & Farber, 1981; Bloom, Hodges, & Caldwell, 1982) and toward the general population at large as cited by Bloom (1977) and DeWild (1981).

There has been an ongoing debate concerning the actual possibility of true primary prevention (Broskowski & Baker, 1974; Lamb & Zusman, 1979 & 1981; Bloom, 1981; Glasscote, 1981; Albee, 1982 & 1986). Some critics like Lamb & Zusman (1981) believe that primary prevention is impossible without knowledge of the specific causes of mental illness and that no evidence exists indicating that efforts aimed at enhancing mental health contribute to reducing the incidence of specific mental illnesses. The lack of precision in defining primary prevention as well as the assumption that stressful life events lead to mental illness have also been challenged

by Lamb & Zusman (1981). Lamb & Zusman (1979) also cite research evidence indicating a genetic influence upon many mental illnesses and note that modification rather than prevention of mental illness is a more realistic goal.

Proponents of primary prevention point to a shift in paradigm from a linear cause and effect model focusing on predisposing factors toward recognition of the systemic complexity of psychopathology and a focus on stress related precipitating factors (Broskowski & Baker, 1974; Bloom, 1981; Albee, 1986). This shift has been based largely upon Cassel's (1976) research which demonstrated a link between severe socio-environmental stressors and susceptibility to both emotional disorders and physical illness. This research lends support to the feasibility of achieving prevention through enhanced self-esteem, stress reduction, mutual support groups and community organization (Kessler & Albee, 1975; Albee, 1986). In addition, advocates believe that primary prevention efforts should not focus solely on diagnosed mental illnesses but should also address those psychodynamic, interpersonal, and social conditions which contribute to severe psychological and emotional distress and maladjustment (Bower, 1973; Bloom, 1981; Albee, 1986).

Glasscote (1981) notes that many aspects of prevention make sense but that both "extreme advocates" and "extreme opponents" of prevention need to recognize that "some of the conditions called mental illness can be prevented without question; others can be prevented in some cases if one tries;

and others, such as schizophrenia and sociopathy, cannot be prevented until mental health technology is more developed" (p.823). Clearly there exists a need for ongoing prudent and well-documented research on the prevention of both mental health disorders and behavioral dysfunctions as well as on the promotion of mental health.

The area of primary prevention in mental health relies upon theoretical concepts related to public health, social psychology, and personality development (Sanford, 1965). The field of public health demonstrated the effectiveness of interventions geared towards communities rather than towards individuals. Bloom (1977) describes three public health terms which need to be examined in order to understand the process of any disease: host, environment, and agent. First, relevant characteristics such as the general health, past history, and genetic makeup of the individual or host must be examined. Next, relevant characteristics of the environment such as its psychologically stressful aspects must be considered. Third, the means or agent by which stressful aspects of the environment become internalized so as to result in some identifiable disease or disorder must be scrutinized. Public health actions are geared toward the removal of detrimental factors or toward intervention at some point in a social structure in order to create changes which will facilitate the attainment of improved psychological health for the population as a whole.

In order to develop effective primary prevention

interventions geared towards social system changes, it is necessary to have knowledge about culture in general, specific subcultures and the psychological means by which cultural values are acquired (Sanford, 1965). In addition, socio-psychological theories regarding how people in general react to particular changes in environmental conditions and how they progress developmentally through the lifespan are also extremely important. Sanford (1965) suggests that large scale preventive actions which are not based upon correct psychological theories can have damaging consequences.

Sanford also stresses the need to acknowledge the complexity of personality and to possess knowledge of personality processes and human motivation. Significant resistance is frequently observed when efforts are made to persuade individuals to take action which might protect their health (e.g., wearing seatbelts and not smoking cigarettes). Kessler & Albee (1975) discuss the relevance of the psychogenic hypothesis to primary prevention. This hypothesis suggests that the composition of adult personality is, for the most part, the result of the emotional conditions during early formative periods in infancy and childhood. Kessler & Albee (1965) suggest that "the major strategies of primary prevention depend for their relevance and effectiveness on the truth of this proposition - that early happenings have later consequences, especially that emotional damage to the child is reflected in its adult disturbance" (p. 563).

Investigators (Price, 1974; Seidman, 1987) have been critical of primary prevention theories, research, and practices which have been based upon a linear causal model. This model is seen as inadequate for addressing the ever-changing, interdependent and complex forces that influence human emotion and behavior. Other investigators like Sameroff (1987) and Seidman (1987) suggest that primary prevention should be conceptualized "within a dynamic, ecological-transactional framework that incorporates the possibility for bidirectional and multifactorial causality" (Seidman, 1987, p.4).

Investigators who have examined medical history (Bower, 1963; Bloom, 1977, 1979; Albee, 1986) note that preventive interventions have been more effective than treatment interventions in reducing the prevalence of most infectious and nutritional diseases. Since the 18th century, efforts have been made to modify the environment in order to eliminate sources of illness and prevent disease (Bloom, 1977). Preventive efforts of this sort have traditionally fallen into the domain of public health. Winslow, as cited in Patterson (1950), defines public health as "the science and art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community effort... " (p.3).

In the 1950's as communicable diseases became under greater control, health departments began to develop programs which focused upon maternal and child care, syphilis and

other venereal diseases, alcoholism, and chronic disease. These are areas with significant aspects related to mental health. As public health specialists began to involve themselves in the mental health field, they collaborated with other professional disciplines such as sociology and social psychology (Sanford, 1965).

Historical Development

Investigators who have examined advocacy for primary prevention in mental health cite the significance of Clifford Beers' (1921) book, entitled A Mind That Found Itself which, focused in part upon the prevention of personality disturbance. His work provided the impetus for the mental hygiene movement, which aimed to eliminate emotional and mental disturbance by teaching mental health principles to clergymen, teachers, and other professionals who would then educate parents, children, and the general public (Kessler & Albee, 1975).

Adolph Meyer and William James collaborated with Beers and helped promote the premise that mental illness could be prevented by improvements in the human environment (Kessler & Albee, 1975). Meyer, as cited in Bloom (1971), states that "communities have to learn what they produce in the way of mental problems and waste of human opportunities, and with such knowledge they will rise from mere charity and mere mending, or hasty propaganda, to well-balanced early care, prevention and general gain of health". As noted by Sanford

(1965), the 1920's saw a significant increase in the number of child guidance clinics and public education programs in the United States.

During the 1920's numerous publications with a psychoanalytic orientation also began to be available for educators and parents (Sanford, 1965). Analysts such as Anna Freud, August Aichorn, and Melanie Klein demonstrated significant interest in the application of psychoanalytic principles to primary prevention of psychopathology (Sanford, 1965; Kessler & Albee, 1975).

The Joint Commission on Mental Illness and Health addressed the area of prevention in 1961 but concluded that "...primary prevention of mental illness has remained largely an article of scientific faith rather than an applicable scientific truth" (Korchin, 1976, p.). Sanford (1965) quotes Rene Dubos' response to the Joint Commission's conclusion made at a meeting of the National Association of Mental Health in 1962:

> "The final report of the Joint Commission on Mental Health and Mental Illness states that humane treatment and rehabilitation of the mentally ill is the great unfinished business of the mental health movement. But the great unfinished business really is to do something about the social, psychological,and other circumstances leading to this condition."(p.1378)

John F. Kennedy included prevention among the priorities proposed for community mental health centers. He called for "far-reaching programs ... (aimed) to prevent the occurrence of mental illness and mental retardation wherever and whenever possible" (Kennedy, 1965, p.301). He added, "We must promote -to the best of our ability - and by all possible means the mental and physical health of all our citizens" (Kennedy, 1965, p. 300). Contrasting with the psychoanalytic model, community psychology clearly endorsed an ecological perspective which advocated the evaluation of and intervention in social systems as a means of preventing the development of psychopathology (Roen, 1971; Kessler & Albee, 1975; Garfield, 1983).

Since 1975, the Vermont Conference on the Primary Prevention of Psychopathology and its published work have been a strong force in focusing the nation's attention on theories and ongoing intervention and research efforts that generally promote mental health, increase resistance to disease, and prevent the occurrence of psychopathology (Heffernan & Albee, 1985; Kessler & Goldston, 1986). Advocates have pushed for the development of national policies to address and ensure the enhancement of the nation's mental health (Bloom, 1981).

The President's Commission on Mental Health was established by President Carter in 1977. An important subgroup of this Commission was the Task Panel on Prevention whose report recommended federal initiatives in the area of primary prevention. The Center for Prevention Research at

the National Institute of Mental Health (NIMH) was founded largely due to the Task Panel's suggestions (Heffernan & Albee, 1985).

In 1979, the Surgeon General's report (U.S. Department of Health, Education, & Welfare, 1979) stressed the related concepts of health promotion and disease prevention and noted that prevention was to receive top priority in health policy at the federal level (Brandt, 1982). Also of significance in 1979 was the formation of the federal Office of Disease Prevention and Health Promotion (McGinnis, 1985).

The Preventive Health Care Incentive Act was introduced by U.S. Senator William Cohen in 1983. Its intention is to allow employers who provide their employees with preventive health programs to receive tax credit (Cohen, 1985). Lenfant and Schweizzer (1985) are among those who have called for improved interdisciplinary efforts to prevent disease.

In 1981, the APA established a Task Force on Promotion, Prevention, and Intervention Alternatives which had a dual mission (Price et al., 1988). Part of its mission was to identify well-documented program models that exemplified the promotion of health, the prevention of psychopathology, and the use of intervention alternatives that minimize dysfunction and maximize growth. Of equal importance was its charge to publish a book describing these innovative models in "practitioner-oriented ways" (p.2).

The book published by the Task Force was entitled <u>14 Ozs. of Prevention</u> and described fourteen model primary

prevention programs across the nation. These programs served a variety of target populations covering periods throughout the human life span. Seven programs dealt with the prenatal through early childhood period and focused upon such problems as premature childbirth, child abuse, neglect, behavioral problems, cognitive delay, mother-child interaction, and interpersonal problem-solving (Johnson, 1988; Olds, 1988; Pierson, 1988; Ramey, Bryant, Campbell, Sparling, & Wasiks, 1988; Rotheram-Borus, 1988; Schweinhart & Weikart, 1988; Shure & Spivak, 1988). Three programs served adolescent populations and focused upon such issues as substance abuse, school attendance, and juvenile delinquency (Botvin & Tortu, 1988; Davidson & Redner, 1988; Felner & Adan, 1988). The final four programs targeted adults and focused upon mother-infant attachment, marital conflict, impact of cardiovascular disease, and adjustment to widowhood (Bloom & Hodges, 1988; Maccoby & Altman, 1988; Silverman, 1988; Tadmor, 1988). Intervention strategies used to address these problems included parent education and support, home visitation, assertiveness training, drug education, environmental modification, youth advocacy, anticipatory guidance, self-help support groups, and community education.

The National Institute of Mental Health (NIMH) established the Center for Prevention Research in 1982 (Steinberg & Silverman, 1987). The Center's responsibilities were diverse: to coordinate research and research training, to promote innovative ideas and programs, to develop new

funding mechanisms, and to sponsor meetings, workshops and conferences on topics of importance to the prevention field. Since 1987, the reorganized Prevention Research Branch within the recently developed Division of Clinical Research in NIMH has continued with these aims (Steinberg & Silverman, 1987).

The Office of Substance Abuse Prevention (OSAP) is an agency within the U.S. Department of Health and Human Services which was created by Congress in 1986 (Johnson, 1990). OSAP attempts to cooperate with other public and private agencies and organizations to form a collaborative and comprehensive approach to substance abuse problems. In this effort, OSAP has sponsored demonstration projects (Goplerund, 1990), provided technical assistance to communities and organizations attempting to implement prevention programs, and disseminated information through media campaigns and its national clearinghouse of publications (Goplerud,1990; Rey, Faegre & Lowery, 1990; Shaffer, Phillips & Enzer, 1989).

Clinical Psychology and Primary Prevention: An Historic Overview of Training and Practice

During the past fifty years, clinical psychology has significantly expanded its domain of expertise and established a respected professional identity. However, several important trends need to be noted when we consider the development of clinical psychology as a profession, when we examine conferences on professional training and practice,

and when we review empirical studies regarding the actual practice and activities of clinical psychologists. First, neither clinical psychology training nor the practice of clinical psychologists emphasizes notions of prevention despite both the logic and evidence supporting the effectiveness of prevention (Crowe et al., 1985). Secondly, the treatment-oriented medical framework emphasizing the psychotherapeutic role has increased in importance over the years and still predominates (Loutit, 1939 cited in Garfield, 1983; Kelly & Goldberg, 1959; Garfield & Kurtz, 1976; Kelly, Goldberg, Fiske, & Kilkowske, 1978; Crowe et al., 1985). Finally, there is a tendency of the profession to respond to employment demands rather than to societal mental health needs (Iscoe, 1981; Garfield, 1983).

Prior to World War II, the training of clinical psychologists was quite similar to that of academic experimental psychologists except for courses in abnormal psychology and tests and measurements. Professional contact with clients was primarily received after leaving the university setting (Garfield, 1983). Although there were some psychologists functioning in schools, hospitals, and clinics their rewards were limited and their primary responsibility was still psychological examinations.

Most investigators note that it was World War II and its shortage of manpower that sparked a restructuring of training and a broadening of the scope of clinical psychology rather than any major force within the field of clinical psychology.

The large number rejected from service in the military for psychological reasons led the nation to recognize the severity of the mental health problems that existed. During this time, many psychologists were employed at induction and reception centers for the purpose of selecting and classifying military personnel. Few were involved in intensive clinical work.

With the progression of the war, there was a sharp increase in psychiatric casualties and a corresponding need for additional personnel. At this point, the role of clinical psychologists was greatly expanded. Hult and Milton (cited in Garfield, 1983, p.3) noted that starting in the fall of 1944 some 200 clinical psychologists were commissioned from the ranks for duty in military hospitals and rehabilitation centers. This shift gave related professional groups the opportunity to acquaint themselves with additional services which could be provided by clinical psychologists. Garfield indicates that these services included taking appropriate case histories, contributing to evaluation and diagnosis, helping to plan research studies and effectively handling a variety of patients in individual and group psychotherapy. This point marked the first differentiation from strictly psychological examiners to a wider range of roles.

In addition, Garfield (1983) notes that due to the large number of veterans discharged with psychiatric disabilities, the Veterans Administration (V.A.) expanded its services and

emerged as the largest employer of clinical psychologists. Since there were relatively few formally trained clinicians, the V.A. also became the predominant force in the training of clinical psychologists. In conjunction with the leading universities in the country, the V.A. developed a large training program which required students to spend half of each of their four years at V.A. hospitals and clinics and the other half at universities taking classes. As part of this joint effort, university faculty served as consultants to the hospitals and clinics which were used for training and students often took positions at the V.A. once training was completed.

The following 1946 quote from Hawley, a former chief medical director of the V.A., (cited in Garfield, 1983) shows an attempt by the V.A. to define the therapeutic role of psychologists within its organization:

> "The clinical psychologist will also have psychotherapeutic duties, but in carrying these out, we believe he must always operate within the medical framework. This arrangement will protect him, in legal questions concerning the practice of medicine, and also make certain that the multiform interrelationships between physical and mental diseases are under careful surveillance and control. Moreover, we believe that such therapeutic responsibilities should be delegated by psychiatrists only to clinical psychologists who are adequately trained in this field, and then only in the types of cases

> for which they are qualified, particularly in such fields as readjustment of habits; personality problems within the normal range; educational disabilities such as reading defects, speech impairments, or similar difficulties requiring re-education; or relatively psychoneurotic conditions without important somatic components." (p. 11)

Since this time, there have been numerous changes and now the V.A. provides primarily internship training.

Garfield (1983) notes that the U.S. Public Health Service also contributed to the expansion of clinical psychology at this time. They provided stipends for graduate students for graduate training and also supplied grants to universities to expand clinical training programs. Certain committees of the APA worked with these federal agencies to provide coordination and certifying functions. In 1947, an APA Committee on the Training of Clinical Psychologists (cited in Garfield, 1983) recommended numerous changes in curriculum, mandated a supervised internship for clinical psychologists in training, and stressed the continuity of clinical psychology with the general field of psychology. This committee stated that "participants should receive training in three functions: diagnosis, research, and therapy, with the special contribution of the psychologist as a research worker emphasized throughout" (p. 11).

Specialized programs developed leading to a Ph.D. in clinical psychology and emphasizing professional clinical experience to be received through practicum work and a full year internship. By 1947, the federal government officially recognized clinical psychology as a distinct professional discipline within the mental health field along with psychiatry, social work, and nursing. Higher academic and personal standards were also established for prospective clinical psychologists and in 1947 the APA developed accrediting procedures for clinical programs (Garfield, 1983).

Professional conferences have been held in an effort to set self-defined priorities in training and practice (Garfield, 1983; Iscoe, 1981). The Boulder Conference in 1949 was the first national conference on graduate education in clinical psychology. The three major areas of diagnosis, therapy and research were again determined to be the major functions of the clinical psychologist. There was no discussion of prevention; the emphasis was on treating mental illness.

The Stanford Conference in 1955 entitled "Psychology and Mental Health" acknowledged the growth of the mental health movement in the early 1950's and the need to follow up on training developments. Preventive intervention was discussed but no action was taken since the demands for mental health treatment services was still so high (Iscoe, 1981).

In 1955, the U.S. Congress established a Joint

Commission on Mental Illness and Health. The Commission's aim was to study the "available resources and current practices in the field of mental health and to come up with recommendations pertinent to the entire problem of mental health" (Garfield, P. 422). The APA was one of the participating organizations involved in this effort. Five years later a document entitled, "Action for Mental Health" summarized the Commission"s conclusions.

The report highlighted a need for public education, promotion of mental health and efforts geared toward prevention. The development of new programs was also recommended if mental health needs were to be met more equally. Psychoanalysis, which was very popular at this time, received scrutiny regarding its apparent limited applicability and availability. Albee (1959) also described anticipated mental health manpower shortages and called for a switch from the one-to-one emphasis.

In 1958, a conference on "Graduate Education in Psychology" was held in Miami. There was less emphasis on clinical psychology. There was some acknowledgement of the need for alterations in clinical psychology training, but as Iscoe noted, "the demand for psychologists of all types was very strong and this demand tended to mitigate against any radical changes in training" (p.. 120).

The U.S. Congress authorized the Community Mental Health Centers Act in 1963 which provided two-thirds of the funds necessary for the construction of facilities to serve as

mental health centers (Korchin, 1976). The community mental health movement developed in response to demonstrated inequities in the delivery of mental health services. The major aim was to place mental health facilities within communities in order to allow for more careful assessment of community needs and to increase access to prevention and treatment services.

In 1965, a national conference on "The Education of Psychologists for Community Mental Health" focused on the lack of training in community mental health for psychologists. This conference stressed the need for both research, prevention, and treatment of individuals within the context of the community.

New roles for psychologists were proposed such as that of change agent, social system analyst, community consultant, and social activist (Korchin, 1976). The participants, traditionally-trained psychologists who worked in community mental health programs, articulated the need for a new field related to, yet separate from, clinical psychology (Kessler & Albee, 1975). This new field, "community psychology", would primarily be concerned with furthering mental health and would collaborate with other disciplines such as law, sociology, and city planning (Golann & Baker, 1975). A Division of Community Psychology was added to the APA following this conference.

Community psychology represents a clear shift away from a medical and psychodynamic model. Here the emphasis is

placed on the environment in which one lives and on modification of as well as intervention in the social systems in which one operates.

The Chicago Conference in 1965 focused on professional preparation of clinical psychologists (Hoch, Ross, & Winder, 1966). Prior to this conference, a statement was prepared to provide conference participants with a summary of eight major issues being debated in the profession (Cook, Bibace, Garfield, Kelly, & Wexler, 1966). Two of the issues presented are relevant to the focus of this research. The first concerned whether clinical psychology training should continue with a treatment orientation or instead emphasize theories and strategies necessary for prevention. The second pertinent issue concerned whether "decisions about the nature of training (should) be responsive to current social needs, or (instead) be based on judgements as to how to best meet the social needs of the future" (p.32). It was concluded that the "implications of one's position on such issues ... is best communicated in a discussion of alternate plans for training" (p. 34).

