To the Graduate Council:

I am submitting herewith a dissertation written by Diane Friedman entitled "Personality Correlates of the Whitehorn-Betz A-B Scale in Psychotherapists." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

Harold Fine, Major Professor

We have read this dissertation
and recommend its acceptance:

Accepted for the Council:

Vice Chancellor
Graduate Studies and Research

PERSONALITY CORRELATES OF THE WHITEHORN-BETZ A-B SCALE IN PSYCHOTHERAPISTS

A Dissertation

Presented for the

Doctor of Philosophy

Degree

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Diane Friedman

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For my father,
who did my worrying,
and my mother,
who did my draft typing.

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Finally, this project would not have come to fruition on schedule had it not been for the compassionate and calm assistance of my friend, Nadine Kaslow, to whom I express my very warm thanks.

ABSTRACT

The major aim of this study, which was an investigation of some personality correlates of the Whitehorn-Betz A-B Scale in psychotherapists, was to determine whether or not A male psychotherapists are more characterologically obsessional, depressed, anxious, and inhibited than B male psychotherapists. Because prior A-B studies based on samples as diverse as college students, alcoholic outpatients and psychiatric inpatients had all suggested the presence of these characteristics in A males, the investigator sought to cross-validate their existence in A male psychotherapists as well.

The investigator proposed a model for understanding why it has been that despite their (hypothetical) emotional problems, A male therapists have historically been shown to be more effective, rather than less effective therapists than B males. Based on Fine's conceptualization of the literary-imaginative and scientific-methodological sensibilities, it was postulated that the therapy work of A males has not appeared to be inferior to that of B males partly because of the ameliorating effects of the literary-imaginative intuitive and creative context in which the depression and anxiety-proneness exist as either potentiators or as integral parts. Some subsidiary aims of the project, then, were to determine whether or not there was a positive relationship between A-standing in both males and females, and possession of a literary-imaginative sensibility, on the one hand, and B-standing in both males and females,

and possession of a scientific-methodological sensibility, on the other.

In addition, it was speculated that B females, who attain B status by endorsing interests in a high number of culturally defined "masculine" activities, would be more characterologically anxious than either A females, who do not endorse gender "inappropriate" interests, or B males, who conform to sex role stereotypes with their endorsements. Finally, it was proposed that the A-B Scale could be shown to be a masculinity-femininity scale by comparing its discriminating abilities with those of an established masculinity-femininity scale.

The total sample consisted of 50 male and 50 female psychotherapists drawn primarily from Houston, New York City, and Knoxville, Tennessee. On the basis of their A-B Scale scores, high scoring males (N=10) and females (N=10) were designated B's, and low scoring males (N=10) and females (N=10) were designated A's. The MMPI and 16 PF were then administered to each by mail. Analyses of variance were performed on selected subscales of these tests.

Although questions were raised about the degree to which test-wise therapists could be expected to respond honestly to MMPI questionnaires, most protocols were noted to have conformed to the expected validity pattern for psychotherapist populations.

Results did not confirm the idea that A male psychotherapists are more depressed, anxious or shy than B male psychotherapists, nor did they establish the A-B Scale as a masculinity-femininity index. There was some evidence, however, that A standing in both

males and females is related to the presence of a literary-imaginative sensibility and B standing to a scientific-methodological one. There was also indication that B females are more diffusely anxious, tense, and detached than B males (but not A females).

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CHAPTER I

BACKGROUND AND OBJECTIVES OF INVESTIGATION

It is widely believed by mental health professionals that the single most significant influence on the nature and quality of a psychotherapeutic treatment is the personality of the therapist (Kissinger & Tolor, 1965; Strupp, 1966, 1955, 1978; Sundland & Barker, 1962). Not surprisingly, then, the professional literature is replete with reports of research efforts designed to identify representative therapist characteristics (Anchor, 1977; Bugental, 1964; Burton, 1972; Ellis, 1978; Ford, 1963; Henry, Sims, & Spray, 1973; Henry, Sims, Spray, & Lee, 1971; Holt & Luborsky, 1958; Kelly & Fiske, 1951; Livingston & Zimet, 1955; Mahrer, 1978; Roe, 1952; Rogow, 1970). The assumption behind most of these inquiries has been that the findings would provide starting points for more elaborate investigations of the complex processes which therapists unintentionally set into motion during the course of the treatments which they conduct. Practically speaking, the ultimate aim of all this research is to raise the level of psychotherapy effectiveness. Additionally, however, considerable curiosity seems to exist as an end in itself about just who the people are who become psychotherapists. The current widespread attention drawn to Janet Malcolm's (1981) description of an anonymous New York City psychoanalyst and his view of the analytic community attests to this interest among general readers, psychotherapy patients, and psychotherapists alike.

Henry, Sims, & Spray (1971, 1973) apparently acted in response to the inherent appeal of this subject in the late 1960's, when they sent mailings to all psychotherapists in New York City, Los Angeles, and Chicago requesting demographic information from them. Moreover, the researchers conducted four-hour interviews with 100 psychotherapists in each of the three cities as well. They found that despite the fact that preparation for a career as a psychotherapist typically takes place in any of three very different kinds of training programs, i.e., social work, psychology, and psychiatry, a large percentage of the people who become psychotherapists have comparable social and cultural backgrounds regardless of the type of training which they originally seek. As a group, they share "a special combination of social marginality in ethnic, religious and political terms (Henry et al., 1973, p. ix)." The greater the career involvement in psychotherapy, as opposed to administration, research, or teaching, the more prominent the attributes of social marginality are likely to be.

Henry et al. (1971) claim there is considerable credence to the popular stereotype of the Jewish psychotherapist and suggest, further, that this image is becoming increasingly accurate: among respondents, they found twice as many Jews as Protestants. Within their sample there was

> a marked tendency for psychotherapists to be second-generation Jewish persons who had rejected, in adolescence, the religious beliefs and political views of their parents and who had experienced intergenerational upward social mobility (Henry et al., 1973, p. 137).

To some extent, of course, these findings are artifacts created by the unusually large populations of Jews in general who reside in each

of the three target cities from which the data were derived. However, since both Los Angeles and New York City are also known to be more heavily populated with psychotherapists than are most other cities in the United States, there is reason to believe that the demographics of professionals there represent a sizable proportion of the total number of psychotherapists around the country.

Other researchers have looked in more detail at the typical familial situations from which psychotherapists tend to emerge. Ford (1963), in his discussion of the patterns of personal and professional identity formation among psychiatric residents, claims that most often, these trainees come from homes in which the mothers are central and the fathers are "passive, noninteracting men contributing little psychologic strength to the family [p. 474]." Burton (1972) concurs with this finding and adds that the great majority of psychotherapists are "early given the responsibility for the happiness of their families" and for assuring their "fate and fulfillment [p. 17]."

From a less historical and more personality-oriented perspective, Roe (1952) gathered data on characteristics of psychologists which differentiate them from people who choose anthropology as a career. After analyzing the Group Rorschachs of seven psychology faculties and five anthropology faculties, she found that the clinical psychologists differ from both other psychologists and from anthropologists by virtue of the intense interest in people which they manifest. (She drew this inference largely from the high numbers of Human and Human Movement responses which the clinicians provided.)

Finally, Livingston and Zimet (1965) sought to identify some of the differences between the characteristic attitudes and broad value systems of medical students headed for careers in various specialty areas. They found, among other things, significant differences in the degree of authoritarianism which future psychiatrists, pediatricians, internists, and surgeons evidenced. Specifically, psychiatry-oriented students scored "markedly lower in authoritarianism than the three other groups combined [p. 225]."

Despite the fact that there are many cultural, familial, and personality similarities which describe psychotherapists as a group, there naturally exists a multiplicity of differences among them as well. One class of such differences underlies the controversy about whether the practice of psychotherapy should most appropriately be viewed as a scientific endeavor, on the one hand, or as an artistic endeavor, on the other (Barron, 1978). The issue, in short, is to what extent theories of personality, psychopathology, and psychotherapeutic technique should be regarded as having evolved logically from the findings of science, or alogically from the wellsprings of inference. Barron (1957), however, takes the position that the extent of the scientific rootedness of any given theory is almost impossible to ascertain. He cites as a confounding variable the subtle but pervasive influence exerted on both a theory's design and later maintenance by the degree to which the theory is experienced as being compatable with the personalities of its architects and adherents.

Based upon this impression that psychotherapists tend to originate or support points of view which best suit their various

personality styles, researchers have tried to pin down the relationship between the theoretical orientations of therapists and their dominant personality characteristics (Marks, 1978; Sundland, 1977; Sundland & Barker, 1962; Walton, 1978). In response to this research, the results of which have been mixed, Lazarus (1978) adamantly states that postulating a "definite connection between the personality of the psychotherapist and his/her theoretical orientation" is mount to buying into "a series of unfortunate stereotypes [p. 359]." To illustrate his point that differences among therapists of the same orientation exceed differences between therapists of varying orientations, he offers the following personality profiles of four behaviorists known to him:

> Therapist A
> Somewhat 'schizoid,' rigid, soft-spoken, passive-aggressive, slightly paranoid, loves music and mathematical puzzles, family centered, scholarly, extremely ambitious.
>
> Therapist B
> Fluent, athletic, energetic, self-centered, quick-witted, sports-minded, elitest, hot-tempered, critical.
>
> Therapist C
> Humanistic, warm, empathic, hedonistic, informal, spontaneous, somewhat naive, extroverted, gregarious.
>
> Therapist D
> Cold, austere, shy, formal, boisterous after a few drinks, intellectual, studious, distant [p. 359].

A sharply contracting perspective is implicit in the descriptions of the personality features which other therapists within a given theoretical orientation have most commonly noted among their peers. Two striking examples follow: one is by Arthur Burton, a psychoanalytically-oriented psychotherapist; and the other is by Albert Ellis, the founder of the Rational Emotive Therapy (RET)

school. Burton (1972) claims that most therapists he knows "feel more lonely [p. 11]," "are more sensual [p. 17]," "live closer to the dynamics of mood--depression and ecstacy [p. 22]," and "experience themselves as closer to the shoals of psychosis than do other people [p. 20]." Further, they manifest a full development of the "feminine" side of their personalities: intuition, sensitivity, affect, artistry, and color. Burton states that while masculinity has its place in psychotherapy, "a primary focus on the phallus and its expression leaves something to be desired [p. 17]." Ellis (1978), in contrast, says that RET tends to attract therapists who are "intellectually, cognitively, or philosophically inclined [p. 329]," "hard-hitting, confronting, instructive, forceful, directive, persuasive, risk-taking, . . . pragmatic, scientific, unmystical, and eclectic [p. 330]."

While the question remains moot as to which theoretical orientation attracts what personality type, an accumulation of research findings based on the Whitehorn-Betz A-B Scale (Whitehorn & Betz, 1960) suggests that jointly, Burton and Ellis may have at least captured the essence of two distinct personality types frequently encountered among psychotherapists. The A-B Scale is a highly abbreviated version of the Strong Vocational Interest Blank for Men (Strong, Campbell, Berdie, & Clark, 1938) which requires subjects to respond to items which address interests in manual, technical, and mechanical operations. Endorsement of a high number of items is coincident with B standing, and rejection of them with A standing. Originally, the A-B Scale was considered a predictor of high and low success rates psychiatric residents in their work with hospitalized schizophrenic

patients. More recently, the scale has been administered along with various other paper and pencil personality measures to a wide variety of populations, including college students (Berzins, Barnes, Cohen, & Ross, 1971), alcoholic outpatients (Nerviano, 1973), and psychiatric inpatients (Johnson, Workman, Neville, & Beutler, 1973). A review of the A-B type personality findings applicable to these people who are not psychotherapists suggests that Burton's description of himself and his colleagues is a shorthand reference to a whole constellation of personality features which corresponds with A standing, while Ellis' description of himself and his colleagues may be shorthand for a constellation which corresponds with B standing.

Research results show that relative to the B male, the A male can be characterized as: lower in self-esteem (McGuigan & Seidman, 1971; Kulberg & Franco, 1976); more socially conforming (Rothman, 1971; Portnoy & Resnick, 1972); more field dependent (Pollack & Kiev, 1963; Shows & Carson, 1966); more prone to rely on culturally stereotyped sex roles (Delk & Ryan, 1975); more cautious, harmavoidant and submissive (Berzins, Barnes, Cohen, & Ross, 1971; Berzins, Dove, & Ross, 1972; Nerviano, 1973); more "feminine" in his interest patterns, more likely to think abstractly and to have a higher verbal aptitude (Dublin, Elton, & Berzins, 1969); more depressed, obsessive compulsive, socially isolated, anxious, apprehensive, inconsiderate and imaginative (Johnson, Workman, Neville, & Beutler, 1973). In short, he is likely to manifest greater emotionality and lesser self-control, stability, and defensiveness (Johnson et al., 1973).

In contrast, the B male can be characterized as: more self-satisfied (McGuigan et al., 1971; Kulberg et al., 1976); more inclined to seek variety for its own sake (Geller & Berzins, 1976); more dominant and risk-taking (Berzins et al., 1971, 1972; Nerviano, 1973); more calm, self-confident, and business-like (Fancher, McMillan, & Buchman, 1972); more socially competent and liable to defensive distortion (McGuigan et al., 1971); more repressing, less neurotic (Kulberg et al., 1976); more concerned with high status roles (Franco & Kulberg, 1975); more interpersonally approaching (Smith, 1972); and more concrete (Dublin et al., 1969).

When the present investigation was initiated, it was not yet known to what extent the above patterns also differentiate groups of A and B male psychotherapists from one another as they do groups of A and B male undergraduates and psychiatric patients. The major aim of this research project, therefore, was to answer the following questions:

1. Do A male psychotherapists appear to be more obsessional (i.e., depressed, submissive, anxious) than do B male psychotherapists?

2. Do B male psychotherapists appear to be more compulsive, euthymic, and dominant than do their A male counterparts?

Given that the results of prior research have suggested that A male psychotherapists would be likely to experience more disturbances of affect and intrusions of anxiety than B male psychotherapists, it seemed reasonable to wonder whether the A males' hypothesized lesser feelings of emotional well-being would negatively effect the

outcome of the treatments which they conduct. Because the initial focus of A-B research was aimed at determining the differential success rates of A and B psychotherapists, this issue has already been addressed in the literature to some considerable extent. It is difficult to do justice with just a few brief remarks to the complexity of the large data base which now exists in this area. However, it seems fair to say that although numerous individual studies have shown that A therapists perform better with schizophrenic and schizoid patients than B therapists do, and that B therapists perform better with neurotic patients than A therapists do, the findings on the whole have been mixed.

This lack of agreement among the research findings may be due to any of a number of factors. To begin with, investigators have not all used the same version of the A-B Scale to determine subjects' initial A-B standings. As a consequence, it may well be that much of the A-B research has been performed with so-called "A-B populations" which actually have little in common with one another. Additionally, some investigators who share a given theoretical bias about treatment have used criterion measures of "treatment success" which grossly conflict with the criterion measures used by numerous other investigators who represent different theoretical orientations. Under these conditions, it is of course impossible for research findings to support one another regarding the differential effectiveness of A and B psychotherapists. Finally, the possibility must at least be considered that the A-B Scale, regardless of which version, is simply an invalid predictor of potential treatment success and, therefore, the

very mixed research results which permeate the literature may primarily reflect the random effects of the scale's inherent invalidity.

There is, then, no consistent evidence that either the A or B psychotherapist type is the more effective treatment agent. Viewed as a finding in its own right, this seemed quite remarkable given the high premium so often placed by the therapeutic community on therapists being emotionally well-contained (Anchor, 1977; Bandura, 1956). Assuming that the A-B personality findings based on people who are not psychotherapists also held true for psychotherapists, one could expect that the treatment performance of the relatively depressed, anxiety-ridden A therapists would be measurably inferior to that of the relatively better-contained B group. But this has not seemed to be the case.

It occurred to the present investigator that an understanding of this hypothetical phenomenon could be facilitated by consideration of two modes of functioning which both Fine and Jasnow have independently identified. Fine (1962) tentatively labels one the "literary-imaginative" and the other, the "scientific-methodological." Although he does not define these styles in any detail, he does state that functioning in the former mode facilitates the emergence of an individual's "artistic creativity, empathy and . . . ability to relate to another human being in need of help [p. 2]," while functioning in the latter mode gives rise to "scientific scepticism and need for inquiry [p. 3]." Fine posits that optimally, this pair of potentials exists in equal measure within a given psychotherapist. More recently, however, Jasnow (1978) has written similarly of what he calls the

"aesthetic" versus "scientific" attitudes, and has stated that although each individual is capable of shifting back and forth between them, the two have come to represent "increasingly antithetical modes of functioning [p. 318]." Jasnow stresses that when he speaks of these modes, he is not speaking of skills "but of a whole personality style striving for integration [p. 322]."

One of the ideas behind the current study was that aspects of the adaptational styles hypothetically manifested by male type A psychotherapists (i.e., proneness to depression and relatively high levels of anxiety) were only part of a much larger constellation of features which could be described in toto as comprising a literary-imaginative orientation. This term, used loosely by Fine (1962), was concretized in the following manner by the present researcher for purposes of this investigation. Individuals who are oriented in a literary-imaginative direction are those who on specific paper and pencil personality inventories achieve scores which suggest that they: are "artistically fastidious, affected, theatrical," possess an "imaginative inner life" and reflect this in conversation, act on "sensitive intuition (Cattell, Eber, & Tatsuoka, 1970, p. 93)," are "absorbed in ideas," are "interested in art, theory, basic beliefs," are "imaginatively enthralled by inner creations," and, finally, are "fanciful, easily seduced from practical judgment (Cattell, Eber, & Tatsuoka, 1970, p. 98)."

The present investigator speculated that: one, the A-B Scale identifies male type A psychotherapists who at the extreme, embody this literary-imaginative orientation; and two, that the therapy work

of type A males, as a group, does not appear inferior to that of type B males, as a group, partly because of the positive and ameliorating effects of the intuitive and creative context in which the depression and anxiety proneness exist either as potentiators or as integral parts.

The investigator also proposed that the hypothesized lower levels of anxiety and depression proneness in male type B psychotherapists were aspects of a larger constellation of features which could be described in toto as comprising a scientific-methodological orientation. This concept, too, is related to that put forth by Fine (1962), but for purposes of the present study, was rendered more specific in the following way. Individuals who are primarily oriented in a scientific-methodological direction are those individuals who on specific paper and pencil personality tests achieve scores which suggest they are: neither artistically fastidious nor lacking in taste, "unaffected by 'fancies,'" likely to act "on practical, logical evidence (Cattell, Eber, & Tatsuoka, 1970, p. 93)," "alert to practical needs," concerned with immediate interests and issues," "prosaic," avoid "anything far-fetched," "guided by objective realities," and, finally, "dependable in practical judgment (Cattell, Eber, & Tatsuoka, 1970, p. 98)." It was speculated that the A-B Scale identifies male type B psychotherapists who at the extreme, embody this scientific-methodological orientation.

Taken together, then, two of the subsidiary aims of this research project were to answer the following questions:

1. Do male A psychotherapists manifest characteristics associated with a literary-imaginative orientation?

2. Do male B psychotherapists manifest characteristics associated with a scientific-methodological orientation?

In contrast to the sizable number of A-B personality studies done with male subjects, only a handful of such projects have been carried out with females. The rationale behind this inequity is partly historical: no female psychiatrists were included in the original Whitehorn-Betz studies and therefore cross-validating samples needed to be all male for the sake of facilitating comparisons with the seminal A-B groups.

Another reason for avoiding the use of females in A-B personality studies has been more conceptually based. B scores on the A-B Scale are attained by people who claim to enjoy a large number of activities which are culturally defined as "masculine." B females would therefore be those who endorse interests which oppose culturally defined "feminine" norms. Researchers have for some reason tended to avoid the interesting question of what B standing implies in females. The present investigator assumed that B standing in women might signal deviations in other areas and that these would be manifested generally by higher anxiety levels than those found in either A females or B males, neither of whom endorse many gender inappropriate items on the A-B Scale. (It should be noted that A males do not have to endorse "feminine" items to attain A standing; they merely have to avoid endorsing "masculine" interests.) Specific characterological patterns among females were not predicted because the A-B literature provides no clues regarding the direction which these might take.

It was also believed that differences in interest patterns between A-B females as well as A-B males would be reflected in differences on an established masculinity-femininity scale which taps sex role attitudes and behaviors. It was hoped that confirmation could be achieved regarding that which researchers have long suspected: that the A-B Scale is itself a kind of masculinity-femininity scale (Dublin, Elton, & Berzins, 1969; Schubert & Wagner, 1975). In addition, it was expected that the A-B Scale would differentiate between female subjects (the A's) who described themselves in a manner consistent with the more "feminine" literary-imaginative orientation, and those (the B's) who described themselves in a manner consistent with the more "masculine" scientific-methodological sensibility, both of which styles have been defined on prior pages here.

In short, the final four subsidiary aims of this project were to answer the following questions:

1. Is B standing in females, relative to A standing, coincident with higher levels of anxiety?

2. Can it be demonstrated that the A-B Scale is similar in discriminative function to other masculinity-feminity scales?

3. Do female A psychotherapists manifest characteristics associated with a literary-imaginative sensibility?

4. Do female B psychotherapists manifest characteristics associated with a scientific-methodological sensitivity?

The following critical review of the literature provides a framework for the present investigation, which was an examination of some personality correlates of A and B standing in psychotherapists.

In the review, the genesis of the original Whitehorn-Betz A-B scales is described, along with the subsequent development of the modified A-B scales created by later authors. Then, the results of the various relevant process/outcome studies which have been done in clinical settimgs with A and B psychotherapists are summarized. Finally, the studies which have sought to identify the personality characteristics of both A-B psychotherapists and A-B non-psychotherapists are reviewed.

