AN INVESTIGATION OF THE RELATIONSHIP BETWEEN
SEX OF THE COUNSELLOR, SEX OF THE CLIENT,
AND EMPATHY

by

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ABSTRACT

The relationship between empathy and sex similarity of counsellors and clients was investigated in this study. Two objectives were advanced to determine: (a) if counsellors of moderate or low empathic ability were more empathic with clients of the opposite sex, and (b) if counsellors of high empathic ability could be equally empathic with clients of both sexes.

The subjects were 96 Caucasian University of British Columbia students enrolled in education or counselling psychology, or volunteering at a campus crisis and information centre. They were tested on the Discrimination Empathy Test, a 14 item, sexually unbiased revision of Carkhuff's (1969) Index of Discrimination. Their scores were ranked and the subjects designated as of high, medium, or low empathic ability. This designation and the sex of the subjects and the clients served as independent variables. The dependent variable was empathy, defined as the discrimination of client affect. It was measured by the Affective Sensitivity Scale, an empathy measuring instrument consisting of video-taped vignettes from real counselling sessions with clients of both sexes and a written scale on which the subjects recorded their empathic response.

Seven null hypotheses were advanced and analysed by a three-way analysis of variance. Only two of the hypotheses were not rejected. Females were found to be more empathic than males, and subjects were more empathic with male than female video-taped clients. For the third main effect, it was found that the three designated levels of empathic ability were not significantly different when re-tested on the Affective Sensitivity Scale. Non-significant results were found in interaction analyses of the three independent variables.
Speculation was offered to explain these results. The lack of significant differences between the levels of empathic ability was probably responsible for the nonsignificance of three of the four interactions. The fourth, the finding of no interaction between the sex of the subjects and the sex of the video-taped clients could have been produced whether or not similarity was an important factor. The findings of additional t tests between each subject/video-taped client match by sex did not clarify any further the role of similarity. The highest mean score for the matches was for female subjects/male video-taped clients, followed, in order, by male subjects/male video-taped clients, female subjects/female video-taped clients, and male subjects/female video-taped clients. The same sex matches were not significantly different. Further research was recommended, especially into the relation of similarity to empathy.
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Chapter 1

INTRODUCTION

Counselling effectiveness, to a large extent, is predicated upon the counsellor's ability to accurately empathize with the client's present inner experience. Of the core dimensions of helping which include respect, genuineness, concreteness, confrontation, and immediacy, empathy is considered to be the most critical (Berenson & Carkhuff, 1967; Carkhuff, 1969; Carkhuff & Berenson, 1967; Truax & Carkhuff, 1967). Carkhuff (1969) further states that without empathy "there is no basis for helping" (p. 173). Therefore, due to the importance of empathy in the counselling process, research into its components is essential for further understanding. One such component of empathy is the similarity between the counsellor and the client.

It has been generally accepted that persons best understand those most like themselves. Klages writes, "understanding is possible only by virtue of some similarity between the perceiving self and the perceived object; and as dissimilarity grows, understanding gives way to failure to understand" (cited in Allport, 1937, pp. 513-514). Gordon Allport (1937) states that experimental "studies have shown that it is indeed a fact that the best judges of a trait in another person are those who themselves possess the trait in a high degree" (p. 514). He notes, however, that "the correlation is not perfect, and the situation is far from simple: flexibility of imagination in one judge may be worth more than stores of unused experience in another" (p. 514).

In this study, it was proposed that the problem of this imperfect correlation be investigated. The sex of the counsellor and of the client
was utilized as an easily controlled example of similarity. Many studies have investigated, either directly or indirectly, the sex variable and its role in counselling (Cartwright & Lerner, 1963; Mendelsohn & Geller, 1963, 1967; Taylor, 1972). Overall findings are generally inconsistent and seemingly contradictory.

The theoretical background is likewise unclear. For example, many counsellors consider it appropriate to match clients and counsellors of the same sex. The rationale behind this is the assumption that because of their very different experiences and self-concepts, men can best understand men, and women can best understand women. Feminist counselling, which seeks to free women to recognize and develop their potential as human beings has, in many cases, adopted this assumption and thus promoted the counselling of women only by other women (Hill, 1975).

Allport (1937) again recognizes the exception.

If the male student of personality is able to free himself from his own self-consciousness in relation to the opposite sex, if he discounts his own idealistic or cynical bias and is able to escape from his "mother image," if he has no preconceptions of the proper social and economic role which women should play, he will achieve a certain objectivity that will improve his judgments of women. And if he is able through some intricate combination of personal traits to take the feminine point of view, he will do even better. Conversely, the woman who seeks to become a good judge of men must have a similarity between the sexes to provide a basis for considerable mutual understanding (p. 519).

Carl Jung (1961) also provides a theoretical basis for the possibility of empathic understanding of the opposite sex through his concepts of the "anima" and the "animus," the unconscious, opposite sex archetypes that form part of the human psyche. He explains that:

... every man carries with him the eternal image of woman, not the image of this or that particular woman, but a definite feminine image. This image is fundamentally unconscious, an heredity factor of primordial origin engraved in the living
As Allport (1937) reports, a suspension of beliefs and a "certain objectivity" (p. 519) are required to overcome the limitations to understanding that are imposed by our self-consciousness and our society. This suspension of beliefs and this objectivity are an integral part of empathy and are absolutely necessary for its expression. Broadly defined, empathy is the counsellor's ability "to allow himself to experience or merge in the experience of the client, reflect upon this experience while suspending his own judgment, tolerating his own anxiety, and communicating this understanding to himself" (Carkhuff and Berenson, 1967, p. 27).

Thus, the nature of empathy needs to be clarified, particularly in order to ascertain the degree to which empathy is predicated upon similarity between the counsellor and the client. If similarity, for instance, is an important condition of empathy, then lack of similarity between counsellor and client would lead to ineffective counselling. Further, if similarity is significant only with counsellors with moderate or low empathic ability, then training in increasing counsellor empathic sensitivity could result in overcoming many counselling barriers, including the need for matching based on similarity. In conclusion, there is a need for further clarification of empathy, its role and its relationship to other variables, such as the sex variable investigated in this study.

**Definition of Terms**

**Empathy.** Empathy, much like intelligence, is probably a multi-dimensional concept (Buchheimer, 1963, 1964; Dimitrovsky, 1964). It involves...
the sensitive perception and understanding of both cognitive and affective information. It also involves the processes of discrimination and communication, discrimination being the passive sensing and interpretation of another person's experience, and communication the active verbalization of this understanding to the experiencing person.

In this study, the focus was on the discrimination of affective information, that is, the ability to accurately judge another's feelings. Empathy was therefore defined as affective sensitivity which is conceptualized by Kagan, Krathwohl, and Farquhar in 1965 as "the ability to detect and describe the immediate affective state of another, or in terms of communication theory, the ability to receive and decode affective communication" (cited in Danish & Kagan, 1971, p. 51).

Operationalized, empathy was the scores attained by subjects on the Discrimination Empathy Test and the Affective Sensitivity Scale. Note that in the context of this study, empathy acted as the dependent variable and an independent variable. To distinguish between these two roles and to maintain independence between the variables, the dependent variable was referred to as empathy and was measured on the Affective Sensitivity Scale, while the independent variable was referred to as level of empathic ability or empathic level and was determined by scores on the Discrimination Empathy Test. Each of the instruments, the Affective Sensitivity Scale and the Discrimination Empathy Test, was intended to measure the same construct, empathy, as defined above. However, these instruments differed in the way they measured empathy. This difference is described below. Artificial results due to this difference were not expected.

**Discrimination Empathy Test.** An empathy measuring instrument, the Discrimination Empathy Test, was a written, multiple choice instrument, altered for the purpose of this investigation from the Index of Investigation
(Carkhuff, 1969, pp. 114-123). Alteration of the Carkhuff test included changing or removing all references to gender in order to neutralize any sex bias. The Discrimination Empathy Test was created for the purpose of measuring and assigning the subjects to high, medium, and low levels of empathic ability, devoid of any influence of sex.

**Affective Sensitivity Scale.** The Affective Sensitivity Scale, developed in 1967 by R. Campbell, measured the dependent variable, empathy. It consisted of a video-tape of 41 vignettes of actual counselling sessions and a written test form. The male or female client in each vignette served as the empathy stimulus to subjects observing the video-tape. The subjects responded to each vignette by selecting from the written test responses the one which best described the client's feeling state. Both clients and counsellors are present on the video-tape and will henceforth be referred to as video-taped clients and video-taped counsellors. The sex of the video-taped clients served as an independent variable in this study.