Hoch et al. (1966) indicate that during the conference concerns about the efficacy of the scientist-practitioner model were expressed and that some participants acknowledged the need for increased "social commitment" on the part of psychologists as well as the need for more "innovative training". Participants cited new challenges for dealing with social problems such as increased college unrest, crime,

school failure, and a growing institutionalized population. Murphy and Frank (1979) indicate that advocates for prevention attempted to heighten awareness of the need to prevent psychological problems.

Three alternate models of training were proposed. Dismissed with little debate were two models advocating the omission of the traditional research component and substituting a professional degree (Psy.D.) for the Ph.D. The third model was called the professional psychologist model and included an emphasis on prevention as well as treatment. It received close scrutiny and extensive discussion. Despite discussion of these proposals, the Boulder model was re-approved almost unanimously (Iscoe, 1981; Garfield, 1983). Garfield suggests that "few were willing to give up the traditional model or the prestige of the Ph.D. for uncertain or untried alternatives" (p. 15) despite dissatisfaction with existing training.

The Vail Conference in 1973 was held to respond to clinicians' dissatisfaction with doctoral education and primarily focused upon patterns of training (Iscoe, 1981). Korman (1976) indicates that some criticism was directed towards what was perceived as a limited sensitivity to social issues and an unexamined commitment to the traditional scientist-practitioner model. A segment of participants cited the need for a heightened desire to develop programs that enhance competencies and prevent dysfunctions. To best

meet this need, trainees would require knowledge of how to develop competencies in other workers in mental health related programs (Korman, 1976). Additional prevention-related issues were also reviewed (Murphy & Frank, 1979).

This conference, like the Chicago Conference, sought to maintain the scientist-practitioner model while widening its scope. Murphy and Frank (1979) summarized the position of participants at the conference:

> "The infiltration of one's clinical services into new settings, transfer of technology as in paraprofessional training, knowledge of social systems and how they should be changed must be integrated with the undiminished need for diagnostic and therapeutic expertise and a sound academic base of knowledge about human beings and the rigor to verify one's perceptions." (p. 180)

A review of professional conferences in psychology indicates that clinical psychologists have for some time expressed interest in prevention and have questioned the ability of existing doctoral programs to address mental health needs and prevention effectively. An examination of empirical studies investigating the roles and functions of clinical psychologists illustrates that clinical psychologists' interest in prevention has not been translated into practice.

The Professional Activities of Clinical Psychologists

In 1939, Loutit surveyed 111 psychologists working in child-guidance clinics. At this time, psychotherapy was

ranked 6th among activities engaged in by this group. It is important to note that psychotherapy was mentioned by only one-third of this group compared to over 86% who mentioned involvement in psychological testing (Garfield, 1983).

A section of Kelly's 1960 survey of members of the APA's Division 12 asked respondents to indicate the role or function to which they devote the highest portion of their time, Psychotherapy ranked first for 31% followed by diagnosis and clinical assessment for 17%, experimental research for 10%, counseling for 5% and supervision for 5% (cited in Garfield, 1983, p. 23).

In 1973, Kelly, Goldberg, Fiske, & Kilkowski (1978) surveyed clinical psychology trainees who had been previously assessed by the V.A. Selection Research Project before entering graduate training in 1947 and 1948. The results of this survey were compared to a 10 year follow-up study of this same group (Kelly & Goldberg, 1959). Both the 1957 and 1973 follow-up surveys asked respondents to indicate their primary role as therapist, teacher, researcher, diagnostician, or administrator-supervisor. Results showed that 50% of these professionals changed their area of specialization over 15 years. Fewer considered themselves primarily researchers and diagnosticians while more considered themselves teachers. There was a slight shift towards the role of psychotherapist and the number of

administrators remained constant:

	1957	1973
Therapist	30%	34%
Teacher	10%	19%
Researcher	16%	12%
Diagnostician	16%	06%
Admin.-Supervisor	26%	26%

Garfield & Kurtz (1976) assessed the activities and views of one-third of the membership of Division 12 listed in the 1973 APA directory. This survey requested information on both respondents' "professional self-view" and the percent of their time spent on designated professional activities. Most of those surveyed (59%) viewed themselves primarily as clinical practitioners, followed by academicians (20%). Few saw themselves as researchers, consultants, supervisors or administrators. With regard to professional activities, provision of direct clinical services (e.g., individual psychotherapy, group psychotherapy, & behavior modification) was the activity engaged in most frequently (49%). Teaching and administration each accounted for 13% of their total professional time. These were followed by diagnostics and assessment (10%) and research (7%). Community consultation accounted for only 5% of the respondents' professional time.

In 1981, Crowe, Grogan Jacobs, Lindsay, and Mark (1985) surveyed clinical psychologists in Pennsylvania in an effort to develop a profile of professional practice of clinical psychologists. Respondents were asked to indicate their

"primary function as a clinical psychologist". Most (64%) identified their primary function as that of therapist. This was followed by primary function as administrators (10%), teachers (3%), or performers of some other function (7%). Survey participants were also asked to indicate the time spent on a large list of professional tasks. Most respondents indicated that they spent the most time on responsibilities requiring direct client services. Within that category, more time was spent on treatment than on assessment. The lowest ratings for time spent were given to tasks that involve research, administration, training and supervision, and the promotion of either the profession or of mental health.

These survey studies regarding the professional practice of clinical psychologists indicate that most are still primarily providing treatment interventions although they are working in a broader range of settings (Garfield & Kurtz, 1976; Crowe, Grogan, Jacobs, Lindsay, & Mark, 1985).

Similarly, despite initial enthusiasm for community mental health centers and high expectations regarding the mandate for mental health, the actual implementation fell short of stated goals. The Community Mental Health Centers Act had predicted the existence of 2,000 community mental health centers by 1975. In 1974, however, only 540 centers funded by the Community Mental Health Center Act actually existed (Korchin, 1976). Numerous factors limited the growth of the community mental health movement and contributed to the disenchantment. Bellak (1974) refers to problems with

the prevailing definition of community mental health itself. He cites too much emphasis having been placed on the delivery aspect and too little directed towards the development of the services themselves. One consequence of inadequate program planning has been the revolving-door phenomenon involving individuals released from psychiatric hospitals In addition, communities were not adequately prepared to accept patients. Proposals to develop programs frequently met with significant community protests. Reductions in federal funding that came with administration changes also significantly impeded growth (Korchin, 1976).

Smith & Hobbs (1966) published a position paper in The American Psychologist entitled "The Community and the Community Mental Health Center". This paper recommended that 50% of every community mental health center's budget be allocated to work with children and families and also that education and consultation be regarded as vital functions in community settings. Outpatient, day care, emergency, inpatient, and consultation and education were the five services highly stressed.

Bloom (1977) examined studies that explored the degree to which training and practices were in synchrony with their stated ideologies. He noted a discrepancy between "rhetoric and reality" at community mental health centers. He observed that staff members, including psychologists, continued to spend most of their time in activities primarily related to clinical practice. In addition, their preferences in the development of additional skills were concentrated in clinical areas.

Of the five services recommended by Smith and Hobbs, Iscoe (1981) reported that day care, consultation, and education have never been given equal status to the others and that intervention with children and families as of 1981 was still not emphasized in community mental health centers. Garfield (1983) also noted that, upon examining community mental health centers, one finds personnel trained in traditional programs and traditional functions with the term "community" referring primarily to the name or setting of the center.

Sarason, Levine, Goldenberg, Cherlin & Bennett (1966) provide an interesting rationale for why the treatment-oriented medical model is still the predominant model in clinical psychology. They note the ramifications of psychology's association and identification with psychiatry. They refer to the debate at the Boulder Conference concerning whether the clinical internship setting must be a psychiatric one. Opponents of this idea felt that it would create an implicit assumption that the clinical-psychiatric model was superior to any other model that could be adopted by a newly developing mental health profession. Most participants, however, felt that the psychiatric setting was indeed the best for training purposes and, in addition, recognized that psychiatric settings had the funds to pay students.

Sarason et al.(1966) note that those two factors decreased the likelihood that clinical psychology training programs would develop their own facilities which would allow

exploration of new problems and practices. The authors suggest that clinical psychology's post-World War II tie with the Veterans' Administration and psychiatry caused the clinical psychology trainee's view of mental health and psychopathology to be bounded by the framework of the setting in which he trained and worked. Trainees became involved primarily with psychotherapy which was the major technique used in those settings.

Although Sarason et al. felt that this involvement was not intrinsically bad, they point out that the profession should have felt concern about "the narrowness of perspective toward the overall mental health problem in our society which was unwittingly imposed on the developing field of clinical psychology" (p. 11). These authors assert that an even more subtle consequence of this exclusive alliance between clinical psychology and the psychiatric setting is the passive way of thinking which is implicitly learned when the clinician deals only with the individuals and problems encountered in his clinical setting. The authors see this mental passivity as stemming from the application of professional skills solely to what is confronted in the clinic and the tendency not to consider possible applications of expertise to other individuals and other settings. Given the difficulty of the clinical treatment process and the length of time required for effectiveness, the authors warn that psychologists can easily "lose sight of the possibility that the traditional clinical model may not be the only or

the best way of dealing with the problem area.

Sarason et al. further suggest that an alteration of the clinician's role in terms of initiative, activity, and the like should be considered in other settings since there could be error in the very theory which led to a particular kind of clinical functioning. These authors give their strongest warning when pointing out that "physical setting and unquestioning acceptance of professional tradition are among the most formidable obstacles to change and the attainment of a broad perspective toward one's work" (p. 14).

Advocates for Change

Advocacy for attention to primary prevention has been persistent, notwithstanding the continuing interest in, and recognition of the importance of, mental health treatment (Seidman, 1987). In 1959, the Ad Hoc Planning Group on the Role of the American Psychological Association in Mental Health issued the following statement:

> "The most recently recognized task of mental health is to bring about individual well-being by modifying communities and larger units of society." (APA, 1959, p.921 in Hansen, 1981).

Bower (1963) argued forcefully that fostering interest and involvement in prevention among mental health professionals was a pressing professional priority.

Sanford (1965) suggested that clinical psychologists need to recognize that times are changing and provided

recommendations for how psychoanalytic psychotherapists might realize their maximal contributions to mental illness prevention. More recently, others have shown natural continuities between treatment and prevention (Strayhorn, 1988; Rosken, 1980). As psychologists work in leadership roles within increasingly complex programs and work settings, they will need to develop change agent skills to manage and intervene in these systems (Egan, 1985). Murphy and Frank (1979) propose that the clinical psychologist should deal with his responsibilities with a keen recognition of "...the needs and vulnerabilities of his clients and the environment in which they live. His obligation is not only to remedy, but to prevent..." (p.180).

In his 1965 article, Sanford offered several observations regarding clinical psychology doctoral programs of the 1960's. First, there appeared to be a tendency to produce "narrowly educated specialists" who lack the ability to examine psychological problems "against a broad background of knowledge and experience" (p. 1396). Applicants to programs were accepted based on the expectation that they would prepare themselves for a specific preconceived social function in the most effectual manner possible. Programs applied pressure to specialize in the early stages of training and to take numerous required courses on techniques and methods. Little collaboration occurred with other social science disciplines. Finally, once trained, clinical psychologists who remained in academia tended to develop a

professional identity similar to that of the general psychologists, while those who left the academic setting more closely resembled private practitioners of psychoanalysis. In 1964, Golann, Wurm & Maagoon (1964) reported that four-fifths of the 52 APA-approved doctoral programs in counseling and clinical psychology participating in their survey did not offer a full course in community mental health.

Sanford (1965) proposed several recommendations for program planners in clinical psychology and concluded:

> "As we think about the future and of the new roles for the clinical psychologist that are emerging, the deficiencies of present training programs become apparent. To meet the needs and to take advantage of the opportunities the future will present, existing programs must be revised and totally new programs should be developed." (p. 1397).

Most of the observations above have remained fairly constant (Murphy & Frank, 1979).

Progress in this area has been problematic despite long-standing interest in primary prevention, federal initiatives aimed at providing needed prevention services, and specific charges for clinical psychology to broaden its scope to include prevention. Both social and professional factors seem to exert their influence upon the role of prevention in the field of clinical psychology. Several sources, including Broskowski & Baker (1974), Kessler & Albee (1975), Albee

(1978), Bloom (1981), and Iscoe (1981), have described these factors as barriers which interfere with improving the status of prevention in clinical psychology and in society at large. Most of these barriers were articulated by the Task Panel on Prevention under President Carter in 1977 (Albee, 1978). The barriers deserve close scrutiny as discussed below.

The first among the social barriers stems from the crisis-oriented nature of our society, which tends not to act until visible pain and suffering are evident. Because primary prevention is future-oriented, many see it as postponable or as having low priority. Primary prevention lacks a strong constituency and political clout because of its future orientation.

Another barrier is the threat that primary prevention in mental health poses to some persons and practices. By its very nature, primary prevention touches upon such sensitive issues as socio-environmental change and people's right to be left alone. For example, considerable outcry resulted from Mayor Koch's recent homeless program in New York City, which swept homeless people from the city streets despite the desires of some to continue as they were.

A third social barrier is erected by the existing structure for fiscal support of certain mental health activities. The current mechanisms for funding third-party reimbursements, treatment staff, and hospital beds are not in tune with primary prevention activities. In addition, fiscal allocations for primary prevention seldom exist or are

extremely small. Most communities cannot meet the treatment needs of those already ill and are hesitant to allocate resources to prevention. Finally, although critics cite a dearth of evidence to support programmatic action, very little support exists for the conduct of research in primary prevention.

Several professional barriers further illustrate the complexity of this area. One barrier concerns the traditional background of the mental health professions, which stresses the treatment of existing dysfunctions. People are attracted to mental health professions with that historic framework in mind, and that same framework molds their training and practice. Sanford (1965) and Kessler & Albee (1975) cite a pre-selection factor on the part of graduate training programs, which recruit and admit individuals with values which make them unlikely to become involved in social change efforts. Territoriality issues within the profession of psychology may also interfere with an increased emphasis being placed upon primary prevention, as has clinical psychology's historic association and identification with psychiatry (Sarason et al., 1966). Moreover, practice in the traditional mode affords status, economic gain, and the immediate gratification of helping others in distress.

What Needs to Be Done

The barriers delineated above will only be overcome when

primary prevention is accorded a status "of visibility and importance, backed by leadership with the mechanisms and resources needed to achieve true viability, rather than tokenism" (Albee, 1978, p. 223). Given the complexity of the barriers described, it appears that no one specialty on its own can bring about the visibility needed for effective prevention. Within the mental health professions, clinical psychology appears to be one logical candidate to focus upon primary prevention since it emphasizes theories of personality, development, and psychopathology and its professionals engage in a broad range of clinical experiences. Related disciplines like counseling psychology and social work are also grappling with the issue of integrating primary prevention into training and practice (Coyne, 1987; Hansen, 1981; Roskin, 1980). In addition, the goals of preventive psychology and clinical psychology are the same; both ultimately aim to increase optimal functioning and personal fulfillment (Bry, 1988).

The literature articulates the ever present need for the field of clinical psychology to continue its tradition of critically examining its status, functions, and spheres of activity. Since 1949 psychology has held numerous conferences in a diligent effort to set self-defined priorities in training and practice (Iscoe, 1981; Garfield, 1983). In 1985, participants of the Planning Conference on Issues of University-Based Graduate Education in Psychology prepared a document entitled "Issues and Concerns: Graduate

Education in Psychology". This document "identified issues that would form the basis of discussion prior to and during a national conference on graduate education in psychology" (Bickman, 1985, p.1). In the document, a conceptual model was articulated which further prompts professional self-scrutiny.

Bickman (1985) pointed out that changing societal issues are reflected in the roles psychologists take on. The model stressed that it is vital to examine the educational system needed to produce practitioners who can serve both society and the science of psychology itself., Throughout this model, two considerations are particularly relevant: the inevitability of change and the need for quality assurance. In addition, far-reaching philosophic issues apply at every level of the model. At the societal level, we can expect that ongoing change will identify new needs at the same time that we attempt to address current problems. At the professional role level, we must protect society from unethical practices while we encourage the development of new roles. At the delivery level of the educational system, we must prepare professionals for diverse roles and at the same time provide the common foundation needed to perform these roles efffectively. Bickman stresses that "we must create an academic climate in which diversity is encouraged while professional standards are acknowledged. The review of changing needs and changing practices would be the watchword at all levels" (p. 5).

Alpert (1985) asserted that psychologists lack knowledge about how to change the practice of their profession even though they have many skills and realize that there is a need for revision of their field's concepts and practices. Alpert further suggested that "there is a need for more discussion about what we want a field to become, discussion unlimited by judgements about the future world or its politics" (p. 1112).

A recent examination of changing practices has raised concern about the relationship between graduate education and the future of psychology. The APA Committee on Employment and Human Resources published a report entitled "The Changing Face of American Psychology" (Howard, Pion, Gottfredson, Flattau, Oskamp, Pfafflin, Bray, & Burstein, 1986). This report highlighted the decline in research productivity by new Ph.D.s, the documented change of the status of psychology graduates, and the reduction of minority representation in the science fields, which was seen as further isolating psychology from society. Bickman (1987) raised the further question of whether the existing system of education and training in psychology adequately prepared students for the "expanding non-academic work environment instead of current stable or shrinking job opportunities in the academic world" (p. 1041).

The rapidly changing and increasingly complex nature of higher education in psychology plus the issues raised in the APA Committee report prompted the National Conference on Graduate Education in Psychology which was held in 1987

(Bickman, 1987). The main purpose of this conference was to review the state of graduate education and to consider recommendations for changes in this area. The conference steering committee selected nine professional issues to be addressed at the conference. These issues revolved around centripetal and centrifugal forces in the field, the structure and content of each level of psychology education, the appropriateness of core and individualized curricula, training setting and organizational issues, program quality control, the responsibility of graduate departments for the marketability of their graduates, student recruitment and retention, the importance of cultural diversity, and the socialization of psychology graduate students (Bickman, 1987).

Ten resolutions were approved at this conference with sixty-seven specific recommendations (APA, 1987). It was acknowledged that the field of psychology is changing and that "students must be educated for change as well as for current knowledge; such education takes place both through curriculum and through faculty as models" (p.1070).

Today's professional clinical psychologists are the role models and teachers for clinical psychologists to follow. As such, they have a responsibility to examine their own attitudes and to establish an agenda for the future. A focus on doctoral training is appropriate since this is the period of time when the socialization process of instilling the values, attitudes, and behaviors which will shape students'

future roles and effectiveness as psychologists is launched and embedded (Bickman, 1985; APA, 1987). Role theory suggests that, in novel situations like graduate school, students rely on the external assessment of others (e.g., faculty) to develop internalized role-related values. Furthermore, these values serve as reference guides for their behavior (Shaw & Costanzo, 1982 in Descatner & Thelen, 1989).

An examination by clinical psychologists of changing societal needs, the area of primary prevention, and their profession's relationship to these issues is in harmony with the goal of the recent National Conference on Graduate Education in Psychology: to discuss issues and consider changes in graduate education.

There is, therefore, a significant body of literature indicating the importance of primary prevention to society as a whole, to the mental health field in general, and to the practice of effective clinical psychology. This literature also points out the existing discrepancy between actual practice and the need for prevention research and program development. Finally, the literature highlights the need for clinical psychologists to monitor, evaluate, and enhance the practice of their chosen profession.

CHAPTER THREE

METHODS

This chapter describes the selection of subjects and provides a demographic description of the sample population. Information is also presented describing the instrumentation, the data collection approach, and the data analysis techniques utilized.

Selection of Subjects

It is commonly accepted that clinical psychologists' current attitudes have been shaped by both formal and socialization effects of graduate training. Therefore, for this study the researcher selected the subject pool from a selection of graduate training programs in clinical psychology. Theoretical orientation and geographic locale were the specific criteria used for the selection of the training programs. In addition, one program provided the opportunity to look at both Ph.D. and Psy.D. programs.

The sampling frame for this study was a group of clinical psychology doctoral programs located in the Northeast region of the United States. Represented were four Ph.D. programs and one Psy.D. program. Of the Ph.D. programs, program A and Program C were in suburban settings and represented psychodynamic and behavioral orientations

respectively. The other two Ph.D. programs, Program B and Program D were in urban settings and represented psychodynamic and behavioral orientations respectively. The Psy.D. program (Program E) was in an urban setting and offered students an option of three tracks: behavioral, community/systems, and psychodynamic. The target population consisted of a group of clinical psychologists who were graduates of these five programs.