CHAPTER II

REVIEW OF RELATED LITERATURE

Genesis of the Whitehorn-Betz A-B Scales

The original study which led to the development of the first A-B therapist scale was done by John Whitehorn and Barbara Betz, both of whom were then supervising psychiatrists at the Henry Phipps Psychiatric Clinic of the John Hopkins Hospital (Whitehorn & Betz, 1954; Whitehorn, 1955; Betz & Whitehorn, 1956; Betz, 1966, 1967). Their primary aim was to locate the therapy variables which contribute to effectiveness in therapeutic outcome with hospitalized schizophrenic patients. Toward this end, they gathered data from the case records of 100 schizophrenic patients who had been treated and discharged by a group of 35 psychiatric residents who had worked at the Phipps Clinic between 1944 and 1952. Of these 100 patients, 50 had been rated "improved" upon discharge by the psychiatric resident who had had primary treatment responsibility for the case, the senior resident psychiatrist, and the psychiatrist-in-chief. More detailed outcome data consisted of: one, the nature of the disposition of the patient at the time of discharge (i.e., whether transferred to another institution or returned to the community); two, evidence of increased social interaction with other patients as reflected by the daily nursing notes; three, evidence of greater participation in clinic programs as visible from nursing and occupational therapy notes; and four, improvement of symptoms marked on the Behavior Chart.

Patient improvement rates were calculated for each of the 35 psychiatric residents, who were then listed in rank order. The seven residents with the highest improvement rates (68% to 100%), designated A's, and the seven residents with the lowest improvement rates (0% to 34%), designated B's, were chosen for later study. The possibility that the A therapists had worked with a clinically "easier" population than had the B therapists was ruled out on the basis of a lack of difference between the clinical characteristics and diagnostic subdivisions upon hospitalization of members of the two patient groups. The hypothesis that the A's were somehow intrinsically better therapists was also rejected after their improvement rates with hospitalized neurotic and depressed patients were compared with those of the B therapists' and were found to be similar.

The third possibility, that schizophrenic patients' improvement rates are a function of specific aspects of their psychotherapeutic treatment, formed the core idea of this study. After abstracting the characteristics of the doctors' approaches and the patients' reactions based on case record entries, Betz and Whitehorn (1956) concluded that:

> improvement in the schizophrenic patient is most likely to occur: (a) when the physician indicates in his personal diagnostic formulation some grasp of the personal meaning and motivation of the patient's behavior, going beyond mere clinical description and narrative biography; (b) when the physician, in his formulation of the strategic goals of a particular patient, selects personality-oriented goals rather than psychopathology-oriented goals, i.e., aims at assisting the patient in definite modifications of personal adjustment patterns and more constructive use of assets rather than mere decrease of symptoms or vague "better socialization"; (c) when the

> physician, in his day-by-day tactics, makes use of "active personal participation," rather than the patterns "passive, permission," "interpretation and instruction," or "practical care" [p. 96].

In a second study which Betz and Whitehorn (Betz & Whitehorn, 1956; Whitehorn & Betz, 1957) conducted along very similar lines, treatment effectiveness with 109 new schizophrenic patients was observed. The aim of this study was to compare and contrast psychotherapy variables between physicians and patients when insulin treatment was combined with psychotherapy and when psychotherapy was used alone. Sixty-four of the 109 patients were treated with psychotherapy only, while 45 were treated with a combination of insulin and psychotherapy. The treating physicians were 18 members of the Phipps Clinic resident staff between the years 1950 and 1954. Whitehorn and Betz studied all of the patients' charts this time, rather than just the upper and lower fifths as they had in the first study. Thus, the A's were the ten most successful therapists (improvement rates of 70% or better) and the B's, the eight least successful therapists (improvement rates of 69% or less). This approach was designed to render it more difficult to obtain statistically meaningful results.

Nevertheless, several significant findings did emerge. The first was that of the 64 patients who had received psychotherapy only, the improvement rate of the A group was 81.5% (38 patients) while that of the B group was 34.5% (26 patients). Chart findings also demonstrated that the same characteristic features which had prevailed in the first study (Whitehorn & Betz, 1954) also applied in this one. That is, patients were more likely to improve when the

therapist's diagnostic formulation showed more understanding of the patient, when treatment goals were personality rather than pathology-oriented, and when the therapist's role was one of active participation rather than passive interpretation. Of major interest was the equally significant finding that when therapeutic outcome was studied for patients who were treated with both insulin and psychotherapy (45 patients), the improvement rate was 82% regardless of whether the patient had had an A or a B therapist. In other words, while A therapists achieved approximately the same improvement rate when using psychotherapy alone (81.5%) or in tandem with insulin (82%), the B therapists showed a sizable increase in improvement rate under the latter condition (82% versus 34%). Additionally, the B therapists adopted "the tactical pattern of active, personal participation . . . more frequently than when psychotherapy was attempted without insulin (Betz & Whitehorn, 1956, p. 98)," i.e., 54% versus 9%. The authors concluded that this difference in the treatment of the B patients who received insulin may have accounted for a considerable degree of their improvement.

It had been noted that when the patient sample of the first study (Whitehorn & Betz, 1954; Betz & Whitehorn, 1956) was combined with the patient sample of this study, there was a "strikingly high association between a favorable clinical course and the use of the tactical pattern of active personal participation by the physician (Betz & Whitehorn, 1956, p. 98)." Of the 71 patients in the combined group who were treated with "active personal participation," 63 (89%) were "improved" at discharge. (Fifty-five of these, incidentally,

had been treated by A therapists; 16 by B therapists.) Betz and Whitehorn therefore addressed the possibility that differences in the patients had evoked differences in their treatments and, ultimately, their "outcome" status. Therefore, they compared the patients who were treated with "active personal participation" with those who were not "in terms of social data, prepsychotic personality characteristics, and clinical characteristics [p. 99]." Statistically significant differences between these two groups were found in two respects: one, 88% of the patients who were treated by "active personal participation" were of middle or upper middle class, in contrast to only 53% of the patients treated by other tactical measures; and two, 59% of the patients receiving the prognostically favorable treatment reportedly had "special abilities or interests [p. 99]" which were visible from their prepsychotic activities, in contrast to only 35% of the patients not receiving this treatment. A conclusion which the authors drew from these data was that therapists were more likely to treat patients with "active personal participation" when they were more aware of the patient's human resources and potentials. They speculated that these potentials may have been more obvious to physicians who shared or approximated their patients' socioeconomic statuses. Since A physicians "used active personal participation" more often, Whitehorn and Betz (1957) speculated that they, in contrast to B physicians, were "less status-bound . . . and more sensitive to a wider range of human resources [p. 909]." The possibility that A physicians used the preferred mode of treatment with their patients because their patients were more representative of the middle

and upper classes was discarded since presumably, the groups had been matched for such characteristics as socioeconomic status at the outset.

At the same time, the researchers were also interested in exploring the idea that personality factors differentiated the A and B physicians from one another and contributed to the salient differences in their clinical styles (Betz & Whitehorn, 1956; Whitehorn & Betz, 1960; Betz, 1963a, 1966, 1967). Because Whitehorn and Betz had for many years been gathering Strong Vocational Interest Blank (SVIB) scores on all members of the Phipps Clinic resident staff, they turned their attention to these readily available data. They noticed that of the 44 vocation groups into which the 400-item SVIB is scored, both A and B physicians scored high in four areas: physician, psychologist, chemist and public administrator. Then, remarkably, they found eight vocations which differentiated between members of the A and B groups: lawyer, C.P.A., osteopath, printer, mathematics- physical science teacher, carpenter, industrial arts teacher, and vocational agriculture teacher. This eight-level measure formed the first of the predictive screens for distinguishing between A and B therapists. A variety of others followed. The most notable was a 23-item version of the SVIB (Whitehorn & Betz, 1960; Betz, 1967), which has since become the most widely used measure by researchers exploring "A-B therapist" variables. Regardless of the version used, according to Whitehorn and Betz, the defining outcome was that A's scored high on lawyer and C.P.A. and low on printer and

mathematics-physical science teacher, whereas B's scored in the reverse direction.

With the introduction of the various SVIB screens, it naturally became possible for Whitehorn and Betz to generate predictions regarding patient outcome ("improved" versus "unimproved") on the basis of physicians' SVIB-derived A and B standings. They conducted one such study at the nearby Sheppard and Enoch Pratt Hospital (Betz, 1963a, 1967). Twenty-two former psychiatric residents for whom SVIB scores were available (having previously been collected for other research purposes) were divided into A and B groups on the basis of their interest pattern profiles. In toto, the 11 A residents had treated 157 patients and the 11 B residents had treated 179 patients. Results were statistically significant in the predicted direction: patients treated by the A physicians showed a 60% improvement rate whereas patients treated by the B physicians demonstrated only a 40% improvement rate. Another study engineered by Whitehorn and Betz which predicted patient condition at discharge on the basis of the physician's SVIB pattern was performed with a patient population which had previously been divided into process and non-process schizophrenic groups (Betz, 1963b, 1966). Thirty-three patients were treated by A physicians and 40 by B physicians. (The number of psychiatric residents was not specified.) Results showed that the A group demonstrated a reliably higher success rate than the B group with process patients (71% versus 18%), but only a negligibly better rate with non-process patients. Betz concluded that this study had successfully cross-validated the findings that "differential personality factors

in psychiatrists" were "causally related to differential treatment success with schizophrenic patients [p. 1091]." Additionally, Betz felt it laid to rest the idea that A physicians had had higher success rates because they had worked with "easier" patients.

Over the years, Whitehorn and Betz have made a number of inferences about the value systems, personalities, and attitudes which they thought might have been serving to differentiate the A and B physicians from one another (Whitehorn & Betz, 1960; Betz, 1963a, 1966, 1967). Betz (1963a) speculated that the A's, whose SVIB interest patterns resembled those of lawyers, were "more oriented toward spontaneity and freedom [p. 210]" and more likely to use problem-solving approaches with patients than the B's, whose interest patterns resembled those of mathematics-physical science teachers. She reasoned (1966) that the "didactic, instructive [p. 53]" style associated with people in the latter field was likely to be experienced by schizophrenic patients as "regulative and coercive [p. 53]" and therefore not as therapeutic as the approach which A's might take. In general, Whitehorn and Betz (1960) believed the A physicians to be "perceptive of the individualistic inner experiences of the patients, while themselves functioning in responsibly individualistic roles." Their "solutions to patient's [six] problems" would likely be "worked out through collaborative exploration of possibilities, rather than in the model of authoritarian instruction [p. 222]." They assumed that the B doctor, in contrast, was prone "to view the patient as a wayward mind needing correction [p. 222]" and likely to

emphasize "value systems weighted more heavily toward exactness and critique (Betz, 1967, p. 969)."

In summary, the Whitehorn and Betz A-B research was developed in the following manner. The authors started with an outcome study in which they examined the treatment records of ex-patients in order to ultimately define two extreme groups of psychiatric residents: one, composed of those who had been highly successful in treating these patients; and the other, composed of those who had been relatively unsuccessful with the same population (Betz, 1966, 1967; Betz & Whitehorn, 1956; Whitehorn, 1955; Whitehorn & Betz, 1954, 1957). The case records of these therapists, who were then labeled A's and B's, respectively, were scrutinized for signs of differential treatment approaches which might have contributed to the differing improvement rates of the patients. It seemed that among other things, the A's had approached their patients in a manner involving active personal participation, in contrast to the passive or interprettive modes which the B's had preferred. It was concluded, after several cross-validation studies, that this stylistic difference was significantly related to successful therapy outcome. Then, since Whitehorn and Betz had easy access to the SVIB scores of the A and B physicians, they looked for and found major discrepancies in interest patterns, on the basis of which they speculated about possible behavioral and personality correlates which might differentiate further between the two physician groups (Betz, 1963a, 1963b, 1966, 1967; Betz & Whitehorn, 1956; Whitehorn & Betz, 1960). Finally, they developed several highly abbreviated versions of the SVIB and used them to predict

which therapists within a given group of psychiatric residents would have higher versus lower improvement rates with their schizophrenic inpatients. Presumably, the 23-item and 10-item SVIB screens could be used to identify therapists whose interests, values, attitudes and personalities were conducive to relatively positive or relatively negative treatment outcomes with this schizophrenic population.

Critique

A number of reviewers, most notably Razin (1971), May (1974), and Cox (1978) have focused on the more serious methodological flaws upon which the Whitehorn-Betz A-B research is shakily built. They all point to the fact that major sampling errors were committed in the course of carrying out the research projects, since some of the same psychiatric residents participated in the 1954, 1956 and 1957 studies. Specifically, Razin calculates that 6 of the 14 therapists who were central to the first "Hopkins" study later became one-third of the 18 therapists at the heart of the second study. He therefore rightly questions whether some of the so-called "cross-validation" procedures actually provide new data or whether they represent, more accurately speaking, "old data re-reported [p. 5]."

Cox (1978) and May (1974) also discuss the related problem of small sample size. May states that Whitehorn and Betz seem to have made the error of centering their N's on the patients rather than on the therapists, who were, after all, the presumed focus of the studies. That is, in describing most of their work (Betz, 1963a, 1967; Betz & Whitehorn, 1956; Whitehorn & Betz, 1954, 1957, 1960), Whitehorn and Betz cite N's of approximately 100, referring to the

size of the patient groups. Total therapist number per study, however, before the upper and lower fifths were split into A's and B's, was typically under 35, so that the final therapist N per A and B group was about 10. In the write-up of the insulin study (Betz, 1963b, 1966), therapist number was apparently considered to be so irrelevant that it was not even mentioned at all.

In addition, Cox cogently argues that researcher bias and resident personality intruded in multiple ways, all of which ultimately affected the decisions about whether or not a patient could be said to have been "improved" upon discharge. He points out that researcher decisions were all-or-none and subjective, rather than "blind." Therefore, although they technically hinged on scrutiny of the written records alone, they had to have been colored by memories of particular residents who the researchers had thought more or less highly of during training. Further, there was no particular reason to assume that the written records of the residents reflected much of anything about the actual treatment which patients had received. Instead, they more likely reflected therapists' beliefs about what should be included in the record and how to describe it, as well as the degree to which residents' writing styles exuded competence and confidence. And, since Whitehorn was Psychiatrist-in-Chief of the Phipps Clinic throughout this period and had probably made his attitudes about appropriate patient care well known, May (1974) suggests a bit cynically but not unreasonably that the treatment strategies in the records more likely than not reflected the styles and beliefs of the supervisors than they did those of the supervisees.

There is also considerable controversy about the way in which Whitehorn and Betz generated, used, and reported their SVIB data. A primary concern is that they separated their residents into A and B groups on the basis of SVIB criteria which they were constantly changing. Sometimes they experimented with their eight-profession SVIB screen; at other times, with the 10-item screen; and at still other times, with the 23-item screen. All told, they devised eight different screen measures (May, 1974), but only rarely did they report which measures were being used in which studies. Since the A's of one measure do not necessarily correspond to the A's of another measure, it has been difficult for later researchers to accurately replicate some of the studies or even to re-evaluate the original data.

For most reviewers, including this one, the thorniest problem of all seems to be that of validity. According to one, validity "has never been satisfactorily demonstrated (Cox, 1978, p. 119)," and therefore, according to another, "there is no substantive support for the A hypothesis (May, 1974, p. 16)." The most telling complaint is that Whitehorn and Betz came to define A's and B's by their SVIB scores, rather than by the improvement rates of their patients. Thus, A status no longer implied a real improvement rate but a SVIB score suggesting that an improvement rate might be 68% or better. Cox' scathing summation of all this is that the supposed A-B therapist variable "was perpetrated by a chance correlation which was both invalid and unreliable" and that the research which followed in its wake has been no more than "an unnecessary waste [p. 119]."

Other A-B Scales

Despite the many valid criticisms which have consistently been levelled at the early Whitehorn-Betz research, a surprising number of "improvements" on the A-B scales have been published. Including the original Whitehorn-Betz group, the various A-B measures number at least 18 at this time. The first revision by someone other than Whitehorn or Betz was published in 1968, after Campbell, Stevens and Uhlenuth resurrected the original criteria and SVIB scores for all 72 Phipps psychiatric residents who had been assessed during the years of the seminal scales' formation. On the basis of their review of the data, they produced a new 80-item A-B scale. By 1971, when Kemp and Stephens published their review of the developmental history of the A-B scales, four more versions had already been introduced. Two were their own modifications of the 23-item scale, which included the addition of eight MMPI items; a third was a 13-item SVIB version suggested by McNair, Callahan and Lorr (1962); and the fourth, a 19-item version by Schiffman, Carson and Falkenberg (1967) was said to be a psychometrically pure form which correlated very highly with the 23-item Strong scale. Kemp and Stephens (1971) concluded in their review that only three of all the A-B scales appeared to have high reliability and validity: the original 23-item Strong scale, the Schiffman, et al. scale, and the Campbell, et al. scale. They recommended continued research to further compare the effectiveness of the three scales.

In response, Seidman (1972) reported the results of his efforts to assess the accuracy of the three scale versions identified above. He used a total of 631 undergraduate males to comprise his sample on

the grounds that psychotherapists were notoriously too uncooperative to justify approaching for such a study. He noted considerable equivalency between the 23-item Strong scale and the Schiffman et al. scale, but found the Campbell et al. scale to be only minimally related to these two. He therefore warned against further use of the Campbell et al. scale, lest contradictory or paradoxical findings emerge and confound the already ambiguous results of the A-B research. Chartier (1974), using a much smaller sample from a population of therapists-in-training, arrived at virtually the same conclusions, as did Seidman, Golding, Hogan and LeBow (1974).

Most recently, Stephens, Shaffer and Zlotowitz (1975) published a new A-B scale which presumably corrected the deficiencies of the previous instruments and achieved unprecedented internal consistency. However, this scale has not been mentioned in the literature very often, probably because it is so new and the heyday of A-B research has long since passed.

Studies of A-B Effects in Clinical Settings

As might be suspected, given the existence of so many A-B scales, there have been more than a few clinical studies designed around the A-B therapist variable. However, since it is known that the different A-B scales measure different things (i.e., that the A's of a group tested with one A-B scale are not necessarily the same A's identified on the basis of results from a different A-B scale), the following review of the clinical studies using the A-B variable will be limited to only those studies based on the Whitehorn-Betz 23-item

scale (hereafter referred to as the WB-23), and the Schiffman, Carson and Falkenberg 19-item scale (hereafter referred to as the SCF). Although only the WB-23 is the focal point of the present investigation, the two A-B measures reportedly correlate very highly with one another (Chartier, 1974; Kemp & Stephens, 1971; Seidman, 1972; Seidman, Golding, Hogan & LeBow, 1974).

McNair, Callahan and Lorr (1962) did a study based on the WB-23 which eventually gave rise to the A-B "interaction hypothesis." Thereafter, their results were as frequently cited in the A-B literature and treated as respectfully as the original Whitehorn and Betz findings had been. McNair, Callahan and Lorr set out to learn whether the Whitehorn-Betz conclusions could be confirmed with nonschizophrenics in an outpatient setting. They used 40 male veterans in 7 clinics as their patient sample, a population judged to be "acceptable to the clinics for 'intensive' psychotherapy--defined as weekly interviews lasting about an hour, aimed at personality change, and excluding supportive treatment [p. 426]." The therapist sample was based on an original N of 55 males, but was ultimately pared down to 20 A's and 20 B's. Several criteria of therapy effectiveness were used. Patients took test batteries composed of the following instruments prior to treatment, and after both four months and one year of treatment: Taylor's Manifest Anxiety Scale, Barron's Ego Strength scale, a Symptom Checklist, and a Self-Rating. Therapists assessed their patient's changes via: a Severity of Illness measure, a measure of Interview Relationship Changes, and an Interpersonal Change and Symptom Reduction Scale. Results reflected by the combined patients'

and therapists' reports revealed that those patients treated for four months by B therapists had improved significantly more than similar patients treated by A therapists. Furthermore, patients treated by B therapists continued to manifest significantly more improvement one year after treatment had begun. McNair, Callahan and Lorr tentatively generated the following idea to account for this striking lack of corroboration of the Whitehorn-Betz data: "A therapists are more successful with schizophrenics and B therapists achieve better results with 'neurotics' or nonhospitalized outpatients [p. 427]." The authors also speculated about the possibility, later to be explored by other researchers, that "B therapists might have been more successful than A therapists due to having had interests or socioeconomic backgrounds more similar to their patients [p. 428]."

The results of this study are opposite to those of the early Whitehorn-Betz studies: the Johns Hopkins researchers had found no differences between the therapeutic effectiveness of their A versus B residents with regard to neurotic or depressed patients. McNair et al. quite appropriately acknowledged their own lack of definitive results. However, Carson (1967), in a relatively early review of the A-B literature, declared the McNair et al. findings to be strongly suggestive of an "interaction hypothesis": A therapists have better treatment outcomes with schizophrenic inpatients while B therapists are more effective with neurotic outpatients. In most of the A-B literature which follows Carson's review, the interaction hypothesis is treated as though it were descriptive of an actual rather than hypothetical set of relationships.

In a clinical study quite similar to those of Whitehorn and Betz', Stephens and Astrup (1965) looked at the records of 334 patients who had been hospitalized at the Phipps Clinic of the Johns Hopkins Hospital between 1950 and 1960. They examined the relationships between patients' discharge and follow-up statuses and: their process-nonprocess schizophrenia classifications, their forms of treatment (with or without insulin coma), and the 63 treating physicians' SVIB A-B statuses. "The results showed both short- and long-term outcome in schizophrenic illness to be far more dependent on the total clinical status of the patient when he came for treatment than on the type of therapist who treated him (as determined by the Strong test) [p. 455]." There were almost no relationships found between discharge status and treatment by A versus B therapists, nor were there correlations between follow-up status and treatment by A and B therapists. This is a remarkable finding considering that 98 of the original patients studied by Whitehorn and Betz were included in this sample. The one significant correlation which was found between physician A or B type and patient discharge status was that A therapists had an improvement rate of 82% and B therapists had an improvement rate of 58% with process patients who did not receive insulin. This finding was consistent with the Whitehorn-Betz data. However, when those patients originally included in the Whitehorn-Betz study were discounted, the correlation disappeared.

The reader will note from a number of the vignettes which follow that the A-B research custom arose of assuming diagnostic equivalence between "schizophrenic," "schizoid," and "avoidant of others"

(or, "AVOS") patients, on the one hand, and of "neurotic" and "turning against the self" (or, "TAS") patients, on the other. Precise descriptions of the "AVOS" and "TAS" terms can be found in the classic article by Phillips and Ravinovitch (1958).

Kemp (1969) built on the findings of one of his own earlier analogue studies (Kemp, 1966), which had suggested that in the most effective therapist-patient pairs (A's with schizoid/AVOS patients and B's with neurotic/TAS patients), subject therapists were more uncomfortable than they were in the less effective pairs (B's with schizoid/AVOS patients and A's with neurotic/TAS patients). Kemp had speculated then that negative attitudes on the part of therapists were involved in mediating the ultimately positive treatment outcomes with their patients. In the present study (1969), he explored A and B therapists' (fourth year medical students') reactions to neurotic/TAS patients after an initial interview by having the therapists fill out patient evaluation questionnaires. Results did not support the hypothesis that B's would express more negative attitudes toward or show more signs of having been uncomfortable with the neurotic patients than would the A's. Kemp's reaction to this negative finding was to conclude that professional training attenuates these tendencies in B therapists.