**Observer-counsellor.** The subjects of this investigation were the observer-counsellors. Their role was to empathize with the feelings of the clients on the Affective Sensitivity Scale's video-tape and with the affective information contained within written expressions of helper problems on the Discrimination Empathy Test. Their sex served as an independent variable of this study.

**Emotional Obviousness.** This referred to the degree of restriction or free expression with which the video-taped clients revealed their emotions.

**Statement of the Problem**

It was proposed that there be an investigation into the relationship between empathy and the sex similarity of counsellors and clients. The objectives of the investigation were to determine: (a) if counsellors of moderate or low empathic ability were more empathically responsive to the feelings of
clients of the same sex than to clients of the opposite sex, and (b) if counsellors of high empathic ability were equally empathic with clients of both sexes.

In order to clarify the relationship between empathy and sex similarity, using the terms defined for this study, the following questions were asked:

1. Is either sex of observer-counsellors more empathic than the other and, if so, which one?

2. Is the ranking of observer-counsellors into high, medium, and low empathic abilities substantiated by the Affective Sensitivity Scale?

3. With which sex, if either, of video-taped clients do the observer-counsellors demonstrate the greater degree of empathy?

4. Which sex, if either, of observer-counsellors demonstrates the greater degree of empathy at each level of empathic ability?

5. Which sex, if either, of observer-counsellors is more empathic with each sex of video-taped clients?

6. With which sex, if either, of video-taped clients do observer-counsellors at each level of empathic ability demonstrate the greater degree of empathy?

7. Which sex, if either, of observer-counsellors is the more empathic with each sex of video-taped clients at each level of empathic ability?

Null Hypotheses

Seven null hypotheses were established to answer the questions asked above and are presented respectively as follows:

1. There is no statistically significant difference between the mean scores of male and female observer-counsellors as measured by the Affective Sensitivity Scale.

2. There is no statistically significant difference between the mean scores of high, medium, and low empathic observer-counsellors as measured by the Affective Sensitivity Scale.
3. There is no statistically significant difference between the mean average scores assigned to male and female video-taped clients by observer-counsellors as measured by the Affective Sensitivity Scale.

4. There is no statistically significant interaction between the sex of the observer-counsellors and the empathic level of the observer-counsellors as measured by the Affective Sensitivity Scale.

5. There is no statistically significant interaction between the sex of the observer-counsellors and the sex of the video-taped clients as measured by the Affective Sensitivity Scale.

6. There is no statistically significant interaction between the empathic level of the observer-counsellors and the sex of the video-taped clients as measured by the Affective Sensitivity Scale.

7. There is no statistically significant interaction among the sex of the observer-counsellors, the empathic level of the observer-counsellors, and the sex of the video-taped clients as measured by the affective Sensitivity Scale.

Basic Assumptions

In this investigation it was assumed that:

1. Empathy, as defined in the Definition of Terms, is distinct and measurable, and is continuously and normally distributed throughout the population.

2. The instruments used, the Discrimination Empathy Test and the Affective Sensitivity Scale, are reliable and valid measures of empathy.

3. The existence of unequal representation by sex of video-taped clients and counsellors on the Affective Sensitivity Scale will not significantly bias the observer-counsellors.

4. The existence of a non-Caucasian video-taped counsellor on the Affective
Sensitivity Scale will not significantly bias the observer-counsellors. Both male and female video-taped clients are equal in their emotional obviousness.

Limitations of the Study

There were several limitations in this study. The sample was not representative of the total population. It consisted of full-time bachelor's and master's degree students at the University of British Columbia, the mean age being 25.7 years. Subjects were selected from third and fourth year education and from counselling psychology at the graduate level. Subjects were also selected from volunteer counsellors at a campus crisis and information centre. These areas of interest indicated that the subjects had a prior desire to serve others, a bias which placed further limits on the sample.

The sample was also limited to subjects of the Caucasian race only, a limitation imposed to control the effects of racial difference. All videotaped clients on the Affective Sensitivity Scale were also Caucasian, although there was a non-Caucasian video-taped counsellor.

Finally, all subjects were volunteers. Since the request for volunteers was directed towards groups, there was a possibility of peer pressure to conform and some resulting hostility.

The study was further limited in its design and use of empathy measuring instruments. Since empathy was treated as both the dependent variable and an independent variable, and since it was important to maintain independence of the uses of empathy, the design of the study required the use of two instruments to measure empathy in a reliable and precise manner. Both instruments, the Discrimination Empathy Test and the Affective Sensitivity Scale, however, were not previously related. Reliability and
correlation were, therefore, computed concurrently with the investigation to establish the degree of instrument relatedness. Also, since the Discrimination Empathy Test was altered from the Index of Discrimination (Carkhuff, 1969), it was necessary to obtain background statistical information.

Finally, the use of the Affective Sensitivity Scale for comparison of empathy shown for male and female video-taped clients was limited by the unequal representation by sex of video-taped clients and counsellors. These instrument related limitations were tolerated because no instruments of similar capabilities could be found.
Chapter 2

REVIEW OF THE LITERATURE

The purpose of this study was to investigate the relationship between the sex of a counsellor, the sex of the client, and the empathic ability of the counsellor. Many research studies have investigated aspects of this relationship or of similar relationships between variables of client-counsellor similarity, and counselling process and outcome. Overall findings have been generally both inconclusive and contradictory. A clear and consistent picture of this relationship has failed to materialize. In this chapter research findings to date are discussed, and some possible reasons for problems with these findings are explored. Included are those studies indicating a positive relationship between variables, no relationship between the variables, and those indicating a more complex relationship between the variables.

Problems with the Research

The inconsistency and inconclusiveness of the research findings to date is due to several possible factors. A major factor is the lack of a clear and consistently used definition of empathy. Empathy is a very broad term, both in its conception and its application. As discussed in the Definition of Terms, empathy is a multi-dimensional concept much like intelligence (Dimitrovsky, 1964). A comparison of empathy research can often be problematic, because each study is exploring a different variable. This study attempted to partially overcome this problem by using a restricted definition, focusing only on the discrimination of feelings.

Tied to the problem of the definition of empathy is the great variation
in test instruments. A large number of instruments have been created to test for empathy, each based on its own peculiar conceptualization and methodology (Kurtz & Grummon, 1972; Olesker, 1971; Taft, 1955). Aside from the particular variable they are testing, these tests vary in the way they are administered. They include pencil and paper varieties, utilization of audio and/or video stimulus, and ratings by independent judges of subjects in real counselling situations. Taft (1955) also reported problems due to the traits being measured (excluding empathy), the subjects, and the low reliability and validity of the measures used.

Finally, with respect to the sex variable, many difficulties have been reported (Oage & Cronbach, 1955; Luchins, 1957; Olesker, 1971). The two most prominent and critical difficulties are the degree of focus provided for the sex variable and the lack of control for it. Findings concerning the sex variable are often only incidental to a larger research study. Luchins (1957) suggested that investigators systematically "vary the empathizers, the objects of empathy and the conditions under which the behaviour occurs ... [thus throwing] ... light on some problems that have been raised" (p. 17). It was through such a variation that the present study attempted to investigate the relationship between sex of the counsellor, sex of the client, and empathy.

**Studies Indicating a Positive Relationship between Similarity and Counselling**

In many studies, similarity has been found to be an important factor in counselling behaviour and outcome. Tuma and Gustad (1957), using measures mostly derived from the California Personality Inventory, found that personality similarity and counselling outcome are positively related. They concluded that "close resemblance between clients and counsellors on
personality variables is associated with a relatively better criterion performance (self-knowledge) by clients" (p. 111).

In a similar study, Mendelsohn and Geller (1963), using the Myers-Briggs Type Indicator, a personality test, found a strong positive relationship between the overall similarity between client and counsellor, and counselling outcome. Their results indicated that the greater the overall similarity, the greater the duration of counselling.