Description of Subjects

The 248 responding clinical psychologists included 47 from Program A, 64 from Program B, 42 from Program C, 23 from Program D, and 72 from Program E. The majority of the participants were White (85%), female (57%), and 40 years of age or younger (54%) (see Appendix D). Nine percent (9%) of the sample was Black, 5% Hispanic and 1% Asian (see Appendix D).

The total group consisted of 176 Ph.D. graduates and 72 Psy.D. graduates. Forty-five percent (45%) graduated from programs with a psychodynamic orientation, 26% described their programs as being behavioral in orientation, and those from Program E (29%) noted that their program offered students a choice of training orientation. The total group contained 40% who described their personal theoretical orientation as being psychodynamic; 30% described theirs as eclectic/integrative, 23% as behavioral, 6% as family systems, and less than 2% as either social/community or

phenomenological/humanistic (see Appendix D).

Most of the sample (80%) reported having 13 years or less of post-doctoral experience. Eighteen percent (18%) have received training at the post-doctoral level (Appendix D). When asked to identify their primary professional role, the majority (63%) described themselves as therapists (see Table 1). The next largest group (10%) was comprised of those who described themselves as being equally therapist, academician, and consultant or supervisor.

Respondents reported devoting varying amounts of time to specific professional activities (see Table 2). For psychotherapy, fifty-three percent (53%) of the sample reported spending more than twenty hours a week; 37% reported spending four to twenty hours a week; and 10% reported spending less than 4 hour a week. For administration, eight percent (8%) of the sample reported spending more than twenty hours a week, 19% reported spending four to twenty hours a week; and 73% reported spending less than 4 hours a week. For diagnosis and assessment, four percent (4%) of the sample reported spending more than twenty hours a week; 35% reported spending four to twenty hours a week; and 61% reported spending less than 4 hours a week. For teaching, four percent (4%) of the sample reported spending more than twenty hours a week; 16% reported spending four to twenty hours a week; and 79% reported spending less than four hours a week.

TABLE 1

FREQUENCY DISTRIBUTION OF SAMPLES PRIMARY PROFESSIONAL ROLE

PRIMARY ROLE	FREQUENCY	%
THERAPIST	156	62.92
THERAPIST, ACADEMICIAN, & SUPERVISOR OR CONSULTANT	24	9.68
ADMINISTRATOR	16	6.45
ACADEMICIAN	15	6.05
THERAPIST, ADMINISTRATOR, & SUPERVISOR	15	6.05
RESEARCHER	7	2.82
SUPERVISOR	6	2.42
CONSULTANT	6	2.42
RESEARCHER, ACADEMICIAN, ADMINISTRATOR	3	1.21
TOTAL	248	100

TABLE 2

FREQUENCY DISTRIBUTION OF AMOUNT OF TIME DEVOTED TO VARIED PROFESSIONAL ACTIVITIES

ACTIVITY		> 20 HRS/WEEK	4-20 HRS/WEEK	< 4 HRS/WEEK OR NOT AT ALL
PSYCHOTHERAPY	FREQ	131	91	26
	%	58.82	36.69	10.48
ADMINISTRATION	FREQ	20	47	181
	%	8.06	18.95	72.98
RESEARCH	FREQ	13	28	207
	%	5.24	11.29	83.47
TEACHING	FREQ	11	40	197
	%	4.44	16.113	79.44
DIAGNOSIS AND ASSESSMENT	FREQ	9	88	151
	%	3.63	35.48	60.89
SCHOLARLY WRITING	FREQ	9	35	204
	%	3.63	14.11	82.26
COMMUNITY CONSULTATION	FREQ	6	28	214
	%	2.42	11.29	86.29
BEHAVIOR MODIFICATION	FREQ	5	27	26
	%	2.02	10.89	87.09
CLINICAL SUPERVISION	FREQ	4	71	173
	%	1.61	28.63	69.76

For clinical supervision, two percent (2%) of the sample reported spending more than 20 hours a week, 28% reported spending four to twenty hours a week; and 70% reported spending less than four hours a week. More than 80% of the sample reported spending less than four hours a week on the following professional activities: behavior modification (87%), community consultation (86%), research (84%), and scholarly writing (82%) (see Table 2 for the complete breakdown on these activities).

Respondents indicated that their extent of experience in various settings ranged from extensive to none at all (see Table 3). Forty-one percent (41%) reported having had extensive experience in hospital settings, 30% of the sample reported extensive experience in community mental health centers, and 19% reported extensive experience in college and/or university settings. Fifteen to twenty-five percent (15%-25%) described having had a moderate degree of experience in the following professional settings: community mental health centers (23%), hospitals (21%), college and/or universities (20%), elementary/middle/high schools (15%). Minimal or no experience at all was cited by 91% of the sample in corporate settings, by 80% of the sample in elementary/middle/high school settings, by 61% of the sample in college and/or university work settings, by 47%of the sample in community mental health centers, and by 38% of the sample in hospital settings.

TABLE 3

FREQUENCY DISTRIBUTION OF EXTENT OF SAMPLES PROFESSIONAL WORK EXPERIENCE IN DESIGNATED SETTINGS

WORK SETTING		EXTENSIVE	MODERATE	NOT AT ALL/MINIMAL
HOSPITAL	FREQ	101	53	94
	%	40.73	21.37	37.9
COMMUNITY MENTAL HEALTH CENTER	FREQ	75	56	117
	%	30.24	22.58	47.18
COLLEGE/UNIVERSITY	FREQ	48	49	151
	%	19.35	19.76	60.89
ELEM/MIDDLE/HIGH SCHOOL	FREQ	13	36	199
	%	5.24	14.52	80.24
CORPORATE SETTING	FREQ	10	11	227
	%	4.03	4.44	91.53
OTHER: CORRECTIONAL INSTITUTION GOVERNMENTAL AGENCY	FREQ	3	21	224
	%	1.21	8.47	90.32

Instrumentation

A correlational survey research design was used to gather data for the profile of clinical psychologists' attitudes and to test hypotheses regarding four of the demographic/descriptive variables and the Overall Attitude Scores. The hypotheses posited were as follows:

I. Due to the societal and ideological influence of the civil rights movement, minority respondents are likely to have heightened sensitivity to social issues and thus likely to have more positive attitudes toward prevention than will non-minority respondents as measured by the OAS.

II. Due to the societal and ideological influence of the feminist movement, female respondents are likely to be more sensitive to social issues and thus likely to have more positive attitudes toward prevention then will male respondents as measured by the Overall Attitude Scale (OAS).

III. Since primary prevention is more concerned with total populations and systems intervention, respondents working in private practice will have a less positive attitude toward prevention than will respondents not in private practice as measured by the OAS.

IV. Programs may differ in terms of the extent to which primary prevention was included in course content and practicum experience. It is expected that the increased awareness gained by respondents exposed to primary prevention during doctoral training will result in their having a more positive attitude toward prevention than will respondents

lacking such exposure as measured by the OAS.

A two-part questionnaire composed of an attitudinal survey and a demographic/descriptive information section was developed to measure the respondents' attitudes toward primary prevention and to investigate sociological variables. The attitudinal survey consisted of 42 items most of which were rated on a Likert scale; the remainder were answered by multiple choice or fill in the blanks. The bulk of the survey, 23 items, provided a detailed picture of the viewpoints held by clinical psychologists toward primary prevention. Four items asked respondents to provide details regarding their exposure to prevention. Two items requested descriptions of any primary prevention research engaged in by their professors during their training and of their own work experience in prevention. Two items asked them to name any courses offering an emphasis upon prevention taken during their training and to list any journals subscribed to that emphasized prevention.

The remaining fifteen items of the survey combined to form an Overall Attitude Scale which had a reliability coefficient of .82. These fifteen items were split to form three subscales focusing on separate attitudinal areas: societal and professional importance of prevention (IMPORTANCE) which had an Alpha value of .55; respondents' personal interest and involvement in prevention (INVOLVEMENT) which had an Alpha value of .64, and, finally, prevention's role in the doctoral training of future clinical

psychologists (FUTURE) which yielded an Alpha value of .78.

The demographic/descriptive information section investigated sociological variables frequently noted in the literature.

Data Collection

During the months of October and November 1989 contact was made with the five clinical psychology doctoral programs which met the selection criteria. The program directors were contacted in order to obtain permission to conduct the survey and obtain access to their graduate mailing lists. Initial mail contacts were followed up with telephone conversations to further explain the focus of the survey and respond to any questions or concerns expressed by the directors.

All programs agreed to cooperate. Programs A, B, and C sent the researcher a copy of their graduate mailing lists. Program E chose to keep their mailing list confidential and requested that prepared stamped questionnaire packets be sent to their department for them to distribute to their graduates by mail. Program D stated that they did not maintain an updated mailing list of their graduates. Therefore, the names of 111 Ph.D. graduates from Program D clinical psychology program were obtained by the researcher's scrutiny of all members of Division 12 (Clinical Psychology) listed in the 1989 Directory of the American Psychological Association (APA, 1989).

During the February and March 1989 period, packets

containing a cover letter from the researcher, a primary prevention reference guide, the survey instrument, and a stamped self-addressed return envelope were mailed to all potential subjects. Each questionnaire was coded in case a second request was necessary. Data collection was completed by May 1990 (see Table 4).

A total of 261 questionnaires were received for a return rate of approximately 35%, with the individual programs' response rates varying from 26% to 43%. Five percent (5%) of the returned questionnaires were eliminated from data analysis: 2% due to their arrival well after the collection cut-off date and 3% by virtue of their having too many missing values as defined by them being more than 3 standard deviations beyond the mean for missing values. The discard of this 5% yielded a net usable return of 248 questionnaires or approximately 33% of the target sample. The net usable return rates from the individual programs ranged from 21% to 40%.

Data Analysis Procedures

Data was processed for computer analysis using the Statistical Package for the Social Sciences (Klecka, Nie, & Hull, 1975; Nie, Hull, Jenkins, Steinbrenner & Bent, 1975; Hull & Nie, 1981) to investigate (a) the existence of possible relationships between characteristics of the respondents' doctoral training programs and their attitudes toward primary prevention and (b) the existence of possible

TABLE 4

DATA COLLECTION SUMMARY

	PROGRAM A		PROGRAM B		PROGRAM C		PROGRAM D		PROGRAM E		TOTAL	
	#	%	#	%	#	%	#	%	#	%	#	%
MAILED	175		182		157		111		182		807	
RETURNED-WRNG.ADD.	29	16.57	20	10.99	6	3.82	3	2.7	3	1.65	61	7.56
ASSUMED RECEIVED	146		162		151		108		179		746	
RETURNED	48	32.88	65	40.12	44	29.14	28	25.93	76	42.46	261	34.99
LATE	1						3		2		6	2.3
INCOMPLETE			1		2		2		2		7	2.68
USABLE RETURN	47	32.19	64	39.51	42	27.81	23	21.3	72	40.22	248	33.24

relationships between specific demographic variables and respondents' attitudes toward primary prevention.

Frequency distributions were developed for descriptive information. Crosstabulations, Pearson product-moment correlations, t-tests, and stepwise multiple regression analyses were used for statistical information. Reliability coefficients were computed for the Overall Attitude Scale and the three subscales using the SPSS covariance matrix - method 1.

Pearson product-moment correlations were used to determine whether a systematic association exists between selected descriptive variables and Overall Attitude towards prevention. T-tests were conducted to compare the Overall Attitude and Subscale means for selected variables to determine the presence or absence of a significant difference between groups. Statistical significance was set at the .05 level with those not meeting this test of significance being judged to be statistically independent due to the absence of a systematic relationship.

Discriminant function analyses were used to examine the overall impact of those variables with significant t-tests upon the clinical psychologists' involvement in prevention work. Stepwise multiple regression analyses were used to examine the overall impact of those variables with significant t-tests upon the clinical psychologists' attitudes toward prevention. Within stepwise regression, variables were examined at each step for entry or removal in

accordance with SPSS subprogram NEW REGRESSION. This process was continued until no variables left out of the equation were eligible for entry. This stepwise multiple regression process made it possible to control for confounding factors and better evaluate the contributions that each significant variable made to the variations in the clinical psychologists' prevention attitudes.

CHAPTER FOUR

RESULTS

The attitudinal profile will be summarized in three parts. First, a descriptive profile of specific viewpoints articulated by the respondents will be provided. Second, a profile of results as they pertain to the Overall Attitude

Descriptive Profile Analysis

The vast majority of the sample (96%) perceived our society's prevention efforts to be non-existent or minimal. Almost all subjects (94%) felt that primary prevention goals were fine in principle whereas only 6% perceived the goals to be unrealistic. Of those with the positive views, 48% expressed doubts about implementation strategies.

The perception of whether primary prevention belonged within the professional domain of clinical psychology was determined for two points in time: at the respondents' entrance into doctoral training and at the respondents' current professional stage (see Table 5). Most of the respondents felt that primary prevention belonged within clinical psychology's domain at both points in time. The percentage who felt that primary prevention belonged within clinical psychology's domain increased over time while the

TABLE 5

FREQUENCY DISTRIBUTION OF SAMPLES' PERCEPTION OF THE RELATIONSHIP BETWEEN PRIMARY PREVENTION AND CLINICAL PSYCHOLOGY

DIRECTION OF CHANGE OVER TIME

ENTERED TRAINING ⟶ CURRENTLY	FREQUENCY	PERCENT
REMAINED THE SAME: SOMEWHAT & DEFINITELY WITHIN DOMAIN	135	54.44
SOMEWHAT WITHIN DOMAIN---> DEFINITELY WITHIN	52	20.97
OUTSIDE DOMAIN--->WITHIN DOMAIN	40	16.13
REMAINED THE SAME:SOMEWHAT & DEFINITELY OUTSIDE DOMAIN	12	4.83
WITHIN DOMAIN--->OUTSIDE DOMAIN	10	4.03

DESCRIPTION OF CHANGE OVER TIME

	PERCENT OUTSIDE DOMAIN	PERCENT WITHIN DOMAIN
UPON ENTERING DOCTORAL TRAINING	20.08	79.92
CURRENTLY	8.47	91.53

percentage who felt that primary prevention belonged outside of clinical psychology's domain decreased over time.

The majority of the sample (92%) perceived their colleagues' professional work experience in prevention as being minimal or nonexistent with only 8% depicting their colleagues' work experience as being moderate or extensive. The respondents' perceptions about the amount of time clinical psychologists as a group devote to prevention activities relative to therapeutic activities were determined for two points in time: at their entrance into doctoral training and at their present stage (see Table 6). Most of the sample felt that the amount of time clinical psychologists devote to prevention relative to therapeutic activities was deficient at both points in time. The percentage who viewed time devoted to prevention as deficient increased over time while the percentage who viewed the time clinical psychologists devoted as sufficient decreased over time.

The subjects' own professional work experience in prevention was assessed by two items in the questionnaire. The first measure asked respondents if primary prevention activities had ever been included in their job responsibilities. Fifty-seven percent (57%) responded in the affirmative. A stepwise multiple regression analysis indicated that there were three predictor variables for this item (see Table 7). The first predictor was interest level in prevention at graduation from doctoral training. If the

TABLE 6

CROSSTABULATION OF PERCEPTION OF COLLEAGUES TIME DEVOTED TO PREVENTION AND STAGE OF PROFESSIONAL DEVELOPMENT

	DEFICIENT/ BARELY ADEQUATE %	SUFFICIENT %
ENTERED TRAINING	75.2	24.8
CURRENTLY	78.6	21.3

TABLE 7

DISCRIMINANT FUNCTION ANALYSIS OF IMPACT OF SURVEY VARIABLES ON *INCLUSION OF PREVENTION IN JOB RESPONSIBILITIES*

HAVE PRIMARY PREVENTION ACTIVITIES EVER BEEN INCLUDED IN YOUR JOB RESPONSIBILITIES?"

PREDICTOR VARIABLES	BETA	PERCENTAGE OF VARIANCE	PERCENTAGE OF EXPLAINED VARIANCE
INTEREST LEVEL IN PREVENTION AT GRADUATION	0.285	8.5	46.1
PERCEPTION OF COLLEGUES PROFESSIONAL WORK EXPERIENCE	0.173	5.1	28
GEOGRAPHICAL LOCALE OF DOCTORAL TRAINING PROGRAM	0.16	4.8	25.9
TOTAL	0.429	18.4	100

respondents' interest at this time was moderate or great, they were more likely to have had a job with prevention responsibilities. The next predictor was perception of colleagues' professional work experience in prevention. Those who saw colleagues' prevention work experience as being moderate or extensive were more likely to have had a job with prevention responsibilities. The third predictor was the geographic locale of respondents' doctoral training program. Respondents who graduated from a program located in an urban area were more likely to have had a job with prevention responsibilities.

The second measure regarding the subjects' own prevention work experience asked if they were professionally engaged in any primary prevention activities at the present time. Forty-one percent (41%) responded in the affirmative. A crosstabulation of the two measures of respondents' prevention behavior produced the following finding: 17 respondents indicated that they are presently engaged professionally in primary prevention activities at their own initiative even though such activities were not included in their job responsibilities. Closer scrutiny revealed that 88% of this sample subgroup were minority respondents. A stepwise multiple regression analysis revealed that ethnicity was one of two predictor variables for current engagement in prevention; Blacks and Hispanics were more likely to currently engage in primary prevention activities than were White respondents. The respondents' interest level in

practicing primary prevention at the time of graduation from doctoral training was also a predictor (see Table 8). Those who described their interest as moderate or great at that time were more likely to currently engage in prevention activities than those whose interest was minimal or nonexistent at graduation.

For those who indicated that they are not currently engaged in any primary prevention activities, possible reasons for the respondents' non-engagement were examined (see Table 9). The reasons cited most often in order of frequency were: that such activities were not part of their current job descriptions, that salaries in this area were deemed too low, that few patients come to clinical psychologists in private practice seeking preventive intervention, and that their professional skills were judged to be inappropriate for prevention activities.

Only 30% of the sample reported having attended any workshops or conferences on primary prevention subsequent to their doctoral training. An overwhelming majority (89%) stated that they have never subscribed to any professional journals that strongly emphasize primary prevention.

Most of the subjects (69%) perceived their colleagues' professional interest in prevention to be minimal or non-existent while 31% considered it to be moderate or extensive. The respondents' own professional interest in practicing primary prevention activities was determined for three different points in time: at application to doctoral

TABLE 8

DISCRIMINANT FUNCTION ANALYSIS OF IMPACT OF SURVEY VARIABLES ON CURRENT ENGAGEMENT IN PRIMARY PREVENTION ACTIVITIES

PREDICTOR VARIABLES	BETA	PERCENTAGE OF VARIANCE	PERCENTAGE OF EXPLAINED VARIANCE
ETHNICITY	0.162	2.9	51.4
INTEREST LEVEL IN PREVENTION AT GRADUATION	0.153	2.8	48.6
TOTAL	0.238	5.7	100

TABLE 9

FREQUENCY DISTRIBUTION OF REASONS FOR NON-ENGAGEMENT IN PREVENTION WORK RANK ORDERED BY PERCENTAGE APPLICABLE

	APPLICABLE		NOT APPLICABLE	
VARIABLE	FREQ	%	FREQ	%
QUESTION 13 B NOT PART OF CURRENT JOB DESCRIPTION	104	71.23	144	58.06
SALARY WAS TOO LOW	31	21.23	217	87.5
QUESTION 13L IN PRIV.PRACT. & FEW SEEK PREVENTION*	26	17.81	222	89.52
QUESTION 13 I ... PROFESSIONAL SKILLS NOT APPROPRIATE	17	11.64	231	93.15
QUESTION 13 C PROVIDES TOO LITTLE GRATIFICATION	13	8.9	235	94.76
QUESTION 13 J CURRENT JOB DEMANDS TOO MUCH TIME	8	5.48	240	96.77
QUESTION 13 E LACKS PROFESSIONAL STATUS	7	4.79	241	97.18
QUESTION 13 K FEW/NO POSITIONS AVAILABLE*	5	3.42	243	97.98
QUESTION 13 H POSITION NO LONGER EXISTS	5	3.42	243	97.98
QUESTION 13D LACKS PROFESSIONAL CHALLENGE	4	2.73	244	98.39
QUESTION 13 G FOUND WORK BORING	1	0.68	247	99.6

* "OTHER" PROVIDED BY RESPONDENTS

training, upon graduation from doctoral training and at their present stage (see Tables 10a & 10b). The percentage of respondents who described their interest in practicing primary prevention activities as being moderate or great increased over time: 43% had moderate or great interest when they applied to doctoral training, 56% felt that way at the time of graduation, and 71% now hold that view. The percentage of those who described their interest as being minimal or non-existent decreased over time: 57% held that view at the time they applied for doctoral training, 44% felt that way at the time of graduation, and only 29% continued to have little or no interest.