In 1970 and 1971, Segal presented results from the first study since that of McNair et al. in which data had been derived directly from a therapy situation. His aim was to "demonstrate that A-B therapists vary sufficiently in their therapeutic practices to permit reliable differentiation of their respective therapeutic activities

(1971b, p. 273)." The therapists, 20 male clinical psychology graduate students, were divided into A's and B's on the basis of the WB-23. The patients, selected from among those already in treatment with these therapists, had scores on the Symptomatic Behavior Rating Scale which showed them to have symptoms most congruent with neurotic (TAS) behavior as defined by Phillips and Rabinovitch (1958). The data studied were two hour-long transcripts, recorded two weeks apart, from each of the 20 therapy relationships. The therapists' verbal behavior during sessions was assessed and found to differ according to the A-B variable in this manner: A's "tended to be more direct and interpretive and to involve themselves with their clients (1971b, p. 275)." B's, in contrast, tended to be less direct and interpretive and to "respond in a manner which seemed to encourage treater self-exploration by the client [p. 275]." Segal (1970) also formally assessed the therapists' interventions and categorized them by means of a number of instruments: Interaction Process Categories, Therapist's Directiveness, and Therapist Specificity. Results suggested that the B's were "less leading" in their interactions than the A's, and that the A's were "somewhat more negative (sarcastic and/or cynical) in their attitudes than the B's (1970, p. 444)," who were more encouraging.

Bowden, Endicott and Spitzer (1972) examined the improvement rates of 66 hospitalized patients in an analytically-oriented setting, using the results of the Psychiatric Status Schedule (PSS), administered after one month and again after three months, as the criterion measure of improvement. Therapists were 36 psychiatric residents and

psychology interns whose A-B standings had been determined by both the WB-23 and the McNair et al. (1962) method. In addition to the PSS data collected on the patients, therapists were asked to rate their liking of and expectations for each of their patients after one and again, after three months. No significant correlations were found between improvement ratings for either schizophrenic patients only or the total group of patients. The only A-B variables which did correlate with an improvement measure were in the opposite direction from that which had been expected: the higher the therapist's A score, the less the patient's improvement at one month on subjective distress and at three months on behavioral disturbance. Not statistically significant but also in the opposite direction were the findings that high B therapists were more apt to have had psychoanalysis and to have been rated highly on clinical competence by their supervisors. Bowden et al., in the discussion of their results, conceded that the patient follow-up periods were brief and that longer treatment might have resulted in more positive findings. They also acknowledged the less than ideal use of only one instrument, the PSS, as an outcome measure. However, they concluded that since their negative results matched in directionality the findings of Stephens and Astrup (1965) as well as those of Draper (1967) and Shader, Grindspoon, Earmatz, and Ewalt (1971), whose work will be discussed shortly, the likelihood was that when researchers used rigorous controls in A-B studies, negative findings more blatantly emerged.

The conclusions of Berzins, Ross, and Friedman (1972), on the basis of their factorially designed test of the interaction

hypothesis, however, were more positive. Over the course of two years, they collected data on three A and three B therapists (derived from an initial sample of 12), all of whom worked at a student health service and subscribed to a short term crisis intervention model, and a total of 153 of their male patients. All therapists treated a wide variety of diagnostic categories of patients. But because of the low incidence of psychosis in their clinical setting, the researchers were forced to substitute DSM-II schizoid patients for schizophrenic patients in this study. They justified this exchange on the grounds that prior research had already demonstrated differential A-B effects on the bases of both the severity of the patient's disturbance and the direction of the therapist's early prognostic projections (Betz, 1963). Apparently, they believed that DSM-II schizoid patients would meet these criteria when compared with neurotic patients. Three outcome factors were derived from seven therapist-generated and six patient-generated posttherapy ratings: Factor I was termed "the therapist's appraisal of his own effectiveness"; Factor II was termed "patient improvement"; and Factor III was termed "patient experienced rapport." Factor I results were statistically significant in support of the hypotheses: "A therapists felt more efficacious with schizoid patients than with neurotic patients . . . whereas the opposite pattern characterized B therapists [p. 233]." Factor II results did not achieve conventional levels of significance. However, B therapists seemed to generate somewhat more improvement in neurotic than in schizoid patients. The surprise was that A therapists' feelings of relative ineffectiveness with neurotic patients, as

assessed in Factor I, were not born out by patients' actual improvement ratings: "A therapists' neurotic patients reported as much improvement as did their schizoid patients [p. 234]." Berzins et al. concluded, therefore, that B therapists "are indeed mismatched with schizoid patients [p. 234]." Factor III results reportedly clarified little relating to the A-B dimension.

As a result of their own study, Chartier and Weiss (1974) also revealed considerable enthusiasm for the A-B variable. They set out to test both the Whitehorn-Betz A hypothesis (A's are superior to B's in work with schizophrenics) as well as the McNair et al. (1962) interaction hypothesis, by measuring the accuracy of A-B therapists' clinical perceptiveness. This variable had previously been identified by Silverman (1967) as being a mediator in the differential effects of A and B therapists. Chartier and Weiss asked six A and six B male therapists-in-training to predict the "actual responses and other behaviors of a neurotic and a schizophrenic patient, once on the basis of partial information . . . and again on receipt of more complete diagnostic information . . . [p. 312]." Therapists were required to choose the correct response of four listed alternatives on a 40-item sentence completion test and two questionnaires based on the patients' actual responses to interviewers' questions and comments. Although two of the measures revealed no differences between the A and B therapists, A's were found to be significantly more perceptive than B's regarding both the neurotic and the schizophrenic patients on the sentence completion test. The researchers

therefore concluded that this data supported a Super A hypothesis: A's are better therapists with both types of patients.

Matthews and Burkhardt (1977) tested both the interaction and Super A hypotheses by studying treatment outcomes of schizophrenic and neurotic patients seen at a mental health center outpatient clinic by therapists who were designated A's and B's by the WB-23. Because prior research had shown that ataractic medications attenuate A and B therapist differences (Whitehorn & Betz, 1957), only schizophrenic patients being treated by ataractic drugs were included in this study, in order to facilitate assessment of the combined effects of chemotherapy and psychotherapy across therapist type. Matthews et al. reviewed in detail the files of 36 patients, 18 of whom had been diagnosed neurotic and 18 of whom had been diagnosed schizophrenic, all of whom together had been treated by seven A and four B male therapists. In a manner similar to that which had been used by Berzins et al. (1972), the present researchers relied on three outcome measures to assess treatment success. Variable 1, the therapist's view of his own effectiveness, was assessed via a rating scale which measured the amount of behavior change the patient had been perceived to undergo. Variable 2 was the number of therapy sessions. Presumably, duration of treatment would be positively correlated with success of treatment. Variable 3 was the therapist's stated reason, as per the record, for termination (i.e., "no further need for treatment" or "patient withdrew against professional advice"). Statistical results related to Variable 1 strongly supported an interaction effect between therapist and patient types, although this was largely due

to "the significantly more positive outcome that Type A therapists obtained with schizophrenic patients as compared to all other therapists by patient pairings [p. 478]." Results related to Variable 2 did not coincide with those of Variable 1, and there were no significant findings related to Variable 3. Patient socioeconomic status, earlier suggested by McNair et al. (1962) to mediate the differential A-B therapist success rates, was found to have no relationship to therapeutic outcome. According to Matthews and Burkhart, "the degree of correspondence between the present study and a previous study (Berzins et al., 1972) was an almost unprecedented event in clinical psychotherapy research. Not only were main effects replicated, but very intricate interactions also were confirmed [p. 479]." The authors therefore supported belief in the Super A hypothesis because in their own study, "A-type therapists . . . obtained better overall success across patient diagnoses, had equivalent therapeutic effects with neurotic patients, and had considerably better results with schizophrenic patients [p. 479]."

On the supposition that actual therapeutic effectiveness may be directly related to type of therapy referrals from colleagues, King and Blaney (1977) undertook a project which is quite unusual in the A-B literature. They polled by mail every known Ph.D.-level psychologist in San Antonio (N=60) concerning his/her patterns of referral and also requested that he/she fill out the Schiffman et al. A-B scale. Forty-one professionals responded with both the A-B data and information about who on a list of the 60 San Antonio psychologists they believed would be most effective with each of six described

patients. The case vignettes depicted two schizophrenics, two neurotics, one character disorder and one marital problem. The experimentors felt that the results provided strong support for the interaction hypothesis, since A's received a higher proportion of schizophrenic referrals than B's while B's received a higher proportion of neurotic referrals. The data also suggested, however, that there was a general tendency for B's to be more effective overall than A's, since B's received a total of 86 referrals while A's received a total of only 49 referrals. The researchers cautioned care in jumping to the latter conclusion because: one, A's received more "other" diagnosis referrals (35) than B's (30); and two, receipt of referrals might be more a function of differential visibility than of effectiveness.

Goodwin (1978a) sought to validate the so-called "paradoxical preference" finding which had begun to appear in the analogue A-B literature, by studying the caseload compositions of A and B therapists. He hypothesized that inexperienced B therapists would have a higher proportion of schizophrenic/schizoid patients than would inexperienced A therapists, who would, in turn, have a higher proportion of neurotic patients than would inexperienced B therapists. He further anticipated that these results would be attenuated for experienced therapists. Twenty A and B therapists, selected on the basis of results of the SCF, from an original pool of 40, were asked to list sex and diagnoses for all patients who they were currently treating. A factorial design was used, with therapist A-B type and experience level as the two factors. Experience level was dichotomized:

still in training (inexperienced), or training completed (experienced). Results showed that inexperienced B's had a higher proportion of schizophrenic/schizoid/borderline patients in their caseloads than did inexperienced A's. Inexperienced A's, contrary to expectations, did not have a significantly higher proportion of neurotic patients in their caseloads than did inexperienced B's. There were no significant findings for experienced therapists. Goodwin speculated that the paradoxical preference of inexperienced B's for the schizophrenic/schizoid patients reflected both their awareness of their deficiencies with this group and their consequent desire to learn, through increased experience, to work more effectively with them. Therefore, perhaps, by the time the inexperienced B's became experienced B's, the A-B differences in treatment effectiveness were attenuated.

In another publication which appeared in the same year, Goodwin (1978b) described the results of his efforts to interview inexperienced and experienced A-B therapists regarding their techniques in general and their feelings about the specific patients with whom they had had the least and the most success. Results revealed no significant differences between A and B therapists. Experience level, however, did appear to be a major differentiating factor. Thus, inexperienced therapists "seemed to perceive themselves as rarely using an advice-giving educational approach . . .; as not personally involved with, . . . or self-disclosing toward their patients; as making extensive use of psychodynamic interpretations . . .; as seeing diagnoses as very useful . . .; as not expressing negative reactions readily to patients; and as being inclined to reject the

'sociopathology of illness' viewpoint of Thomas Szasz." Experienced therapists, in contrast, "perceived themselves as not using depth interpretations frequently; as tending to use an advice-giving educational approach; as being more personally involved with and self-disclosing with their patients; as expressing negative reactions readily; as using banter to a moderate extent; as finding diagnoses comparatively useless; and as tending to agree with the viewpoint of Thomas Szasz [p. 1591]."

Draper (1967) did not begin his study as most other A-B researchers did, by sorting therapists into A's and B's with one of the Strong measures and then predicting their behavior on the basis of this variable. Instead, he followed the procedure which Whitehorn and Betz had originally used: he gauged the success of 27 medical interns doing a four-week rotation with 389 patients at the King County Hospital in Seattle, and then looked at their SVIB profiles. He used the full 400-item Strong rather than any of the briefer A-B sorting techniques used by other researchers. Draper studied the following data: past patient records, supervisors' previous evaluations of the interns, his own recollections of these students, intern application credentials, and intern Strong scores. Satisfactory improvement in the patients was assessed via the discharge disposition, so that only those patients sent back into the community were considered successes while those sent to other institutions were not. The 14 doctors with the highest discharge rates (above 44%) were then studied in relation to those with the lowest discharge rates (below 44%). Findings which were the reverse of the

Whitehorn-Betz data emerged. In Draper's sample, those interns with the highest patient success/discharge rates tended to produce high math-science teacher and printer profiles, while those interns with the lowest success/discharge rates tended to produce high lawyer and CPA profiles. In other words, SVIB A interns were less successful with this clinical population than were SVIB B interns. Draper speculated that one reason for this turnabout might have been the simultaneous use of phenothiazines with many of the patients in psychotherapy with the interns. Whitehorn and Betz (1957) had noted that when insulin was administered along with psychotherapy, A and B physicians' success rates with patients were approximately the same. Therefore, Draper suggested the possibility that the skill of the B's in his study might have been bolstered, similarly, by the effects of the phenothiazines which their patients received.

Critique

In Razin's (1977) judgment, with which this reviewer is essentially in agreement, the A-B clinical studies have been very weak, in contrast to the A-B personality studies, "in terms of providing consistent, sound evidence [p. 293]" of the meaningfulness of the A-B variable. What Razin does not say, but what seems to be the problem underlying all attempts to demonstrate the validity of the A-B variable with regard to treatment outcome, is that mental health workers are unable to achieve more than a modicum of agreement among themselves about what specifically constitutes treatment success. Therefore, in reflection of the Tower of Babel quality which characterizes

the field, the following variety of "outcome of measures" has been used to assess the differential effectiveness of A-B therapists. Among the inpatient studies: all-or-none improvement ratings based on hospital records at the time of discharge (Draper, 1967; Stephens & Astrup, 1965); length of hospitalization, such that the shorter the stay, the higher the success rate attributed to the physician (Draper, 1967); and therapist assessment of patient improvement on mental status at one and at three months (Bowden et al., 1972). Among the outpatient studies: patient and/or therapist assessment of improvement via paper and pencil checklists (after four months and again after one year, McNair et al., 1962; after two years, Berzins et al., 1972; not stated, Matthews et al., 1970); and a wide variety of variables assumed to be but unproven as relevant to eventual treatment outcome: therapists' differential reactions to patients after one interview (Kemp, 1969); therapists' differential preferences for patient types, as assessed by scrutiny of caseloads (Goodwin, 1978a); therapists' differential styles with varying patient types (Segal, 1970, 1971b); and, finally, referral patterns among local professionals (King et al., 1977). Given the variety of the preceding list, it is an empty gesture to tally up the number of favorable versus unfavorable A-B therapist outcome study results, because such a tally would imply similarities in the underlying assumptions of the studies which cannot possibly exist, given that in a number of cases, assumptions are actually contradictory. Nevertheless, an approach of this sort was taken both by Razin (1977) and by Cox (1978).

It may be more useful at this point to critically consider only a few of the individual studies which have just been described in this review. The results of three in particular so permeate the literature that it is almost impossible for a reader to intelligently evaluate the other A-B studies and arguments, both pro and con, without an awareness of the relative strengths and weaknesses of these. They are: the McNair et al. (1962) outpatient study, which is typically, albeit erroneously, credited with the genesis of the interaction hypothesis; and the inpatient post hoc evaluations of both Stephens et al. (1965) and Draper (1967), which have so often been cited as decisively contradicting the Whitehorn-Betz results.

Of all the reviewers, Chartier (1971) has perhaps composed the most organized assault on the interaction hypothesis. He cites three major ways in which the McNair et al. (1962) study differs from those of Whitehorn and Betz'. To the extent that he is correct, the McNair et al. material cannot justly be considered as an extension of the Whitehorn-Betz data, and the interaction hypothesis then no longer has a rationale upon which to rest: inferences which are drawn in one study on the basis of findings from the other may be unwarranted. Chartier's first point is that in the Whitehorn-Betz studies, outcome measures were based on post hoc information gathered from hospital records which included several people's evaluations of a given patient; in the McNair study, in contrast, process rather than outcome was assessed via paper and pencil tests taken by therapists and patients who had agreed to be subjects in a study. His second point is that the Whitehorn-Betz and McNair et al. patient samples differed

with regard to both sex and socioeconomic standing. The former group was at least 50% female and composed of people who were primarily upper or upper middle class; the latter group was all male and composed of people who were predominantly lower or lower middle class. Chartier's third point is that different A-B scales were used by the experimentor teams: Whitehorn and Betz relied on a variety of A-B scales, while McNair et al. used one of their own creation. Thus, it is not really evident that the two teams of researchers are even reporting studies involving similar therapist populations. After making the above arguments, Chartier concludes that the interaction hypothesis may be "actually contraindicated by comparable success rates of A's and B's with neurotics [p. 24]," a reference to the fact that the Whitehorn-Betz A's and B's did not manifest differential success rates with their neurotic patients. This reviewer considers it unreasonable and highly inconsistent that Chartier argues thusly after he has taken such pains to itemize the ways in which these studies deviate from each other. His major point is that the results of each cannot legitimately be used to augment the other's findings. Surely this means that the results cannot be used to detract from the other's findings either.

With regard to the Stephens and Astrup (1965) study, Razin (1971) complains about two items which he considers to be methodological problems. The first is the crudeness of the indexes of follow-up status which were used to assess patients (letters, phone conversations, etc.), and the related lack of detail about the way in which sources were checked for accuracy. The second is the "statistically

unsophisticated [p. 7]" nature of the data evaluation, which involved the computation of correlations for each group or subgroup rather than analyses of variance. Because the latter approach was not used, interaction effects went unexamined. Razin argues that this study is "riddled by too many flaws" to be able to either discount or disprove the Whitehorn and Betz data. He says that if Stephens and Astrup

> had statistically examined interaction effects and not "homogenized" so much heterogeneous data (ataractic drug versus no drug; year-to-year differences in proportion of improved patients and of A therapists, etc.) it seems very likely that the nonsignificant (A-B) differences they found would have become significant. In short, one gets the impression that they "washed out" a real effect by lumping together several extraneous variables, by considering a different, more deterogeneous population of patients (1950-1960 versus 1948-1954) and by using improper statistics to do so [p. 8].

Razin also says that Stephens and Astrup's conclusion that "'personality' and not 'technique' is most important for predicting outcome in no way 'disproves' Whitehorn and Betz' view" since "the SVIB measures 'personality,' not therapeutic technique [p. 7]."

Razin (1971) and Silverman (1967) address the problems implicit in comparing the Draper study with those of Whitehorn and Betz'. A major issue is that Draper used some improvement criteria which were opposite to those used by Whitehorn and Betz. Therefore, his finding, opposite to Whitehorn and Betz', of B therapists' superiority over A's could almost be seen as bolstering the A-B hypothesis rather than detracting from its credibility. Specifically, Draper's improvement criterion was speed of discharge, "where discharge was determined by symptomatic improvement, including social participation and presence of environmental resources (Razin, 1971, p. 11)." Whitehorn and Betz

did not measure speed of discharge at all, but if they had, it would have run counter to their theoretical position to have assumed that less treatment was a sign of greater therapist effectiveness. Whitehorn and Betz stated that their B therapists, like Draper's, aimed at symptomatic improvement and that this distinguished them from A's, who aimed for greater personality integration and adaptation as well. Therefore, as both Razin and Silverman point out, "It should be no surprise, then, that if attainment of 'B-like' goals defines success in a B-like atmosphere (quick discharge and therefore limited interpersonal contact), B-like therapists are more successful (Razin, 1971, p. 11)."

A more general criticism of the A-B variable itself, with which this reviewer is in agreement, has been articulated by Bowden et al. (1972). This group points out that a number of clinical studies have suggested that such A-B differences which regularly do appear in the clinical research findings tend to diminish under two conditions: one, as A-B therapists' experience levels increase; and two, when schizophrenic patients take antipsychotic medications. Since both of these conditions typically apply in the natural course of events, Bowden et al. question the utility of continuing to study the A-B variable when its major effects become so quickly and so regularly irrelevant.

Studies of Personality and Attitude Correlates of A-B Status in Psychotherapists

In response to both the Whitehorn-Betz A-B findings and Witkins 1950's studies about the characteristic ways in which people orient

themselves in space as a function of other aspects of their personality styles, Pollack and Kiev (1963) administered the Rod-and-Frame test to 40 male staff members of the Phipps Clinic who had already taken the SVIB for Whitehorn and Betz. Results showed that although the entire group oriented themselves in a field independent manner when compared with the norms for undergraduate males, the B physicians were extremely field independent when compared with the A physicians as well. In addition, the B's performed within a considerably narrower range than did the A's. Pollack and Kiev saw this latter finding as confirmation of the assumption that A's were more flexible than B's. They also felt that the narrower performance range of the B's reflected their "precise and mechanistic approach" to tasks as well as the capacity to be "unaffected by the visual field [p. 95]" or to discount its effects.

Then, Pardes, Winston, and Papernik (1971) set out to replicate and extend the Pollack et al. study by administering the Rod-and-Frame test to 32 A and B male and female staff persons at Kings County Hospital, and 26 male and female psychiatric inpatients there. Results from this study were opposite to those expected: B staff members appeared to be more field dependent than A staff members, and B inpatients scored in a more field dependent direction than did A inpatients. However, there were major differences between the Pardes et al. and Pollack et al. samples insofar as: one, only the former included females as well as males; and two, the former had been divided into A's and B's on the basis of the 80-item Campbell scale whereas the latter group had been divided on the basis of the 19-item

Kemp revision. Although Pardes et al. performed rank order correlations to account for the various subgroups (e.g., all therapists, all males, male doctors, etc.), they could not substantiate the results of the Pollack and Kiev study.

Rothman (1971) administered the WB-23 A-B Scale to 30 male "doctoral level counselors [p. 442]" and made the following predictions:

> (a) a relationship would exist between a therapist's A score . . . and an "experiential" therapeutic orientation, and a B score and an "analytic" orientation; (b) a developmental history of "socially dependent conforming behavior" would be characteristic of the B therapists, while a developmental history of "socially independent nonconforming" behavior would be characteristic of A therapists [p. 442].

Results from the Sundland and Barker Therapist Orientation Questionnaire and an author-constructed Biographical Information Blank did not confirm hypothesis A. Hypothesis B was not only not confirmed, but a significantly negative relationship was found to exist. The author therefore tentatively concluded that A therapists may be most accurately perceived as the more socially conforming of the two groups.