Halpern (1955), using the Guilford-Martin Inventory of Factors (GAMIN), tested female nursing students on satisfaction with their own behaviour. The student nurses also predicted each other's responses to the inventory, this prediction serving as an operational definition of empathy. The result was that empathy positively correlated with similarity of the predictor, and the predictee, and with the predictor's satisfaction with her own behaviour. This suggested that similarity may be a vital part of the empathic process. Halpern (1955) concluded that:

What may instead be indicated is that people cannot effectively predict about what they have not phenomenologically experienced. . . . There is a greater likelihood that a person would recognize feelings and patterns of behaviour in others if he has known similar feelings and patterns of behaviour in himself. When an individual is confronted with the emotions and actions of another person that are alien to his own experience, accurate recognition, and hence, accurate prediction, is little better than a chance matter.

The degree of similarity between two people may therefore reflect the overlapping of their capacities to empathize with each other (p. 451).

Wolf and Murray (1936) reached a similar conclusion based on an experiment that involved the rating and ranking of personality traits. Taft (1955), however, expressed reservations about Wolf and Murray's (1936) conclusions by questioning whether they were measuring the ability to judge or simply the degree to which the judge belonged to the criterion group.
Bryson and Cody (1973) investigated the relationship between client and counsellor race and the level of empathic understanding. This was facilitated by stimulated recall sessions of interview excerpts and rated by three independent raters. They found that race was related to understanding, that black counsellors understood black clients best, that white counsellors understood white clients best, and that whites understood the clients of both races best overall.

Two studies investigating sex matching and retention in counselling indicated similar positive relationships. Heilburn (1961) found that sex matching increased client retention. Mendelsohn and Geller (1967) investigated the sex matching variable in clients who had failed to return for counselling and thereby appeared to have terminated treatment. They found that most of those who returned (91 percent) were paired with same sex counsellors, while of those who never returned only 46 percent were paired with same sex counsellors.

There are four studies specifically investigating sex matching and its relation to empathy. In a study by Daane and Schmidt (1957), a comparison was made of patient self-description with those predicted by their counsellors. The study found that the greater empathy occurred between counsellor and client of the same sex. The study also found that male counsellors were more empathic with female clients than female counsellors with male clients.

In a study more relevant to this investigation, Feshbach and Roe (1968) defined empathy as "the experiencing of an emotion similar to that of another person as a consequence of perceiving feeling in the other persons" (p. 134). The subjects were six year old children. The study found that boys were more empathic with boys than with girls; and that girls were
more empathic with girls than with boys. The study also found that, overall, boys were no less empathic than girls.

Hill (1975), in an interesting and complex study, investigated the interaction between the sex of the client, the sex of the counsellor, and empathy. Carkhuff's (1969) scale for therapist offered empathy (communication empathy) was utilized with 24 counselling students. While the study dealt with several variables, including the experience level of counsellors, the central conclusion concerning sex matching and empathy was that counsellors "at all levels of experience have difficulty being as empathic with opposite-sex clients as with same-sex clients" (p. 10).

Finally, the study by Olesker (1971) is perhaps the most relevant to this investigation. She used the Affective Sensitivity Scale to examine the relationship of the sex variable to empathy in a systematically controlled fashion. The study involved "a comparison of the sexes as well as a comparison of the effects of judging persons of the same and opposite sexes in making empathic judgments" (Olesker & Balter, 1972, p. 561). The findings showed that the judge in same sex combinations was more empathic than in opposite sex combinations. Also, and in support of Feshbach and Roe (1968), both males and females expressed the same overall degree of empathy. The author concluded that "this study points to the importance of sexual similarity when making empathic judgments as well as the need to consider the sex of the object as well as the sex of the judge when studying empathy" (Olesker & Balter, 1972, p. 562).

The interpretation of Olesker's (1971) results as reflective of the effect of the sex variable on empathy is somewhat limited, however. She limited her sample to students of average intelligence (scoring within one standard deviation of the mean). Her rationale was that emotional
sensitivity is related to intelligence. Other corroborating evidence indicates that this is the case (Davitz, 1964; Rothenberg, 1970; Smith, 1966; Taft, 1955). Thus the number of highly empathic subjects in Olesker's (1971) study may have been limited, and the research biased toward a comparison of persons of relatively lower empathy. This would have excluded possible subjects who, because of their high empathic ability, could possibly have suspended their own belief system and empathized equally with those of the opposite sex as they did with their own sex. This was only conjecture but it was felt to be worth investigating through the present study.

**Studies Indicating No Relationship between Similarity and Counselling**

Few studies indicate that there is no relationship between client-counsellor similarity and various counselling variables. This lends some support to the conclusion that similarity and counselling variables are positively related as outlined in the previous section. However, there are exceptions.

Ewing (1974), using a counsellor evaluation form filled out by clients after an initial interview, found that racial similarity of clients and counsellors was not an important factor in the effectiveness of counselling. In connection with other traits, Taft (1955), in a review of the factors related to the ability to judge behavioural characteristics in people, stated that there was a fairly consistent lack of correlation between empathy and age (in adults), training in psychology, and sex.

Studies which utilize sex as the similarity variable and which indicate no relationship with counselling variables are numerous. Mendelsohn and Geller (1963), whose study was mentioned in the previous section, also investigated the sex matching of counsellor and client and the length of counselling. The results were not significant, and they concluded that
sex matching has little or no effect on the duration of counselling. This is in direct contradiction to the findings of Heilburn (1961) and Mendelsohn and Celler (1967), both discussed in the previous section. Similarly, Scher (1975) reported that the sex of the counsellor and the sex of the client did not contribute to success in counselling.

Valentine (1927), in a series of experiments, had men and women judge the character qualities and intelligence of children and youths after a few minutes of general conversation. The sex of the children was not systematically controlled, however. The only conclusion drawn from the results was that men and women do not differ in their ability to judge the characters of children and youths.

Rothenberg (1970), using children as subjects, investigated the relationship between the sex of the child, sex of the actor in a tape recording, and the social sensitivity score. Social sensitivity is the ability to accurately perceive and comprehend the behaviour, feelings, and motives of other individuals. The results showed no difference in social sensitivity scores between the boys and girls. Furthermore, when the frequencies of the levels of responses were evaluated by sex, no significant differences were found in the comparison.

The Rothenberg (1970) study was one of 31 studies reviewed by Maccoby and Jacklin (1974). They asked, "What of the stereotype that girls are more sensitive to the nuances of interpersonal relationships--more 'tuned in' to what other people are thinking and feeling--than boys?" (p. 211). Their conclusion was that the two sexes are "equally" empathic, although the measures used have been "narrow" (p. 349).

Using Carkhuff's (1969) Index of Communication which rates empathic responses, Taylor (1972) explored the effects of client sex upon the level of empathic understanding expressed by male and female helpers. Taylor
(1972) concluded from the results that:

... sex is not a critical variable in determining the initial level of empathic understanding expressed by counsellors. There is, therefore, no evidence to support the assumption that sex matching or cross-sex matching of counsellor and client will result in a higher level of functioning on the part of the counsellor. (p. 51)

However, significant results were found for the male counsellor-male client match-up. This interaction resulted in lower levels of empathy than the other interactions. The author felt that this might have been due to a role-expectancy factor. These results ostensibly contradict the results found by Hill (1975), discussed in the previous section. Both investigators used the same instrument on similar populations, graduate level counselling students.

Studies Indicating a Complex Relationship between Similarity and Counselling

Few conclusions can be drawn from the many studies cited above. It appears as if similarity may be a significant factor in the counselling process. It is much more difficult, however, to speculate on the significance of the sex variable in interaction with empathy. Findings in this area are highly inconclusive and worthy of further investigation.

A few studies have shown that the interaction between similarity and counselling process variables is neither simply one of a positive relationship nor of no relationship. Grantham (1973), in a study investigating the effects of counsellor race on black students in initial interviews, found that the race of the counsellor was a significant factor in determining the depth of client self-exploration. Utilizing Carkhuff's (1969) Depth of Self-Exploration Scale, Grantham (1973) found that the results reversed the positive correlation reported in the literature for the interaction between self-exploration and the level of counsellor functioning. The study found
that low functioning white counsellors elicited a high level of self-exploration with black clients, while high functioning black counsellors elicited a lower level of self-exploration with black clients. The author felt that this may have been caused by a need for black counsellors to establish an identity with black clients rather than moving directly to the exploration of personally relevant material.

With respect to the sex variable, Brooks (1974) found that opposite sex dyads elicited more self-disclosure than same sex dyads and a female-female dyad resulted in more self-disclosure than a male-male dyad.