Slightly less than half of the sample (48%) felt that their doctoral training had no direct impact upon their overall interest in primary prevention. Nearly as many (40%) felt that their overall prevention interest increased as a direct consequence of their doctoral training. The remaining 12% felt that their overall interest in primary prevention decreased as a direct result of doctoral training. Table 11 provides a breakdown of these results by program.

A majority of the sample (61%) reported having no courses that included coverage of primary prevention (see Table 12 for this breakdown by program). Sixty percent (60%) of the respondents who did have course coverage in primary prevention were from the one PsyD. doctoral program included in the study. Of those who had primary prevention course coverage, 58% felt that it was viewed as being peripheral to

TABLE 10 A

FREQUENCY DISTRIBUTION OF SAMPLES' DEPICTION OF PROFESSIONAL INTEREST IN PRACTICING PRIMARY PREVENTION

DESCRIPTION OF CHANGE

	PERCENT NONE/MINIMAL	PERCENT MODERATE/GREAT
UPON APPLICATION TO CLINICAL PSYCH. TRAINING	56.68	43.32
UPON GRADUATION FROM CLINICAL PSYCH. TRAINING	43.72	56.28
CURRENTLY	29.03	79.97

TABLE 10 B

DIRECTION OF CHANGE

T1-->T2-->T3	FREQUENCY	PERCENT
UP	104	41.94
DOWN	46	18.55
SAME: MODERATE OR GREAT	45	18.15
SAME: NONE OR MINIMAL	36	14.52
DOWN-->UP	9	3.63
UP-->DOWN	8	3.23

TABLE 11

FREQUENCY DISTRIBUTION OF IMPACT OF DOCTORAL TRAINING ON OVERALL INTEREST IN PRIMARY PREVENTION

	PROGRAM A		PROGRAM B		PROGRAM C		PROGRAM D		PROGRAM E	
	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%
DECREASED	10	21.28	7	11.11	2	4.76	1	4.35	10	13.89
REMAINED THE SAME	29	61.7	32	50.79	21	50	14	60.87	22	30.55
INCREASED	8	17.02	24	38.1	19	45.24	8	34.78	40	55.56
TOTAL	47		63		42		23		72	

TABLE 12

FREQUENCY DISTRIBUTION OF PRIMARY PREVENTION COURSE COVERAGE IN DOCTORAL PROGRAM

	PROGRAM A		PROGRAM B		PROGRAM C		PROGRAM D		PROGRAM E	
	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%
SOME	6	12.77	17	26.56	13	30.95	3	13.04	59	81.94
NONE	41	87.23	47	73.44	29	69.05	20	86.96	13	18.06

professional training by the program at large compared to 42% who felt that their program viewed prevention courses as being central to their training (see Table 13 for the breakdown by program). Of those subjects in programs that did provide coursework in primary prevention, 77% reported that some or most program students enrolled in the course or courses; 23% indicated that few or no students enrolled. Psy.D. respondents noted that this was a required course in their program (see Table 14 for this breakdown by program).

Most of the respondents (91%) in this study who had access to primary prevention coursework in their doctoral training did enroll in the course (see Table 15 for program breakdown). Fifty-two percent (52%) of this group considered the course to be peripheral to their training and 48% considered it to be central to their training (see Table 16 for breakdown by program). The majority of the group (70%) who enrolled in a prevention course felt that the course increased their interest in primary prevention, 26% felt it had no effect upon their primary prevention interest, and only 4% said it decreased their interest (see Table 17 for breakdown by program

Respondents whose doctoral programs did not offer a prevention course were asked whether the inclusion of a primary prevention course would have enhanced their doctoral training. Ninety-three percent (93%) felt that such inclusion probably or definitely would have enhanced their doctoral training (see Table 18 for the program breakdown).

TABLE 13

FREQUENCY DISTRIBUTION OF STATUS OF PREVENTION COURSE COVERAGE TO PROGRAM AT LARGE

	PROGRAM A		PROGRAM B		PROGRAM C		PROGRAM D		PROGRAM E	
	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%
PERIPHERAL	4	80	13	92.86	5	55.56	—	—	28	50
CENTRAL	1	20	1	7.14	4	44.44	2	100	28	50

TABLE 14

FREQUENCY DISTRIBUTION OF WHO TOOK THE COURSE(S) BY PROGRAM

	PROGRAM A		PROGRAM B		PROGRAM C		PROGRAM D		PROGRAM E	
	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%
FEW	—	—	8	53.33	4	44.44	—	—	8	14.29
SOME	—	—	3	20	4	44.44	1	50	10	17.86
MOST	4	100	4	26.67	1	11.11	1	50	38	68.86

TABLE 15

FREQUENCY DISTRIBUTION OF SAMPLES' ENROLLMENT IN PREVENTION COURSEWORK BY PROGRAM

	PROGRAM A		PROGRAM B		PROGRAM C		PROGRAM D		PROGRAM E	
	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%
NO	1	25	2	13.33	2	22.22	—	—	3	5.36
YES	3	75	13	86.67	7	77.78	2	100	53	94.64

TABLE 16

FREQUENCY DISTRIBUTION OF SAMPLES' PERCEPTIONS OF PREVENTION COURSEWORK BY PROGRAM

DID YOU CONSIDER THE COURSE(S) CENTRAL OR PERIPHERAL TO TRAINING ?

	PROGRAM A		PROGRAM B		PROGRAM C		PROGRAM D		PROGRAM E	
	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%
PERIPHERAL	3	75	8	57.14	4	50	—	—	29	51.79
CENTRAL	1	25	6	42.86	4	50	2	100	27	48.21
TOTAL	4		14		8		2		56	

TABLE 17

FREQUENCY DISTRIBUTION OF INFLUENCE OF PREVENTION COURSEWORK BY PROGRAM

HOW DID COURSE INFLUENCE YOUR PROFESSIONAL INTEREST IN PREVENTION ?

	PROGRAM A		PROGRAM B		PROGRAM C		PROGRAM D		PROGRAM E	
	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%
DECREASED	—	—	—	—	—	—	—	—	3	5.36
NO EFFECT	2	50	1	7.14	3	37.5	—	—	16	28.57
INCREASED	2	50	13	92.86	5	62.5	2	100	37	66.07
TOTAL	4		14		8		2		56	

TABLE 18

FREQUENCY DISTRIBUTION OF POTENTIAL INFLUENCE OF PREVENTION COURSEWORK BY PROGRAM

IF NO COURSE COVERAGE, WOULD INCLUSION HAVE ENHANCED TRAINING?

	PROGRAM A		PROGRAM B		PROGRAM C		PROGRAM D		PROGRAM E	
	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%	FREQ.	%
NO	2	4.26	5	7.81	6	14.29	1	4.35	4	5.56
PROBABLY	24	51.06	25	39.06	21	50	10	43.48	13	18.06
DEFINITELY	21	34	34	53.13	15	35.71	12	52.17	55	76.39
TOTAL	47		64		42		23		72	

The majority of the sample (72%) reported that to their knowledge no professor was engaged in any ongoing prevention research; 28% indicated that their program did include professors who were so engaged (see Table 19 for a breakdown by program). Of those whose professors were so involved, 16% worked on these prevention research projects. A sizable majority of the sample (84%) reported that the emphasis placed on prevention during their pre-doctoral internship was minimal or non-existent.

Four sentences were presented in the questionnaire regarding how the respondents' doctoral programs prepared them for engaging in primary prevention work (see Table 20 for a breakdown of responses by program). The subjects were asked to circle all responses that were applicable to their training experience. Only 22% of the sample felt that their training prepared them for working in the primary prevention area. Fifty-eight percent (58%) felt that their training had not prepared them well, 42% of the sample felt that their training did not make them aware of the possibilities in this area and 7% felt that their training discouraged this kind of effort.

When subjects speculated about training of future clinical psychologists, they placed a significant value upon the role of prevention. A strong majority (95%) of the sample felt that it would be somewhat or very important for future clinical psychologists to receive training in primary prevention when they were asked to consider existing societal

TABLE 19

PERCENTAGE OF PROFESSORS ENGAGED IN PREVENTION RESEARCH RANK ORDERED BY PROGRAM

WERE ANY PROFESSORS ENGAGED IN PRIMARY PREVENTION RESEARCH?

RANKING	NOT AWARE OF ANY	%	YES	%
1	PROGRAM A	95.74	PROGRAM E	59.72
2	PROGRAM D	86.96	PROGRAM C	21.43
3	PROGRAM B	81.25	PROGRAM B	18.75
4	PROGRAM C	78.57	PROGRAM D	13.04
5	PROGRAM E	40.28	PROGRAM A	4.26

TABLE 20

FREQUENCY DISTRIBUTION OF PREPAREDNESS FOR PREVENTION WORK BY PROGRAM

If I were interested in working in primary prevention I feel that...

	PROGRAM A		PROGRAM B		PROGRAM C		PROGRAM D		PROGRAM E	
	#	%	#	%	#	%	#	%	#	%
MY TRAINING PREPARED ME	1	2.13	13	20.31	11	26.19	9	17.39	25	34.72
MY TRAINING DID NOT PREPARE ME WELL	29	61.7	36	56.25	26	61.9	16	69.57	37	51.39
MY TRAINING DID NOT MAKE ME AWARE OF THE POSSIBILITIES	30	63.83	33	51.56	14	33.33	8	34.78	18	25
MY TRAINING DISCOURAGED THIS KIND OF EFFORT	3	6.38	6	9.38	1	2.38	2	8.7	5	6.94

PROGRAMS RANK ORDERED BY FREQUENCIES

RANKING	WELL	NOT WELL	NOT AWARE	DISCOURAGED
1	PROGRAM E	PROGRAM D	PROGRAM A	PROGRAM B
2	PROGRAM C	PROGRAM C	PROGRAM B	PROGRAM D
3	PROGRAM B	PROGRAM A	PROGRAM D	PROGRAM E
4	PROGRAM D	PROGRAM B	PROGRAM C	PROGRAM A
5	PROGRAM A	PROGRAM E	PROGRAM E	PROGRAM C

mental health problems. Seventy-five percent (75%) of the sample somewhat or strongly agreed that the APA should require the inclusion of a primary prevention curriculum in clinical psychology programs to qualify for full accreditation. However, most respondents felt that such inclusion should not alter the current emphasis placed upon treatment approaches.

If future clinical psychologists were to receive training in primary prevention, 81% of the sample felt that such training would be most appropriate at the doctoral level while 13% felt that it should occur at the post-doctoral level and 6% felt that it should occur on both levels. The majority of the sample (57%) felt that the study of the dynamics of social structure should receive less emphasis than the study of individual and family dynamics but felt that it warrants a far greater emphasis than is presently given. It should be noted, however, that a significant portion (42%) thought that the two should receive equal emphasis. Similarly, the same percentage (57%) felt that the study of social theory should receive less emphasis than personality theory but more emphasis than is presently given. Again, the remaining 42% felt that emphasis should be placed on both equally.

Regarding the practicum experience, most of the sample (60%) felt that consultation skills should receive less emphasis than psychotherapy skills but more emphasis than is currently being given. The remaining 40% felt that both

skill areas should receive equal emphasis. The vast majority (86%) of the sample felt that internship experiences in industrial, correctional and social welfare settings would be somewhat or very appropriate for future clinical psychologists.

The sample was asked what the effect on the field would be if clinical graduate students today devoted equal time to developing prevention skills as to developing treatment skills. The largest percentage of the sample (47%) felt that it would be non-effectual, 29% felt it would be somewhat beneficial and 24% felt it would be somewhat or very detrimental to the field.

Overall Attitude Scale (OAS) Profile

The Overall Attitude Scale (OAS) was comprised of three subscales: Importance, Involvement, and Future. The scale and subscales yielded scores for each subject measuring the degree to which he or she is favorable towards primary prevention. Most of the subjects (65%) were moderately or very positive in their overall attitude toward primary prevention.

Four hypotheses were posited relating to the Overall Attitude Scale. Hypothesis I was that minority respondents would show a more positive attitude toward primary prevention than would non-minority respondents. Results of T-tests supported this hypothesis (see Tables 21a & 21b). When ethnicity was examined, Blacks had the most positive

TABLE 21 A

MEAN ATTITUDE SCORES FOR VARIABLES HAVING SIGNIFICANT DIFFERENCE (ETHNICITY)

ETHNICITY/RACE	OVERALL ATTITUDE	IMPORTANCE	INVOLVEMENT	FUTURE
WHITE	751.59	816.67	694.64	746.94
BLACK	855.8	880.43	631.52	855.59
	***	*	***	***

* P<.05

*** P>.001, TWO TAILED

TABLE 21 B

ETHNICITY/RACE	OVERALL ATTITUDE	IMPORTANCE	INVOLVEMENT	FUTURE
ASIAN/HISPANIC/WHITE	752.3	817.22	693.89	748.57
BLACK	855.8	880.43	631.52	855.59
	***	*	***	***

* P<.05

*** P>.001, TWO TAILED

attitudes followed first by Hispanic respondents, next by White respondents, and finally by Asian respondents. The difference in Attitude means between Blacks and Whites was clearly significant and persisted across all subscales. There was no significant difference between Black and Hispanic mean Attitude scores but even when the Hispanic group was combined with the White and Asian groups, Black respondents still had significantly more positive attitudes than all other respondents combined. In both cases these differences were significant on the Overall Attitude Scale and on the Involvement and Future Subscales at the < .001 level and were significant on the Importance Subscale at the < .01 level. A stepwise multiple regression analysis indicated that ethnicity predicted to attitudes toward prevention and accounted for approximately 5% of the Overall Attitude Score variance (see Table 22).

Hypothesis II stated that females would show a more positive attitude toward prevention than would male respondents (see Table 23). Results of T-tests also supported this hypothesis. Females manifested more positive and significantly different scores on the Overall Attitude Scale (< .05 level), on the Involvement Subscale (< .05 level), and on the Importance Subscale (< .01 level).

It was further hypothesized (Hypothesis III) that respondents exposed to primary prevention during doctoral training would show a more positive attitude toward prevention than respondents not exposed to prevention during

TABLE 22

STEPWISE MULTIPLE REGRESSION ANALYSIS OF IMPACT OF SURVEY VARIABLES ON ATTITU...

PREDICTOR VARIABLE	BETA	PERCENTAGE OF VARIANCE	PERCENTAGE OF EXPLAINED VARIANCE
INTEREST LEVEL IN PREVENTION AT GRADUATION	0.329***	14	70
ETHNICITY	0.213***	4.7	23.5
GEOGRAPHIC LOCALE OF TRAINING PROGRAM	0.117**	1.3	6.5

** P< .01

*** P< .001, TWO-TAILED

TABLE 23

MEAN ATTITUDE SCORES FOR VARIABLES HAVING SIGNIFICANT DIFFERENCE (GENDER)

SEX	OVERALL ATTITUDE	IMPORTANCE	INVOLVEMENT	FUTURE)
MALE	741.82	793.63	675.71	749.99
FEMALE	776.88 *	845.07 **	729.75 *	764.84

* P<.05

** P< .01, TWO TAILED

their training. Exposure during doctoral training was determined by responses to two variables: prevention course inclusion and emphasis upon primary prevention during the internship. The results supported this hypothesis. T-tests for prevention course inclusion showed a significant difference on the Overall Attitude Scale and on the Involvement Subscale at the <.01 level (see Table 24). T-tests also indicated that the respondents' interest level at the time of application to the program discriminated between attitudes of the overall sample. Controlling for the strength of prevention interest at the time of application, the data were scrutinized to see if prevention coursework still discriminated between attitudes. Results indicated that the level of significance decreased from the < .01 level but remained significant a the < .05 level. T-tests for prevention emphasis during internship indicated a significant difference on the Involvement Subscale at the < .05 level (see Table 25).

It was also hypothesized (Hypothesis IV) that respondents who were not in private practice would show a more positive attitude toward prevention than would those in private practice. Although respondents not in private practice showed a more positive attitude on all subscales, no significant difference in attitudes was found. Therefore, this hypothesis was not supported.

T-tests were used to judge the presence or absence of significant difference in Overall Attitude Scale Scores for

TABLE 24

MEAN ATTITUDE SCORES FOR VARIABLES HAVING A SIGNIFICANT DIFFERENCE (PREVENTION COURSES)

DURING YOUR DOCTORAL TRAINING HOW MANY COURSES INCLUDED COVERAGE OF PRIMARY PREVENTION?

PREVENTION COURSES OFFERED	OVERALL ATTITUDE	IMPORTANCE	INVOLVEMENT	FUTURE
SOME	746.11	815.42	676.67	746.19
NONE	787.45 **	841.99	754.92 **	774.88

* P< 01, TWO-TAILED

TABLE 25

MEAN ATTITUDE SCORES FOR VARIABLES HAVING SIGNIFICANT DIFFERENCE (INTERNSHIP W/PREVENTION)

TO WHAT EXTENT WAS PRIMARY PREVENTION EMPHASIZED IN YOUR PREDOCTORAL INTERNSHIP EXPERIENCE?

PREVENTION COURSES OFFERED	OVERALL ATTITUDE	IMPORTANCE	INVOLVEMENT	FUTURE
NOT AT ALL	746.11	815.42	676.67	746.19
SOME	787.45	841.99	754.92 *	774.88

* P> .05, TWO-TAILED

the program selection criteria (theoretical orientation and geographical locale of doctoral training). No significant difference was found between mean attitude scores on the OAS for each of the five doctoral programs (see Table 26). There was no significant difference in attitude means between respondents from programs with a psychodynamic orientation and those from programs with a behavioral orientation. There was also no significant difference found in attitude means between respondents from Psy.D. and Ph.D. programs.

Respondents from programs located in an urban setting showed a more positive attitude toward prevention than respondents from programs located in a suburban setting (see Table 27). The difference was significant on the Overall Attitude Scale and on the Involvement Subscale at the $< .01$ level and on the Importance Subscale at the $< .05$ level. A stepwise multiple regression analysis indicated that geographic locale of the training program was the third predictor variable and accounted for 1.3% of the total 20% of the variance.

Other Significant Findings

Respondents were asked to characterize their own professional interest in practicing primary prevention at the time they applied to clinical psychology doctoral training (see Tables 28 and 29). T-tests showed that those respondents whose interest in practicing primary prevention was moderate or great at the time of application had a more

TABLE 26

MEANS AND STANDARD DEVIATIONS OF SCORES FROM ALL SCALES FOR ALL PROGRAMS

		TOTAL POPULATION	PROGRAM A	PROGRAM B	PROGRAM C	PROGRAM D	PROGRAM E
OVERALL ATTITUDE	MEAN	755.68	734.75	775.52	734.52	781.88	777.08
	SD	115.6	127.92	94.79	124.91	116.77	103.02
IMPORTANCE	MEAN	830.31	813.83	855.47	785.71	798.91	829.86
	SD	128.28	155.02	91.74	136.75	123.51	126.84
INVOLVEMENT	MEAN	692.47	654.26	729.49	622.2	722.83	741.32
	SD	198.82	194.98	190.63	205.7	205.42	189.49
FUTURE	MEAN	754.87	735.56	756.14	746.6	805.96	767.36
	SD	131.73	141.43	122.49	132.89	129.14	117.46

TABLE 27

SIGNIFICANT DIFFERENCE IN ATTITUDE MEANS FOR URBAN AND SUBURBAN DOCTORAL TRAINING PROGRAMS

GEOGRAPHIC LOCALE	OVERALL ATTITUDE	IMPORTANCE	INVOLVEMENT	FUTURE
SUBURBAN	734.64	800.64	658.01	740.77
URBAN	777.15	835.69	733.88	768.42
	**	*	**	

* P< .05

** P< .01, TWO-TAILED

TABLE 28

SIGNIFICANT DIFFERENCE IN ATTITUDE MEANS FOR DEGREE OF INTEREST IN PREVENTION AT TIME OF APPLICATION TO DOCTORAL TRAINING

OWN PROFESSIONAL WORK EXPERIENCE	OVERALL ATTITUDE	IMPORTANCE	INVOLVEMENT	FUTURE
NONE/MINIMAL	742.86	816.96	668.3	743.11
MODERATE/GREAT	786.76 **	830.61	757.59 ***	778.37 **

** P< .01

* P< .05

*** P< .001, TWO-TAILED

TABLE 29

SIGNIFICANT DIFFERENCE IN ATTITUDE MEANS FOR DEGREE OF INTEREST IN PREVENTION AT TIME OF GRADUATION FROM DOCTORAL TRAINING

OWN PROFESSIONAL WORK EXPERIENCE	OVERALL ATTITUDE	IMPORTANCE	INVOLVEMENT	FUTURE
NONEXISTENT	713.58	795.14	612.85	724.54
MODERATE	799.4 ***	844.42 **	780.13 ***	784.69 ***

** P< .01

*** P< .001, TWO-TAILED

positive attitude toward prevention than those whose interest at that time was minimal or non-existent (see Table 28). The difference was significant on the Overall Attitude Scale at the < .01 level, significant on the Involvement Subscale at the < .001 level, and significant on the Future Subscale at the < .05 level.