In response to the number of A-B analogue studies which were at that time being published, Berzins, Dove, and Ross (1972) assessed the invariance assumption, according to which A and B undergraduates were assumed to be personologically similar to A and B mental health professionals. Because they specifically wanted to cross-validate the personality correlates of A-B status which had previously been identified in groups of nonprofessionals (Berzins, Barnes, Cohen, &

Ross, 1971), Berzins et al. administered Jackson's Personality Research Form (PRF) to 94 A-B male professionals, 661 A-B male undergraduates, 114 A-B male college clinic outpatients, and 720 A-B female undergraduates. Results were that the four groups differed significantly on 19 of the 20 content scales. Multivariate appraisal indicated that there were three significant dimensions which accounted for the variance between groups. The first, the dominant dimension, contrasted the female group with all three male groups and was labeled Masculinity-Femininity. The second, the Playful versus Intellectual dimension, primarily contrasted male and female undergraduate normals (high scores on Play) with professionals and patients (high scores on Understanding). And the third, Self-Esteem, contrasted the group of professionals (highest scorers on Desirability and Harmavoidance) with the group of male clinic patients (lowest on Desirability but highest on Defendence). Then, they found five "core" scales on the PRF which significantly correlated with the A-B Scale scores of members of all of the groups despite the very large differences which existed between the means of the original raw scores. The five scales were: Harmavoidance, Dominance, Change, Sentience, and Succorance. Of these five scales, Harmavoidance was the single best predictor of A-B Scale scores: A's proved to be highly harmavoidant relative to other subjects in a given sample. The authors summed up the significance of this finding as follows:

> . . . the A type S . . . may be described as relatively cautious, submissive, uninclined to seek variety or sensual pleasure for its own sake, and as somewhat succorant.

> Conversely, the B-type S shows a risk-taking, dominant, variety-seeking, and counterdependent orientation to experiences [p. 391].

Delk and Ryan (1975) explored the relationship between A-B therapist status and "attitudes regarding sex roles for the mentally healthy adult male and female [0. 589]." Seventy-six male and female psychotherapists completed the "University of Kentucky version" of the A-B scale which, although the authors do not stipulate further, is a label which probably refers to one of the Kemp revisions. After the lowest and highest quartiles were chosen for further study, those 17 A and 20 B therapists were administered a 38-item bipolar scale which yielded sex role stereotype scores. Results revealed that A therapists significantly stereotyped to a greater degree than did B therapists, and that female therapists stereotyped least, to a degree approaching statistical significance.

Geller and Berzins (1976) investigated the relationship between A-B Scale scores and theoretical orientation in a nationwide sample of prominent male psychotherapists. Using the mail system, they had 95 "eminent" professionals self-administer the 19-item Kemp revision of the A-B scale as well as respond to a questionnaire relating to psychotherapy orientation in which the three major dimensions were "insight," "relationship," and "action." Results were not statistically significant in any direction, but it was noted that several pioneers in the treatment of schizophrenic/schizoid patients were appropriately classified as A's, such as S. Arieti, D. Bullard, D. Jackson, and several others who did not wish to be identified, while only a few others were classified as B's, most notably J. Rosen. Similarly, a number

of therapists recognized for their work with neurotics were at the B end of the distribution, such as H. Kelman, R. Lowenstein, and C. Rogers. There was, therefore, some mild support for the interaction hypothesis. Also, several of the therapists who espoused an eclectic point of view were found to be AB's, in the middle of the distribution, and there did appear to be "some association between the B end of the scale and a therapist's affinity for affective interchange, self-disclosure, confrontation, and other relationship-emphasizing ingredients [p. 80]." The authors concluded that most of the therapists at the B end of the distribution were "more oriented toward complex, involving, exciting experiences with patients than most of the therapists at the A end of the distribution," and speculated that "the presumed superiority of A-type therapists in working with process and chronic schizophrenics may result from a greater tolerance for communications and behaviors that B-type therapists may more rapidly become impatient with [p. 81]."

To learn whether or not there might be physiological correlates of A-B status, Hasenfus, Martindale, and Kaplan (1978) measured alpha wave amplitude in a total of 8 A and B clinical graduate students and 8 A and B experimental graduate students, where only one subject in each of the two groups was female. Results were analyzed in two directions: one, by comparing clinical with experimental students; and the other, by comparing all A's with all B's. There were only very weak findings regarding the contrast between clinical and experimental subjects, but statistically significant results emerged which attested to the greater average amplitude of alpha waves in A's

than in B's. According to the authors, the presence and quantity of alpha waves vary directly with the capacity for less focused rather than more pointed attention. They therefore concluded that the greater average amplitude of alpha in A's supported the contention, first put forth by Freud, that "effective therapists exhibit 'freely floating' or wide attention [p. 128]."

Studies of Personality and Attitude Correlates of A-B Status in Non-Psychotherapists

Shows and Carson (1966) replicated the experimental conditions set by Pollack and Kiev (1963) when they had tested the field dependence-independence dimension among A-B psychotherapist subjects with the Rod-and-Frame test. The major change which Shows et al. introduced here was a shift in the composition of the subject group from therapists to undergraduate males. After taking the 19-item Kemp revision, all A's, B's, and AB's were then administered the Rod-and-Frame test. Results were strikingly similar to those of Pollack et al.: "the mean orientation score of the A's did not differ significantly from the mean score of the non-AB controls (middles)" and "the B's were significantly more field independent than both the control group and the A's [p. 459]." Shows et al. understood these findings to indicate: one, that A-B-ness was a bipolar dimension rather than a typology; and two, that B's manifested more psychological differentiation in their perceptual approach than did A's.

Kenworthy (1968) compared the A-B Scale scores of 107 senior medical students (sex composition unspecified) who had designated

psychiatry as their specialty area, with their scores on the Medical College Aptitude Test (MCAT), scales from the Allport, Vernon, Lindsey Study of Values (AVL) and scales on the Edwards Personal Preference Schedule (EPPS). Significant differences found were as follows: A's scored higher on the Aesthetic than the Theoretical scale of the AVL, higher on Verbal than Quantitative abilities on the MCAT, higher than B's on the EPPS Autonomy scale, and lower than B's on the EPPS Order scale. The author saw these results as attesting to the "more individualistic and independent, outspoken self-sufficient, non-conforming and unconventional [p. 3488-B]" nature of the A's in contrast to the greater needs for order, to be more passive and retiring, and less assertive [ibis.]" of the B's.

Dublin, Elton, and Berzins (1969) administered 12 scales from the Omnibus Personality Inventory (OPI) to 1200 undergraduate males and approximately as many females, and related these scores to the subjects' A-B standings (derived from the SCF version of the A-B Scale) as well as to their scores on four scales of the American College Test Program battery (ACT). Results showed that males and females differed from each other in the following ways: on the OPI, males consistently scored higher than females on Masculinity-Femininity (MF), Impulse Expression (IE), and Theoretical Orientation (TO); they also scored higher on the ACT Natural Science (NS) scale; females consistently scored higher on the OPI Estheticism (ES) and ACT Verbal (V) scales. The researchers found that for both sexes, AB's and B's had progressively higher scores on masculinity than A's, and that for females, the same kind of relationship held true for Theoretical

Orientation (TO). Furthermore, they found that the differentiations on the A-B variable were accomplished largely by scales which showed large differences between the sexes and which called to mind "sex-role stereotypes and sex differences in interests and aptitudes [p. 742]." Although male A's and B's differed only slightly with respect to ACT Verbal (V) and Natural Science (NS) scores, when those scores were treated as a triad together with the OPI Masculinity-Femininity (MF) scale scores, the differences between the extreme A's and extreme B's were apparent: B's who scored higher on measures of masculinity also scored higher on natural science abilities, whereas A's outscored them on verbal abilities. The significance of this finding was that although a brief scan of any of the versions of the A-B scale would suggest to the viewer that the test discriminates among test-takers on a masculinity-femininity dimension (in the most stereotyped, conventional sense), this had not been demonstrated before in the A-B literature.

Berzins, Barnes, Cohen, and Ross (1971) assessed the personality dimensions involved in the A-B distinction by administering Jackson's Personality Research Form (PRF) to 223 undergraduate males. Toward this end, they used the SCF version of the A-B scale to distinguish among three groups: A's, AB's, and B's. Because the accumulating personality test data was beginning to suggest that A males were more maladjusted than B males by virtue of their lower MF scores (Dublin et al., 1969) and greater field dependence (Pollack et al., 1963; Shows et al., 1966), Berzins et al. predicted that their A's would appear more "schizoid" and their B's would appear more "neurotic" on the PRF. Results characterized the B subject as "oriented toward

thrill seeking or risk taking (low Harmavoidance), concerned with sensory, physical enjoyment (high Sentience), tending to present himself in a positive light (high Desirability), dominant or ascendant (high Dominance), and persistent (high Endurance)," while the opposite descriptive labels depicted A's as "inhibited and cautious, unconcerned with sensory pleasures, tending toward 'undesirable' self-presentations (or lacking self-esteem), submissive, and lacking in stamina [p. 363]."

McGuigan and Seidman (1971) investigated the relationship in 65 undergraduate males between A-B status, as measured by the 19-item Kemp revision, self-esteem, as measured by the Tennessee Self-Concept Scale, and social competence, as measured by a 20-item questionnaire devised by Laynon. Although a statistically significant linear relationship between A-B status and self-esteem was not found, there was a trend for B's to show higher self-esteem and to report higher self-satisfaction and fewer personal defects than did A's. While the linear relationship between the A-B dimension and social competence was minimal,

> . . . scorers at the B end of the distribution obtained significantly higher social competence scores than did those at the A end of the distribution. Further, "social competence" appeared to be related to defensive distortion [p. 494].

Fancher, McMillan, and Buchman (1972) administered to 30 undergraduate males the 19-item Kemp revision of the A-B Scale, a programmed case test of accuracy in person perception, and a role-taking task that was assessed for accuracy. The researcher's assumed that B's, who had been appearing relatively consistently on other

personality measures as "more masculine and tough-mindedly rational" in their approach to problems than A's, would be more inaccurate in person-perception than A's as well. This hypothesis was an outgrowth of a previous study done by Fancher in which "accuracy on a non-analytic 'programmed case' test of interpersonal perception was positively related to an empathic approach by judges, and negatively related to an intellectualized, inferential approach [p. 22]." Although results of the tests of the major hypotheses were all in the predicted direction, the correlations were "modest in magnitude" and "therefore lent only the slimmest of support for the hypotheses [p. 26]." However, the following stylistic patterns emerged when the subjects were judged in their role-taking performances: A types were seen as more angry, hesitant, nervous, rude, shy, and stubborn, whereas B types were seen as more businesslike, calm, and self-confident. The authors concluded that A's were likely to be more empathic than B's because members of the former group had easier access to their feelings than did members of the latter group.

Smith (1972) looked at the postural and gestural communications of 20 undergraduate males chosen from an initial group of 225 on the basis of their extreme scores on an unidentified version of the A-B scale. Hypotheses were that A's would be more variable as a group and that they would reflect greater caution and inhibition in their postural and gestural styles with a stranger than would B's. Results were that A's showed significantly greater variability than did B's in the number of Hand Gestures made and Negative Nods used, but not in any of the other gestural categories. A's were found to be more

variable than B's in the amount of time spent in the Trunk Side position and the Arms Crossed position. They were in general, more idiosyncratic in nonverbal channels of communication. Smith interpreted these findings in the direction supported by the literature on the meaning of gestural and postural communications, which suggests that certain categories reflect positive, engaging, and affiliative attitudes, while their absence reflects less positive, less engaging, and less affiliative attitudes. By this means, he interpreted his data as meaning that B's were more interpersonally approaching than A's were.

Johnson, Workman, Neville, and Beutler (1973) administered the 16 PF, MMPI, and WB-23 to 143 consecutive admissions to a psychiatric hospital three weeks after admission, 53 of whom were male and 90 of whom were female. They found only one significant intercorrelation of A-B scores with the MMPI and 16 PF scale scores for females, but 20 for males which were significant, 13 of which were at the .01 level. In addition, they found six correlations for males and females which were significantly different. Johnson et al. summarized their significant findings as suggesting: 1) that A-B scales assessed different characteristics in men than in women; 2) from the MMPI, that A males had more typically feminine interests, were more depressed, obsessive compulsive, socially isolated, anxious, and less defensive (in the social desirability sense) than B males; and 3) from the 16 PF, that A males were emotionally less stable, had poorer self-control, greater emotionality and psychiatric pathology, and were more imaginative, inner directed, apprehensive, depressive, inconsiderate and

anxious than B males. In light of all this, Johnson et al. tentatively posited the idea that it might be "the extent of a therapist's symptomatology or personality deviancy" which led to "greater empathy or tolerance of pathology associated with certain diagnostic categories" and which, thereby, "accounted for the differential therapeutic outcome of A and B therapists [p. 271]."

Nerviano (1973) attempted to cross-validate previous findings reported in the A-B literature in which Jackson's Personality Research Form (PRF) had been administered to A-B undergraduate males (Berzins et al., 1971, 1972), professional males, outpatient males, and undergraduate females (Berzins et al., 1972). Nerviano's population was composed of 129 chronic alcoholic male veterans. He found that the same core scales which had distinguished the A's and B's in the other studies also did so with this population. Thus, male alcoholic A's emerged as "cautious, uninclined to seek sensory 'thrills,' change-avoidant, and submissive; the B types, in contrast, were "depicted as more adventurous, as seekers of sensation and change, and as more dominant [p. 1338]."

Schubert and Wagner (1975) tested the hypothesis that A's would show greater creativity than B's, greater personal involvement with people in general, have greater "femininity," and be more verbal in orientation. They administered the Campbell version of the A-B Scale, the MMPI, and 12 tests of creative potential taken from Guilford's array of creativity tests, to two groups of male undergraduates (N=608; N=237). Characteristic A MMPI scores were high on scales F, Hy, Pd, Mf, Pa, Pt, Sc, and Ma. The characteristic elevated B scale

was Si. Eleven of the 12 creativity tests showed high correlations with A-ness. The authors felt that these results validated the original hypothesis.

Kulberg and Franco (1976) administered the Marlowe-Crowne Social Desirability Scale (MC), the Eysenck Personality Inventory, The Janis Field Self Esteem Scale (SE), and the 19-item Kemp A-B Scale to 146 male and 106 female undergraduates. Results were that B males scored higher on "sensation seeking, self esteem, and extraversion," and B females: appeared as higher sensation seekers, had higher self esteem, and were more repressing and less neurotic than A females [p. 573]. Kuhlberg et al. also found that the single most predictive A-B scale for both males and females was the Sensation Seeking Scale of the Eysenck Personality Inventory, on which B's scored high. Contrary to the results on previous research, the only outstanding difference between males and females was on the Extraversion Scale. Otherwise, female B's showed even stronger correlations than male B's with sensation seeking, repression and high self-esteem. The authors' speculated that "the introverted, self-conscious and socially incompetent schizophrenic may be threatened by the extraverted, high-self-esteem B," and they proposed, instead, that "it was the dominant 'openness to feelings' (sensitizers, lower self-esteem) personality characteristics of the A therapist that made him effective with schizophrenics [p. 575]."

Summary

This review of the literature has demonstrated the development, trends, and problems of the A-B research over the last 25 years.

Although the original Whitehorn-Betz data looked so promising that many of the clinical studies reported here were funded by university fellowships or federal grants (Berzins et al., 1972; Campbell et al., 1968; May, 1974; Seidman, 1972; and Stephens et al., 1975), the results of these have been mixed, at best. Some of this mixture can be accounted for by experimentor sloppiness: e.g., the continued use of the Campbell version of the A-B scale for years after the publication of multiple studies which had demonstrated the lack of overlap between it and other A-B scales. But much of the lack of clarity in the results of the clinical research seems to lie in the faultiness of the A-B construct itself. For whatever the reasons, there has simply been no substantive accumulation of evidence that the A-B variable is a viable predictor of clinical "success" or "failure" with any sort of patient. However, there is an indication that

> for a certain early period (but not after 1955), there well may have been at Hopkins a group of residents who tested differently on the SVIB and whose patients' outcomes were recorded jointly by themselves and their supervisors as superior (May, 1974, pp. 16-17).

There is also an indication, drawn primarily from the A-B personality studies, that there is a similarity between the male A type personality and that of the schizoid/schizophrenic patient. This attitude was first articulated by Silverman in his 1967 review of the A-B field dependence-independence literature. Since then, the personality profile of the male A relative to the male B has been developing with considerable consistency. He can be characterized, in summary, as: lower in self-esteem (McGuigan et al., 1971; Kulberg et al., 1976); more socially conforming (Rothman, 1971; Portnoy et al., 1972); more

field dependent (Pollack et al., 1963; Shows et al., 1966); more prone to rely on culturally stereotyped sex roles (Delk et al., 1975); more cautious, harmavoidant and submissive (Berzins et al., 1971, 1972; Nerviano, 1973); more "feminine" in his interest patterns, more likely to think abstractly and to have a higher verbal aptitude (Dublin et al., 1969); more depressed, obsessive compulsive, socially isolated, anxious, apprehensive, inconsiderate and imaginative (Johnson et al., 1973). In short, the type A male is likely to manifest greater emotionality and defensiveness as well as lesser self control and stability than the B male (Johnson et al., 1973).

The type B male, in contrast, lacks many of these characteristics and appears, instead: more self-satisfied (Kulbeck et al., 1976; McGuigan et al., 1971), more inclined to seek variety for its own sake (Geller et al., 1976); more dominant and risk-taking (Berzins et al., 1971, 1972; Nerviano, 1973); more calm, self-confident, and business-like (Fancher et al., 1972); more socially competent and liable to defensive distortion (McGuigan et al., 1971); more repressing, less neurotic (Kulberg et al., 1976); more concerned with high status roles (Franco et al., 1975); more interpersonally approaching (Smith, 1972); and more concrete (Dublin et al., 1969).

Studies involving A-B females have yielded considerably less gratifying results. This is understandable insofar as most A-B differentiations on paper and pencil personality tests are accomplished by scales and measures which typically show large differences between the sexes. However, although women usually score as A's when pooled with males, they are not considered to be as neurotic as A

males, because "the emotional and feeling orientation is more consistent with the culturally defined role of healthy women (Kulberg et al., 1976, p. 572)." To date, B females in relation to A females have been found to be more extraverted and sensation seeking (Kulberg et al., 1976), as well as more theoretically-oriented (Dublin et al., 1969).

The research described in this review did not produce consistently strong evidence of differential effectiveness of A and B therapists, either male or female, with neurotic or with schizophrenic patients. It did seem to this reviewer, however, that there was a clear trend for male A's to be more sensitive to or in tune with other A types than for male B's to be similarly so with either other B's or with A's (Berzins et al., 1972; Goodwin et al., 1978). It may be that this trend is related to the accumulated findings from the A-B personality research which have thus far suggested that contrary to the original assumption that A males are better adjusted than B males are, the reverse is more true. To the extent that male A psychotherapists may be more like their disturbed patients than male B psychotherapists are, they may also be more sensitive to them. Some evidence for this possibility is implicit in the general research finding that greater improvement is likely to occur in patients "who experience themselves as similar to the doctor (Sapolsky, 1965, p. 75)."

Prior to the current investigation, the question of whether or not male A psychotherapists do as a group manifest a greater degree of test pathology of a certain kind than male B psychotherapists do had not yet been answered. If the invariance assumption regarding the

stability of A-B personality characteristics across all male populations, including one of psychotherapists, were accurate, then the A male therapists could be expected to reveal particular characterological features indicative of obsessionalism and anxiety on the MMPI, as A subjects did in the Johnson et al. (1973) study. It was therefore the intent of this investigator to test the invariance assumption in this regard and then explore the extent to which the findings related to others from the 16 PF, which were proposed as correlates of a literary-imaginative versus scientific-methodological orientation. In addition, it was proposed that B females, who endorse A-B Scale items which are traditionally "masculine," would reveal higher levels of anxiety on the 16 PF than either A females or B males. B females were also expected to describe themselves in a manner consistent with a scientific-methodological orientation, while A females were expected to describe themselves in a fashion suggestive of a literary-imaginative sensibility. Finally, it was hoped that A-B standings would be reflected in differential scores on the MMPI Mf Scale, so that a definitive relationship could be pinpointed between the A-B Scale and established masculinity-femininity measures.

CHAPTER III

METHODOLOGY

Basis of Project

Johnson et al. (1973) administered the 23-item A-B Scale, MMPI, and 16 PF to 143 hospitalized psychiatric patients, 53 of whom were male, and 90 of whom were female. They found only one significant intercorrelation among the females and assumed that it had occurred by chance. Among the males, in contrast, they found 13 statistically significant intercorrelations of A-B Scale scores with the MMPI and 16 PF scores. Additionally, six of the correlations for males and females were statistically different. Johnson et al. summarized their findings as follows: one, the A-B Scale assesses different things in men than in women; two (from the MMPI), A males have more typically feminine interests, are more depressed, obsessive compulsive, socially isolated, anxious, and less defensive (in the social desirability sense) than B males; and three (from the 16 PF), A males are emotionally less stable, have poorer self-control, greater emotionality and psychiatric pathology, and are more imaginative, inner directed, apprehensive, depressed, inconsiderate and anxious than B males.

The present study was designed as a partial replication of the Johnson et al. study. The major differences between the current project and the Johnson et al. project are that: (a) this investigator used practicing psychotherapists as subjects whereas Johnson

et al. used consecutive hospital admissions as subjects, and; (b) this investigator gathered and analyzed data from only the upper and lower quintile male and female A's and B's, whereas Johnson et al. gathered and analyzed data from their total subject population.

The general aim of the current project was to further substantiate the invariance assumption regarding the characteristics of A-B populations. The more specific aims were to learn:

1. whether A standing among male psychotherapists, contrasted to B standing in the same professional group, is associated with a higher probability of attaining evaluations on MMPI subscales which reflect characterological depression, anxiety-proneness, and discomfort in social settings;

2. whether A males are more likely to be diagnosed as submissive and disaffiliative than are B males according to selected measures of the Leary Interpersonal Diagnosis of Personality;

3. whether there are differences between A-B male psychotherapists on those 16 PF subscales which are associated with a literary-imaginative sensibility versus a scientific-methodological one;

4. whether B females are more anxious than A females and B males;

5. whether there are differences between A-B female psychotherapists on those 16 PF subscales which are associated with a literary-imaginative sensibility versus a scientific-methodological one.