Cartwright and Lerner (1963) investigated the counsellor's empathic ability as it related to sex matching. Using 28 patients and 16 client-centered therapists, the authors measured empathy by the degree of discrepancy between the patient's self-descriptions and the therapist's attempt to predict the patient's self-description. Initially, the therapists obtained higher scores with patients of the opposite sex. This difference did not hold by the end of therapy. The authors concluded that:

... perhaps therapists at the beginning of their contacts with patients of the same sex err in understanding by assuming that they are more like themselves than is warranted. This assumption of similarity would be less likely to occur with patients of the opposite sex, leaving the therapist freer from a projective set and more open to discovering how it is that the patient views himself (p. 112).  

Cartwright and Lerner's (1963) conclusion was very similar to the conditions set by Carkhuff and Berensen (1967) and Allport (1937) for a high level of empathy.

Credence for the possibility of high empathic persons overcoming the limitations of role and being able to accurately empathize with others dissimilar to themselves was found in the literature review in Truax and Carkhuff (1967, pp. 165-167). These studies dealt with the matching of
probation officers to juvenile delinquents. Truax and Carkhuff (1967) generalized from the results and stated that "it would seem likely that matching of patient and therapist types plays a critical role in cases where the therapist is quite restricted in his ability to show understanding, warmth and genuineness to all but a narrow range of human beings" (pp. 166-167).

In closing, Olesker (1971), as mentioned earlier, found that same sex combinations resulted in greater empathy than opposite sex combinations. However, she also reported that "23% of the sample still showed more empathy with 'other sex' individuals so that being of the same sex does not always result in increased empathy" (p. 102).

Summary

The intention of this study was to clarify the relationship between sex similarity and empathy. This relationship is particularly relevant to the field of counselling, to the issue of client-counsellor matching according to sex, and to the need for effective counselling.

In this chapter, the findings of several research studies have been discussed. A survey of these findings has indicated no clear, consistent picture of the relationship between counselling and client-counsellor similarity, and more specifically, between empathy and the sex of counsellors and clients. While it appears that similarity may be a significant factor in the counselling process, it is more difficult to draw any conclusions as to the significance of sex similarity in interaction with empathy. Most studies (Feshbach & Roe, 1968; Olesker, 1971; Rothenberg, 1970; Taylor, 1972) indicated no difference in empathic ability between males and females. Those studies that dealt directly with the relationship of sex similarity to empathy, however, were clearly divided. Daane and Schmidt (1957), Feshbach and Roe (1968), Hill (1975), and Olesker (1971) all indicated that sex similarity is a significant factor in
empathy. Maccoby and Jacklin (1974), in their review of 31 studies, and Taylor (1972) both indicated that sex similarity was not a significant factor in empathy. The findings of Cartwright and Lerner (1963), however, and the comments by Truax and Carkhuff (1967) indicated that the relationship between similarity and empathy may be more complex than indicated by other researchers.

Several problems with the past research were discussed. These included the lack of a clear and consistently used definition of empathy and the wide variation in empathy measuring instruments and test administration. Also, the inadequate degree of research focus on and lack of control for the sex variable often made findings concerning the sex variable only incidental to a larger study.

In reflecting upon these issues and problems, this study was designed with the relationship between empathy and client-counsellor sex similarity as the central focus. Provision was made for possible complexity within this relationship by comparing high, medium, and low empathizers. To avoid problems of past research, empathy was clearly defined, and standard empathy measuring instruments were used. Both definition and instruments were consistent with recent theory and research. This study also followed the suggestion by Luchins (1957) that the empathizers, objects of empathy, and the condition under which the behaviour exists be systematically varied. Thus, the study was designed so that males empathized with males, females empathized with males, males empathized with females, and females empathized with females. Empathy was measured by testing groups of subjects who were to judge the feelings of several videotaped clients who presented a variety of personal issues and feelings. The design, procedure, and sample, as well as a discussion on the empathy measuring instruments used in this study are presented in the following chapter.
Chapter 3

METHOD

It was proposed that the relationship between empathy, and the sex similarity of counsellors and clients be investigated. The method of this investigation is discussed in this chapter and includes the sample, procedure, instruments, design, and statistical analysis.

Sample

The sample consisted of 96 full-time winter and summer session university students who were enrolled in bachelor or master's degree programs at the University of British Columbia. Undergraduate students in education, graduate students in counselling psychology, and volunteers at a student crisis and information centre were the subjects of the study. There were 48 male and 48 female subjects, their ages ranging from 17 to 49 years, with a mean of 25.7 years. All subjects were Caucasian.

Permission from class instructors and the crisis and information centre co-ordinator was obtained to recruit participants for the study. All potential subjects signed an Agreement of Participation form. Participation was voluntary and without remuneration.

Procedure

The total time to administer both the Discrimination Empathy Test and the Affective Sensitivity Scale was approximately 90 minutes. Since this was prohibitive within the confines of normal class time (one hour), the testing was carried out over two sessions for the subjects.

The first session involved writing the Discrimination Empathy Test. Three hundred and twenty-five students volunteered to participate.
Following some introductory remarks, the investigator distributed the test booklet and an answer card along with the Masters Thesis Research Project and Agreement of Participation form (see Appendix A), which briefly outlined the project and procedure that would be followed. Any queries were answered by the investigator. All subjects agreeing to participate then signed the form. The investigator then asked all subjects to write their name, age, sex, class number and telephone number on the answer card. This was to provide information necessary for follow-up. Finally, the investigator read aloud the instructions to the Discrimination Empathy Test. Testing lasted approximately 20 to 25 minutes. Test booklets and answer cards were collected when the subjects had finished. Subjects were thanked for their time and effort and were informed that they would be contacted by the investigator to arrange a time for a second session.

Subjects were contacted by phone. Of the original 325 subjects, 109 were available and agreed to participate in the second session. In order to control the effects of racial differences, 30 of the 325 were eliminated by the investigator because they were not Caucasians and were not included in the 109. Various reasons, including lack of time and unwillingness to continue, were given by the other subjects who did not continue. Times were arranged for the second sessions and testing took place in small groups of up to six subjects in small video equipped rooms of the Education Clinic.

The Affective Sensitivity Scale was administered in the second session. The test booklets and answer cards were distributed to the subjects. The subjects read the instructions and the investigator answered all questions. The testing procedure had to be made very clear to the subjects, since the test utilized a video-tape as the stimulus, and the tape could not be stopped once begun. The test lasted one hour. Subjects were asked to write any
comments that they had about the test and to leave them with the investigator. They were again thanked for their participation.

Following the testing procedure the answer cards were coded, according to sex of subject, and scored by computer. Discrimination Empathy Scale scores were used to assign subjects to groups. Six groups of 16 subjects each were created. They distinguished high, medium and low empathic ability for male and for female subjects. Assignment to the groups was based upon counting 16 subjects from the two extreme scores and assigning these to the high and low empathy groups. The medium empathy group consisted of those 16 subjects whose scores were not represented within the other two groups. The 13 subjects not included within the six groups had scores that were the same as those already included in the groups. They were randomly eliminated from the final sample to give groups of equal proportion.

Instruments

Discrimination Empathy Test. The Discrimination Empathy Test was the basis for assigning subjects to groups. It was an adaptation of "A Description of Helper Responses to Helper Expressions: An index of discrimination," a standardized test developed by Robert R. Carkhuff (1969, pp. 114-123). Carkhuff's test was a refinement of the Truax Accurate Empathy Scale (Truax & Carkhuff, 1967), which was based on the work of Carl Rogers.

The instrument consisted of 14 problem stimulus expressions, that is, statements expressing a specific problem as stated by a helpee. These expressions covered social-interpersonal, educational-vocational, child-rearing, sexual-marital, and confrontation content areas, and depression-distress, anger-hostility, and elation-excitement emotional areas.

The problem stimulus expressions were presented to the subjects as a written test, and each one was followed by four brief helper or counsellor
responses in multiple choice form. These responses were developed by Carkhuff (1969) to cover a representative sampling of the range of potential helper responses. The four responses ranged from a demonstration of "little" discriminative empathy to a demonstration of a "high" degree of discriminative empathy.