Respondents were also asked to characterize their own professional interest in practicing primary prevention at the time of their graduation from clinical psychology doctoral training. T-tests showed that those respondents whose interest in practicing primary prevention at the time of graduation was moderate or great had a more positive attitude toward prevention at the time of the present study than those whose interest had been minimal or non-existent (see Table 29). The difference was significant on the Overall Attitude Scale, on the Involvement Subscale, and on the Future Subscale at the < .001 level. The difference was significant on the Importance Subscale at the < .01 level A stepwise multiple regression analysis indicated that interest level at graduation from doctoral training was the first predictor variable accounting for 14% of the total variance.

There was no significant difference between the attitude scores of respondents who viewed colleagues as having minimal professional work experience in prevention and respondents who viewed colleagues experience as being moderate. However, respondents who viewed their colleagues as having either minimal or moderate work experience in prevention had a more

positive attitude toward prevention than those who perceived their colleagues' prevention experience as nonexistent (see Tables 30 & 31). The difference between those who viewed colleagues' experience as minimal and those who viewed colleagues' experience as nonexistent was significant at the < .001 level for both the Overall Attitude Scale and the Involvement Subscale and significant at the < .05 level for the Future Subscale. Similarly, the difference between those who viewed colleagues as having moderate prevention work experience and those who viewed their colleagues' prevention work experience as being non-existent was significant at the < .001 level for both the Overall Attitude Scale and the Involvement Subscale and significant at the < .05 for the Future Subscale.

TABLE 30

MEAN ATTITUDE SCORES FOR VARIABLES HAVING SIGNIFICANT DIFFERENCE (COLLEAGUES PREVENTION EXPERIENCE: NONEXISTANT/MINIMAL)

ON THE BASIS OF MY INTERACTION WITH FELLOW CLINICAL PSYCHOLOGISTS, I FEEL THEIR PROFESSIONAL WORK EXPERIENCE IN PRIMARY PREVENTION HAS BEEN...

COLLEGUES' PROFESSIONAL WORK EXPERIENCE	OVERALL ATTITUDE	IMPORTANCE	INVOLVEMENT	FUTURE
NONEXISTENT	695.83	796.88	572.92	708.33
MINIMAL	770.75	826.5	725.26	764.88
	***		***	*

* p< .05

*** P< .001, TWO-TAILED

TABLE 31

MEAN ATTITUDE SCORES FOR VARIABLES HAVING SIGNIFICANT DIFFERENCE (COLLEAGUES PREVENTION EXPERIENCE: NONEXISTENT/MODERATE)

COLLEGUES' PROFESSIONAL WORK EXPERIENCE	OVERALL ATTITUDE	IMPORTANCE	INVOLVEMENT	FUTURE
NONEXISTENT	734.64	800.64	658.01	740.77
MODERATE	777.15	835.69	733.88	768.42
	***		***	*

* P< .01

*** P< .001, TWO-TAILED

CHAPTER FIVE

DISCUSSION

One of the more striking findings in this study was the rather high level of support and interest among the respondents toward the idea of prevention. Despite the possibility that clinical psychologists who were more positively disposed to prevention were more likely to respond to the questionnaire, these findings are noteworthy given the relatively low emphasis on prevention work in most clinical training programs. For the clinical psychologists in this sample, primary prevention in mental health appears generally to be a positively valued professional issue for which support is based on a shared value system independent of the type of training received. As Hillerbrand (1987) suggests, there exists in psychology a community norm of promoting human welfare. Most clinical psychologists feel positively about the idea of prevention since it is a humane concept and an ethical approach. In addition, both preventive psychology and clinical psychology share the basic goal of striving to help people maximize their capabilities and lead satisfying lives (Bry, 1988). Therefore, it is logical for people in a human service profession like clinical psychology to be supportive of prevention.

An earlier study (Crowe et al., 1985) aimed at developing a practice description in clinical psychology showed prevention ranking low in terms of time spent and importance to respondents' practice. The present study suggests that this low ranking was not due to a negative attitude towards primary prevention in general.

Although the sample was positive in their overall attitude towards prevention, women and ethnic minorities had significantly more positive atitudes than men and whites respectively. Furthermore, the possession of an ethnic minority identification predicted to more positive attitiudes toward primary prevention. In recent American history, minorities and women have been involved in struggles for social and political change and attempts to encourage both self-actualization and group advancement and empowerment. For ethnic minority and female clinical psychologists, the practical and ideological influence of the civil rights and feminist movements has undoubtedly heightened sensitivity to complex social issues and deepened their insight into the impact of these complex issues upon everyday life.

The need to interact effectively within a non-supportive social system may have forced the development of many skills such as coping, stress management and intergroup negotiation strategies. These very same skills are crucial to the primary prevention model. In addition, the focus in civil rights movements on the philosophy of group advancement as a prerequisite for individual progress lends itself comfortably

to prevention strategies aimed at total populations. Therefore, the composite values of ethnic minority and female clinical psychologists may have more in common with prevention values than the composite values of whites and men in general.

At the present time, women and minorities are overrepresented in a multigenerational underclass of poverty-stricken citizens in the United States (Altman, 1987). Many of these individuals feel an alienation from society at large and lack hope for economic and social well-being. Greater sensitization to the current realities for many women and ethnic minorities may arise among clinical psychologists from these groups due to their identification and affiliation with their reference group and their knowledge about the range of stresses associated with poverty and inequality.

The especially strong support of black respondents for primary prevention may be due to their recognition of the historic resistance displayed by minorities as a group to seeking mental health treatment. This recognition and identification with their reference group may lead to increased motivation to address incipient problems, intervene at a point where help is accepted, and act before crises develop.

An examination of viewpoints tapped in this study reveals a complicated attitudinal profile. There is a significant recognition of the appropriateness of primary prevention for society and for the clinical psychology

profession. These results suggest that these respondents would show support for earlier recommendations from conferences and research studies (Murphy & Frank, 1979; Hoch, Ross, Winder, 1966) which suggested that clinical psychologists need to show greater social commitment and have an obligation not only to treat and remedy but also to prevent. Clinical psychologists in this sample are critical of the minimal amount of time spent by society at large and by their colleagues in the prevention area.

There is clear recognition of a discrepancy between the professional possibilities and the practice realities with regard to primary prevention. Attempts to reconcile the discrepancy between the ideal and the real give rise to ambivalence (e.g., "I feel I contradicted myself several times and wish to clarify. I think prevention should be a top priority but feel that monies should not be taken away from treatment. I also think that prevention should be included in clinical curriculum but not in place of personality/pathology courses. Maybe doctoral training should stay the same so prevention could get the attention it deserves at the post-doc level..."). Also evident was an apparent sense of frustration (e.g., "I am a former social worker, trained with lots of courses on welfare systems; prevention models fascinate but utterly frustrate me in a social structure where implementation is so difficult.") and inadequacy regarding how to translate the ideal into practice (e.g. "I can't think of how to offer my skills in a

meaningful and rewarding way"). These reactions and conflicts were evident even for many of those respondents who perceived primary prevention as belonging within clinical psychology's professional domain. Comments by respondents often reflected uncertainty as well as defensive reactions to this conflict ranging from a denial of difficulties and aggressive pursuit to avoidance of the area altogether.

Not all respondents were ambivalent, however. One segment of respondents, for example, stated quite clearly that clinical psychologists ought to be actively involved in prevention. One respondent stated "This is an area all psychologists should be very concerned with. No more excuses! Our experience in healing should help illuminate prime areas for preventive efforts". Some respondents were even stronger about their view that basic political and social changes are needed for good primary prevention programs to be possible and that psychologists must take several forms of action. Some of the action strategies suggested in the comment sections included the need for psychologists to lobby for the development of all prevention areas, to focus on ways of combining knowledge of personality dynamics with social-cultural advocacy, and to apply their theoretical expertise and research savvy to the remedying of both "social malaise and the deterioration of the quality of life for all".

At the other extreme were those who view prevention as mainly a political rather than psychological issue and "hence

not the specific province of psychology". Some respondents who felt that psychological problems are largely determined by socio-economic and social issues, suggested that perhaps some other psychology specialty should increase its emphasis upon primary prevention rather than dramatically changing the focus of clinical psychology training. Still others felt that although such work may be appropriate for clinical psychologists it is often not feasible (e.g., "...primary prevention activities are precluded by many social and political realities rather than by research preferences of clinicians. I treat drug addicts and am aware that poverty and its concomitant problems contribute to substance abuse. However, not many real avenues exist within clinical psychology to address it at this level"). Others questioned whether the political and societal pressure associated with work aimed at prevention is too threatening for most people in the clinical psychology field, or whether the values shared by the majority of psychologists are contrary to primary prevention values.

Some respondents cited a fear that existing sources of funding will be diverted from treatment and research to prevention rather than any new money being generated. Perhaps this leads those making a living by engaging in treatment extremely hesitant and conflicted about advocating for prevention.

A more moderate view was expressed by those who felt that the distinction between treatment and prevention was

artificial and related more to the type of skills demanded. Many who worked with clients in a primary prevention capacity found that these patients were not distinguishable in psychopathology from the modal patient in treatment. Differences were presented more in terms of how the clients defined themselves and the helping professional. Both a trained psychoanalyst and a cognitive-behavioral psychotherapist felt that primary prevention strategies could be a valuable component if integrated into treatment plans. Several other comments focused upon the need for clinical psychologists to collaborate with those professionals who may have more expertise in the prevention areas in order to best meet the mental health needs of the public.

Clinical psychologists may be most comfortable at the individual and group level of preventive intervention while the level of systems intervention creates more conflict due to its perceived political implications. Hillerbrand (1987) argues that it is non-productive to treat this debate about the relationship between clinical psychology and social action as a political issue. He feels that a more useful approach would involve the recognition of unresolvable philosophical tensions which make it difficult to obtain a consensus regarding psychology's role in social action. In pursuing this question, he addressed three primary sources of tension: First, tensions between professionals who engage in an ethical decision making process which uses "a rational determination of rights using formal mechanisms of agreement

and objective impartiality", and those whose decision making process is based on "competing responsibilities for caring for others" (p. 112); second, "tensions between those arguing that the American Psychological Association's Ethical Principles inform choice versus mandate behavior" (p. 111); finally, "tensions between those in the profession who are consumers [practitioners] versus creators [scientist] of fact" (p.111). It might be useful to conceptualize the ambivalence surrounding prevention as creating such tensions rather than creating dichotomies. Hillerbrand (1987) suggests that ongoing dialogue about these tensions can lead to greater professional insight and vitality (Hillerbrand, 1987).

In spite of the complex issues surrounding prevention, the percentage of respondents who reported a moderate or great interest in practicing primary prevention increased from the point of their application to doctoral training to their current professional stage. It is most likely that this increase over time stemmed from their growing awareness of the complexity of societal and individual problems with mental health sequela since this study revealed that most respondents received no formal exposure to primary prevention during doctoral training.

It appears that individuals feel isolated in their interests and beliefs about prevention since they perceive little interest or action on the part of their colleagues (only 21% reported that their colleagues currently devote

sufficient time to prevention). One respondent stated, "My education was excellent in regards to seeing psychopathology in its social context—out in the real world my colleagues have a much narrower focus". The dissemination of the results of this study, illustrating the positive attitudes of most clinical psychologists, would be supportive to those who feel such professional isolation. The respondents' perceptions are understandable when we note that few attend prevention-oriented conferences or subscribe to professional journals which focus on primary prevention despite professed interest. Unless we continue to explore this issue, the isolation will be exacerbated.

It is interesting that although most respondents believe that their colleagues demonstrate minimal interest and involvement in prevention, over fifty percent (50%) of the respondents state that they themselves have had a job with primary prevention responsibilities. This is significant since it indicates that there are job sites which are aware of a need for preventive activities and see clinical psychologists as professionals capable of fulfilling such roles.

Several variables were predictive of respondents having had primary prevention included in their job responsibilities. The first predictor was a higher interest level in practicing primary prevention at the time of graduation. Possession of such an interest may trigger in these graduates a more active quest for positions that place

a value upon prevention roles. The predictive strength of interest at the time of graduation underscores the potential benefit of exposing students to prevention and instilling interest in the variety of roles which are possible during the training period. Faculty members are key figures during this influential period since they become the "conveyors of norms, values, and beliefs of the discipline" (APA, 1987, p. 1081; Descutner & Thelen, 1987).

A second predictor for the inclusion of primary prevention activities in job responsibilities was the perception that colleagues had some work experience in that area. A sense of collegiality and social support may well nurture the respondents' own engagement in primary prevention work when they believe that their colleagues are similarly involved. It follows that the greater the perception that a significant number of colleagues are engaged in prevention, the greater the likelihood that such action is seen as having received a stamp of approval from the profession at large.

When we consider that a third predictor for the inclusion of primary prevention activities in respondents' job responsibilities was an urban locale for doctoral training, it is important to acknowledge the intricacy of the urban scene. This milieu can be characterized by the more hectic and stressful pace of life, the interactions with complex and often inefficient bureaucracies, and the poverty-stricken inner-cities comprised largely of minorities, women and children. Frequently, individuals lacking financial

resources will use training institutes for mental health services since fees are usually minimal or non-existent. Consequently, graduate students in urban settings are exposed to the vast array of social problems with mental health ramifications in the communities where their programs are located. Through their work with patients, the graduate students' perception of existing mental health needs is more amplified in an urban setting than in a suburban setting. This broadened perception may then lead to a greater awareness and appreciation for the role of prevention.

Although primary prevention activities are not infrequently included in clinical psychologists' job descriptions, there is a strong likelihood that these activities are often not executed due to prohibitive day-to-day constraints. One respondent's comment reflects the sentiment expressed by many, "I directed a mental health department at a community mental health center for six years. When I began I expected prevention to be central to our community efforts but we had no money for prevention. Insurance paid for illness". This likelihood would support the respondents' perception that colleagues are minimally involved in prevention work if involved at all. Once again a discrepancy looms when respondents describe what is and what could be. Several of their comments reveal how this disparity may affect their sense of professional gratification. Some respondents noted that attempts at prevention work are often frustrating in a social structure

where implementation is so difficult. Clinical psychologists working in schools and community mental health centers stressed that they were required to justify the allocation of their limited time and to engage mainly in revenue-producing activities. Those individuals not yet experiencing problems ranked low on the service totem pole (e.g.,"Ideally and technically, the prevention model has a place. Realistically, it is generally not funded or supported. It is usually up to the clinician to take the initiative and make time for any primary prevention research or project"). This disparity between ideology and intent and actual practice has a long history (Bloom, 1977; Garfield, 1983; Iscoe, 1981).

A substantial percentage (41%) reported current engagement in primary prevention activities. The exact nature of this work and the actual amount of professional time devoted to these functions is not known, thus warranting future investigation. However, this significant percentage is a further indication that clinical psychologists are more active in this area than is commonly perceived. This involvement in primary prevention work does raise the question of how clinical psychologists' minimal socialization into prevention roles affects their competence and overall ability to negotiate these complex role demands.

Ethnic minority heritage is predictive of a proclivity towards both the overall attitudes towards prevention and current involvement in primary prevention activities. It is

interesting that black respondents formed an overwhelming majority of those who were engaged in preventive work even when primary prevention activities were never actually included in their specified job responsibilities. This result further illustrates that black clinical psychologists may possess a self-initiated commitment and a personal motivation for primary prevention work. As was true for having a job at some time with primary prevention responsibilities, a higher interest in practicing primary prevention at graduation from doctoral training was also predictive for current engagement.

A higher percentage of respondents indicated having had a job with primary prevention responsibilities than reported being presently engaged in primary prevention work. It is interesting that of the four most frequently cited reasons for current non-engagement in primary prevention work, only one is related to a frequently cited barrier in the literature. It was commonly lamented that in the real world the lack of prevention funding precludes the possibility of earning a living by providing such services.

The issue of funding prompted several divergent themes in the respondents' comments. Although prevention is an important concept, some felt that given the epidemic proportions of existing mental health problems, there is little time, energy, or funding left for primary prevention. A triage approach is required due to staff shortages, escalating treatment costs, and inadequate funds. Others

felt that primary prevention will become a more actively used strategy as the health care crisis worsens. One respondent provided the following observation: "Our great problems appear to be related to older cars which require large repair bills- which we will pay. Prevention is scheduled maintenance, a practical idea to which most subscribe but few will spend the money or even do without the car for the required time of service."

In asserting that primary prevention is not done because people have not learned how to make it pay, one respondent suggested that psychologists need to use their "psychological smarts" to link the incentives of those who need the services to those who have the money. An example offered was the tapping of corporations who would be willing to pay for literacy and social skills training because these corporations know that they need employees from a shrinking labor pool. This same respondent admits, however, that "faculty in universities are not usually the ones to explore and develop linkages in the real world to get things paid for".

Goldston (1977) and Lorion (1987) note that preventive interventions in mental health have been stifled by the lack of a vocal constituency promoting the need for a greater allocation of professional and fiscal resources. There is a need for clinical psychologists to consider the potential of an advocacy coalition involving other mental health professionals which would aim to become this needed vocal

constituency.

Most of this sample noted that primary prevention responsibilities were not currently included in their job respondibilities and many in private practice indicated that patients seldom come seeking preventive intervention. However, these profissionals are challenged to consider the possibility that as legitimate as they are in some respects, these reasons for non-engagement in primary prevention work may be rationalizations or passive excuses for not being actively involved in prevention work.

In fact, clinical psychologists working in traditional treatment or academic settings can integrate primary prevention into their professional practice by expanding the conception of their role while keeping the core of their role intact. Roskin (1980) describes how both behavioral and psychodynamnic ego psychology approaches are easily adaptable to a primary prevention focus. Examples of this shift in conceptualization are an emphasis on behavioral approaches that strengthen healthy behavior, an emphasis on psychodynamic approaches, and an emphasis upon intervention strategies that address the ego's growth rather than its restoration.

Similarly, the mere fact that someone is in private practice need not preclude primary prevention work. The predominantly passive style of clinical psychologists in private practice does in fact limit the sphere of their work to those who seek them out. Roskin (1980) notes that primary

prevention work may require practitioners to reach out to those who may benefit from help and who want to strengthen their competence in relationships and work-related areas. Furthermore, Strayhorn (1987) suggests that child therapists can integrate a health-building approach focusing on skill and competence building by using goal setting, modeling and arranging behavioral contingencies into treatment approaches that attend to psychopathology. He further suggests additional ways that private entrepreneurs can engage in primary prevention (e.g., paid seminars for expectant mothers regarding early stages of mental health development.

The final reason for non-engagement in primary prevention work to be discussed here involves the respondents' judgement that their professional skills were not appropriate for prevention activities. Again, respondents' limited exposure to primary prevention has resulted in a two-fold outcome. First, there is a legitimate realization that they have not been trained in certain key skills and theoretical approaches necessary for some primary prevention roles and intervention strategies. Secondly, there is awareness that the narrow perspective provided by their training has inhibited their ability to conceive of multiple creative applications of their existing body of expertise to the area of primary prevention (Sanford, 1965; Sarason et al., 1961).

In the past, Murphy & Frank (1979) were among those who proposed that clinical psychologists' actual experience in

psychotherapy can foster their ability to perceive and meet others' needs in ways that prevent the development of psychopathology. Similarly, it has been proposed that the same expertise used in diagnostic procedures which are traditionally focused upon individuals can also be applied in diagnosing social situations (Sanford, 1965).