6. whether A-B Scale score elevations relate to MMPI Mf Scale score elevations in both males and females.

Subjects

A total of 100 subjects from three major cities (Knoxville, Houston, New York) participated in this study, 50 of whom were female and 50 of whom were male. To insure that all subjects had had at least two years of training in how to conduct psychotherapy, participants were limited to those holding master's degrees in social work, doctorates in clinical psychology, or those who had completed at least two full years of training in psychiatry. Only those professionals who regularly provided at least ten hours per week of direct psychotherapy service were included in the sample.

Participation was on a voluntary basis. The only incentive for each subject was the option of receiving: (1) eventual feedback on his/her A-B status, MMPI scores, and 16 PF scores; (2) an abstract of this study. There was no remuneration of any other kind.

Descriptive data on the sample's personal demographics, professional demographics, professional training experiences, theoretical orientations, personal psychotherapy experiences, and attitudes about the relative weights of artistry and science in the practice of psychotherapy are presented, respectively, in Tables 1-6.

To learn whether or not there were differences among the means of the three professional groups comprising the total sample (N=100) on each of the demographic items, nonorthogonal two-way sex (male, female) by profession (M.S.W., Ph.D., M.D.) analyses of variance were

Table 1. Personal Demographics of Sample (N=100).

Variable	N
Sex	
Male	50
Female	50
Age Range	
24 to 30	25
31 to 40	43
41 to 50	19
51 to 60	9
61 to 70	4
Religion	
Protestant	36
Catholic	14
Jewish	25
Agnostic	12
Atheist	3
Other	10
Number of Siblings	
None	13
One	28
Two	34
Three	14
Four (or more)	11
Birth Order	
Only child	13
First born	43
Second born	28
Third born	9
Fourth (or more) born	7
Current Marital Status	
Single	13
Married	64
Divorced	18
Widowed	1
Cohabitating	4
Number of Times Married	
None	17
One	60
Two	20
Three	2
Four (or more)	1

Table 2. Professional Demographics of Sample (N=100).

Variable	Mean	S.D.
Professional experience post degree (years)	8.66	11.47
Professional activities (hrs./wk.):		
Individual adult psychotherapy	10.84	6.68
Marital/family therapy	5.78	5.59
Child psychotherapy	2.34	4.06
Group psychotherapy	1.94	2.07
Supervision/consultation	5.40	6.48
Administration	5.45	7.57
Teaching	1.61	2.96
Research	1.44	3.51
Professional publications:		
Number of publications	3.36	8.43
Number of primary authorship publications	2.33	6.32

Table 3. Professional Training of Sample (N=100).

Type of Training	N
Social Work (M.S.W.)	46
Clinical Psychology (Ph.D.)	43
Psychiatry	11
Psychiatrists	7
Psychiatric residents (3rd year)	4
Postgraduate Training (completed)	
Psychoanalysis	1
Geriatrics	1
Family therapy	1
Child therapy	2
General adult therapy	4
Postgraduate Training (in process)	
Psychoanalysis	1
Geriatrics	2
Family therapy	2

Table 4. Primary and Secondary Theoretical Orientations of Sample (N=100).

Theoretical Orientation	Primary N	Secondary N	Total
Psychodynamic	62	19	81
Humanistic	7	19	26
Phenomenological	4	5	9
Behavioral	--	5	5
Systems	15	37	52
Cognitive	8	6	14
Other	4	--	4
Total	100	91	

Table 5. Personal Psychotherapy Experiences of Sample (N=100).

Variable	Mean	S.D.
Number of times in treatment	1.79	1.31
Total years in treatment	3.22	3.05
Number of types of treatments	1.47	1.18

Table 6. Attitudes of Sample: Is Psychotherapy an Art or a Science (N=100)?

Attitude	A		AB		B		Total	
	N	%A	N	%AB	N	%B	N	%
Predominantly a science	1	5	11	18	3	15	15	15
Art and science in equal measure	13	65	32	54	10	50	55	55
Predominantly an art	6	30	17	28	7	35	30	30

performed for each of the appropriate variables. These included the following: age; number of times married; number of siblings; birth order; hours per week spent engaging respectively in individual adult therapy, family/marital therapy, individual child therapy, group therapy, supervision/consultation, administration, teaching, research; number of professional publications; number of first authorship professional publications; number of personal psychotherapies; total years in personal psychotherapy; number of types of personal psychotherapies; and number of years of experience as a therapist since receipt of mental health degree.

No significant differences were obtained for any of the personal demographics or the attitude variable. Significant differences were, however, found on some professional demographics and on one personal psychotherapy experience variable. (The following discussion of significant results obtained here can best be followed by reference to Table 7.)

Significant interaction effects were found both for the mean number of hours spent (weekly) engaging in individual adult psychotherapy ($F_{(2,94)} = 3.66$, $p<.05$) and for the mean number of hours spent (weekly) engaging in supervision and/or consultation ($F_{(2,94)} = 3.21$, $p<.05$). Simple main effects tests revealed that for the above two variables, the only sex difference was in the number of hours male versus female psychologists spend providing supervision/consultation ($F_{(1,94)} = 5.50$, $p<.05$). Within this sub-sample, the mean number of supervision/consultation hours of the males ($\bar{X} = 9.35$, S.D. = 7.43) significantly exceeded that of the females ($\bar{X} = 4.80$, S.D. = 6.44).

Table 7. Summary of Significant Analysis of Variance of Demographic Variables for Three Professional Groups (N=100).

Variable	Between Groups Sum of Squares	Within Groups Sum of Squares	df	F
Supervision/Consultation (hrs./wk.)				
Interaction effect	237.02	3463.63	2,94	3.21*
Pair-wise cell means comparisons:				
male M.S.W.'s/Ph.D.'s	543.63	3463.63	1,94	14.75***
male M.S.W.'s/M.D.'s	139.47	3463.63	1,94	3.78
male Ph.D.'s/M.D.'s	285.44	3463.63	1,94	7.74**
female M.S.W.'s/Ph.D.'s	2.79	3463.63	1,94	.07
female M.S.W.'s/M.D.'s	1.17	3463.63	1,94	.03
female Ph.D.'s/M.D.'s	15.60	3463.63	1,94	.42
Individual Adult Therapy (hrs./wk.)				
Interaction effect	318.03	4073.12	2,94	3.66*
Pair-wise cell means comparisons:				
male M.S.W.'s/Ph.D.'s	174.17	4073.12	1,94	4.01*
male M.S.W.'s/M.D.'s	.07	4073.12	1,94	.01
male Ph.D.'s/M.D.'s	229.71	4073.12	1,94	5.30*
female M.S.W.'s/Ph.D.'s	47.48	4073.12	1,94	1.09
female M.S.W.'s/M.D.'s	.82	4073.12	1,94	.01
female Ph.D.'s/M.D.'s	107.73	4073.12	1,94	2.48
Research (hrs./wk.)				
Interaction effect	10.02	1076.53	2,94	.43
Main effects:				
males and females	.01	1076.53	1,94	.01
M.S.W.'s/Ph.D.'s	115.68	1076.53	1,94	10.10**
M.S.W.'s/M.D.'s	28.57	1076.53	1,94	2.49
Ph.D.'s/M.D.'s	89.72	1076.53	1,94	7.83**
Administration (hrs./wk.)				
Interaction effect	6.04	5139.93	2,94	.05
Main effects:				
males and females	518.51	5139.93	1,94	9.48**
M.S.W.'s/Ph.D.'s	8.53	5139.93	1,94	.15
M.S.W.'s/M.D.'s	25.08	5139.93	1,94	.45
Ph.D.'s/M.D.'s	.68	5139.93	1,94	.01
Personal Psychotherapies (number)				
Interaction effect	5.36	151.92	2,94	1.65
Main effects:				
males and females	7.01	151.93	1,94	4.34*
M.S.W.'s/Ph.D.'s	2.04	151.93	1,94	1.26
M.S.W.'s/M.D.'s	.24	151.93	1,94	.15
Ph.D.'s/M.D.'s	5.84	151.93	1,94	3.61

*$p<.05$, **$p<.01$, ***$p<.001$.

Pair-wise comparisons of the cell means of the three professional groups (M.S.W.'s versus Ph.D.'s, M.S.W.'s versus M.D.'s, and Ph.D.'s versus M.D.'s) examined for females only, for males only, and for males and females combined were then executed for each of the two variables. No significant differences were found between any of the female groups on either of the variables. Significant differences were, however, found between male M.S.W.'s and Ph.D.'s on the adult therapy variable ($F_{(1,94)} = 4.01$, $p<.05$) as well as on the supervision/consultation variable ($F_{(1,94)} = 14.75$, $p<.001$). The mean number of hours male M.S.W.'s spend weekly engaging in individual adult psychotherapy ($\bar{X} = 12.92$, S.D. = 7.89) is significantly higher than the mean number of hours during which male Ph.D.'s in this sample function similarly ($\bar{X} = 9.03$, S.D. = 7.04). In contrast, the mean number of hours that the male M.S.W.'s spend (weekly) engaging in supervision/consultation ($\bar{X} = 1.85$, S.D. = 1.87) is significantly lower than the mean for male Ph.D.'s ($\bar{X} = 9.35$, S.D. = 7.43). Significant differences were also found between male Ph.D.'s and male M.D.'s on the adult therapy variable ($F_{(1,94)} = 5.30$, $p<.05$) and on the supervision/consultation variable ($F_{(1,94)} = 7.74$, $p<.01$). Regarding the former variable, the mean number of hours (weekly) spent engaging in individual adult psychotherapy for male Ph.D.'s ($\bar{X} = 9.03$, S.D. = 7.04) was significantly lower than the mean for male M.D.'s ($\bar{X} = 14.25$, S.D. = 6.1). On the latter variable, the mean number of hours (weekly) spent engaging in supervision/consultation for Ph.D.'s ($\bar{X} = 9.35$, S.D. = 7.43) was significantly higher than was that for male M.D.'s ($\bar{X} = 5.12$, S.D. = 3.31).

In other words, male Ph.D.'s in this sample differed from both the male M.D.'s and the male M.S.W.'s on both the individual adult psychotherapy variable and the supervision/consultation variable. Male M.D.'s and male M.S.W.'s, in contrast, did not differ from one another on either variable. All of the above differences within the male sample (N=50) were reflected in the differences found between professional groups in the statistical analyses done for male and female samples combined. The specific results of these analyses (N=100) can be found in Table 7.

Analyses of variance performed on the remaining variables revealed no further significant interaction effects. A main effects test, however, revealed differences among the professions regarding the number of hours (weekly) which they spend performing research activities ($F_{(2,94)} = 5.34$, $p<.01$). Pair-wise comparisons of marginal means of the various groups (M.S.W.'s versus Ph.D.'s, M.S.W.'s versus M.D.'s, Ph.D.'s versus M.D.'s) were then conducted for males only, for females only, and for males and females together, in order to locate the specific sources of difference. No significant differences were found between any of the female professional groups. Differences were, however, found between professions within the males only group (N=50) and within the males and females together group (N=100).

Specifically, differences appeared between male Ph.D.'s and M.S.W.'s ($F_{(1,94)} = 8.27$, $p<.01$). Within this sample, the mean number of hours male Ph.D.'s spend engaging in research activities each week ($\bar{X} = 3.03$, S.D. = 4.5) exceeds the mean for male M.S.W.'s in

the same activities ($\bar{X}$ = 0.0, S.D. = 0.0). Differences also appeared between male Ph.D.'s and M.D.'s ($F_{(1,94)}$ = 6.42, $p<.05$). The mean number of hours male Ph.D.'s spend engaging in research activities ($\bar{X}$ = 3.03, S.D. = 4.56) exceeds the mean for male M.D.'s ($\bar{X}$ = .50, S.D. = 1.41). Not surprisingly then, male Ph.D.'s were found to spend more time engaging in research than was any other professional group in this sample. These significant differences among males on the research variable are reflected in the differences found for males and females together in each of the professional groups. (Specific results of these other analyses can be found in Table 7.)

An analysis of variance performed on the number of hours spent (weekly) engaging in administrative activities produced significant sex main effects ($F_{(1,94)}$ = 9.48, $p<.01$). The mean number of hours for males ($\bar{X}$ = 7.72, S.D. = 9.16) was greater than the mean number of hours for females ($\bar{X}$ = 3.18, S.D. = 4.64).

Finally, an analysis of variance performed on the number of personal psychotherapies undertaken by the subjects also produced significant sex main effects ($F_{(1,94)}$ = 4.34, $p<.05$). The mean number of personal psychotherapies for females ($\bar{X}$ = 2.06, S.D. = 1.33) exceeded the mean number for males ($\bar{X}$ = 1.52, S.D. = 1.24).

Two-way chi square analyses of profession (M.S.W., Ph.D., M.D.) on the following discontinuous demographic variables were then performed separately for males, for females, and for the sexes combined: religion, current marital status, primary theoretical orientation, and secondary theoretical orientation. Significant differences were found only with regard to both of the theoretical orientation variables.

Table 8 demonstrates that the significant chi square obtained for the female population only ($\chi^2_{(8)} = 16.30$, $p<.05$) is in all likelihood due to the fact that there is a preponderance of female M.S.W.'s (78%) who embrace a psychodynamic perspective as a primary theoretical orientation. In contrast, only 67% of the female Ph.D.'s and 33% of the female M.D.'s principally subscribe to this orientation.

Similarly, a significant chi square was obtained on this same variable for the male and female groups combined ($\chi^2_{(10)} = 18.54$, $p<.05$). Here, too, it seems to be the M.S.W. group which is responsible for this finding. Seventy-six percent of all social workers, versus 49% of all psychologists and 55% of all psychiatrists (including the residents) claim psychodynamic theory as their primary orientation.

Table 9 reveals that the significant chi square obtained on the female only population with regard to secondary theoretical orientation ($\chi^2_{(8)} = 17.92$, $p<.05$) is based on the high percentage of female social workers (54%) who subscribe to systems theory versus only 21% of female psychologists and 0% of female M.D.'s.

The same table also shows that the significant chi square obtained on the male and female population combined with regard to this variable ($\chi^2_{(10)} = 21.01$, $p<.05$) hinges on the high percentage of the total M.S.W. sample (57%) who secondarily base the treatments which they conduct on systems theory. In contrast, only 21% of the total psychologist group and 30% of the total psychiatrist group (including residents) think and/or work similarly.

Table 8. Primary Theoretical Orientations of Sample (N=100).

	M.S.W.'s						Ph.D.'s						M.D.'s					
	males		females		males + females		males		females		males + females		males		females		males + females	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Psychodynamic	10	72	25[1]	78	35[2]	76	11	39	10	67	21	49	5	63	1	33	6	55
Systems	1	7	2	6	3	7	8	29	1	7	9	20	1	12	2	67	3	27
Phenomenological	0	0	0	0	0	0	2	7	2	13	4	10	0	0	0	0	0	0
Cognitive	0	0	2	6	2	4	3	11	1	6	4	9	2	25	0	0	2	18
Humanistic	2	14	3	10	5	11	1	3	1	7	2	5	0	0	0	0	0	0
Behavioral	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	1	7	0	0	1	2	3	11	0	0	3	7	0	0	0	0	0	0
Totals	14		32		46		28		15		43		8		3		11	

[1]The frequency count in this cell seems to be responsible for the chi square effect obtained based on the female population only ($\chi^2_{(8)} = 16.30$, $p<.05$).

[2]The frequency count in this cell seems to be responsible for the chi square effect obtained based on the male + female population ($\chi^2_{(10)} = 18.54$, $p<.05$).

Table 9. Secondary Theoretical Orientations of Sample (N=91).

Secondary Orientation	M.S.W.'s						Ph.D.'s						M.D.'s					
	males		females		males + females		males		females		male + females		males		females		males + females	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Psychodynamic	2	17	4	13	6	14	6	24	4	29	10	26	1	14	2	67	3	30
Systems	8	67	16[1]	54	24[2]	57	5	20	3	21	8	21	5	72	0	0	5	50
Phenomenological	0	0	0	0	0	0	5	20	0	0	5	13	0	0	0	0	0	0
Cognitive	1	8	0	0	1	3	2	8	2	14	4	10	0	0	1	33	1	10
Humanistic	0	0	10	33	10	24	4	16	4	29	8	20	1	14	0	0	1	10
Behavioral	1	8	0	0	1	2	3	12	1	7	4	10	0	0	0	0	0	0
Totals	12		30		42		25		14		39		7		3		10	

[1]The frequency count in this cell seems to be responsible for the chi square effect obtained based on the female population only ($\chi^2_{(8)} = 17.92$, $p<.05$).

[2]The frequency count in this cell seems to be responsible for the chi square effect obtained based on the male + female population ($\chi^2_{(10)} = 21.01$, $p<.05$).

By way of summarizing the differences within this sample among the three professional groups and between the sexes, the following can be said: 1) male M.S.W.'s and M.D.'s spend significantly more time engaging (weekly) in individual adult psychotherapy than do male Ph.D.'s; 2) male Ph.D.'s spend significantly more time engaging in both supervision/consultation and research than do male M.S.W.'s or M.D.'s; 3) male psychologists do significantly more supervision/consultation than do female psychologists; 4) M.S.W.'s (but particularly the females) support a psychodynamic perspective as a primary theoretical orientation more often than Ph.D.'s or M.D.'s do; 5) M.S.W.'s (but particularly the females) subscribe to systems theory as a secondary theoretical orientation more often than Ph.D.'s or M.D.'s do; 6) the males in all three professions spend more time performing administrative functions than the females do, and 7) the females have had more personal psychotherapies than have the males.

Procedures

The initial procedure entailed contacting potential subjects by phone to describe the nature of the study and enlist participation. One hundred twenty psychotherapists were approached in this manner. A mailing of relevant materials was then sent to each. The investigator considered the sample achieved when the first 50 qualified males and the first 50 qualified females had completed and returned the enclosures. These enclosures consisted of: 1) a Background Information sheet which briefly described the history of the A-B variable, the aims and procedures of the study, and the incentives for participation (see Appendix A); 2) an Informed Consent (see Appendix B);

3) a Demographic Data form (see Appendix C); 4) a copy of the Whitehorn-Betz A-B Scale (see Appendix D); and 5) a stamped envelope addressed to the investigator's assistant.

After the A-B Scales were returned and scored, the scores were rank ordered and the list divided into quintiles so that the ten highest scoring males and the ten highest scoring females were defined as B's, while the ten lowest scoring males and the ten lowest scoring females were defined as A's. From this point on, the investigator had no further contact with the middle quintile AB subjects (30 males and 30 females), other than to answer their questions, provide them with notice of their AB standings, and forward them abstracts of the completed study.

Copies of the Minnesota Multiphasic Personality Inventory (MMPI) and the Sixteen Personality Factor Questionnaire (16 PF), along with the appropriate answer blanks, were then mailed to each of the ten A and ten B females and the ten A and ten B males, with a request that the subject self-administer and then return the materials to the investigator's assistant in the envelope provided (see Appendix E). Data collection was considered completed when these materials were received by the investigator.

The investigator's assistant was a clerical worker employed by the investigator specifically for work on this project. Her primary functions were to receive the materials from subjects, to remove the names and addresses from them, and to replace these with numerical codes before forwarding the packages to the investigator for analysis. The assistant maintained the only master list with subjects' names

and codes on it, but the investigator herself was responsible for securing the data in a safe place.

Measures

1. Informed Consent. The Informed Consent described both the nature of the study and the precautions which were taken by the investigator to protect the subjects' identities. Information about each subject's right to discontinue participation in this project at any time was also included. (See Appendix B for a copy of this document.)

2. Demographic Data. Basic demographic data, including information pertaining to each subject's training and professional interests and functions in the mental health field, were requested of each subject. (See Appendix C for a copy of this document.)

3. The A-B Scale. The Whitehorn-Betz A-B Scale (Whitehorn & Betz, 1960) is a 23-item interest inventory derived from the 1938 edition of the Strong Vocational Interest Blank for Men (Strong, Campbell, Berdie, & Clark, 1938). The test requires the subject to respond ("Like," "Indifferent," "Dislike") to items primarily concerned with manual, technical, or mechanical activities. Whitehorn and Betz originally compiled this scale on the basis of correlations they found between the SVIB scores and therapeutic performances of 35 psychiatric residents at the Johns Hopkins Hospital between the years 1944 and 1952. They noticed that those therapists who endorsed most of the 23 items showed lower improvement rates in their work with schizophrenic inpatients than did those residents who did not endorse the items. Although Whitehorn and Betz considered this scale to be a

valid predictor of resident performance with schizophrenic inpatients (Whitehorn & Betz, 1960; Betz, 1960, 1967), more recent studies by other investigators have failed to confirm this finding (Stephens et al., 1965; Draper, 1967; Bowden et al., 1972). Reliability data on the A-B Scale has not been reported in the literature. Normative data exists for various male/female populations, including college students, medical students, and experienced psychotherapists (Kemp, 1971). The scale can be scored in a variety of ways, but for purposes of this research project it was scored so that high scores were coincident with B standing and low scores with A standing. (See Appendix D for a copy of this document.)

4. The Minnesota Multiphasic Personality Inventory (MMPI). Developed empirically in the late 1930's to assess the type and degree of pathology in adult psychiatric patients, the MMPI (Hathaway & McKinley, 1967) has long been one of the most frequently used psychological assessment instrunents in the United States. It is a self-report consisting of 566 true-false items which serve as the basis for the derivations of four validity scales and a large number of clinical scales. The MMPI exists in multiple forms, but only the Group Form was used for purposes of this study.

The 14 basic MMPI subscales used in this study are so familiar in research and clinical practice that it seems unnecessary to include descriptions of them here. The interested reader, however, is referred to Hathaway and Meehl's (1951) classic work on the subject. In addition to the 14 standard scales, however, two other MMPI

subscales were used in this research project. They are: (a) Barron's Ego Strength (Es) Scale, and (b) Little and Fisher's Denial of Hysteria (Dn) Scale.