The instrument was altered so that each problem stimulus expression and its four responses could be interpreted as representing either a male or a female client or counsellor. The pronouns "he" and "she" were changed to "he/she" and reference to sex-typed behaviors or activities were changed by adding a behavior or activity more representative of the sex not represented in the original Index of Discrimination (Carkhuff, 1969). For example, the original pronouns "she" and "her" in Carkhuff's (1969) "Excerpt 1" were changed to "she/he" and "her/him" as follows:

I don't know if I am right or wrong feeling the way I do. But I find myself withdrawing from people. I don't seem to socialize and play their stupid little games any more. I get upset and come home depressed and have headaches. It all seems so superficial. There was a time when I used to get along with everybody. Everybody said, "Isn't [she/he] wonderful. [She/he] gets along with everybody. Everybody likes [her/him]." I used to think that was something to be really proud of, but that was who I was at that time. I had no depth. I was what the crowd wanted me to be--the particular group I was with. (p. 115)

In this way all references to gender in the original Carkhuff form were removed or altered. Also, two items that were found to be unalterable were eliminated from the instrument. These changes were made in an attempt to remove any sex bias from the test, thus allowing the observer-counsellor the opportunity to empathize with the problem stimulus expressions without reference to or influence from the sex of the helpee.

The answering procedure was also altered from the original rating of responses. The Discrimination Empathy Test simply had the subjects select what they felt was the "best" response to the problem stimulus expression. The rationale for this procedure was the desire for the subjects to answer both tests, the Discrimination Empathy Test and the Affective Empathy Scale, in a similar
fashion. Also, according to Wedek (1977), "the empathy literature indicated that an empathy measure that involved ... a response of multiple choice type rather than rating or ranking called into effect a direct rather than inferential reasoning type of response" (p. 133).

The total score for the test consisted of the total number of correct answers out of a possible 14. A scoring key is presented for the test in Carkhuff (1969, pp. 124-125).

Carkhuff's (1969) Index of Discrimination has proved a popular instrument. It has been used for research, for measurement of counsellor effectiveness, and for evaluation of students in counsellor training programs. For Carkhuff's (1969) Index of Communication, a communicated empathy measuring test related to the Index of Discrimination, factor analyses of the data from the 16 responses indicated:

... a principle factor accounting for approximately two-thirds of the variability in the indexes. Since all variables load significantly on the factor, the direct suggestion is that all of the tests are essentially measuring the same variable 16 times. This is true independent of both affect and content and independent of experience level. This is not true independent of the level of functioning of helpers. (Carkhuff, 1969, pp. 102-103)

Carkhuff (1969, p. 104) further reported that the levels of communication established by the test for various populations including outpatients, college students, lay personnel, and professional helpers were comparable with scores obtained from similar population groups who responded to standard interviews (in Carkhuff & Berenson, 1967, Table 1, p. 9). This data "establishes not only the construct validity of the instruments employed but also the stability of the findings" (Carkhuff, 1969, p. 104).

Truax and Carkhuff (1967, Chapter 3) have summarized the validity of the Truax Accurate Empathy Scale to show a strong relationship between the scale, and process and outcome variables. Kurtz and Grummon (1973) also indicated significant positive correlations between the Carkhuff (1969) communication
rating scale and two outcome measures, client self-exploration (r = .47) and the total positive Tennessee Self Concept Scale (r = .42).

Evidence of reliability of the Accurate Empathy Scales was readily available and was presented in Truax and Carkhuff (1967, Table 1, p. 45). Correlations for 28 studies involving a variety of therapist and patient populations were presented. Pearson product moment correlations (r) ranged from .43 to .79 while Ebel interclass reliabilities for pooled data used in the analysis of findings provided coefficients ranging from .50 to .95.

Affective Sensitivity Scale. The Affective Sensitivity Scale, an empathy measuring instrument consisting of a video-tape and an accompanying multiple-choice test, was developed in 1967 by Robert J. Campbell. It was designed to test a subject's ability to identify the emotions of another.

The video-tape served as the stimulus to the subject answering the test. It consisted of 41 short excerpts or vignettes from film and video-tape scenes of actual counselling sessions (Kagan, Krathwohl, Goldberg, Campbell, Schauble, Greenberg, Danish, Resnikoff, Bowes, and Bondy, 1967, p. 137). Eleven different video-taped clients and ten different video-taped counsellors were utilized with the number of scenes per client ranging from two to six. Four of the video-taped clients were male and seven were female. Nine of these clients were high school students, and the other two were older, married women. Nine of the video-taped counsellors were male, and one was female.

The scenes ranged along a continuum of emotional obviousness from subtle to blatant. They also varied in emotional depth and in the nature of the problem that the video-taped client was experiencing. These problems included interpersonal conflicts, social maturity, and educational planning as well as problems of a more serious nature (Kagan, et al., 1967, p. 137). With the use of three expert judges, Olesker (1971, pp. 62-63) had the degree of emotional obviousness rated. The means of male and female video-taped clients were not
significantly different. Thus the possibility of bias from different degrees of emotional obviousness was controlled.

The written test consisted of 67 multiple-choice items that represented the possible feelings of the video-taped clients. One choice represented the true underlying feelings of the client; the other two were distractors. The subject observing the video-tape selected the response which he felt accurately reflected the feelings of the video-taped client.

The total score for the test consisted of the total number of correct answers. A scoring key was available for the test.

For statistical purposes of this study the Affective Sensitivity Scale was used as male and female video-taped client subtests as well as in its original form, as a combination of the two subtests. To equalize the scoring of the subtests, since there were 46 female and 21 male items, a weight factor of .456522 was applied to the scores on the female video-taped client subtest. The total possible score, reflecting the presence of the weight factor, was 42 (21 male plus 21 female).

The instrument was standardized with both reliability and validity data provided. Reliability, using the Kuder-Richardson Formula 20 (K-R20), ranged from .53 to .73 with most coefficients in the .70's (Kagan, et al., 1967), p. 35). A K-R20 reliability coefficient using 232 subjects was .74 (Kagan, et al., 1967, p. 175). Using 26 undergraduate students a test-retest reliability coefficient was calculated. The Pearson product moment correlation (r) between the two sets of scores was calculated at .75 (Kagan, et al., 1967, p. 175).

The validity was investigated by a number of studies. Concurrent validity was obtained by Spearman rank correlation coefficients (rho's) between test scores and therapist rankings of group members' sensitivity to feelings. Rho's of .35, .59, and .64 (significant at .01 level when added
together and averaged) were obtained for a group of doctoral practicum students from test scores and rankings by their supervisors on counsellor effectiveness (Kagan, et al., 1967, p. 178). A predictive validity study between test scores on an earlier version (form A) of the Affective Sensitivity Scale and later peer ratings of counsellor effectiveness resulted in an $r$ of .49 (significant at .01 level) (Kagan, et al., 1967, p. 179). Construct validity was indicated through an increase in affective sensitivity over a six month training period for two groups. The increase for both groups was significant, one at the .025 level and the other at the .005 level (Kagan, et al., 1967, p. 186). Content validity was indicated by the procedures used in developing the test, along with the results of various item analyses and other internal analysis data (Kagan, et al., 1967, p. 189).

**Rationale for Instrument Selection.** The very nature of the multidimensionality of empathy made selection of instruments difficult. It was important that the instruments should be valid, reliable, and efficient. This was even more crucial when two different instruments were needed to measure the same construct, empathy. Selection of the two instruments used, the Discrimination Empathy Test and the Affective Sensitivity Scale, kept the above in mind. Validity and reliability have been discussed above, while a discussion of the rationale for using these two instruments follows.

The validity of this investigation required that the two instruments meet certain criteria. Considering the investigation's purpose of investigating the effect of the sex variable on empathy, the first criterion was that the sex variable be strictly controlled. Thus Luchin's (1957) suggestion that the empathizers, objects of empathy, and the conditions under which the behaviour occurs be systematically varied assumed a critical meaning. The instrument needed to have independent male and female objects
of empathy. The Affective Sensitivity Scale met this criterion with its male and female clients who served as objects of empathy.

Since the investigation also sought to determine the effects of the sex variable on empathy of persons at different levels of empathic ability, a second instrument was needed. The purpose of the second test was, however, to determine solely the level of empathic ability divorced from any influence of a sex variable. Therefore the Discrimination Empathy Test was used. The objects of empathy, the stimulus expression statements, were phrased so that gender could not be recognized.