Perhaps respondents who are currently engaged in primary prevention activities also feel that their professional skills are not appropriate for the work which they are expected to perform. If so, it is likely that feelings of incompetence, inadequacy and frustration may pervade their work and have the potential for increasing the stress associated with such efforts. In addition, a concern is raised regarding the quality of prevention services delivered. This concern can be addressed by following through on a recommendation made by participants of the 1987 National Conference on Graduate Education in Psychology (APA, 1987). The field was encouraged to develop and conduct assessment procedures that can facilitate study of psychologists' effectiveness in their diverse capacities. Such a scrutiny could help identify the successful elements of training programs that transfer to work in various roles and settings (APA, 1987).

Despite the majority of respondents feeling that primary prevention did belong within the professional domain of clinical psychology, most (60%) indicated that their training did little to inspire, or even directly decreased, their

interest in the prevention model. In fact, the nature of the training experience has been exemplified by a paucity of coursework and minimal institutional research in the prevention area as well as by internships virtually barren of prevention role development and mentorship.

Most respondents who indicated that there were courses covering primary prevention during their own training noted that this coverage was not usually in a specific course on primary prevention. Instead information about primary prevention was provided in the form of one or two lectures or readings within the context of a more traditional course (e.g., a therapy course focused on at-risk populations). One respondent had primary prevention training and found it to be a "powerful and distinct turn-off" to prevention and community-based work; since the course content was deemed obtuse and irrelevant while the instructors appeared to be focused more on abstract theoretical questions than on real-life applications. Several respondents who had no access to prevention coursework noted that their interest in primary prevention developed through their own reading in spite of their training rather than because of it.

Given their exclusive focus upon treatment modalities, current programs generally produce what Sanford (1965) has described as "narrowly educated specialists" (p. 1396) who lack the ability to examine psychological problems "against a broad background of knowledge and experience" (p. 1396). For many, lack of awareness has led to an inability to

conceptualize the existence of specific primary prevention roles and activities that seem suitable. Uncertainty also emanates from the devalued status accorded primary prevention in training. Clinical psychologists question prevention work as warranting the allocation of their limited time and resources since it did not warrant such attention in their training It has been asserted that all mental health fields accord higher prestige and priority to psychotherapeutic services than to other intervention alternatives (Lorion, 1987). The absence of prevention course content in some programs and its peripheral status in others transfers a non-verbal message about the institution's values and attitudes (APA, 1987).

It is evident that for most of this sample, training fell short of its responsibility to socialize clinical psychologists in a broad array of roles encompassing primary prevention, thus leaving them with a lack of confidence in the area. Some of the respondents' comments concurred with this view and suggested that most clinical psychology programs train students to become private practitioners with very little emphasis placed on community-oriented prevention practices and techniques. It was felt that training programs respond to the financial realities, "follow the buck", and prepare students for specific work that is actually available subsequent to training. Still others articulated their impression that the academic environment and grants reinforce treatment research more than prevention research.

It is important to note that forty percent (40%) of the sample reported that their doctoral training had a positive effect upon their interest in prevention. It could be that over the course of their training experience these individuals sought out avenues for multiple mentorship from related programs or departments which provided them with a broader exposure that included prevention. Since this was an exploratory study, there remains a need for further investigation regarding the specific nature of the training experiences' positive effect.

The sample's underlying interest in prevention is further revealed by the fact that those who had access to such classes did in fact enroll. The fact that respondents exposed to primary prevention during training currently show a more positive attitude towards primary prevention further confirms the desirabilitiy of early exposure to this model. In addition, it reemphasizes the crucial role played by this period of professional development.

Many expressed dissatisfaction with their training's minimal attention to primary prevention and felt that the inclusion of primary prevention coursework would have enhanced their training. Several authors (Korman, 1976; Murphy & Frank, 1979) have described a longstanding sense of dissatisfaction with the limited sensitivity to social issues and the limited focus on competency-building as one means of preventing dysfunctions.

Since perceptions regarding appropriate professional

roles are already deeply engrained upon graduation from training programs (Bickman, 1987), doctoral programs should give careful consideration to the future roles which their students may want to or be called upon to assume. It is vital that programs periodically reassess existing curriculum and initiate changes when necessary. When applying to and entering doctoral programs, students may initially indicate that their primary goal is to ultimately do psychotherapeutic work. This study shows that interest in practicing primary prevention work increases as clinical psychologists gain exposure and experience in the mental health field. One respondent indicated that this topic is "very relevant and interesting—its an issue I couldn't fully appreciate until working in the field". Therefore, it is incumbent upon program directors and faculty to be aware of such potential interest shifts and to provide an educational model with a broad enough foundation to make students capable of creative applications for their special skills.

It is also important to note that a strong majority deemed the training of future clinical psychologists in primary prevention to be of importance in light of the existing societal mental health problems. Most felt that this training would be most appropriately given at the doctoral level. However, some respondents questioned the feasibility of integrating prevention into a four to five year program since few want to diminish the current emphasis placed by training programs on treatment approaches.

Participants in both the Chicago Conference in 1968 and the Vail Conference in 1973 discussed their shared desire to maintain the traditional training model while widening its scope to include prevention-related issues (Korman, 1974; Murphy & Frank, 1979).

Despite the expressed concern about the feasibility of implementation, an overwhelming majority endorsed an APA stance requiring that clinical psychology programs include a primary prevention curriculum in order to qualify for full accreditation. These sentiments are synchronous with recommendations that graduate programs in psychology provide "creative educational opportunities within a diversity of models" (APA, 1987, p.1072).

This is a strong mandate for reassessment and change in curricula and practica experiences in clinical psychology doctoral programs. One of the possible arenas for such reassessment and change is the internship setting since a strong majority of the sample considered industrial, correctional and social welfare settings to be appropriate for the internship experiences of future clinical psychologists. This suggestion echoes an earlier recommendation by Sanford (1965) that psychologists should work in diverse settings where they can study the dynamics of social structure as well as individual functioning within these structures.

It is important to stress that these respondents have maintained their commitment to traditional treatment

approaches. However, they highly recommend the integration of a primary prevention model. The findings of this study suggest that training institutions may be out of touch with the real sentiments of their graduates who are engaged in the practice of clinical psychology. It is important that colleges and universities gain this awareness to bridge the gap between the present focus of academic circles and the demands faced by the practitioner.

Ambivalence surfaced yet again when respondents were pressed to consider how primary prevention might be integrated into clinical psychology doctoral programs. When asked "what would be the effect on the profession if clinical graduate students today spent an equal amount of time in developing prevention skills as in developing treatment skills?", over three-fourths of the respondents felt that there would be no effect or a beneficial effect on the profession. However, when requested to provide specific recommendations for future training, nearly 60% of the respondents were unwilling to approve equal emphasis being given to both prevention and treatment.

For example, most felt that the study of individual and family dynamics should be given greater emphasis than the study of social structure dynamics. Similarly, the majority felt that the study of social theory should be given less emphasis than the study of personality theory., Within the practicum experience, most felt that consultation skills should receive less emphasis than psychotherapy skills.

However, respondents stressed that each of these prevention components warrant greater emphasis than is currently given.

Two distinct views surfaced in respondents' comments regarding the centrality of prevention coursework. One group held the position that prevention should be provided as an elective with the choice of training emphasis being left to the student. This group felt that the degree to which a primary prevention curriculum is useful relates in part to what students plan to do with their degree (e.g., what client population they desire, etc.).

The other group felt that primary prevention should be required as part of a core curriculum for all students. They stress a need for clinical psychologists to become organizationally trained. They further believe that the profession must establish a more comprehensive community perspective instead of a limited individual and family perspective.

This point raises another subject in need of exploration: should the decision about whether to include or how to include primary prevention in future training rest within the province of the individual graduate students, within the province of individual graduate programs, or within the province of professional agencies granting accreditation?

It is clear that although clinical psychologists did not think that equal emphasis upon prevention and treatment would be professionally detrimental, there exists an underlying

conflict. This conflict arises from a fear that a substantial addition of prevention components might erode the quality of training, reduce proficiency in treatment skills, and diminish hard-won professional status. Furthermore, since they lacked adequate exposure to prevention during their training, it is hard for psychologists to imagine that the integration of primary prevention could be an enhancement of existing training programs or even to conceive of equal professional value being placed upon primary prevention.

Finally it is noteworthy that a sizable group (40%-42%) did support the placement of equal emphasis on each prevention and treatment component. This significant constituency deserves the profession's attention. The clear presence of mutually conflicting emotions and thoughts about primary prevention in the clinical psychology discipline further illustrates the challenging need for continued professional discourse in this area.

Given the fact that today's clinical psychologists generally lack primary prevention training and are already past the stage of doctoral study, the increased opportunity for post-doctoral education in primary prevention becomes very important. Realizing that training for changing needs and interests is a heavy responsibility, doctoral programs cannot be expected to bear the sole burden. Thus, follow-up action ought to be taken on the recommendations emanating from the 1987 National Conference on Graduate Training in Psychology which stated that supplements to the doctoral

degree are necessary for the strengthening of the profession. These supplements could take the form of certificate and continuing education programs (APA, 1987).

Implications for Clinical Psychology Training and Profession

The results of this study clearly indicate a need for the profession to critique its current and future training and practice. The initiating of this study itself serves as an example of professional self-scrutiny and provides a platform from which training institutions can further explore their basic programs. The resolutions approved by the National Conference on Graduate Education in Psychology (APA, 1987) included a charge for psychology programs to engage in a process aimed at identifying "their core educational values, goals, and content areas in order to provide breadth in their graduate training offerings" (p. 1071).

The process of self-study must rise above the demarcation of specific course titles and as Spence (1987) describes, should identify program values and perspectives at a "metatheoretical level" (p.1053). In addition, there is a need for this information to be conveyed to students in a way that will foster a professional identity as "psychologists first and as certain brands of psychologists second" (Spence, 1987, pp. 1053-1054).

In 1987, Conference participants noted that "most graduate programs do not offer systematic education in the multiple professional roles, issues, dilemmas, and problems

of the discipline" even though such action would be prudent (APA, 1987, p. 1080). In addition, it was recommended that "accreditation develop a multidimensional approach that would allow innovations and differences in education and training objectives" (p. 1074).

Training programs must find ways to provide an educational base that is broad enough to enable clinical psychologists to examine psychological problems against a diverse field of experience and expertise. There is a need to assess the profession's responsivity and responsibility and re-conceptualize the domain of clinical psychology training. A broader formulation aimed at training individuals to best address the continuum of societal mental health needs would facilitate the recognition that prevention and treatment go hand in hand. Changes are needed from the point of application through the point of graduation for these goals to be realized.

Criteria for screening clinical psychology applicants must be reexamined. Sanford (1965) proposed that programs should seek applicants who express a "clarity of thinking, richness of imagination, breadth of interests, and openness to experience" (p. 1397) rather than a stated desire to prepare for a specific preconceived role. In order to facilitate a broader identification with the psychology field as a whole, it may be important that applicants be required either to have majored in psychology on the undergraduate level or to have subsequently completed a set of fundamental

coursework in basic psychology. Primary prevention components must be synthesized within program curricula so that an effective interface can be achieved between graduate education and identified social needs.

The suggestion to include primary prevention as another dimension of training will initially be perceived as a force that triggers oppositional attitudes. Although conflict in many ways serves as a source for change (Blumberg, 1980) it is also a by-product of change initiatives. Individuals involved may experience internal conflict regarding how such changes will directly effect them. At the same, conflict will arise between groups as well (e.g.: subgroups of faculty vs other subgroups, faculty vs administrators, students vs faculty etc.). Studies of change in education indicate that educators tend to react to "adversary conditions" by becoming more resistant to change efforts, withdrawing into defensive stands and ultimately becoming "incapable of responding creatively to conflict situations" (Milstein, Lusthaus, Lusthaus, 1980, p. 9). Kuhn's (1970) distinction between persuasion and conversion provides insight into why primary prevention implementation meets resistance despite existing interest in prevention. Through persuasion a clinical psychologist may be able to recognize intellectually a new perspective but may remain incapable of internalizing the new perspective if there has been no conversion.

Given the historical socialization emphasis placed upon the status of treatment and the minimal value placed on

primary prevention, it should not be surprising that clinical psychologists' responses would range from hesitancy to total upset. There must be a recognition that tensions are inevitable and everpresent due to the polarities within the profession. When the implicit and explicit value system that has historically influenced clinical psychology doctoral training confronts the prevention value system, anxiety will heighten. The dialectic process of synthesizing these polarities in newly revamped training programs can lead to novel concepts of program enrichment and move the entire profession to a new level of professional preparation.

It would be a useful contribution for the profession to take a proactive stance and begin to actively reshape its educational system (Altman, 1987). The clinical psychology field can take the futuristic approach (Alpert, 1985) to bring about change and to establish frameworks for action. For this approach to be comprehensive, there must be room for ideas to emanate from calculated projections (e.g. anticipated demographic, economic, or psychological trends), assessment of current political realities, and "professional fantasies" which can "introduce bold and new ideas" (Alpert, 1985, p. 1113). Alpert (1985) asserts that despite psychologists' impressive repertoire of skills they do not know how to alter the practice of their profession. She states that "there is a need for more discussion about what we want a field to become, discussion unlimited by judgements about the future world or its politics. To entertain a

professional fantasy provides another way of contemplating the field" (p. 1112).

Examples abound illustrating meaningful change resulting from a futuristic approach. Twenty years ago those involved in education and care of handicapped children and adults fantasized about an ideal world where education and society would be open to all regardless of their handicapping condition. Even after the passage of landmark legislation in 1975 (PL 94-142) advocates struggled to envision a truly barrier-free society. With the signing of the Americans With Disabilities Act in 1990 (PL 101-336) years of advocacy and proactive planning have produced a reality that many doubted was possible.

The profession of clinical psychology has often laid claim to a medical model and has often been criticized for its tendency to function under such a model. It is not accurate, however, to describe the model guiding clinical psychology as "medical". Medicine is defined as "the science of diagnosing, treating, or preventing disease or damage to the body or mind" (Websters II, 1988, p.738). To be technically accurate, clinical psychology has followed a "psychiatric model" focusing on diagnosing and treating psychopathology. This is not surprising given the profession's historic relationship with psychiatry. This model has led clinical psychologists to view themselves as clinicians and to consider the domain of their expertise to be theory development, research, diagnosis, and treatment of

existing psychopathology. Therefore, it is understandable that they find it hard to comprehend how primary prevention fits into their profession.

It is commonly acknowledged that the constructs of mental health and mental illness form a complex continuum of emotional and psychological states. Clearly there is a need for intervention in each segment of this continuum, including promotion of positive mental health, prevention of mental disorders, and treatment. Yet, currently every mental health-related profession (clinical, counseling, educational, social, and community psychologists, psychiatrists, social workers, and psychiatric nurses, etc.) is placing major emphasis only one end of the continuum—psychotherapeutic treatment. This raises a very important question: How can mental health professionals ethically ignore the rest of the continuum?

Every field flirts with the prevention model. Community psychology has most clearly staked out prevention as its guiding principle. However, it should be noted that the very formation of community psychology was in reaction to inadequacies in the field. Therefore, it was not a proactive move even though it was needed and important. Assigning different segments of the continuum of mental health needs to different specialties is a disjointed and ineffective approach. A comprehensive sequential approach is needed allowing each specialty to apply its unique perspectives and skills to both treatment and prevention needs along all

segments of the continuum.

The use of a futuristic approach based upon the views of respondents to this survey has prompted the following professional fantasy: Let us assume that the purpose or goal of mental health professions would be to address the needs of society's mental health continuum. To do this, each profession must develop and implement theories, research methods, and intervention strategies aimed at facilitating optimal effectiveness in both the prevention and the treatment of emotional, behavioral, and psychological damage, at all levels of need: individual, family, community, regional, state, and national.

By allowing each discipline to add its unique dimension, this comprehensive approach will ultimately provide a well-integrated and humane means of effectively addressing societal mental health needs. The challenge for the clinical psychology profession as well as for other related fields is to determine what its unique perspective and contribution will be in this model.

This futurist approach and professional fantasy can be applied more specifically to a potential process for integrating the primary prevention component into existing clinical psychology doctoral programs. Once the decision has been made to broaden the scope of the training program, administrators, faculty, and program planners will have to recognize and honestly confront their own value systems and existing sphere of expertise. This would be important in

order to avoid benign obsolescence resulting from a sense of incipient inadequacy. This is vital because students' perceptions of faculty values often lead them to comply with program policies based upon how well they mesh with those values (Descutner & Thelen, 1989).

There is a need to develop processes that will help faculty members integrate prevention content into the diverse areas of psychology (Bickman, 1987). Existing resources, such as the Prevention Research Branch at NIMH, should be tapped for regenerative professional experiences for faculty. This would promote an expansion of knowledge, provide access to instructive material and models, and allow them to build supportive collegial relationships with prevention specialists.

Simultaneously, the program director or faculty representative will consult with doctoral programs, such as The University of Vermont, which presently has a primary prevention curriculum and a long history of commitment to advocacy in this area. This discourse can help better elucidate the issues to be confronted and discussed among faculty in the program. It is important that enrolled students be involved in the decision making process. Colloquia should be scheduled with presenters focusing on primary prevention as it is practiced and how it could relate to the clinical psychology profession. This begins to provide students with a frame of reference and a knowledge base for continued discussion. Perhaps after each

colloquium a survey could be made of students to assess their receptivity and perceptions regarding its relevance to training and future work.

At a pre-selected program meeting, the chairperson or director will announce the program's intention to add a primary prevention component to training and indicate why the issue is important to future training. In addition, the discussion leader should expect some resistance and encourage faculty and students to focus on inherent problems, express concerns, reactions, and fears. As a follow-up, request that faculty over the next month devote one or two sessions of each course to fantasize, brainstorm, and generate ideas regarding specific applications and relevancy of primary prevention and how it might be integrated into their existing course. Each class will summarize the problems, possibilities, and conclusions and present them for discussion at the next program meeting. This allows students to feel like a part of the process with some input and control over the decisions being made.

The faculty would need to meet again to allow them an opportunity to vent their feelings and reactions (how expansion will effect faculty courseload, length of residency for students etc.). They should debate the pro's and con's of alternate models of integration and narrow down choices to those viewed as the best to present to students for their reaction. Students' feedback could be heard at another program meeting or a survey could be developed assessing

students' attitudes towards the models.

The ultimate model selected should be one where prevention curriculum modules are integrated with traditional treatment modules. If primary prevention was included as an elective or single survey course it would be implicitly assigned a secondary or peripheral status and would be at risk of being eliminated from the curriculum entirely if programs were faced with budget cuts. A comprehensive curriculum will assure that all future clinical psychologists have been exposed to both the prevention and treatment of mental health problems.

The adoption of a primary prevention component into clinical psychology doctoral training programs could well attract more women and ethnic minorities to this field since this study indicates that these groups have a proclivity towards positive attitudes and involvement in prevention. The increased enrollment of women and ethnic minorities would be an affirmative response to concerns expressed by the field (Howard, Pion, Gottfredson, Flattau, Oskamp, Pfafflin, Bray, & Burstein, 1986).

Not only is there a recognized need to continue increasing the representation of ethnic minorities and women in the profession but also a special need to increase the pool of minority researchers. Primary prevention as an area within psychology needs to continue the development of theoretical, programmatic and implementation approaches which

are based on and supported by rigorous research. It is an area ripe for quality research from a multidisciplinary perspective.

The profession has acknowledged the need to increase the production of scientific research so that the field can advance in both theory and practice (Howard etal, 1986). A programmatic commitment to prevention under the futurist's professional fantasy model will be likely to not only attract more minority and female researchers and practitioners to the field but also spark the development of additional university based forums for generating primary prevention research. This type of programmatic enrichment should lead to graduates being better prepared to address society's mental health needs.

Limitations of the present Study & Suggestions For Future Research

The results of this study must be considered within the framework of several limitations First, this exploratory study surveyed a limited subsection of clinical psychologists who graduated from clinical psychology programs located in a confined geographical area. A large-scale investigation of this issue will be needed to determine whether the overall positive attitude toward prevention and the characterized viewpoints can be generalized to the profession as a whole.

Given the attitudinal difference found relating to an urban locale for one's doctoral training, a broader national

study could determine if this finding is true for other regions of the country. In addition, future research can determine how much the finding regarding the impact of training in an urban setting is a consequence of who choses to train in urban settings rather than the effect of doing so.

In addition, some survey questions referred to broad and complex concepts (e.g., "primary prevention" and "psychopathology"). The broad definitions presented difficulty for some respondents who would not equally endorse all methods of primary prevention and who felt that primary prevention was not equally important across the range of psychopathology. Future research might focus on attitudes and involvement in specific prevention models and assess their relative appropriateness for specific disorders.