The Ego Strength (Es) Scale was developed by Barron (1953) to predict the responses of psychoneurotic patients to psychotherapy. Nevertheless, this scale is now widely viewed as a viable assessment device for estimating adaptability and personal resourcefulness in other situations as well (Gynther et al., 1976). Like the other MMPI scales, this one was constructed empirically. It was based on the correlations found between improvement rates in 33 psychoneurotic outpatients, 17 of whom were judged to have shown little or no improvement after six months of treatment, and their pre- and post-treatment MMPI responses. According to Barron (1953), the 68 keyed responses fall into the following clusters: physical functioning and physiological stability, psychasthenia and seclusiveness, attitudes toward religion, moral posture, sense of reality, personal adequacy and ability to cope, phobias and infantile anxieties, and a miscellaneous grouping of five heterogeneous items. Odd-even reliability for a sample of 126 patients was .76, and the test-retest reliability, using a three-month interval between testings, was .72 for a sample of 30 cases (Graham, 1977). Measures of this scale's validity have been relatively inconsistent, but Graham (1973) points out that "many of the failures to replicate Barron's finding that Es scores were related to change after psychotherapy utilized change after hospitalization and therefore did not represent a true replication of his study [p. 89]." According to Barron, however, the scale was

cross-validated with three different samples, all of which showed positive correlations with rated improvement after six months of psychodynamic psychotherapy.

The Denial (Dn) Scale was developed by Little and Fisher (1958) as a measure of a person's tendency to engage in hysterical denial. The 26-item scale, which is actually a subset of the standard Hysteria (Hy) Scale, excludes those Hy items pertaining to physiologic disorders and includes only those Hy items relating to poor interpersonal relations, feelings of hostility, etc. The Dn Scale was derived by computing the correlations between the Hy Scale scores of 60 psychiatric patients and 90 random admissions to a general hospital ward. Thereby, the two primary dimensions of the Hy Scale were highlighted: one, which reflects physiological functioning, and the other, which relates to nonsomatic psychological behavior. The Kuder-Richardson reliability coefficient based on the scores of 100 psychiatric subjects was .75. High scores on Dn correlate most highly with the MMPI K Scale, with which it shares nine items. High Dn "generally describes the uninsightful, the antiintraceptive, the morally virtuous individual . . ." as well as the "'muted' or pseudo normal profile [p. 306]."

5. The Interpersonal Diagnosis of Personality (The "Leary"). As a natural outgrowth of his assumption that the human personality is a "multilevel pattern of interpersonal responses (overt, conscious, or private) expressed by the individual," Leary (1957, p. 15) constructed a means of diagnosing these different levels of the personality. An explanation of his five personality levels and their

respective means of assessment follows. Level I, the Level of Public Communication, refers to the way in which a person is seen by others. Most typically, it is assessed by means of the MMPI, but it can also be derived from the compiled Interpersonal Check List (ICL) ratings on an individual as made by people who know him/her. Level II, the Level of Conscious Communication, refers to what an individual chooses to tell about himself/herself. It is most frequently assessed via the ICL, but can also be derived from therapy interviews or by ratings of autobiographical essays made by trained personnel. Level III, the Level of Private Perception, is akin to preconscious or fantasy behavior. It can be measured in a variety of ways, but the most frequently used index involves a special scoring of the Thematic Apperception Test (TAT). A variation of Level III is called the III-MM. It is derived from two of the standard MMPI scales (Mf and Pd), and represents an individual's underlying character structure or basic intentionality. Level IV, the Level of the Unexpressed, refers to that behavior which is so anxiety provoking as to necessitate its complete avoidance. This level of the personality can be assessed via the ICL, after an individual has checked off those characteristics descriptive of what he/she expressly wishes to "not be." It can also be ascertained by compiling the ratings on thema which have been avoided at Levels I, II, and III. Level V, the Level of Values, represents the ego ideal. It is assessed via the ICL, filled out to describe the "ideal self." A fuller description of the various levels, their rationales, and assessment devices can be found in Freedman, Leary, Ossorio, and Coffey (1951).

The Leary method of diagnosis has been most aptly and briefly summarized by McDonald (1962):

> A set of interpersonal variables, listed in a circular continuum, is used to categorize behavior at all levels. This circle is conceived as a two-dimensional grid with the vertical axis measuring dominance-submissiveness and the horizontal axis measuring love-hate. The center of the circle represents the mean of the normative population. The distance and direction of the subject's summary scores from the center reflects the particular kind of interpersonal behavior and its degree of deviation from the norm.
>
> The circle is divided into octants, starting with one at the top and proceding in a counterclockwise direction through eight. As [some of] the results [of this study] will be presented by octants, the interpersonal variables to which each refers will now be given . . ., the adaptive diagnostic category appearing first, the maladaptive diagnostic category appearing second: Octant 1, managerial-autocratic; Octant 2, competitive-narcissistic; Octant 3, critical-sadistic; Octant 4, skeptical-distrustful; Octant 5, self-effacing-masochistic; Octant 6, docile-dependent; Octant 7, cooperative-over-conventional; and Octant 8, responsible-over-generous [p. 315].

Both the Leary levels I and III-MM were used in this study. Each was derived from the MMPI, which has already been described here.

6. The Sixteen Personality Factor Questionnaire (16 PF). The 16 PF is a 187-item self-report described by Cattell, Eber and Tatsuoka (1970) as "a measuring instrument duly validated with respect to the primary personality factors and rooted in basic concepts in general psychology [p. 13]." Cattell arrived at his group of 16 personality factors (actually, 15 plus intelligence) by: first, listing all words in the dictionary used to describe behavior; second, reducing these to 4,504 "real traits"; third, culling from these the 171 terms which seemed to represent synonym groups; fourth, analyzing the results of research with college students asked to rate acquaintances with these 171 terms; fifth, developing bypolar rating scales for the 36 surface

traits which he thereby identified; sixth, administering these rating scales to a wide variety of populations in order to establish validity; seventh, concluding from his factor analyses of this data that there are approximately 15 distinct personality factors; and eighth, naming these the "primary personality factors." According to Gynther and Gynther (1976), the 1967-1968 edition of the 16 PF "contains only those items that continued to have significant validity for the factors after 10 successive factor analyses on different samples [p. 226]."

In addition to measuring the primary factors, the 16 PF can also be scored for eight composite factors which underly these. There are six forms of the 16 PF, two of which, Forms A and B, are designed for newspaper literate adults. Only the 1967-1968 edition of Form A was used in this study. It offers a three-choice response, including an in-between selection. Standardization data exist for United States adults, undergraduates, and high school students, as well as for samples stratified according to geographic area, population density, age, family income, and race.

Early versions of the 16 PF did not include any validity scales. However, the 1967-1968 edition of the 16 PF incorporates three such measures: the Motivational Distortion Scale (MD), the Faking Bad Scale (FB), and the Random Scale. Winder, O'Dell, and Karson (1975) report a high rate of accuracy for these scales. MD picks up 85% of the faking good profiles while misidentifying only 10% of the normal profiles. FB identifies 94% of the faking bad profiles while misidentifying none of the honestly answered profiles.

The Random Scale is able to identify about 90% of the random files while misclassifying only about 6% of the nonrandom records.

Only ten of the 16 PF primary factors were used in the course of this research project. The following descriptions of these relevant scales are based primarily on Golden's (1979) characterizations. Scale C (Low Ego Strength-High Ego Strength) is a measure of ego strength. Low scores are associated with:

> an inability to handle frustration, a general emotional lability, an evasion of responsibility, and a tendency to worry and give up. High scores are associated with emotional maturity, general lack of anxiety, and an inability to deal with frustrating or difficult situations [p. 111].

Scale E (Submissiveness-Dominance) is a measure of dominance. Low scores are associated with submissiveness, obedience, conventionality, and docility, as well as with extreme passivity. High scores are suggestive of dominance, hostility, rebelliousness, and independence. Scale H (Threctia-Parmia) is a measure of boldness.

> Low scores are associated with shyness, restraint, sensitivity to threat, emotional cautiousness, and unfriendliness. High scores are associated with adventurousness, extroversion, social boldness, interest in the opposite sex, responsiveness, impulsivity, and a general insensitivity to danger signs [p. 112].

Scale I (Harria-Premsia) is a measure of emotional sensitivity. Low scores are associated with:

> tough-mindedness, self-reliance, lack of sentimentality, cynicism, logic, practicality, and lack of hypochrondriasis. High I scores are associated with emotional sensitivity, insecurity, dependence, imaginativeness (in inner life and in conversation), attention-seeking behavior, and hypochondriasis [p. 113].

Scale M (Praxernia-Autia) is a measure of the imagination. Low scorers are generally described as conventional, practical,

> objective, conservative, and not overly imaginative of farseeing. High scorers, on the other hand, are imaginative, interested in art and philosophy, fanciful, subjective, and unconventional [p. 114].

Scale N (Artlessness-Schrewdness) is a measure of shrewdness.

> Low scores on scale N are suggestive of genuineness, spontaneity, vagueness, a lack of self-insight, simple tastes, passivity, and a blind trust in human nature. High scores on scale N suggest social awareness, a calculating mind, emotional detachment, worldliness, ambition, and alertness to cutting corners and taking advantage of situations. Scale N significantly correlates with the Hysteria scale of the MMPI [p. 114].

Scale O (Untroubled Adequacy-Guilt Proneness) is a measure of guilt proneness. Low O scores suggest an individual who is self-confident, cheerful, internally controlled, and able to act when necessary. High O scores are associated with individuals who are apprehensive, insecure, depressed, sensitive to the disapproval and approval of others, phobic, hypochondriacal, and lonely. Scale Q_1 (Conservatism of Temperament-Radicalism) is a measure of rebelliousness. "Low scores are associated with conservatism, while high scores are associated with radicalism, a tendency to be experimenting, liberal, analytical, and free thinking [p. 115]. Scale Q_3 (Low Self-sentiment Integration-High Strength of Self-sentiment) is a measure of the ability to bind anxiety.

> Low scorers are characterized by a lack of control, a carelessness with respect to social rules, and a tendency to follow one's own urges. High scorers are controlled, socially precise, compulsive, and possess strong will power [p. 115].

Scale Q_4 (Low Ergic Tension-High Ergic Tension) is a measure of free floating anxiety and tension.

> Low scores are associated with low tension, low anxiety,

> a relaxed and tranquil approach to life, and a general lack of frustration. High scorers . . . are characterized by tension, frustration, and a generally highly anxious approach to problems. This scale is the single best indicator of neurotic anxiety on the 16 PF [p. 116].

In addition to the above 10 primary factors, there are eight composite, or secondary factors which can be derived from the 16 PF. Two of these were used in this research project. The first, Q_{II} (Adjustment-Anxiety) is a measure of anxiety. The primary scales which comprise this one are Q_4 (Low Ergic Tension-High Ergic Tension, or free floating anxiety), O (Untroubled Adequacy-Guilt Proneness), C (Low Ego Strength-High Ego Strength), L (Alaxia-Protension, or suspiciousness), and Q_3 (Low Self-sentiment Integration-High Strength of Self-sentiment, or the ability to bind anxiety). High scores on this scale are associated with significant psychological problems [p. 117]." The second composite factor which was used in this study is Q_{III} (Pathemia-Cortertia, or Tough Poise).

> An individual who is high on this factor is low on A (warmth), I (emotional sensitivity), and M (imagination). These are people who are not easily swayed by feelings. Low scorers are more likely to be swayed by their emotions and reactions to personal factors in a situation [p. 118].

Unlike the MMPI, there is no item overlap among the 16 PF scales (not counting, of course, the secondary factors). Scoring is effected by granting two points to the keyed response and one point to the intermediate response. Test-retest reliability after four to seven days in a population of 146 adults produced correlations ranging from .65 on Intelligence (B), to .93 on Venturesomeness (H), with a median value of .87 for all scales. After four years, the test-retest stability coefficients ranged from .21 for females on

Shrewdness (N), to .64 for females on Venturesomeness (H) (Gynther et al., 1976). Validity figures, computed via correlations with the pure factors on which the construction of the entire test rests, range from a low of .35 (B:Intelligence) to a high of .92 (H:Venturesomeness) (Cattell et al., 1970).

CHAPTER IV

ANALYSIS OF THE RESULTS OF THE INVESTIGATION

Summary of Major Findings

The aim of this study was to test six hypotheses about the Whitehorn-Betz A-B standings of male and female psychotherapists.

Hypothesis 1. Based on the findings of the Johnson et al. (1973) study, it was hypothesized that there would be MMPI T score differences between type A and type B male psychotherapists. More specifically, it was expected that elevations on scales D, Pt, Mf, and Si would be higher for A males than for B males. The results of the current study, however, did not lend any support for the hypothesis that A male psychotherapists are more depressed, obsessional, and socially withdrawn or that they have more feminine interests (as measured by the MMPI) than do B male psychotherapists.

Hypothesis 2. This hypothesis was an outgrowth of the relevant literature on the interpersonal styles of A-B males (Berzins, Dove, & Ross, 1972; Fancher et al., 1972; Nerviano, 1973; Smith, 1972). It was expected that each of the A and B groups of males would produce a characteristic personality pattern as measured by the I-s and III-MM levels of the Leary Interpersonal Diagnosis of Personality, and that these patterns would be significantly different from one another. More specifically, it was speculated that for either of the two Leary levels, but not for both, the summary points for A males would

fall in octants 6, 5, 4, or 3, which represent, roughly speaking, the submissive-disaffiliative octants, while the summary points for B males would fall in octants 2, 1, 8, or 7, which approximate the dominant-affiliative octants. The results of the present investigation did not lend any support for Hypothesis 2.

Hypothesis 3. In keeping with the findings of Johnson et al. (1973), it was hypothesized that there would be differences between A-B male psychotherapists on certain 16 PF scales. It was proposed, in addition, that extreme scores on those scales are associated with what Fine has called the "literary-imaginative" versus "scientific-methodological" sensibilities. Differences were anticipated, specifically, on scales I (A<B), M (A B), Q_{II} (A<B), and Q_{III} (A<B). Results of the current study supported the hypotheses only partially: on Scale I, a significant difference was found between the means of male A's and male B's. This difference fell in the predicted direction. Thus, A males described themselves as attention-seeking, insecure, indulgent, theatrical, imaginative, and sensitive, all of which features were proposed as characteristics of the literary-imaginative sensibility. B males, in contrast, described themselves as cynical responsibility-takers who are practical, logical, and expect little from the world, all of which attributes are in keeping with the scientific-methodological orientation.

Hypothesis 4. In light of the fact that prior researchers have considered the A-B Scale to be essentially a masculinity-femininity index (Dublin et al., 1969; Schubert et al., 1975), it was

hypothesized that there would be differences on the MMPI Mf Scale between A and B males (A>B) and A and B females (A<B). Results did not support this hypothesis.

Hypothesis 5. Given that B females endorse interests on the A-B Scale that are regarded as characteristically "masculine," other emotional anomalies were expected from them. In particular, it was hypothesized that B females would show signs of being more characterologically anxious than either A females or B males. Differences between the groups were therefore expected on 16 PF scales Q_4 (B females > B males; B females > A females) and Q_{II} (B females > A females; B females > B males). Results of the present investigation supported the hypothesis to some degree. Significant differences in the predicted directions were found between the means of B females and B males on scales Q_4 and Q_{II}. No differences, however, were found between the means of B females and A females on these measures.

Hypothesis 6. This hypothesis stated that there would be differences between A-B females on those 16 PF scales which are associated with a literary-imaginative sinsibility versus a scientific-methodological one. More specifically, differences were anticipated on scales I (A>B), M (A>B), Q_{II} (A>B), and Q_{III} (A<B). Results supported the hypothesis only in part: on Scale M a significant difference in the predicted direction was found between the means of female A's and female B's. Thus, A females, relative to B's, manifested the following characteristics associated with a literary-imaginative orientation: absorption in ideas, fancifulness, and interest in art

and theory. B females, in contrast, manifested the following characteristics associated with the scientific-methodological orientation: concern with immediate issues, a prosaic approach, steady dependability.

In summary this research project yielded four significant findings. The first was that male A psychotherapists described themselves as attention-seeking, insecure, indulgent, theatrical, imaginative, and sensitive, while male B psychotherapists depicted themselves as cynical responsibility-takers who are practical, logical, and expect little from the world (16 PF Scale I). The second, was that female A psychotherapists described themselves as being absorbed in ideas, fanciful, and interested in art and theory, while female B psychotherapists depicted themselves as prosaic, concerned with immediate issues, steady, and dependable (16 PF Scale M). Taken together, these findings support the notion that A-ness is associated with a literary-imaginative orientation and B-ness, with a scientific-methodological one in both males and females. The third and fourth significant results viewed in combination revealed that female B's, who expressed interests in typically male activities on the A-B Scale, were found to be more anxious than male B's, whose stated interests, in contrast, conformed to culturally sanctioned sex roles (16 PF scales Q_4 and Q_{II}).

The Findings

Results of the study will be presented and examined separately for each of the four instruments which were used in this investigation:

1. The Whitehorn-Betz A-B Scale
2. The Minnesota Multiphasic Personality Inventory (MMPI)
3. The Leary Interpersonal Diagnosis of Personality
4. The Sixteen Personality Factor Questionnaire (16 PF).

1. The Whitehorn-Betz A-B Scale

The total group of 100 psychotherapists earned a mean score of 10.80, with a standard deviation of 3.31 on the A-B Scale. These values are almost identical to those obtained by Berzins, Herron, & Seidman (1971) in a nationwide sample of 133 practicing psychotherapists, by Berzins, Dove, & Ross (1972) in a sample of 661 male psychology students and 94 Midwest therapists and traineers, and by Geller et al. (1976), in a nationwide sample of prominent psychotherapists.

The AB scores of the male (N=50) and female (N=50) groups were rank-ordered separately. The lower and upper A-B score quintiles of each group were then designated as A's and B's respectively. The full breakdown of scores for the four A and B groups (N=40) are presented in Table 10.

To learn whether or not there were any differences between the mean A-B scores of the three professional groups included in the sample, a nonorthogonal sex (male, female) by profession (M.S.W., Ph.D., M.D.) analysis of variance was performed on the subjects' A-B scores, both for the total sample (N=100) and for the A plus B sample (N=40). No significant interaction effects were found in either of the two cases. Significant profession main effects were, however,

Table 10. Mean A-B Scores for A and B Psychotherapists (N=40).

Group	N	Mean	S.D.
Male A's	10	6.5	1.77
Male B's	10	15.1	.87
Female A's	10	5.1	1.59
Female B's	10	15.3	.94

found in both the total sample ($F_{(2,34)} = 4.10$, $p<.05$) and in the A plus B sample ($F_{(2,34)} = 4.74$, $p<.05$). (The following discussion of significant results obtained here can best be followed by reference to Table 11.)

T tests were then performed on pairwise comparisons of the A-B scores of M.S.W.'s and Ph.D.'s, M.S.W.'s and M.D.'s, and Ph.D.'s and M.D.'s. Each of these t tests was conducted for both the total sample and for the A plus B sample. Within the total sample, significant differences were found between M.S.W.'s and Ph.D.'s ($F_{(1,94)} = 6.01$, $p<.05$) as well as between M.S.W.'s and M.D.'s ($F_{(1,94)} = 8.01$, $p<.01$). The mean of the total M.S.W. group ($\bar{X} = 12.45$, S.D. = 4.46) was significantly higher than the mean of the total M.D. group ($\bar{X} = 5.50$, S.D. = 2.12) or the mean of the total Ph.D. group ($\bar{X} = 8.83$, S.D. = 4.79). Within the A plus B sample, significant differences were again found between M.S.W.'s and Ph.D.'s ($F_{(1,34)} = 7.18$, $p<.05$), as well as between M.S.W.'s and M.D.'s ($F_{(1,34)} = 9.40$, $p<.01$). As was true for the total sample, the mean of the M.S.W.'s in this reduced sample ($\bar{X} = 12.4$, S.D. = 4.41) was greater than the mean of the M.D.'s ($\bar{X} = 12.05$, S.D. = 7.07) and the mean of the Ph.D.'s ($\bar{X} = 8.47$, S.D. = 4.67). In other words, the A-B mean scores of the M.S.W.'s in both of the above two samples were closer to the B end of the continuum than were those of either the M.D.'s or the Ph.D.'s.

To learn whether or not members of the three professional groups were represented proportionately in the A, AB, and B categories, a chi square analysis of A-B status (A, AB, B) on profession

Table 11. Summary of Analysis of Variance of A-B Score Means of Three Professional Groups.

Sample Size	Between Groups Sum of Squares	Within Groups Sum of Squares	df	F
Total Sample (N=100)				
Interaction effect	3.48	998.31	2,94	.16
Main effects:				
males and females	15.25	998.31	1,94	1.43
M.S.W.'s, Ph.D.'s, M.D.'s	87.19	998.31	2,94	4.10*
A's and B's Only (N=40)				
Interaction effect	6.09	734.58	2,34	.14
Main effects:				
males and females	33.16	734.58	1,34	1.53
M.S.W.'s, Ph.D.'s, M.D.'s	205.06	734.58	2,34	4.74*

*$p < .05$.

(M.S.W., Ph.D., M.D.) was performed for the entire sample (N=100). Significant differences were not, however, obtained. Because of the possibility that the relatively small total M.D. group (N=12) had obscured differences between the total M.S.W. (N=45) and Ph.D. N=43 groups, another chi square analysis of A-B status (A, AB, B) was done on profession (M.S.W., Ph.D.) excluding the M.D.'s. But no significant differences were obtained here, either. In summary, there was no evidence that any of the three professional groups was disproportionately represented in the A, AB, or B groups.

2. The Minnesota Multiphasic Personality Inventory (MMPI)

Of the 40 MMPI protocols collected for study, all but one were essentially normal range profiles. Discounting the Mf Scale (because it is expected that college educated males score in the 70 to 80 T score range) there were only 21 T scores which exceeded 70. Insofar as 560 T scores were coded in toto, this means that only three percent of the scaled scores were outside of the normal range.

The profiles of all 40 subjects were valid according to the validity guidelines set forth by Caldwell and O'Hare (1975). In fact, most of the obtained validity configurations matched the prototype proposed by Caldwell and O'Hare (1975) as being typical for normal college graduates and psychotherapists (i.e., L = 36-40; F<60; K = 55-68).

The method of data analysis in this investigation entailed statistical scrutiny of the A and B subjects' MMPI T scores, computed one scale at a time. In its most sophisticated clinical use, the MMPI

is ordinarily interpreted through pattern analysis of individual profiles. Under such conditions, questions about normal-versus-deviant t-score elevations or valid-versus-invalid profiles can be addressed in light of an individual's total MMPI T score pattern. But this is not the standard procedure in most large-scale MMPI research use (Dahlstrom & Welsh, 1960; Butcher & Tellegen, 1978). Instead, the complexity and richness of individual pattern analysis is by-passed so that generalizations can be made more directly about groups rather than about individuals. In the case of the present investigation, the method of comparing T scores rather than individual profile analyses was chosen for one principal reason: the object of the study was to learn more about test correlates of the A-B Scale itself rather than about the make-up of individual A's or B's. Secondarily, the current methodology was adopted in order to facilitate comparison and contrast with other already available paper and pencil data on the A-B Scale culled from undergraduate and outpatient populations.