Finally, the investigator thought that the nature of answering the test should be similar. Both tests conformed to a style that involved presentation of a stimulus and selection of the appropriate answer from a set of alternatives. This was deemed important, since the medium of stimulus presentation differed for each instrument. The Affective Sensitivity Scale was audio-visual, using a video-tape of real counselling situations, while the Discrimination Empathy Test used the written word to convey the person's problem.

However, some precedence for mixing two seemingly different instruments had been established. Carkhuff (1969) discussed the research of Antonuzzo and Kratochvil who found a close relationship between "(1) the verbal or recorded presentation of the helpee stimulus expression statements and the written responses of subjects and (2) the written presentation of the helpee stimulus expression statements and the written responses of subjects" (p. 108). When commenting on their study, Carkhuff (1969, p. 131) stated that, while the written form was useful for obtaining a quick and reasonable indication of the level of discrimination by a large number of individuals, his bias was in favour of functional indexes approximating
real-life experiences and that he therefore preferred the audio form wherever possible. The use of the Affective Sensitivity Scale video-tape, which contained many of the non-verbal cues found in real life, was thought by the investigator to be even more superior than audio.

The final criterion was that the two instruments be sensitive to and test the same variable, that is, discrimination empathy. It was felt that empirical evidence could substantiate this similarity. This proved to be difficult, however, since no correlation between the Affective Sensitivity Scale and the Index of Discrimination was found in a search of the literature.

Evidence from some related studies was available, however. Kurtz and Grummon (1972), in a comprehensive study of the correlations between various measures of empathy and various outcome measures reported a non-significant correlation of .05 between the Affective Sensitivity Scale and Carkhuff's (1969) Index of Communication, a tape-rating scale of communication empathy. Resnikoff (1972) had more positive results when he correlated the Affective Sensitivity Scale with Truax's scales of Facilitative Interpersonal Functioning (Truax & Carkhuff, 1967), an instrument from which Carkhuff's scale was a refinement. Resnikoff (1972) reported a non-significant correlation of .36 between the Affective Sensitivity Scale and the Accurate Empathy Test. He also reported a significant .70 correlation between the Affective Sensitivity Scale and the genuineness scale and stated that the high correlation "indicates the ability of an individual to detect an 'honest' response on the part of a counsellor and to offer that type of response himself" (Resnikoff, 1972, p. 465).

While the above results were not an encouraging indication of a strong relationship between the Affective Sensitivity Scale and Carkhuff's empathy
scale, it was noted that the Affective Sensitivity Scale measured only the more restrictive discriminative empathy, while the Carkhuff scale assessed the level of communication, a much broader conceptualization of empathy. As reported in Appendix C, this investigation tested for significant correlation between the Affective Sensitivity Scale and the Discrimination Empathy Test.

**Design**

A 2 x 3 x 2 Three-factor Experiment with Repeated Measures (Case II) design (Winer, 1962, p. 337-344) was utilized. Only the last factor was repeated. Factor 'A' denotes the sex of the observer-counsellor, factor 'B' denotes their level of empathic ability, and factor 'C' denotes the sex of the video-taped client. The level of empathic ability, factor 'B', was determined by the score attained on the Discrimination Empathy Test and divided into three independent groups as described in the procedure. These three factors comprised the independent variables of the study.

The dependent variable was the empathy score attained on the Affective Sensitivity Scale. Three scores were obtained: one for male video-taped clients, one for female video-taped clients, and a total which included both male and female video-taped clients.

There were a great number of possible extraneous variables. These included race, intelligence, age, social class, family background, personality, values, and marital status. Research (Bryson & Cody, 1973) indicated a possibility of race biasing the results. Thus race was controlled through limiting the sample to one race (Caucasian). All other variables were not controlled. There was no reason to believe that the results would be biased by not controlling these extraneous variables. Also, all subjects were university student volunteers. Thirteen students were randomly eliminated from the final sample by computer random number generation. This was not expected to bias the results.
Statistical Analysis

The data was analyzed by a BMDP2V—Analysis of Variance and Covariance Including Repeated Measures (U.C.L.A., 1977) program. The purpose was to determine the relationship between sex of the observer-counsellor, level of empathy, and sex of the video-taped client. Seven null hypotheses were advanced. The \( F \) Ratio was employed to determine whether or not to reject each hypothesis. The level of significance was set at \( .05 \). Most related studies relied on \( .05 \) as an acceptable level of significance.

Hypotheses one, two, and three were tested by comparing the means and testing for significant differences within each of the three main factors:

1. Factor A: There is no statistically significant difference between the mean scores of male and female observer-counsellors as measured by the Affective Sensitivity Scale.

2. Factor B: There is no statistically significant difference between the mean scores of high, medium, and low empathic observer-counsellors as measured by the Affective Sensitivity Scale.

3. Factor C: There is no statistically significant difference between the mean scores assigned to male and female video-taped clients by observer-counsellors as measured by the Affective Sensitivity Scale.

The remaining hypotheses were tested through analysis of the interaction as follows:

4. Interaction A x B: There is no statistically significant interaction between the sex of the observer-counsellors and the empathic level of the observer-counsellors as measured by the Affective Sensitivity Scale.

5. Interaction A x C: There is no statistically significant interaction between the sex of the observer-counsellors and the sex of the video-taped clients as measured by the Affective Sensitivity Scale.
6. Interaction B x C: There is no statistically significant interaction between the empathic level of the observer-counsellors and the sex of the video-taped clients as measured by the Affective Sensitivity Scale.

7. Interaction A x B x C: There is no statistically significant interaction among the sex of the observer-counsellors, the empathic level of the observer-counsellors, and the sex of the video-taped clients as measured by the Affective Sensitivity Scale.

A variety of other statistical procedures were also executed on the results from the Discrimination Empathy Test and the Affective Sensitivity Scale. The Affective Sensitivity Scale was treated as two subtests, one comprised of only male clients, and one comprised of only female clients, as well as a total test, combining the two subtests. For each of the tests and the subtests, the mean, the standard deviation, the range of scores, and the standard error of measurement (SEM) were calculated. Internal consistency reliability was also computed using the Hoyt estimate of reliability. Finally, correlations were calculated between the Discrimination Empathy Test and the total test and each of the subtests of the Affective Sensitivity Scale, and also between the Affective Sensitivity Scale total test and subtests, and between the subtests. A summary of test statistics is reported in Appendixes B and C.

Summary

In summary, 96 male and female students, divided into three levels of empathic ability, empathized with male and female video-taped clients. The degree of empathy was measured using the Affective Sensitivity Scale. A three-way analysis of variance was used to investigate the relationship between the sex of the counsellor-observer, the level of empathy, and the sex of the video-client. The reliability of the instruments used and correlations among the data sets were also calculated.
Chapter 4

RESULTS

Hypotheses were advanced to determine the relationship between the sex of the observer-counsellors, empathic ability of the observer-counsellors, and the sex of the video-taped clients. A $2 \times 3 \times 2$ Three-factor Experiment with Repeated Measures (Case III) design (Winer, 1962, pp. 337-344) was utilized. The dependent variable was measured by the empathy score attained on the Affective Sensitivity Scale. The statistical analysis was performed using BMDP2V - Analysis of Variance and Covariance Including Repeated Measures (U.C.L.A., 1977). Factor "C", sex of the video-taped clients, was repeated. To test the seven null hypotheses, an analysis of the three main effects and the four interactions was done. The level of statistical significance was set at .05. The summary of this analysis is presented in Table 1.