The possible limitations of volunteer response bias must also be addressed. The positive overall attitude found in this study may have been influenced by : (a) the survey's sole focus on primary prevention which may have biased the sample and pulled for positive responses; and (b) the possibility that clinical psychologists who possessed a high interest in prevention were more likely to read, complete and return the questionnaire.

A major objective of this heuristic exploratory study was to provide a much-needed data base and point to additional areas in need of further investigation. Training institutions have been the predominant focus of this study

and discussion. There is a need to ascertain the attitudes of clinical psychology educators about primary prevention. This study indicated that clinical psychologists in private practice cite having no time or money to focus on prevention. Do college professors feel the same way? How many college professors are engaged in primary prevention instruction and/or research? If there is no such involvement, why is that the case? Are professors aware of any funding available to them for research or program development in this area? How would clinical psychology professors change the curriculum to address the concerns identified by this study? It would also be of interest to send the same questionnaire to professors from the same universities used in this study or from other clinical psychology programs. This would allow for a comparison of graduates and their faculty or mentors who set policy, curriculum and initial professional socialization.

Future research should also focus upon issues of professional role conflict and role clarity regarding prevention work which were raised by this study. It would also be important to develop research strategies aimed at examining the very process of social change in a profession. In addition, further exploration is called for regarding psychologists' values, political ideologies, and other personality profile issues which may influence attitudes and professional involvement in this area.

The raising of questions is an important process for

helping the field identify numerous problems and biases. Hence, continued survey research is recommended both as a technique for gathering needed information and as a strategy for raising the field's professional consciousness.

APPENDIX A

Cover Letter and Reference Guide

February 1, 1990

Dear Colleague,

I am a doctoral candidate in clinical psychology at The City University of New York working under the direction of Dr. Paul Wachtel. I would appreciate your assistance with a survey connected with my dissertation.

An analysis of the current state of mental health in the United States reveals a high incidence of emotional disorder and distress, exorbitant societal and treatment costs, and limited fiscal and professional resources to address existing needs. In light of these factors mental health professionals have been encouraged to increase their attention to primary prevention of psychopathology.

A review of the literature indicates that there has been relatively little exploration of the relevance of primary prevention to the profession of clinical psychology. This exploratory study is one preliminary step toward acquiring greater insight into this complex area.

Please take a few moments to consider both the area of primary prevention and the future directions of training and practice in clinical psychology, and share your views in this survey. Be assured that your personal answers will not be divulged under any circumstances: all questionnaires are strictly confidential. Please do not put your name on any of the materials. Each questionnaire will be identified by a code number so that no connection can be made between any individual and his or her answers.

A primary prevention reference guide is attached to this letter; feel free to consult it prior to and as you respond to the survey. It will take approximately 15 minutes of your time.

I am interested in your unique perspective and hope I can count on your participation. Thank you in advance for your cooperation.

Sincerely,

Susan Hughes-Moss

Susan Hughes-Moss

Primary Prevention Reference Guide

When responding to this questionnaire, please use the following definition and description of primary prevention as your guide.

DEFINITION:

In the mental health fields primary prevention consists of two major features. One feature pertains to the reduction of the incidence (i.e. rate of occurrence of new cases) of psychopathology. The second feature involves the maintainance or enhancement of mental health. It involves intervention prior to the occurrence of troubled states. Most primary prevention strategies aim to enhance coping skills and reduce stress.

DESCRIPTION:

A review of the literature illustrates a wide array of primary prevention proposals.

* Different levels of intervention are described. Effective intervention can be applied to individuals and families, organizations, and larger social systems.

* In addition, all different points across the lifespan are receptive to preventive intervention.

* Strategies for primary prevention in mental health include crisis intervention, competence building, mental health consultation, mental health education, and advocacy and social action.

* These strategies are directed towards high risk groups, individuals or groups experiencing a life crisis, as well as the general population at large.

APPENDIX B

Questionnaire

Part I

On the following pages are several questions related to primary prevention in mental health. Please read each item carefully and respond by circling the number of the answer that best represents your view or by filling in the blank as indicated.

1. Primary prevention aims to prevent psychopathology by eliminating stressors and strengthening coping skills.

   I think these goals are:

   1....Unrealistic in principle.
   2....Fine in principle, impossible to implement strategies
   3....Fine in principle, uncertain about whether they can be implemented.
   4....Fine in principle, can be implemented.

2. Presently our society's efforts toward the prevention of psychopathology are:

Nonexistent	Minimal	Moderate	Quite Significant
1	2	3	4

3. In considering our nation's social concerns, I believe the prevention of psychopathology should be considered:

   1....Not a national priority
   2....A low national priority
   3....A moderate national priority
   4....A top priority

4. Given that the total budget for state, local and federal mental health funding is more or less fixed, the following statement comes closest to my opinion:

   1.....We should allot more funds to primary prevention research & programs and less to treatment research and programs.

   2.....We should allot less funds to primary prevention research & programs and more to treatment research and programs.

   3.....The current relative allocations to prevention as compared to treatment are appropriate.

5a. As I conceptualize the roles, functions, skills, and theories which constitute the professional domain of clinical psychology, I would characterize primary prevention research and practice as follows:

Definitely outside domain	Somewhat outside domain	Somewhat within domain	Definitely within domain
1	2	3	4

b. At the time I entered doctoral training in clinical psychology I regarded primary prevention training and practice as follows:

Definitely outside domain	Somewhat outside domain	Somewhat within domain	Definitely within domain
1	2	3	4

6a. When I consider the professional activities of clinical psychologists as a group, I feel that the amount of time devoted to preventive activities relative to therapeutic activities is:

Excessive	Sufficient	Barely Adequate	Deficient	Extremely Deficient
1	2	3	4	5

b. At the time I entered doctoral training in clinical psychology I felt that the amount of time clinical psychologists devoted to preventive activities relative to therapeutic activities was:

Excessive	Sufficient	Barely Adequate	Deficient	Extremely Deficient
1	2	3	4	5

7. On the basis of my interaction with fellow clinical psychologists, I feel their professional interest in primary prevention is:

Nonexistent	Minimal	Moderate	Extensive
1	2	3	4

8. On the basis of my interaction with fellow clinical psychologists, I feel their professional work experience in primary prevention has been:

Nonexistent	Minimal	Moderate	Extensive
1	2	3	4

9. How would you characterize your own professional interest in practicing primary prevention of psychopathology?

A) When you applied to clinical psychology doctoral training:

None	Minimal	Moderate	Great
1	2	3	4

B) Upon graduating from clinical psychology doctoral training:

None	Minimal	Moderate	Great
1	2	3	4

C) Presently:

None	Minimal	Moderate	Great
1	2	3	4

10. As a direct consequence of my doctoral training my overall interest in primary prevention...

Decreased Greatly	Decreased Somewhat	Remained The Same	Increased Somewhat	Increased Greatly
1	2	3	4	5

11. Have you ever subscribed to any professional journals that stongly emphasize primary prevention?

No	Yes
1	2

If yes, please specify which: _____

_____

_____

12a. When you consider your professional work experience as a clinical psychologist, have primary prevention activities ever been included in your job responsibilities?

No	Yes
1	2

b. If yes, please use the space below to describe the position(s), tasks, recipients, and work setting(s) in which you engaged in primary prevention work:

Position	Tasks	Recipients	Work Setting(s)

13a. Are you currently professionally engaged in any primary prevention activities?

No	Yes
1	2

b. If NO, why not: (Please circle all that apply)

1....Not part of my current job description.

2....Provides too little personal gratification.

3....Lacks professional challenge.

4....Lacks professional status.

5....Salary was too low.

6....Found work boring.

7....Position no longer exists.

8....My professional skills were not appropriate.

9....Other (specify below).

_____

_____

14. When you consider the courses offered in your clinical psychology doctoral program, how many included coverage of primary prevention philosophy and practices?

# of courses: _____ (provide number)

If your program DID have a course in primary prevention, please answer the items below. If your program did NOT offer any courses in primary prevention, please go to # 20.

15. If your program did have a course(s) in prim. prevention was(were) the course(s) considered central or peripheral to professional training by the program at large?

PERIPHERAL	CENTRAL
1	2

16. When you consider the student body in your doctoral program, who took the course(s) in primary prevention?

No Students	Few Students	Some Students	Most Students
1	2	3	4

17a. If your program had a course(s) in primary prevention, did you take these courses?

No	Yes
1	2

b. If yes, please provide the course title(s):

_____

_____

18. How did the course influence your professional interest in primary prevention?

Decreased Interest Greatly	Decreased Interest Somewhat	No Effect	Increased Interest Somewhat	Increased Interest Greatly
1	2	3	4	5

19. Did you consider the course(s) central or peripheral to your training?

PERIPHERAL	CENTRAL
1	2

20. If your program did not have any courses in primary prevention, would the inclusion of such a course have enhanced your professional training?

Definitely Not	Probably Not	Probably	Definitely
1	2	3	4

21a. During your doctoral training, were any of your professors involved in ongoing prevention research?

No	I Don't Know	Yes
1	2	3

b. If yes, please briefly describe work:

_____

_____

_____

c. If yes, did you work on these research projects?

No	Yes
1	2

22. When you consider your predoctoral internship experience to what extent was primary prevention emphasized?

Not At All	Minimally	Moderately	Heavily
1	2	3	4

23. If I were interested in working in primary prevention, I feel that...

(Circle all responses that apply)

1....My training prepared me well for such work.

2....My training did not prepare me well for such work.

3....My training did not make me aware of the possibilities.

4....My training discouraged this kind of effort.

24. Have you attended any workshops or conferences on primary prevention subsequent to your doctoral training?

Yes	No
1	2

25. When I consider the doctoral training of future clinical psychologists, I believe the study of the dynamics of social structures relative to the study of individual and family dynamics should receive...

No Emphasis	Less Emphasis	Equal Emphasis	Greater Emphasis
1	2	3	4

26. When I consider the doctoral training of future clinical psychologists, I believe the study of social theory relative to personality theory should receive...

No Emphasis	Less Emphasis	Equal Emphasis	Greater Emphasis
1	2	3	4

27. When I consider the doctoral training of future clinical psychologists, I believe that practicum experience in consultation skills relative to psychotherapy skills should receive...

No Emphasis	Less Emphasis	Equal Emphasis	Greater Emphasis
1	2	3	4

28. When I consider the doctoral training of future clinical psychologists, I would rate the appropriateness of internship experiences in industrial, correctional, and social welfare settings as follows:

Very Inappropriate	Somewhat Inappropriate	Somewhat Appropriate	Very Appropriate
1	2	3	4

29. When I consider existing societal mental health problems, I would rate the importance of future clinical psychologists receiving training in primary prevention as follows:

Very Unimportant	Somewhat Unimportant	Somewhat Important	Very Important
1	2	3	4

30. If future clinical psychologists were to receive training in primary prevention I feel the training would be most appropriate at the...

Doctoral Level	Postdoctoral Level
1	2

31. To what degree do you agree with the following statement:

The APA should require the inclusion of a primary prevention curriculum in clinical psychology programs to qualify for full accreditation.

Strongly Disagree	Disagree Somewhat	Agree Somewhat	Strongly Agree
1	2	3	4

32. If clinical graduate students today devoted equal time to developing prevention skills as treatment skills, the effect on clinical psychology as a field would be...

Very Detrimental	Somewhat Detrimental	Not Effectual	Somewhat Beneficial	Very Beneficial
1	2	3	4	5

THANK YOU FOR TAKING TIME TO GIVE YOUR RESPONSES!
PLEASE GO ON TO PART II

Part II

Psychologist Background Information

Below are questions that will provide information about your background. Please read each item carefully and respond by circling the number of the most appropriate answer or by filling in the blank as indicated.

1. Sex:
   1....Male
   2....Female

2. Date of birth: ___/___/___

3. Ethno-racial group : (circle only one)

   1.... Asian, Asian-American
   2.... Black, Afro-American
   3.... Latino, Hispanic
   4.... White, Caucasian
   5.... Other:

4. Doctoral degree received: 1....Ph.D.
   2....Psy.D.

5. Highest degree received: 1....Doctorate
   2....Postdoctorate

6. Date degree received:

   Doctorate: ___/___/___
   Post-Doctorate: ___/___/___

7. What is the primary theoretical orientation of your doctoral program?

   1.....Behavioral/Cognitive Behavioral
   2.....Humanistic/Phenomenological/Existential
   3.....Family Systems
   4.....Psychodynamic
   5.....Eclectic/Integrative
   6.....Social/Community
   7.....Other (please specify below)

   _____

8. What is your personal theoretical orientation?

1.....Behavioral/Cognitive Behavioral
2.....Humanistic/Phenomenological/Existential
3.....Family Systems
4.....Psychodynamic
5.....Eclectic/Integrative
6.....Social/Community
7.....Other (please specify below)

_____

9. Which of the following best captures your primary professional role as a clinical psychologist?

1.....Therapist
2.....Academician
3.....Researcher
4.....Administrator
5.....Supervisor
6.....Consultant
7.....Other: (please specify below)

_____

10. Have you ever been professionally employed in a clinical psychology doctoral program?

1.....Yes
2.....No

If yes, in what capacity? (please circle all that apply)

1.....Program Director
2.....Clinic Director
3.....Professor
4.....Clinical Supervisor
5.....Research Supervisor
6.....Other: (please specify below)

_____

11. Are you in private practice? 1.....Yes
2.....No

If yes: 1.....Full time
2.....Part time

12. If you engage in direct client services (therapy, testing, etc) what percent (%) of your clinical services are devoted to each of following populations?

(please specify)

	%
Children/Adolescents	____
Adults	____
Families	____
Couples	____
Other: (please specify below)	____

_____

13. If you engage in any direct client services (therapy, testing, etc) what is the socio-economic status of the largest percentage of your client population?

1.....Upper class or upper middle class
2.....Middle class
3.....Working class
4.....Lower class

14. If you engage in any direct client services (therapy, testing, etc) what is the ethno-racial group of the largest percentage of your client population?

1.....White, Caucasian
2.....Black, Afro-American
3.....Hispanic, Latino
4.....Asian, Asian-American
5.....Other (please specify below)

_____

15. Please use the rating scale below when responding to this question:

1 = Full time/Only professional activity
2 = 20-40 hrs/week
3 = 8-20 hrs/week
4 = 4-8 hrs/week
5 = Less than 4 hrs/week
6 = Don't do at all

For each activity below, circle the scale number that best reflects the amount of professional time you devote to each activity.

Please be sure to circle one number for each line.

PSYCHOTHERAPY:	1	2	3	4	5	6
DIAGNOSIS & ASSESSMENT:	1	2	3	4	5	6
COMMUNITY CONSULTATION:	1	2	3	4	5	6
BEHAVIOR MODIFICATION:	1	2	3	4	5	6
TEACHING:	1	2	3	4	5	6
CLINICAL SUPERVISION:	1	2	3	4	5	6
RESEARCH:	1	2	3	4	5	6
ADMINISTRATION:	1	2	3	4	5	6
SCHOLARLY WRITING:	1	2	3	4	5	6
OTHER	1	2	3	4	5	6

(specify) _____

16. Please use the rating scale below when responding to this question:

1= Extensive
2= Moderate
3= Minimal
4= None at all

For each institution below, circle the scale number that best reflects the extent of your professional work experience in each setting.

Please be sure to circle one number for each line.

HOSPITAL.....	1	2	3	4
ELEM/MID/ HIGH SCHOOL....	1	2	3	4
UNIVERSITY....	1	2	3	4
COMMUNITY MENTAL HEALTH CENTER...	1	2	3	4
CORPORATE SETTING.....	1	2	3	4
OTHER	1	2	3	4

(specify) _____

17. What is the geographical location of your current primary employment setting?

1.....Urban
2.....Suburban
3.....Rural

In the space provided below please comment on the issues included or raised by this questionnaire. Thank you.

_____

_____

_____

_____

Appendix C

SUBSCALE ITEMS FORMING OVERALL ATTITUDE SCALE

Societal and Professional Importance of Prevention

(IMPORTANCE)

Questions #3, #4, #5a, #6a

Respondents' Personal Interest and Involvement in Prevention

(INVOLVEMENT)

Questions #9c, #12a, #13a, #20

The Role of Prevention in the Training of Future Clinical Psychologists

(FUTURE)

Questions #25, #26, #27, #28, #29, #31, #32

APPENDIX D

FREQUENCY DISTRIBUTION OF SAMPLE ON ALL DEMOGRAPHIC VARIABLES

DEMOGRAPHIC/ DESCRIPTIVE VARIABLES	FREQ.	%
SEX		
MALE	106	42.7
FEMALE	142	57.3
AGE		
40 YRS. AND UNDER	133	53.8
41 YRS. AND OVER	114	46.2
ETHNICITY		
ASIAN	3	1.2
AFRICAN AMERICAN/BLACK	23	9.3
CAUCASIAN/WHITE	210	85
HISPANIC/LATINO	11	4.5
TYPE OF DOCTORAL DEGREE		
PH. D.	174	70.2
PSY. D.	74	29.8
HIGHEST LEVEL OF TRAINING		
DOCTORAL	203	81.9
POST-DOCTORAL	45	18.1
NUMBER OF YRS. POST DOCTORATE		
13 YRS. OR LESS	195	79.6
14 YRS. OR MORE	50	20.4
THEORETICAL ORIENTATION OF PROGRAMS		
BEHAVIORAL	111	45
PSYCHODYNAMIC	65	26
OTHER*	72	29

* CHOICE OF THREE TRACKS: BEHAVIORAL, PSYCHODYNAMIC, SOCIAL/COMMUNITY

DEMOGRAPHIC/ DESCRIPTIVE VARIABLES	FREQ.	%
PERSONAL THEORETICAL ORIENTATION		
BEHAVIORAL	56	22.6
PSYCHODYNAMIC	100	40.3
FAMILY SYSTEMS	14	5.6
ECLECTIC/INTEGRATIVE	74	29.8
HUMANISTIC/PHENOMENOLOGICAL	3	1.2
SOCIAL/COMMUNITY	1	0.4
EMPLOYMENT: CLIN. PSYCH. DOCTORAL PROGRAM		
YES	71	28.6
NO	177	71.4
EMPLOYMENT CAPACITY IN C.P. PROGRAM		
DIRECTOR (CLINIC OR PROG.)	9	12.7
PROFESSOR (FULL OR ASSOC.)	29	40.8
SUPERVISOR (CLINICAL OR RESEARCH)	33	46.5

APPENDIX E

PROGRAM DESCRIPTIONS

PROGRAM	GEOGRAPHIC LOCALE	TYPE OF DEGREE	THEORETICAL ORIENTATION
PROGRAM A	SUBURBAN	PH.D.	PSYCHODYNAMIC
PROGRAM B	URBAN	PH.D.	PSYCHODYNAMIC
PROGRAM C	SUBURBAN	PH.D.	BEHAVIORAL
PROGRAM D	URBAN	PH.D.	BEHAVIORAL
PROGRAM E	URBAN	PSY.D.	ECLECTIC

References

Albee, G. W. Mental health manpower problems. Hew York: Basic Books, 1959.

Albee, G. W. Report of the Task Panel on Prevention. In D. G. Forgays (Ed.), Primary prevention of psychopathology (Vol. 2). Hanover: N.H.: University Press of New England, 1978.

Albee, G. W. Preventing psychopathology and promoting human potential. American Psychologist, 1982, 37, 1043-1050.

Albee, G. W. Toward a just society. American Psychologist, 1986, 41, 891-898.

Alpert, J. L. Change within a profession. American Psychologist, 1985, 40, 1112-1121.

Altman, I. Centripetal and centrifugal trends in psychology. American Psychologist, 1987, 42, 1058-1069.

American Psychological Association. Resolutions approved by the National Conference on Graduate Education in Psychology. American Psychologist, 1987, 1070-1084.

Auerbach, S. M. & Kilmann, R. R. Crisis interventions: A review of outcome research. Psychological Bulletin, 1977, 84, 1189-1217.

Beers, C. A mind that found itself. New Jersey: Doubleday, 1921.

Bellak, L. A concise handbook of communlty psychiatry and community mental health. New York: Grune & Stratton, 1974.

Bickman, L. B. (Ed.). Issues and concerns: Graduate education in psychology. Washington D.C.: American Psychological Association, 1985.

Bickman, L. B. Graduate education in psychology. American Psychologist, 1987, 1041-1047.