Two-way sex (male, female) by AB status (A, B) analyses of variance were performed on selected subscale T scores of the MMPI. The following discussion of significant results obtained on this instrument can best be followed by reference to Table 12.

Analysis of variance performed on Scale F revealed a significant interaction effect ($F_{(1,36)} = 5.72$, $p<.05$). A test of simple main effects showed that there were differences between male and female B's ($F_{(1,36)} = 4.16$, $p<.05$). The mean for B males was 55.00, with a standard deviation of 5.83. The mean for B females was 50.60, with a standard deviation of 3.86. Thus, female B's tended to have

Table 12. Summary of Analysis of Variance of MMPI T Score Means (N=40).

MMPI Subscales	Between Groups Sum of Squares	Within Groups Sum of Squares	df	F
Scale F				
Interaction effect	133.22	837.30	1,36	5.72*
Simple main effects:				
A males and females	42.05	837.30	1,36	1.80*
B males and females	96.80	837.30	1,36	4.16*
male A's and B's	101.25	837.30	1,36	4.35*
female A's and B's	39.20	837.30	1,36	1.68*
Scale K				
Interaction effect	52.90	1502.40	1,36	1.26
Main effects:				
males and females	44.10	1502.40	1,36	1.05
A's and B's	8.10	1502.4	1,36	.19
Scale Hs				
Interaction effect	0.00	3609.00	1,36	0.00
Main effects:				
males and females	32.40	3609.00	1,36	.32
A's and B's	152.10	3609.00	1,36	1.51
Scale D				
Interaction effect	6.40	3368.60	1,36	.06
Main effects:				
males and females	.40	3368.60	1,36	.00
A's and B's	12.10	3368.60	1,36	.12
Scale Hy				
Interaction effect	.90	1281.00	1,36	.02
Main effects:				
males and females	129.60	1281.00	1,36	3.64
A's and B's	40.00	1281.00	1,36	1.12
Scale Pd				
Interaction effect	119.02	2705.70	1,36	1.58
Main effects:				
males and females	42.02	2705.70	1,36	.55
A's and B's	5.62	2705.70	1,36	.07
Scale Mf				
Interaction effect	2.02	1687.50	1,36	.04
Main effects:				
males and females	8791.22	1687.50	1,36	187.54**
A's and B's	1133.22	1687.50	1,36	2.84

Table 12. Continued

MMPI Subscales	Between Groups Sum of Squares	Within Groups Sum of Squares	df	F
Scale Pa				
Interaction effect	11.02	1673.10	1,36	.23
Main effects:				
males and females	42.02	1673.10	1,36	.90
A's and B's	50.62	1673.10	1,36	1.08
Scale Pt				
Interaction effect	3.02	2100.50	1,36	.05
Main effects:				
males and females	140.62	2100.50	1,36	2.41
A's and B's	5.62	2100.50	1,36	.09
Scale Sc				
Interaction effect	65.02	1254.30	1,36	1.86
Main effects:				
males and females	18.22	1254.30	1,36	.52
A's and B's	7.22	1254.30	1,36	.20
Scale Ms				
Interaction effect	105.62	4044.50	1,36	.94
Main effects:				
males and females	140.62	4044.50	1,36	1.25
A's and B's	164.02	4044.50	1,36	1.45
Scale Si				
Interaction effect	32.40	2080.00	1,36	.56
Main effects:				
males and females	193.60	2080.00	1,36	3.35
A's and B's	19.60	2080.00	1,36	.33
Scale Dn				
Interaction effect	11.02	1542.10	1,36	.25
Main effects:				
males and females	1.22	1542.10	1,36	.02
A's and B's	30.62	1542.10	1,36	.71
Scale Es				
Interaction effect	.62	1091.10	1,36	.02
Main effects:				
males and females	87.02	1091.10	1,36	2.87
A's and B's	81.22	1091.10	1,36	2.67

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

lower T scores on Scale F than did male B's. Additional simple main effects tests also revealed differences between male A's and male B's ($F_{(1,36)} = 4.35$, $p<.05$). The mean for male A's was 50.50, with a standard deviation of 4.83. The mean for male B's was 55.00, with a standard deviation of 5.83. Therefore, A males in this sample had lower T scores on Scale F than did B males.

An analysis of variance performed on Scale Mf produced no evidence of a significant interaction effect. Sex main effects ($F_{(1,36)} = 187.54$, $p<.001$) were, of course, found for this subscale. The mean T score for males was 70.10, with a standard deviation of 5.95. The mean T score for females was 40.45, with a standard deviation of 7.77. Hence, the Scale Mf means for females was substantially lower than it was for males. This difference, however, must be understood to be an artifact of the Mf scale's construction and the method of T score coding which has traditionally been employed and which renders the meaning of this scale's T scores different from those of the other clinical scales.

Analyses of variance performed on the following MMPI scales yielded neither significant interaction effects nor main effects: K, Hs, D, Hy, Pd, Pa, Pt, Sc, Ma, Si, Dn, and Es. Hypothesis 1 had proposed that T score elevations on scales D, Pt, Mf, and Si would differentiate male A's from male B's, but the above results did not lend any support for this hypothesis. Hypothesis 4 had proposed that T score elevations on Scale Mf would differentiate female A's and B's, but the results did not support this notion, either.

3. The Leary Interpersonal Diagnosis of Personality

In order to test Hypothesis 2, which predicted that for either Levels I or III-MM, but not for both, the summary points of A males would fall in octants 6,5,4 or 3, and the summary points of B males would fall in octants 2,1,8 or 7, the Leary circle was divided in half. Thereby, octants 6,5,4 and 3 were condensed into one variable, SD, representing the submissive-disaffiliative interpersonal mode. Simultaneously, octants 2,1,8 and 7 were condensed into a second variable, DA, representing the dominant-affiliative interpersonal mode. Chi square analyses were then conducted for AB status (A,B) on the two newly created Leary variables (SD, DA). These analyses were done separately for Levels I and III-MM, both for males and for females, using Fisher's exact test as a test of significance. However, no significant findings emerged and, therefore, no support was gathered for Hypothesis 2.

One interesting finding related to the absence of significant differences just described, is that the Level I summary points of 35 out of the 40 tested therapists (18 males, 17 females) fell in the dominant-affiliative sector, and only 5 (2 males, 3 females) in the submissive-disaffiliative sector. This skew was not repeated in the distribution of III-MM summary points. For this Leary level, the scores of 25 of the 40 therapists (13 males, 12 females) fell in the dominant-affiliative sector, while the scores for the remaining 15 (7 males, 8 females) fell in the submissive-disaffiliative sector.

4. The Sixteen Personality Factor Questionnaire (16-PF)

A two sex (male, female) by two AB status (A, B) analysis of variance was performed on selected subscale sten scores of the 16 PF. The following discussion of significant results obtained on this instrument can best be followed by reference to Table 13.

Analysis of variance conducted on Scale M revealed a significant interaction effect ($F_{(1,36)} = 5.63$, $p<.05$). A simple main effects test ($F_{(1,36)} = 6.66$, $p<.05$) showed that there was a difference between the means of A females ($\bar{X} = 8.00$, S.D. = .94) and B females ($\bar{X} = 6.00$, S.D. = 2.30) on this variable. In other words, A females were found to be more imaginative, or less conservative, than were B females.

Analysis of variance performed on Scale N produced evidence of a significant interaction effect ($F_{(1,36)} = 5.88$, $p<.05$). A simple main effects test ($F_{(1,36)} = 11.76$, $p<.01$) showed that there was a difference between the mean of B females ($\bar{X} = 5.30$, S.D. = 2.00) and that of B males ($\bar{X} = 2.70$, S.D. = 1.41) on this variable. Thus, B females were found to be more shrewd and emotionally detached than B males.

Analysis of variance performed on Scale Q_4 showed a significant interaction effect ($F_{(1,36)} = 6.29$, $p<.05$). Significant main effects tests showed that there were two types of differences which accounted for the interaction effect. The first ($F_{(1,36)} = 10.97$, $p<.01$) was a difference between the mean of B males ($\bar{X} = 4.30$, S.D. = 1.94) and that of B females ($\bar{X} = 7.10$, S.D. = 1.66). The second ($F_{(1,36)} = 5.05$, $p<.05$) was a difference between the mean of A males

Table 13. Summary of Analysis of Variance of 16 PF Sten Score Means (N=40).

16 PF Subscales	Between Groups Sum of Squares	Within Groups Sum of Squares	df	F
Scale C				
Interaction effect	5.62	109.50	1,36	1.84
Main effects:				
males and females	7.22	109.50	1,36	2.37
A's and B's	3.02	109.50	1,36	.99
Scale E				
Interaction effect	8.10	94.40	1,36	3.08
Main effects:				
males and females	12.10	94.40	1,36	4.61*
A's and B's	2.50	94.40	1,36	.95
Scale H				
Interaction effect	1.60	100.20	1,36	.57
Main effects:				
males and females	4.90	100.20	1,36	1.76
A's and B's	.40	100.20	1,36	.14
Scale I				
Interaction effect	.90	98.80	1,36	.32
Main effects:				
males and females	36.10	98.80	1,36	13.15**
A's and B's	12.10	98.80	1,36	4.40*
Scale M				
Interaction effect	16.90	108.00	1,36	5.63*
Simple main effects:				
A males and females	9.80	108.00	1,36	3.26
B males and females	7.20	108.00	1,36	2.40
male A's and B's	1.80	108.00	1,36	.60
female A's and B's	20.00	108.00	1,36	6.66*
Scale N				
Interaction effect	16.90	103.40	1,36	5.88*
Simple main effects:				
A males and females	0.00	103.40	1,36	0.00
B males and females	33.80	103.40	1,36	11.76**
male A's and B's	6.05	103.40	1,36	2.10
female A's and B's	11.25	103.40	1,36	3.91

Table 13. Continued.

16 PF Subscales	Between Groups Sum of Squares	Within Groups Sum of Squares	df	F
Scale O				
Interaction effect	.90	93.80	1,36	.34
Main effects:				
males and females	10.00	93.80	1,36	3.83
A's and B's	4.90	93.80	1,36	1.88
Scale Q_1				
Interaction effect	3.60	91.80	1,36	1.41
Main effects:				
males and females	2.50	91.80	1,36	.98
A's and B's	2.50	91.80	1,36	.98
Scale Q_3				
Interaction effect	1.22	97.70	1,36	.45
Main effects:				
males and females	.02	97.70	1,36	.00
A's and B's	9.02	97.70	1,36	3.30
Scale Q_4				
Interaction effect	22.50	128.60	1,36	6.29*
Simple main effects:				
A males and females	.20	128.60	1,36	.05
B males and females	39.20	128.60	1,36	10.97**
male A's and B's	18.05	128.60	1,36	5.05*
female A's and B's	6.05	128.60	1,36	1.69
Scale Q_{II}				
Interaction effect	11.66	76.38	1,36	5.49*
Simple main effects:				
A males and females	.57	76.32	1,36	.27
B males and females	31.25	76.32	1,36	14.72**
male A's and B's	10.51	76.32	1,36	4.95*
female A's and B's	2.52	76.32	1,36	1.18
Scale Q_{III}				
Interaction effect	3.60	105.79	1,36	1.22
Main effects:				
males and females	49.28	105.79	1,36	16.77***
A's and B's	8.83	105.79	1,36	3.00

*$p<.05$.

**$p<.01$.

***$p<.001$.

($\bar{X}$ = 6.20, S.D. = 2.20) and that of B males ($\bar{X}$ = 4.30, S.D. = 1.94). These differences say that both A males and B females experience more tension than do B males.

Analysis of variance performed on Scale Q_{II} showed a significant interaction effect ($F_{(1,36)}$ = 5.49, $p<.05$). A simple main effects test ($F_{(1,36)}$ = 14.72, $p<.001$) revealed that there was a difference between the means of male B's ($\bar{X}$ = 3.86, S.D. = 1.40) and female B's ($\bar{X}$ = 6.36, S.D. = 1.42). In other words, female B's experience more diffuse anxiety than do male B's.

Analysis of variance performed on Scale E revealed no significant interaction effect. However, a main effects test ($F_{(1,36)}$ = 4.61, $p<.05$) showed that there was a difference between the female mean ($\bar{X}$ = 6.80, S.D. = 1.60) and the male mean ($\bar{X}$ = 7.90, S.D. = 1.71). Another way of stating this is to say that males are more dominant than are females.

Analysis of variance performed on Scale I also revealed no significant interaction effect. Main effects tests on this variable, however, indicated differences along both sex ($F_{(1,36)}$ = 13.15, p .001) and AB status ($F_{(1,36)}$ = 4.40, $p<.05$) lines. Regarding the former, differences were found between the female mean ($\bar{X}$ = 8.00, S.D. = 1.47) and the male mean ($\bar{X}$ = 6.10, S.D. = 1.91). In addition, differences were found between the mean of A males and females ($\bar{X}$ = 7.60, S.D. = 2.00) and that of B males and females ($\bar{X}$ = 6.50, S.D. = 1.76). These results indicate that female A's and B's are more imaginative, emotionally sensitive, and insecure than are male A's and B's, who are, in contrast, more self-reliant and practical. The

results also suggest that both male and female A's are more imaginative, insecure, and emotionally sensitive than are male and female B's, who tend, relatively speaking, to be more practical and self-reliant.

Finally, analysis of variance performed on Scale Q_{III} revealed no significant interaction effect. Nevertheless, sex main effects were found ($F_{(1,36)} = 16.77$, $p<.001$). Differences were found between the means of A and B females ($\bar{X} = 5.30$, S.D. = 1.99) and A and B males ($\bar{X} = 7.52$, S.D. = 1.49). In other words, the findings state that females are more likely to be swayed by their emotions than are males.

For purposes of summarizing the extent to which the above results are in accord with the original predictions, the reader is reminded that Hypothesis 3 had posited that there would be differences between A-B males on 16 PF scales I, M, Q_{II} and Q_{III}. In only one case, that of Scale I, however, was the hypothesis born out. The difference between the means for male A's and male B's on that scale fell in the predicted direction. Hypothesis 6 was the same as Hypothesis 3, except that the former was aimed at the female subjects. Results showed that Scale M was the only one of the four predicted scales which differentiated female A's and B's. Finally, Hypothesis 5 had predicted that female B's would score higher on scales Q_{II} and Q_4 than either female A's or male B's. Results confirmed the hypothesis only with regard to the male B's.

CHAPTER V

DISCUSSION OF RESULTS

The Sample

Before exploring the findings of this study in detail, it is important to first consider the nature and limitations of the sample. Statistical analyses of the demographic information obtained from the 100 participants in the present investigation revealed that there were no significant differences among the three professional groups (social workers, psychologists, psychiatrists) vis-a-vis their personal demographics. These results are synchronous with the findings of researchers who have examined the social and cultural demographics of members of the three professional groups (Henry, et al., 1971; Henry, et al., 1973) as well as their personality features (Roe, 1956).

Not surprisingly, however, the current study did reveal that there were a number of differences in the ways that members of the three professional groups typically spend their work-day time. Specifically, male Ph.D.'s in this sample spend fewer hours each week conducting individual adult psychotherapy but more hours doing both research and "supervision/consultation" than do male or female M.S.W.'s, male or female M.D.'s and female Ph.D.'s.

One might suppose that this male Ph.D. group is composed of people whose personalities and interests are inherently different from those of the other two professional groups and from their female

counterparts by virtue of these differences in their work-day functions. Such a position seems difficult to defend, however, without further evidence of differing personality and interest patterns among pre-professionals who have not yet been exposed to and affected by the biases, specialities, and methods of their eventual training institutions. It is far more likely that psychologists spend more time doing research than members of either of the other two psychotherapist groups by virtue of both their pretraining disposition and interests and the specialized training in the conduct of research which they received from their academic institutions.

Similarly, the greater amount of time which male psychologists spend as supervisors'consultants can be understood, in part, to be a function of the testing skills which only the psychologists possess. Unfortunately, the Demographic Data sheet completed by all participants in this study did not include a separate category labelled "psychological testing" by means of which therapists could indicate the hours per week which they devote to this endeavor. Therefore, the probability that psychologist subjects were forced to include their practice of this function under the rubric "supervision/consultation" is quite high. It is possible, then, that consultative testing accounts for most of the imbalance in this realm among the three professional groups.

The reader will have noticed that one of the differences between the professional groups is paralleled by an equivalent difference between the sexes within a single profession. That is, male Ph.D.'s within this sample do more "supervision/consultation" than

female Ph.D.'s do. This anomaly is integrally related to another sex difference found through analysis of the demographic data: males across the professions spend more time doing administrative work than females do.

That females in this culture seek and achieve positions of power (i.e., administrative positions) less frequently than men do is such a common-place observation of late that it requires little expansion here. What is of immediate significance is that the sex differential in the sphere of administrative work provides a clue for understanding and interpreting the sex differences found within the Ph.D. group alone regarding the amount of time these psychotherapists devote to "supervision/consultation." It was argued above that the "supervision/consultation" inequity among the professions was possibly a function of the Ph.D.'s consultative testing skills. This, of course, does not explain why the female Ph.D.'s, who presumably have the same testing skills as their male peers, spend less time utilizing either them or other "supervision/consultation" skills. The answer to this question seems to lie in the imbalance in administrative functions found between the sexes. Typically, consultants for both agencies and individuals are chosen from among the most visible practitioners within a given community. Since visibility increases in direct proportion to administrative position, it is very likely that the more visible group, i.e. the males, would comprise the bulk of the pool from which most supervision and consultation in the community would be sought. Hence, the male Ph.D.'s consult and supervise more than the female Ph.D.'s do.

Analysis of the demographic data also revealed that the females, across the three professions, claimed to have been more often involved in personal psychotherapies than the men, across the professions. The general trend in our culture for women to seek psychotherapy in greater numbers and more frequently (per person) than men has been amply documented elsewhere (Gove & Tudor, 1973), but perhaps most comprehensively by Chesler (1972).

Finally, in response to the investigator's request that subjects state the theoretical orientations which embody the primary and secondary frames of reference which they rely on while functioning as psychotherapists, some differences between the sexes and among the professions became apparent. Specifically, a preponderance of female social workers designated a psychodynamic orientation as their primary theoretical frame of reference, and a systems approach as their secondary organizer. The questions these findings raise are: 1) why are the female social workers less varied in their orientations than are the male social workers, and; 2) why is systems theory so prominent an organizer for this group but not for the psychologists and psychiatrists.

Although it seems apparent why social workers are more likely to subscribe to a psychodynamic paradigm than any other, it is not equally obvious why this should be true for females but not for males. Traditionally, social work has relied on Freudian principles to explain the inner dynamics of people. In the last several decades, however, ego psychology has come to the fore as the rubric upon which psychosocial casework theory and practice are built (Parad & Miller, 1963;

Roberts & Nee, 1970). It is therefore likely that ego psychology is the position that most social work graduates know best and eventually claim as their own. However, it may be that the men who enter social work, which is a preponderantly female field, feel somehow less constrained by or more rebellious in relation to certain rules, mores or codes, and that this flexibility, reflected in their very choice of profession, frees them to follow less conventional theoretical routes. Clearly, this area is one which further research could profitably explore.

That systems theory is such a prominent secondary orientation among the social work group alone is very likely an artifact deriving from the geographic location from which the bulk of the social work subjects in this investigation were drawn, namely, Houston, Texas. The Houston-Galveston mental health milieu is very strongly dominated by several groups of professionals who espouse systems theory and conduct a variety of lecture series, workshops and formal institutes promulgating this perspective. It therefore seems possible that the social workers, many of whom pursue informal postgraduate training, reflect this additional training in their psychotherapy biases. In contrast, the psychologists and psychiatrists may be less likely to seek additional training to bolster their credentials and knowledge bases, so that the fact of their residence in Houston would be less relevant on this variable.

In summary, although there are a number of differences in the professional demographies provided by the social workers, psychologists, and psychiatrists who participated in this investigation,

almost all of these are attributable to professional training, and in one case, geographic trends. There were no differences found in the sphere of personal demographics. Therefore, there is little reason to presume that the three psychotherapist groups who comprise the present sample are other than homogeneous for purposes of this study. A variety of sex differences regarding the professional demographics were noted both across the professions and within the psychologist group alone. But all of these differences seem to be very much in accord with male-female trends noted by other researchers. The sole anomalous finding concerns the primary and secondary theoretical orientations of the social workers. These are not entirely understood by this investigator but probably reflect a geographic limitation of the sample.

The Findings

The present investigation produced no evidence that A standing among male psychotherapists signals a higher likelihood of obsessionalism, depression, or social discomfort than B standing does. This finding directly contradicts those of Johnson et al. (1973), who administered the same battery of tests to a group of psychiatric inpatients. It is believed that one major cause of the discrepancy between the two sets of results is the homogeneity of the current sample (e.g., by virtue of professional choice, training, and personal demographic features) contrasted with the heterogeneity of the Johnson et al. sample. Given that the range of MMPI *T* scores obtained from the 40 tested individuals here was fairly narrow (i.e., 39 out of 40 were normal range protocols), a much larger sample in the

current study would have been necessary to pinpoint any real differences which might in fact exist. It is the opinion of this investigator, however, that such presently undetected MMPI differences between the A and B groups would be likely to be so subtle that they would convey only a limited amount of information. It is therefore not recommended that further effort be made to tease out these possible differences on the MMPI.

When Johnson et al. (1973), Berzins et al. (1971), Nerviano (1973), Fancher et al. (1972), and Schubert et al. (1975) arrived at conclusions about the personalities of A males which supported the idea that these men, relative to B's, tend to be depressed, anxious, fearful and shy, they based their conclusions on findings derived from samples of undergraduates and adult psychiatric patients. At the outset of the present investigation, the project director assumed that since similar A-B characteristics had been tapped in populations which appeared as diverse as hospitalized mental patients and college students, they would also be identifiable in psychotherapists.