Hypothesis 1 (Factor A)

It was hypothesized that there is no statistically significant difference between the mean scores of male and female observer-counsellors as measured by the Affective Sensitivity Scale. An analysis of the results from Table 1 indicated an $F$ Ratio of 6.78 (1, 90), significant beyond the .05 level. Hypothesis one was, therefore, rejected. Female observer-counsellors responded with greater empathy to the feelings of the video-taped clients than did the male observer-counsellors. The means and standard deviations of empathy scores for male and female observer-counsellors are reported in Appendix D.
Table 1

Analysis of Variance of Sex of Observer-counsellors, Level of Empathic Ability, and Sex of Video-taped Clients

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of observer-counsellors (A)</td>
<td>57.6392</td>
<td>1</td>
<td>57.6392</td>
<td>6.78*</td>
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<tr>
<td>Level of empathic ability (B)</td>
<td>28.0515</td>
<td>2</td>
<td>14.0258</td>
<td>1.65</td>
</tr>
<tr>
<td>A x B</td>
<td>7.8816</td>
<td>2</td>
<td>3.9408</td>
<td>.46</td>
</tr>
<tr>
<td>Error</td>
<td>764.6540</td>
<td>90</td>
<td>8.4962</td>
<td></td>
</tr>
<tr>
<td>Sex of video-taped clients (C)</td>
<td>254.2173</td>
<td>1</td>
<td>254.2173</td>
<td>66.14*</td>
</tr>
<tr>
<td>A x C</td>
<td>1.5388</td>
<td>1</td>
<td>1.5388</td>
<td>.40</td>
</tr>
<tr>
<td>B x C</td>
<td>10.1985</td>
<td>2</td>
<td>5.09924</td>
<td>1.33</td>
</tr>
<tr>
<td>A x B x C</td>
<td>5.8025</td>
<td>2</td>
<td>2.9012</td>
<td>.75</td>
</tr>
<tr>
<td>Error</td>
<td>345.9233</td>
<td>90</td>
<td>3.8436</td>
<td></td>
</tr>
</tbody>
</table>

* P < .05

Hypothesis 2 (Factor B)

It was hypothesized that there is no statistically significant difference between the mean scores of high, medium, and low empathic observer-counsellors as measured by the Affective Sensitivity Scale. The F Ratio from Table 1 of 1.65 (2, 90) was not significant beyond the .05 level. The results, therefore, failed to reject hypothesis two. Observer-counsellors of high, medium, and low levels of empathic ability as designated by their performance on the Discrimination Empathy Test did not retain the same level of empathic ability when re-tested by the Affective Sensitivity Scale. The
three "level of empathic ability" groups were not significantly different in their levels of empathy in response to the video-taped clients. The means and standard deviations of empathy scores for observer-counsellors of high, medium, and low empathic ability are reported in Appendix E.

Hypothesis 3 (Factor C)

It was hypothesized that there is no statistically significant difference between the mean scores assigned to male and female video-taped clients by observer-counsellors as measured by the Affective Sensitivity Scale. An analysis of the results from Table 1 showed an F Ratio of 66.14 (1, 90), significant at the .05 level. Hypothesis three was, therefore, rejected. The observer-counsellors, both male and female together, responded with greater empathy to the feelings of the male video-taped clients than to the feelings of the female video-taped clients. The means and standard deviations of empathy scored by observer-counsellors for male and female video-taped clients are reported in Appendix F.

Hypothesis 4 (A x B)

It was hypothesized that there is no statistically significant interaction between the sex of the observer-counsellors and the empathic level of the observer-counsellors as measured by the Affective Sensitivity Scale. The F Ratio from Table 1 of .46 (2, 90) was not significant beyond the .05 level. The results, therefore, failed to reject hypothesis four. There was no significant variation in the relationship of the sex of observer-counsellors to empathy at each level of the observer-counsellors' empathic ability. Male and female observer-counsellors differed significantly in empathy towards the feelings of the video-taped clients regardless of the level of their empathic ability. Female observer-counsellors were more sensitive to affect at each level of their empathic ability than were the males. The means and standard deviations for the groups are reported in Table 2.
Table 2

Means and Standard Deviations of Male and Female Observer-counsellors at High, Medium, and Low Empathic Ability

<table>
<thead>
<tr>
<th>Sex of observer-counsellors</th>
<th>Empathic ability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>23.79</td>
</tr>
<tr>
<td>SD</td>
<td>3.14</td>
</tr>
<tr>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>24.84</td>
</tr>
<tr>
<td>SD</td>
<td>4.21</td>
</tr>
</tbody>
</table>

Note: Maximum score = 42

For each sex

Hypothesis 5 (A x G)

It was hypothesized that there is no statistically significant interaction between the sex of the observer-counsellors and the sex of the videotaped clients as measured by the Affective Sensitivity Scale. The F Ratio from Table 1 of .40 (1, 90) was not significant beyond the .05 level. The results, therefore, failed to reject hypothesis five. There was no significant variation in the relationship of the sex of the observer-counsellors to the degree of empathy towards either sex of the video-taped clients. Conversely, male and female video-taped clients differed significantly in the degree of empathy scored for them by the observer-counsellors, regardless of the observer-counsellors' sex. The means and standard deviations for these groups are reported in Table 3.
Table 3

Means and Standard Deviations of Male and Female Observer-counsellors with Male and Female Video-taped Clients

<table>
<thead>
<tr>
<th>Sex of observer-counsellors</th>
<th>Sex of video-taped clients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>12.33</td>
</tr>
<tr>
<td>SD</td>
<td>2.61</td>
</tr>
<tr>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>13.25</td>
</tr>
<tr>
<td>SD</td>
<td>3.08</td>
</tr>
</tbody>
</table>

Note: Maximum score for each sex of video-taped clients = 21.

Hypothesis 6 (B x C)

It was hypothesized that there is no statistically significant interaction between the empathic level of the observer-counsellors and the sex of the video-taped clients as measured by the Affective Sensitivity Scale. The $F$ Ratio from Table 1 of 1.33 (2, 90) was not significant beyond the .05 level. The results, therefore, failed to reject hypothesis six. There was no significant variation in the relationship of the sex of the video-taped clients to the degree of empathy scored for them by observer-counsellors of each level of empathic ability. Male and female video-taped clients were responded to with significantly different degrees of empathy regardless of the observer-counsellors' level of empathic ability. Male videotaped clients received the higher empathy scores at each level. The means and standard deviations for these groups are reported in Table 4.
Table 4

Means and Standard Deviations of Observer-counsellors of High, Medium, and Low Empathic Ability with Male and Female Video-taped Clients

<table>
<thead>
<tr>
<th>Empathic ability of observer-counsellors</th>
<th>Sex of video-taped clients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>High</td>
<td>13.19</td>
</tr>
<tr>
<td>M</td>
<td>11.13</td>
</tr>
<tr>
<td>SD</td>
<td>2.33</td>
</tr>
<tr>
<td>SD</td>
<td>1.96</td>
</tr>
<tr>
<td>Medium</td>
<td>12.47</td>
</tr>
<tr>
<td>M</td>
<td>10.57</td>
</tr>
<tr>
<td>SD</td>
<td>2.38</td>
</tr>
<tr>
<td>Low</td>
<td>12.72</td>
</tr>
<tr>
<td>M</td>
<td>9.77</td>
</tr>
<tr>
<td>SD</td>
<td>3.38</td>
</tr>
<tr>
<td>SD</td>
<td>1.87</td>
</tr>
</tbody>
</table>

Note: Maximum score for each sex of video-taped clients = 21

a n = 32 for each level of empathic ability

Hypothesis 7 (A x B x C)

Finally, it was hypothesized that there is no statistically significant interaction between the sex of the observer-counsellors, the empathic level of the observer-counsellors, and the sex of the video-taped clients as measured by the Affective Sensitivity Scale. As with the interactions of hypotheses four, five, and six, the F Ratio of .75 (2, 90) was not significant at the .05 level. There was no significant variation in the relationship of the sex of the observer-counsellors to the empathy scored for
either sex of video-taped clients at each level of observer-counsellors' empathic ability. Again, female observer-counsellors were more sensitive to the feelings of the video-taped clients, and the male video-taped clients received higher empathy scores, regardless of the level of empathic ability of the observer-counsellors. The means and standard deviations for all these groups are reported in Table 5.

Table 5
Means and Standard Deviations of Male and Female Observer-counsellors of High, Medium, and Low Empathic Ability with Male and Female Video-taped Clients

<table>
<thead>
<tr>
<th>Empathic ability of observer-counsellors</th>
<th>Sex of video-taped clients</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male observer-counsellors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>13.06</td>
<td>10.73</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>2.14</td>
<td>1.90</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>12.06</td>
<td>9.61</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>2.20</td>
<td>2.58</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>11.88</td>
<td>9.21</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>3.32</td>
<td>1.69</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female observer-counsellors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>13.31</td>
<td>11.53</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>2.58</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>12.88</td>
<td>11.53</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>3.14</td>
<td>1.77</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>13.56</td>
<td>10.33</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>3.33</td>
<td>1.93</td>
<td></td>
</tr>
</tbody>
</table>

Note: Maximum score for each sex of video-taped clients = 21

\( n = 16 \) for each level of empathic ability
Summary

To summarize, null hypotheses one and three were rejected by the results of the three-way repeated measures analysis of variance. The empathy score on the Affective Sensitivity Scale served as the dependent variable. The findings of hypothesis one, testing a main effect, were that female observer-counsellors were significantly more empathic than male observer-counsellors. The findings of hypothesis three, also testing a main effect, were that observer-counsellors of both sexes were significantly more empathic with male than female video-taped clients.