Bloom, B. L. Community mental health: A general introduction. Monterey, CA.: Brooks/Cole, 1977. (a)

Bloom, B. L. The rhetoric and some views of reality. In I. Iscoe, B. Bloom, & C. D. Spielberger (Eds.), Community Conference in transition: Proceedings of the National Conference on Training in Community Psychology. Washington, D. C.: Hemisphere Publishing, 1977. (b)

Bloom, B. L. Marital disruption as a stressor. In D. G. Forgays (Ed.), Primary prevention of psychopathology (Vol. 2). Hanover, N. H.: University Press of New England, 1978.

Bloom, B. L. Prevention of mental disorders: Recent advances in theory and practice. Community Mental Health Journal, 1979, 15, 179-191

Bloom B. L. The logic and urgency of primary prevention. Hospital and Community Psychiatry, 1981, 32, 839-842.

Bloom, B. L., Hodges, W. F., & Caldwell, R. A. A preventive program for newly separated: Initial evaluation. American Journal of Community Psychology, 1982, 10, 257-264.

Bloom, B. L. & Hodges, W. F. The Colorado separation and divorce program: A preventive intervention program for newly separated persons. In R. H. Price, E. L. Cowen, R. P. Lorion & J. Ramos-McKay (Eds.), 14 ounces of prevention. Washington, D.C.: American Psychological Association, 1988.

Blumberg, A. School organizations: A case of generic resistance to change. In M. M. Milstein (Ed.), schools, Conflict, and Change. New York: Teachers College Press, 1980.

Bolman, W. M. & Bolman, W.M Crisis intervention as primary or secondary prevention. In I. N. Berlin & L. A. Stone (Eds.), Basic handbook of child psychiatry (Vol. 4). New York: Basic Books, 1979.

Botvin, G. J. & Tortu, S. Preventing adolescent substance abuse through life skills training. In R. H. Price, E. L. Cowen, R. P. Lorion & J. Ramos-McKay (Eds.), 14 ounces of prevention. Washington, D.C.: American Psychological Association, 1988.

Bower, E. M. Primary prevention of mental and emotional disorders: A conceptual framework and action possibilities. American Journal of Orthopychiatry, 1963, 33, 832-848.

Bower, E. M. K.I.S.S. and kids: A mandate for prevention. American Journal of Orthopychiatry, 1973, 556-565.

Brandt, E. N. Prevention policy and practice in the 1980's. American Psychologist, 1982, 37, 1038-1042.

Broskowski, A. & Baker, F. Professional, organizational, and social barriers to primary prevention. American Journal of Orthopschiatry 1974, 44, 707-719.

Bry, B. H. The practice of preventive psychology.

Contemporary Psychology, 1988, 33, 612-613.

Cassel, J. The contribution of the social environment to host resistance. American Journal of Epidemiology, 1976, 104, 107-123.

Cohen, W. S. Health promotion in the workplace. American Psychologist, 1985, 40, 213-216.

Conyne, R. K. Primary preventive counseling: Empowering people and systems. Muncie, IN: Accelerated Development, 1987.

Cook, S., Bibace, R., Garfield, S., Kelly, G., & Wexler, M. Issues in the professional training of clinical psychologists. In E. L. Hoch, A. O. Ross, & C. L. Winder (Eds.), Professional preparation of clinical psychologists. Washington, D. C.: American Psychological Association, 1966.

Crowe, M. B., Grogan, J. M., Jacobs, R. R., Lindsay, C. A., & Mark, M. M. Delineation of roles of clinical psychology: A survey of practice in Pennsylvania. Professional psychology: Research and Practice, 1985, 16, 124-137.

Cowen, E. L. The wooing of primary prevention. American Journal of Community Psychology, 1980, 8, 258-284.

Cowen, E. L. Primary prevention research: Barriers, needs, and opportunities. Journal of Primary Prevention, 1982, 2, 131-137.

Cowen, E. L. Primary prevention in mental health: Past, present, and future. In R. D. Felner, L. A. Jason, J. N. Moritsugu, & S. S. Farber (Eds.). Preventive Psychology. New York: Pergamon, 1983, 11-25.

Danish, S. J. & D'Augelli, A. R. Promoting competence and enhancing development through life development intervention. In L. A. Bond & J. C. Rosen (Eds.), Primary prevention of psychopathology (Vol 4). Hanover, N. H.: University Press of New England, 1980.

Davidson W. S. & Redner, R. The prevention of juvenile delinquency: Diversion from the juvenile justice system. In R. H. Price, E. L. Cowen, R. P. Lorion, & J. Ramos-McKay (Eds.), 14 ounces of prevention. Washington, D. C.: American Psychological Association, 1988.

Descutner, C. J. & Thelen, M. H. Graduate student and faculty perspectives about graduate school. Teaching of Psychology, 1989, 16, 58-61.

DeWilde, D.W. Toward a clarification of primary prevention.

Community Mental Health Journal, 1981, 16, 306-316.

Dougherty, D. Children's mental health problems and services. American Psychogist, 1988, 43, 808-812.

Durlak, J. A. Social problem-solving as a primary prevention strategy. In R. D. Felner, L. A. Jason, J. N. Montsugu, & S. S. Farber (Eds.), Preventive pschology Theory, research and practice. New York; Pergamon Press, 1983.

Egan, G. Change agent skills in helping and human service settings. Monterey, CA: Brooks/Cole, 1985.

Erlenmeyer-Kimling, L. Issues pertaining to prevention and intervention of genetic disorders affecting human behavior. In G.W. Albee & J. M. Joffee (Eds.), Primary prevention of psychopathology (Vol. 1). Hanover, N. H.: University Press of New England, 1977.

Felner, R. D., Norton, P. L., Cowen, E. L., & Farber, S. S. A prevention program for children experiencing life crisis. Professional Psychology, 1981, 12, 446-452.

Felner, R. D. & Adam, A. M. The school transitional environment project: An ecological intervention and evaluation. In R. H. Price, E. L. Cowen, E. P. Lorion & J. Ramos-McKay (Ed s.), 14 ounces of prevention. Washington, D.C.: American Psychological Association, 1988.

Frank, R. G. & Kamlet, M. S. Direct costs and expenditures for mental health in the United States, 1980. NIMH Division of Biometry & Epedimiology, Contract No. 83-MO-54337009d. Rockville, Md.: National Institute for Mental Health, 1984.

Garfield, S. L., & Kurtz, R. Clinical psychologists in the 1970's. American Psyologist, 1976, 31, 1-9.

Garfield, S. L. Clinical psychology: The study of personality and behavior (2nd ed.). New York: Aladine, 1983.

Garmezy, N. Intervention for children at risk for behavior pathology. Clinical Psychologist, 1975, 28, 12-14.

Garmezy, N. Stress, competence, and development: Continuities in the study of schizophrenic adults, children vulnerable to psychopathology, and the search for stress-resistant children. American Journal of Orthopsychiatry, 1987, 57, 159-174.

Glasscote, R. M. Talking sense about prevention. Hospital & Community Psychiatry, 1981, 32, 823.

Golann, S. E., Wurm, C. A., & Magoon, T. M. Community mental health content of graduate programs in departments of psychology. Journal of Clinical Psychology, 1964, 20, 518-522.

Golann, S. E., & Baker, J. Current and future trends in community psychology. New York: Human Science Press, 1975.

Goldston, S. E. Defining primary prevention. In G.W. Albee & J. M. Joffe (Eds.), Primary prevention of pschopathology (Vol. 1). Hanover, N. H.: University Press of New England, 1977.

Goplerund, E. N. (Ed.) Breaking new ground for youth at risk: Program summaries. Rockville, MD: OSAP Division of Communication Programs, DHHS Publication No. (ADM) 89-1658, 1990.

Gordon, R. An operational classification of disease prevention. In J. A. Steinberg & M. M. Silverman (Eds.). Preventing mental disorders-A research perspective. Washington, D. C.: U.S. Dept. of Health and Human Services, 1987, 20-26.

Hansen, F. K. Primary prevention and counseling psychology: Rhetoric or reality? The Counseling Psychologist, 1981, 9, 57-59.

Harwood, H. J., Napolitano, D. M., Kristiansen, P. L., & Collins, J. J. Economic costs to society of alcohol and drug abuse and mental illness, 1980. ADAMHA Office of Program Planning and Coordination, Contract No. 283-83-002. Rockville, Md.: Alcohol, Drug Abuse, & Mental Health Administration, June, 1984.

Hatch, O. G. Psychology, society, and politics. American Psychologist, 1982, 37, 1031-1037.

Heffernan, J. A. & Albee, G. W. Prevention perspectives from Vermont to Washington. American Psychologist, 1985, 40, 202-204.

Hillerbrand, E. Philosophical tensions influencing psychology and social action. American Psychologists 1987, 111-118.

Hoch, E. L., Ross, A. O., & Winder, C. L. (Eds.). Professional preparation of clinical psychologists. Washington, D. C.: American Psychological Association, 1966.

Howard, A., Pion, G. M., Gottfredson, G. D., Flattau, P. E., Oskamp, S., Pfafflin, S. M., Bray, D. W., & Burstein, A.

G. The changing face of American psychology: A report from the Committee on Employment and Human Resources. American Psychologist, 1986, 41, 1311-1327.

Hull, C., & Nie, N. SPSS update 7-9. New York: McGraw-Hill, 1981.

Iscoe, I. Conceptual barriers to training for the primary prevention of psychopathology. In J. M. Joffe & G. W. Albee (Eds.), Primacy prevention of psychopathology (Vol. 5). Hanover, N. H.: University Press of New England, 1981.

Johnson, D. L. Primary prevention of behavior problems in young children: The Houston parent-child development center. In R. H. Price, E. L. Cowen, R. P. Lorion, & J. Ramos-McKay (Eds.), 14 ounces of prevention. Washington, D.C.: American Psychological Association, 1988.

Kelly, E. L. & Goldberg, L. R. Correlates of later performance and specialization in psychology: A follow-up study of trainees assessed in the V.A. selection research project. Psychological Monographs, 1959, 73 (12, Serial No. 482).

Kelly, E. L., Goldberg, L. R., Fiske, D. W., & Kilkowski, J. M. Twenty-five years later: A follow-up study of the graduate students in clinical psychology assessed in the V.A. selection research project. American Psychologist, 1978, 746-755

Kennedy, J. F. Message from the President of the United States relative to mental illness and mental retardation. House Document No. 58, 88th Congress 1st. Washington, D.C.: U. S. Government Printing Office, 1965.

Kessler, M. & Albee, G. Primary prevention. Annual Review of Psychology, 1975, 26, 557-591.

Kessler, M. & Goldston, S. E. (Eds.) A decade of progress in primary prevention. Hanover, NH: University of New England, 1986.

Klecka, W., Nie, N., & Hull, C. SPSS primer. New York: McGraw- Hill, 1975

Korchin, S. Modern clinical psychology. New York: Basic Books, 1976.

Korman, M. National conference on levels and patterns of training in psychology: The major themes. American Psychologist, 1974, 29, 441-449.

Kuhn, T. S. The structure of scientific resolutions.

Chicago: University of Chicago Press, 1970.

Lamb, H. R., & Zusman, J. Primary prevention in perspective. American Journal of Psychiatry, 1979, 136, 12-17.

Lamb, H. R., & Zusman, J. A new look at primary prevention. Hospital & Community Psychiatry, 1981, 32, 843-848.

Laosa, L. M. Social competence in childhood: Toward a developmental, socioculturally realistic paradigm. In M. W. Kent & J. £. Rolf (Eds.), Primary prevention of psychopathology (Vol. 3). Hanover, N. H.: University Press of New England, 1979.

Leavell, H. R., & Clark, E. G. Preventive medicine for the doctor in his community (3rd ed.). New York: McGraw-Hill, 1965.

Leitenberg, H. Primary prevention of delinquency. In J. D. Burchard & S. N. Burchard (Eds.), Primary prevention of psychopathology (V01. 10). Sage Publications, 1987.

Lenfant, C. J. & Schweizer, M. Contributions of health-related biobehavioral research to prevention of the cardiovascular disease. American Psychologist, 1985, 40.

Lorion, R. P. Methodological challenges in prevention research. In J. A. Steinberg & M. M. Silverman (Eds.), Preventing mental disorders- A research perspective. Washington, D. C.: Supt. of Docs., U.S. Gov't. Printing Office, DHHS Publication No. (ADM) 87-1492, 1987.

Maccoby, N. & Altman, D. G. Disease prevention in communities: The Stanford heart disease prevention prevention. In R. H. Price, E. L. Cowen, R. P. Lorion, J. Ramos-McKay, 14 ounces of prevention. Washington, D. C.: American Psychological Association, 1988.

Malone, C. A. Crisis intervention as primary or secondary prevention with poverty parents at risk. In I. N. Berlin & L. A. Stone (Eds.), Basic handbook of child psychiatry (Vol. 4). New York: Basic Books, 1979.

McGinnis, J. M. Recent history of federal initiatives in prevention policy. American psychologist, 1985, 40, 205-212.

Mednick, S. A. & Witkin-Lanoil, G. H. Intervention with children at high-risk for schizophrenia. In G. W. Albee & J. M. Joffe (Eds.), Primary prevention of psychopathology (Vol 1). Hanover, N. H.: University Press of New England, 1977.

Milstein, M. M. (Ed.) Schools, conflicts, and Change. New York: Teachers College Press, 1980.

Milstein, M. M., Lusthaus, C. S., & Lusthaus, E. W. Conflict in education. In M. M. Milstein (Ed.), Schools, Conflict, and Change. New York: Teachers College Press, 1980.

Murphy, L. B. & Frank, C. Prevention: The clinical psychologist. Annual Review of Psychology, 1979, 30, 173-207.

Nie, N., Hull, C., Jenkins, J., Steinbrenner, K., & Bent, D. Statistical package for the social sciences, 2nd ed. New York: McGraw-Hill, 1975.

O'Gorman, P. Prevention issues involving children of alcoholics. In S. Matlins (Ed.), Services for children of alcoholics (DHHS Pub. No. (ADM) 81-1007). Washington, D.C.: U. S. Government Printing Office, 1981.

Olds, D. L. The prenatal/early infancy project. In R.H. Price, E. L. Cowen, R. P. Lorion, & J. Ramos-McKay (Eds.), 14 ounces of prevention. Washington, D.C.: American Psychological Association, 1988.

Patterson, R. G. Foundations of community health education. New York: McGraw-Hill, 1950.

Pierson, D. E. The Brookline early education project. In R. H. Price, E. L. Cowen, R. P. Lorion, & J. McKay (Eds.), 14 ounces of prevention. Washington, D.C.: 1988.

Price, R. H. Etiology, the social environment, and the prevention of psychological dysfunction. In P. Insel & R. H. Moos (Eds.), Health and the social environment. Lexington, MA: D. C. Heath, 1974, 287-300.

Price, R. H., Cowen, E. L., Lorion, R. P., & Ramos-McKay, J. 14 ounces of prevention. Washington, D.C.: American Psychological Association, 1988.

Ramey, C. T., Bryant, D. M., Campbell, F. A., Sparling, J. J., & Wasik, B. H. Early intervention for high-risk children: The Carolina early intervention program. In R. H. Price, E. L. Cowen, R. P. Lorion, J. Ramos-McKay (Eds.), 14 ounces of prevention. Washington, D. C.: American Psychological Association, 1988

Reiger, D. A., Goldberg, E. D., Taube, C. A. The de facto U.S. mental health services system. Archives of General Psychiatry, 1978, 35, 685-693.

Reiger, D. A., Myers, J. K., Kramer, M., Robins, C. N.,

Blazer, D. G., Hough, R. L., Eaton, W. W. & Locke, B. Z. The NIMH epidemiological catchment area program. Archives of General Psychiatry, 1984, 41, 934-941.

Rey, K. H. Prevention research findings: 1988- Rockville, MD: OSAP Division of Communications Programs, DHHS Publication No. (ADM) 89-1615, 1990.

Roen, S. R. Evaluative research and community mental health. In A. E. Bergin & S. L. Garfield (Eds.) Handbook of psychotherapy and behavior change. New York: Wiley, 1971.

Roskin, M. Integration of primary prevention into social work practice. Social Work, 1980, 192-196.

Rotheram-Borus, M. Assertiveness training with children. In R. H. Price, E. L. Cowen, R. P. Lorion, J. Ramos-McKay (Eds.), 14 ounces of prevention. Washington, D. C.: American Psychological Association, 1988. -

Samuels, S. C. Long-term effects of early childhood educational enrichment programs: Preventive implications. Journal of Preventive Psychiatry, 1981, 1, 57-75.

Sanford, N. The prevention of mental illness. In B. B. Wolman (Ed.), Handbook of Clinical Psychology New York: McGraw- Hill, 1965.

Sarason, S., Levine, M., Goldenberg, I., Cherlin, D., & Bennett, E. Psychology in community settings Clinical, education, vocational, social aspects. New York: John Wiley & Sons Inc., 1966.

Sarason, I. G. & Sarason, B. R. Teaching cognitive and social skills to high school students. Journal of Consulting and Clinical Psychology, 1981, 49, 908-918.

Schweinhart, L. J. & Weikart, E. P. The High/Scope Perry preschool program. In R. H. Price, E. L. Cowen, R. P Lorion, & J. Ramos-McKay (Eds.), 14 ounces of prevention. Washington, D.C.: American Psychological Association, 1988.

Shure, M. B. & Spivak, G. Interpersonal cognitive problem solving and primary prevention: Programming for preschool and kindergarten children. Journal of Clinical Child Psychology, 1979, 8, 89-94.

Shure, M. B. & Spivak, G. Interpersonal cognitive problem solving. In R. H. Price, E. L. Cowen, R. P. Lorion, & J. Ramos-McKay (Eds.), 14 ounces of prevention. Washington, D.C.: American Psychological Association, 1988.

Seidman, E. Toward a framework for primary prevention research. In J. A. Steinberg & M. M. Silverman (Eds.), Preventing mental disorders-A research perspective. Washington, D. C.: Supt. of Docs, U.S. Gov't. Printing Office, DHHS Publication No. (ADM) 87-1492, 1987, 2-19.

Shaffer, D., Philips, I., Enzer, N. B. (Eds.) Prevention of mental disorders, alcohol and other drug use in children and adolescents. Rockville, MD: OSAP Division of Communication Programs, DHHS Publication No. (ADM) 89-1646, 1990.

Shaw, M. E., & Costanzo, P. R. Theories of social psychology (2nd ed.). New York: McGraw-Hill, 1982.

Silverman, P. R. Widow-to widow: A mutual help program for the widowed. In R. H. Price, E. L. Cowen, R. P. Lorion, & J. Ramos-McKay (Eds.), 14 ounces of prevention. Washington, D.C.: American Psychological Association, 1988.

Smith, M. B. Themes and variations. In J. B. Joffe & G. W. Albee (Eds.), Primary prevention of psychopathology (Vol. 5). Hanover, N. H.: University Press of New England, 1981.

Smith, M. B. & Hobbs, N. The community and the community mental health center. American Psychologist, 1966, 21, 499-509.

Spence, J. T. Centrifugal versus centripetal tendencies in psychology. American Psychologists 1987, 42, 1052-1054.

Spivack, G. & Shure, M. B. Social adjustment of young children: A cognitive approach to solving real-life problems. San Francisco: Jossey Boss, 1973.

Steinberg, J. A. & Silverman, M. M. Preventing mental disorders- A research perspective. Washington, D. C.: Supt. of Documents, U. S. Gov't• Printing Office, DHHS Publication No. (ADM 87-1492, 1987.

Strayhorn, J. M. The competent child: An approach to psychotherapy and preventive mental health. New York: Guilford Press, 1988.

Tadmor, C. S. The perceived personal control preventive intervention for a caesarean birth population. In R. H. Price, E. L. Cowen, R. P. Lorion, & J. Ramos-McKay (Eds.), 14 ounces of prevention. Washington, D.C.: American Psychological Association, 1988.

U.S. Department of Health, Education, and Welfare, Public Health Service. Healthy people: The surgeon General's

report on health promotion and disease prevention (DHEW PHS Publication No. 79-55071B). Washington, D.C.: U. S. Government Printing Office, 1979.

Wagenfeld, M. O. The primary prevention of mental illness. Journal of Health and Social Behavior, 1972, 13, 195-203.

Zax, M., & Cowen, E. L. Abnormal psychology: changing conceptions. New York: Holt Rinehart, & Winston, 1972.