There are several reasons in addition to the homogeneity of the present sample why this is not the demonstrable case. In the first place, it may be that the current project director took too seriously the common lore that psychotherapists are not very different from the people who they treat, including the most disturbed among their patients (i.e., the hospitalized cases). This, as it develops, is rather obviously not so. In the second place, an error of logic was possibly made in implicitly conceptualizing college students as "normal adults" in a situation in which MMPI results were to be

compared with those of another "normal adult" population, i.e., psychotherapists. College students, and most particularly the Freshmen who are so often "volunteered" for psychology studies, are essentially an adolescent population. Adolescent MMPI profiles are so notoriously askew in comparison with adult MMPI profiles that separate norms were long ago devised for purposes of making T score conversions. It therefore seems possible to this investigator that the MMPI results of the college student studies should not have been assumed equivalent to studies of so-called "normal adults." And in the third place, it may have required a foolhardy degree of research ingenuousness to expect a test-wise population of psychotherapists to respond in good faith to MMPI questionnaires. Despite the apparent validity of the profiles, the possibility always exists that a sizable number of these protocols have been unnaturally flattened as a result of participant fear that the promised anonymity would not be preserved.

Perhaps the most salient result of the current study is that contrary to the attitude expressed both explicitly and implicitly in the A-B Scale literature previously reviewed here, A-B Scale test correlates do not appear to be consistent across populations. How can this contradiction be understood? The simplest answer seems to be that an incorrect assumption about the universal cross-validity of the A-B Scale was early made (Shows et al., 1966) and that later investigators relied upon this erroneous assumption to unravel the anomalies in the data which they eventually gathered. The fallacious thinking has been that since the A-B Scale identifies extreme groups among members of all populations, rather than just among certain very

heterogeneous populations such as adolescents (undergraduates) and psychiatric patients, it can be demonstrated that these extreme scorers share qualities, traits, styles or attitudes of one kind or another. Then, when research data has been collected from a homogeneous group in which A-B personality differences may be limited, such as a psychotherapist group, it must be quite tempting to interpret mixed results in a (subtly) biased manner which conforms to the prevailing assumptions. It certainly seems very suspicious that there are no relevant personality differences between A-B groups on a straight-forward self-report inventory like the MMPI (as per the present study), and yet significant differences on infinitely more complex measures where reliability ratings are perforce lower, such as those involved in the assessment of developmental histories (Rothman, 1971) or the categorization of psychotherapists' theoretical orientations (Geller & Berzins, 1976).

Although the Leary results provided no support for the original hypotheses, they do form a strong statement about the homogeneous way in which the psychotherapist subjects are viewed by others. Eighty-seven percent of the tested therapists obtained Leary Level I scores which place them in the dominant-affiliative sector of the interpersonal circle. This means that others would tend to view these therapists, as a group, as competitive, dominant, generous, and somewhat conventional. There is no Leary literature which describes the extent to which this finding compares with those regarding other groups of therapists. However, the present results are very similar to those derived from the administration of Leary batteries to first

year medical students. McDonald (1962) found that of the 64 medical students he tested, over 75% were likely to be perceived by others as both managerial and responsible. Similarly, Gynther and Kempson (1962) found that of their six tested seminarians engaged in clinical pastoral training all but one appeared in this fashion at the level of public perception. All of these results are consistent with Leary's (1957) notion that scores in the upper half of the Leary circle isolate "help givers" from "help takers" (the lower half).

Given the extent to which the present psychotherapist sample seems so homogenous on the combination of tests chosen for the present investigation, it would be of interest in future studies to learn of more subtle differences which might exist among members of the three professions. It is recommended that research be done comparing the Leary's (Level I) of A-B social workers, psychologists, and psychiatrists without merging any of the octants into broader categories, as was done in the present study. In this way, any differences within the dominant-affiliative sector would be able to emerge more clearly.

Patterns in the underlying character structures of the A and B therapists did not conform to the predictions. Indeed, the underlying personality patterns appeared quite random when viewed from the A versus B perspective.

The present study also failed to produce clear cut confirmation that the A-B Scale is a kind of masculinity-femininity index. Specifically, there were no differences found between the MMPI Mf Scale scores of the A versus B males or the A versus B females. Such differences had been expected on this scale for several reasons. The

first is that a prior A-B study involving undergraduates had found differences on the Masculinity-Femininity (M-F) Scale of the Omnibus Personality Inventory (OPI) (Dublin et al., 1969), while another had reported differences on the MMPI Mf Scale itself (Schubert et al., 1975). The dysjunction between these results and those of the present study is thought to be attributable to two separate factors: 1) the MMPI Mf Scale apparently taps different features than the OPI M-F Scale does, and; 2) the current sample of psychotherapists is so homogeneous on the basis of educational level alone that any such differences which might have appeared in a more heterogeneously educated group were easily obscured (Dahlstrom & Welsh, 1960; Dahlstrom, Welsh, & Dahlstrom, 1975).

The other reason that the MMPI Mf Scale differences had been expected is more conceptual in origin. High Mf Scale scores among males tend to reflect the relative absence of stereotypically "masculine" interests (Graham, 1977). Because the A-B Scale itself is essentially an inventory which discriminates between those who endorse characteristically "masculine" pursuits (the B's) and those who do not (the A's), it was expected that this difference would be reflected in the Mf Scale scores. But apparently the 10 such items on the 60-item MMPI Mf Scale were not sufficient in and of themselves to dichotomize an otherwise homogenous group in this way. In other words, the current psychotherapist sample is so homogeneous on the other Mf Scale loadings that differences regarding interests in "masculine" activities are statistically invisible on this scale.

Because there was no support for the idea that male A psychotherapists tend to be more depressed, anxious or shy than male B psychotherapists (based on the MMPI findings), the correlative notion of the literary-imaginative sensibility as the umbrella context for these personality features was abandoned by the present investigator. It was not necessary, however, to entirely reject the idea that A standing in males and females is related to a literary-imaginative mode and B standing, to a scientific-methodological one, despire the fact that A males were found to be no more depressed, anxious or shy than B males.

On the 16 PF, the A males and females, relative to the B's in this sample, described themselves as imaginative, flightly, theatrical, attention-seeking, indulgent, insecure, and likely to act on intuition. To the extent that the qualities of imagination and creativity are related, the greater imaginativeness of these A psychotherapists is consistent with the results of Schubert and Wagner (1975), who found that A male undergraduates in their sample scored higher than B males on 11 of 12 administered creativity tests from the Guilford array. In the current sample, B males and females described themselves relative to the A's, as being more practical, logical, cynical responsibility-takers who expect little from the world. In addition, A females relative to B females in this sample claimed to be more absorbed by ideas, interested in art, and easily seduced from practical judgment. The B females, in contrast, more often described themselves as alert to practical needs, prosaic, earnest and steady.

Thus, the A and B poles of the A-B Scale coincide, respectively, with the proposed literary-imaginative orientation and the scientific-methodological sensibilities.

The adjectives employed in the above sets of A-B polarities have not infrequently been used as descriptors of "feminine" versus "masculine" traits or attitudes (Colwil & Lips, 1978). It therefore seems that despite the absence of direct Mf Scale corroboration, there is some evidence that the A-B Scale is, among other things, "masculinity-femininity" sensitive. To the extent that the A-B Scale can be thought of as related to a "masculinity" (B-ness)-"femininity" (A-ness) index, it is only natural that high scores on this scale (defining B-ness) would imply very different things for men than for women. Whereas high scoring men have, by definition, acknowledged interests in typically "masculine" pursuits, high scoring women have expressed interests and attitudes which run counter to the sex role behaviors typically designated "feminine." As a consequence, the implications of B-ness are different for males than for females. And indeed, the results of the present study demonstrated that B females describe themselves as being more tense than B males, more diffusely anxious, and more detached. Similarly, A males, who have by definition eschewed typically "masculine" interests, also describe themselves as being more tense than their B male counterparts do.

The finding of greater tension and anxiety in B females is quite provocative, in light of the fact that prior research has shown these women to also have higher self-esteem and to be less neurotic than A females (Kulberg et al., 1976). The two sets of findings are

not necessarily contradictory. It may be that the anxiety and tension of B females are the requisite fees exacted for their sex role deviations, but that these deviations, in turn, conduce to elevated levels of self-esteem. Clinicians need to be alert to the possibilities of this double bind, lest they mindlessly overprotect their female patients from the supposed burdens of additional anxiety and in so doing, exact a perhaps less visible but ultimately heavier price from them by preserving the status quo. Greater precision in research is required to examine the relationship between androgyny in women and overall emotional well-being.

One unanticipated pair of findings emerged in the course of this study: female B's achieved a lower MMPI Scale F mean (50.6) than did male B's (55.0), while male A's achieved a lower Scale F mean (50.5) than did male B's (55.0). The implication of these differences frankly baffles this researcher. It is extremely difficult to interpret individual Scale F T scores which, like these, are in the low-middle range, or to contrast pairs of T scores within this domain. A conservative reading of these data suggests merely that each of the four A-B groups is composed of relatively well adjusted individuals who describe themselves in a conventional manner.

A-B standings aside, a number of personality differences between male and female psychotherapists were identified through the results of this project. Not surprisingly, the male group was found to be more dominant than the female group, while the latter was found to be more easily swayed by their emotions as well as more imaginative, sensitive and insecure than the former group. All of these

differences between the sexes have been previously noted in the A-B literature (Berzins et al., 1972; Dublin et al., 1969), in the developmental literature (Kagan, 1964; Mischel, 1966), and in the general psychology literature (Allport, Vernon, & Lindzey, 1951; Hutt, 1972).

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APPENDIXES

APPENDIX A

BACKGROUND INFORMATION AND INSTRUCTIONS

During the 1950's, John Whitehorn and Barbara Betz did a series of post hoc analyses in which they examined the records of several hundred schizophrenic inpatients who had been treated at the John Hopkins Hospital. Whitehorn and Betz wanted to see if they could tease out some of the reasons why certain patients had responded favorably to hospitalization while others had not. With this aim in mind, they were also attentive to both the techniques and personalities of the psychiatric residents who had been responsible for each of the patients. They adopted the habit of referring to those residents who had had very high success rates with their patients as "A's," and to those residents who had had very low success rates with their patients as "B's."

In the course of analyzing their data, Whitehorn and Betz happened upon an unexpected correlation: they found that certain profile patterns derived from the standard 400-item Strong Vocational Interest Inventory were highly predictive of residents' A versus B standings. After further experimentation, Whitehorn and Betz produced a much abbreviated version of the Strong which they claimed was also predictive of residents' relative successes with schizophrenic inpatients.

Not surprisingly, this A-B research, as it came to be called, set off both a wave of controversy and a flood of experimentation within the professional community. On the one hand, it seemed naive to some to believe that a 23-item interest inventory could be capable of distinguishing between talented and competent therapists and those who were neither. On the other hand, since it was so simple to administer and score, it seemed silly not to give it a try. Over the next 20 years, at least 80 articles were published and a score of dissertations written on various phenomena relating to the A-B variable.

The attitudes and some findings of A-B researchers during the 1960's were more or less positive. Two major theories evolved and were explored from a wide variety of angles, both with A-B therapists and with A-B undergraduates in analogue studies. The first of these theories was that A therapists were more successful than B's with schizophrenic inpatients, but that B therapists were more successful than A's with outpatient neurotics. This was known as the interaction hypothesis. The second theory, the Super A hypothesis, was that A's were better therapists across all clinical populations.

As the years passed, it became increasingly evident from the number of contradictory and negative findings which were emerging, that the A-B variable had limited utility as a predictor of anything directly related to the process or outcome of psychotherapy. But it also became increasingly clear that the 23-item Strong actually did reliably differentiate between groups of people who had distinctive personality styles. In other words, there really does seem to be such a thing as an A personality and a B personality, although the relevance of these categories for understanding psychotherapeutic work is currently minimal. (These labels, by the way, have nothing to do with the Type A and Type B personality styles that have recently been publicized in relation to people's varying degrees of proneness to heart attacks and other ailments which occur as a function of stressful living.)

My own interest in the A-B variable is in achieving some degree of refinement in our understanding of the personality correlates which are associated with A-B standing in mental health professionals. I am therefore asking that: one, you fill out the enclosed A-B Scale and return it to my assistant, who will assign your materials a numerical code to protect your identity; and two, if you should qualify as an A or B (but not as an AB), that you fill out two additional personality measures which will be sent to you. In exchange for your participation, notification of your A-B standing, your personality test scores, and an abstract of this research project will be made available to you if you should want them.

Thank you very much for your cooperation.

Diane Friedman
Doctoral Candidate
The University of
Tennessee, Knoxville

INSTRUCTIONS

1. Fill out the enclosed Demographic Data questionnaire. If you wish to know your A-B standing and/or to receive an abstract of the findings when the study is completed, fill out the attached form as well.

2. Administer the enclosed A-B Scale to yourself. Do not write your name on it.

3. Read and sign the Informed Consent in the presence of a witness and return it, along with the rest of the materials, in the envelope which has been provided.

APPENDIX B

INFORMED CONSENT

I understand that I have been invited to participate in a research project being conducted by Diane Friedman in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Clinical Psychology, for which she is a candidate at The University of Tennessee, Knoxville.

I understand that the aim of this project is to explore various personality correlates of the Whitehorn-Betz A-B Scale as they appear in psychotherapists. The procedure involved will consist first, of my being asked to fill out a 23-item A-B Scale and return it to Ms. Friedman's assistant, who will immediately remove my name from the material and replace it with a numerical code in order to protect my anonymity. From this point on, the assistant, who is not a mental health professional, will be the only person involved with this study to have access to the original list with my name on it. If I am selected as one of the subjects to be studied in more detail, I may then be asked to fill out two personality measures, which together, will take about one and one-half to one and three-quarters hours to complete, and send them to Ms. Friedman's assistant. The assistant will again remove my name from the data and replace it with my numerical code, after which she will forward the package to Ms. Friedman for analysis. The master list with my name and code

number on it will be destroyed as soon as data collection is complete. At no time will my name ever be mentioned in any account of this research.

However, should I be interested in obtaining information about my own A-B standing or personality scores, I may indicate my wish to do so on the enclosed form, which I will send to the assistant along with the data I submit. I will also have the option, on the same form, of requesting an abstract from Ms. Friedman describing the major findings from this study, which I may expect to receive after August, 1982, when this project will have been completed.

I realize that Ms. Friedman is prepared to answer any questions which I may have concerning the research procedures, and that I am free to withdraw my consent and discontinue participation in this project at any time.

_____ _____

Subject Date

_____

Witnessed by:

_____

Investigator

Home phone: (713) 790-9425
Home address: 7950 North Stadium Drive
Apartment 162
Houston, Texas 77030

CODE #: ___ ___ ___

APPENDIX C

DEMOGRAPHIC DATA FORM

Please check the appropriate blanks.

1. Sex:____ Male____ Female____

2. Nationality: ____U.S.A. ____Other (specify):_____

3. Religion: ___Protestant ___Catholic ___Jewish ___Agnostic
___Atheist ___Other

3. Age: ___24-30 yrs. __31-40 yrs. __41-50 yrs. __51-60 yrs.
___61-70 yrs.

5. Age: ___yrs.

6. Current Marital Status: __Single __Married __Divorced __Separated
__Widowed __Cohabitating

7. Number of times married: __0 __1 __2 __3 __4 __other (specify):__

8. Number of siblings: __0 __2 __2 __3 __4 __other (specify):__

9. Birth order: __only __1st __2nd __3rd __4th __other (specify):__

10. Check all relevant academic degrees you have been granted (or levels of training you have completed) in the mental health field:

Social Work: __M.S.W. (or equivalent) __D.S.W.
Psychology: __M.A. __Ph.D. __Postdoctoral work
Branch of Psychology_____
(e.g., Clinical, Counseling, etc.)
Psychiatry: __Psychiatric Residence __Postgraduate work

11. Number of years professional experience in mental health field since receiving your degree:

__1 __2 __3 __4 __5 __other (specify): __ __does not apply

12. If you are still in training, please indicate your current level:
Social Work: __D.S.W. candidate __Other (specify):_____
Psychology: __Ph.D. candidate _____
(indicate level of training: e.g., ABD, on internship, third year, etc.)

Branch of Psychology _____
(e.g., Clinical, Counseling, etc.)

Postdoctoral Program _____
(name specialty area)

Psychiatry: Psychiatric Residency _____
(indicate level of training, e.g., first year, second year, etc.)

Postgraduate Program _____
(indicate specialty area)

13. Rank order the theoretical vantage points from which you most typically conceptualize your individual therapy work (regardless of the specific techniques you may use). If your thinking is always limited to the confines of a single conceptual system, check only that one.

__Psychodynamic __Hymanistic __Phenomenological __Behavioral __Systems
__Cognitive __Other (specify):_____

14. Check the approximate extent to which you conceive of your psychotherapeutic work as being a scientific process versus an artistic one:

__entirely scientific
__predominantly scientific, but has some artistic elements
__half scientific, half artistic
__predominantly artistic, but has some scientific elements
__entirely artistic

15. Average number of hours per week that you engage in the following professional activities:

__individual adult psychotherapy
__family/marital psychotherapy
__individual child psychotherapy
__group psychotherapy
__supervision/consultation
__administrative activities
__teaching
__research

16. Approximate number of publications ___
Number of publications in which you are a major author ___

17. Number of times you have been in therapy ___
Total number of years of personal therapy ___
Orientation(s) of your therapist(s) (in chronological order)

_____

_____

_____

_____

_____

APPENDIX D

THE WHITEHORN-BETZ A-B SCALE

Directions: For each occupation listed below, indicate whether you would like that kind of work or not. Don't worry about whether you would be good at the job or about your lack of training for it. Forget about how much money you could make or whether you could get ahead in it. Think only about whether you would like the work done in that job.

Circle the "L" in the answer column if you LIKE that kind of work.
Circle the "I" in the answer column if you are INDIFFERENT.
Circle the "D" in the answer column if you DISLIKE that kind of work.

Please be sure to leave no question unanswered.

1.	Building contractor	L	I	D
2.	Carpenter	L	I	D
3.	Marine engineer	L	I	D
4.	Mechanical engineer	L	I	D
5.	Photoengraver	L	I	D
6.	Ship officer	L	I	D
7.	Specialty salesman	L	I	D
8.	Toolmaker	L	I	D
9.	Manual training	L	I	D
10.	Mechanical drawing	L	I	D
11.	Drilling in a company	L	I	D
12.	Making a radio set	L	I	D
13.	Adjusting a carburator	L	I	D
14.	Cabinet making	L	I	D

Directions: For each activity or amusement, indicate your interest as before.

15.	Entertaining others	L	I	D
16.	Looking at shop windows	L	I	D
17.	Interest public in a new machine through public addresses	L	I	D
18.	President of a society or club	L	I	D
19.	Many women friends	L	I	D

Directions: If each of the following items really describes you, mark "Yes"; if it does not, mark "No"; if you are not sure, mark "?".

20.	Accept just criticism without getting sore	Yes	?	No
21.	Have mechanical ingenuity	Yes	?	No
22.	Can correct others without giving offense	Yes	?	No
23.	Follow up subordinates effectively	Yes	?	No

APPENDIX E

REQUEST TO PARTICIPANTS

February 17, 1982

Dear

Thank you very much for your participation in the first phase of my doctoral research project: Personality Correlates of the Whitehorn-Betz A-B Scale in Psychotherapists.

Traditionally, A and B individuals are so labelled by virtue of the fact that their scores on the A-B Scale fall in either the upper or the lower quartiles of a tested sample. Although I have not yet received all the preliminary returns from the 48 males and 48 females who together constitute two separate samples for purposes of my study, the bulk of the data has been returned to me. Among the 39 male respondents, scores range from 3 (extreme A) to 16 (extreme B); among the 41 female respondents, scores range from 4 (extreme A) to 16 (extreme B). Your A-B Scale score is ___, which means that in the context of this sample of psychotherapists, you are designated a(n) ___.

The second phase of my study requires that if you are either an A or B (but not an AB), you complete the two personality inventories (the MMPI and 16 PF) which I have enclosed. PLEASE DO NOT WRITE YOUR NAME ANYWHERE ON THESE MATERIALS. The answer blanks have already been coded numerically to protect your anonymity. However, it is essential that you fill out the enclosed Name and Address Form so that your data can be identified in a consistent manner throughout my study.

Self-administration of the two personality inventories should take approximately two hours, total time. (For some of you, considerably less time may be involved.) Those of you who have taken an MMPI within the last two months may feel free to submit a photocopy of your answer sheet, as long as you have answered all 566 questions. (In those cases, the newer Form Board answer blanks will be acceptable.) Similarly, you may submit a recent 16 PF answer blank photocopy, as long as the test you took was Form A. In any event, please be sure to return both the precoded answer blanks and the test booklets upon completion.

I appreciate that time is at a premium for each of you, but am nevertheless emboldened to request that you take no more than two weeks to complete the two inventories. If vacations, illness, or other personal requirements render this timetable impossible for you, please call me (collect) so that I can plan accordingly. My home phone number is (713) 790-9425. I am often home during the day, and almost always in the evenings after 7:30.

Thank you again for your cooperation. I am most appreciative of your willingness to participate in this study.

Sincerely,

Diane Friedman

VITA

Diane Friedman was born in Brooklyn, New York on April 5, 1945. She attended elementary school in Forest Hills, New York and was graduated from Woodmere Academy in Woodmere, New York in June 1963. The following September, she entered Miami University, Oxford, Ohio, where she majored in Elementary Education. She then transferred to New York University in September 1965 and changed her major to English at the same time. In January 1968 she received a Bachelor of Arts degree. In January 1970 she was awarded a Master of Arts degree in English from the same university.

In September 1974, after having taught English for a total of four years at the Bronx High School of Science and The High School of Art & Design, both in New York City, Ms. Friedman entered Yeshiva University, also in New York. She was awarded a Master's degree in Social Work there in June 1976.

The author then entered the Graduate School of The University of Tennessee, Knoxville, in September 1976, where she majored in Clinical Psychology and minored in Social Work. From September 1980 through August 1981 she interned at the Texas Research Institute of Mental Sciences (TRIMS) in Houston, Texas. In December 1982 she was granted the Doctor of Philosophy degree in Psychology.

Ms. Friedman is a member of Phi Beta Kappa and an Affiliate of the American Psychological Association. She is a co-author of "Psychotherapy Trainees in Psychotherapy" (Kaslow, N. & Friedman, D. In F. Kaslow, Ed., Psychotherapy for psychotherapists. New York: Haworth Press, in press).

Ms. Friedman is currently employed by the Community Mental Health Organization, Inc., which is a comprehensive community mental health center in Englewood, New Jersey, where she now lives.