The results failed to reject hypotheses two, four, five, six, and seven. The findings of hypothesis two, testing the third main effect, were that there was no significant difference between the mean scores of high, medium, and low level empathic ability groups. The groups were designated by their performance on the Discrimination Empathy Test.

The findings of hypothesis four were that there was no significant interaction between the sex of the observer-counsellors and the empathic level of the observer-counsellors. The findings of hypothesis five were that there was no significant interaction between the sex of the observer-counsellors and the sex of the video-taped clients. The findings of hypothesis six were that there was no significant interaction between the empathic level of the observer-counsellors and the sex of the video-taped clients. Finally, the findings of hypothesis seven were that there was no significant interaction between the sex of the observer-counsellors, the empathic level of the observer-counsellors, and the sex of the video-taped clients.

The significance and interpretation of these results is discussed in the following chapter. For a summary of test statistics and correlations between the empathy measuring instruments see Appendixes B and C respectively.
Chapter 5

DISCUSSION

In the previous chapter, the data were analyzed and the seven null hypotheses tested by the results of a three-way factorial analysis of variance. It was intended that the results examine the relationship between the three independent variables: the sex of the observer-counsellors, the empathic ability of the observer-counsellors, and the sex of the video-taped clients. The dependent variable was empathy as measured by the Affective Sensitivity Scale.

The results were unexpected. The findings of hypothesis one conflicted with much of the previous literature. Speculation of possible problems with the instruments and procedure is offered to explain the findings of hypotheses two and three. Analyses of the results of the four interaction hypotheses showed no significant interaction between and among the three independent variables.

Interpretation of the Results

A review of the literature indicated that there would be no difference between the empathic ability of males and females (Feshbach & Roe, 1968; Maccoby & Jacklin, 1974; Olesker, 1971; Rothenberg, 1970; Taylor, 1972; Valentine, 1927). It was hypothesized, in hypothesis one, that there is no statistically significant difference between the mean scores of male and female observer-counsellors as measured by the Affective Sensitivity Scale. Hypothesis one was rejected at a highly significant .01 level of confidence. Male and female observer-counsellors demonstrated significantly different degrees of empathy with the feelings of the video-taped clients. Females were measured as being more empathic than males. It is important to note,
however, that in interpreting this finding the difference that exists was not absolute but rather a matter of proportion and degree. Several, although fewer, male observer-counsellors were as highly empathic with the video-taped clients as were several high scoring female observer-counsellors. The apparent conflict in findings between this and Olesker's (1971) study may have been due to differences between samples used.

Recently, and subsequent to the gathering and analysis of data, two literature reviews (Hall, 1978; Martin, 1977) pertaining to this hypothesis have been published. These reviews re-examined and discussed previous studies concerned with the comparison, by sex, of empathic ability. In support of the results of hypothesis one, these reviews indicated a growing trend in the direction of divergence of empathic ability in favour of females. Hall (1978) stated that the trend was a result of a "combination of more precise measuring instruments and more powerful data analyses" (p. 824). Her study also showed that the divergence was greater for visual-plus-auditory studies than for either visual-alone or auditory-alone stimuli. Also, it was greater for visual stimuli than for auditory stimuli. The Affective Sensitivity Scale falls into the visual-plus-auditory stimuli class.

The second hypothesis tested the strength of the second independent variable, level of empathic ability, and particularly the differentiation of the observer-counsellors into groups of high, medium, and low empathic ability. This test was necessary since the groups were created on the basis of the ranking of scores attained by subjects on the Discrimination Empathy Test while their empathy, as determined by the Affective Sensitivity Scale, served as the dependent variable. Thus, it was absolutely imperative that these two instruments measure the same variable, empathy, and that the
assumption that they were measuring the same variable be statistically verified.

It was hypothesized that there is no statistically significant difference between the mean scores of high, medium, and low empathic observer-counsellors as measured by the Affective Sensitivity Scale. The Affective Sensitivity Scale was, to some degree, able to replicate the division of the observer-counsellors into high, medium, and low empathic ability groups as created from the ranking of subject scores from the Discrimination Empathy Test. The difference between group means was not significant, however, and the null hypothesis was not rejected.

An analysis of the results of this hypothesis naturally leads to speculation as to what happened and to suggestions of further research which will be discussed in the final chapter. Several possible factors, as well as combinations of these factors, may have accounted for the failure to reject hypothesis two.

First, it was important to consider the possibility of statistical regression to the mean having occurred. Assuming that both instruments were measuring the same variable, and noting that the level of empathic ability groups were selected on the basis of their extreme high or low Discrimination Empathy Test scores, it was possible that regression to the mean accounted for the lack of significant difference between groups when re-tested by the Affective Sensitivity Scale. Subjects who scored extremely high or extremely low on the Discrimination Empathy Test could have migrated statistically toward the mean when re-tested on the Affective Sensitivity Scale.

A second possible factor concerned the response style utilized by the instruments. Both instruments relied upon a multiple-choice style of subject
response. The use of this style was based upon Wedek (1947), who felt that the multiple-choice response style was preferable to ranking or rating since it called into effect a direct rather than inferential reasoning type of response. The multiple choice response style, while probably accurate in separating the high empathizers from the rest of the empathizers, however, could have produced less valid indications of true empathic ability at moderate and particularly low levels. To illustrate, subjects of truly moderate ability in empathy may have received very low scores on the Discrimination Empathy Test because they selected mostly the second best responses, all of which would be scored as incorrect.

This problem of instrument response style was further complicated by an unforeseen problem in the Discrimination Empathy Test. The Index of Discrimination (Carkhuff, 1969) upon which the Discrimination Empathy Test was based, utilizes "Action" as well as "Affect" in its ranking of the four alternate responses. Subjects scored highest when they selected a response with both high affect and high action components. The Discrimination Empathy Test used this high affect, high action response as its "correct" empathic response, while the high affect, low action response, although showing the same degree of empathy towards the feelings in the written expression of a helpee's problem, was classified, for scoring purposes, as an "incorrect" response. The other two responses, both low affect, were also classified as "incorrect."

The Affective Sensitivity Scale, on the other hand, measured only significant understanding of video-taped client affect. Observer-counsellors selecting high affect, low action responses on the Discrimination Empathy Test could conceivably have been assigned to medium or low empathic ability groups when, in fact, they were highly sensitive to affect. Thus the extra
action component in the Discrimination Empathy Test probably resulted in persons of high affective empathy being placed in medium or low empathic ability groups. These persons, when tested by the Affective Sensitivity Scale, might have scored highly, as did several observer-counsellors in each group.

Finally, the possibility that the two instruments were measuring two different constructs could not be discounted. The correlation between the two instruments at \( r = 0.24 \) was low, although significant \((p < 0.02, df = 108)\), (see Appendix C). The stimulus information provided by the Affective Sensitivity Scale's video-tape was far more global than the highly restrictive written problem stimulus expressions of the Discrimination Empathy Test. The internal process of discrimination and selection by the subjects may have been completely different for each instrument.

In hypothesis three, it was hypothesized that there is no statistically significant difference between the mean scores assigned to male and female video-taped clients by observer-counsellors as measured by the Affective Sensitivity Scale. This hypothesis, at an extremely significant \((.00)\) level of confidence, was rejected. The observer-counsellors, both males and females together, responded with much greater empathy to the feelings of the male video-taped clients than to the feelings of the female video-taped clients.

These findings, like those of hypothesis one, conflicted with the findings of Olesker (1971), who had also used the Affective Sensitivity Scale. Two facts may have accounted for this conflict—test differences and/or sample differences.

The rejection of hypothesis three, at such a high level of significance, suggested that the Affective Sensitivity Scale used for this investigation
varied considerably from the version used by Olesker (1971). Based on the findings of Olesker (1971) it was assumed that male and female video-taped clients are equal in the mean degree of emotional obviousness. This was based on the judgment of an independent panel who rated the video-taped clients for emotional obviousness. The findings that the observer-counselors were more empathic with male video-taped clients than with female video-taped clients indicated, however, that the male test items were probably less difficult than the female items. Olesker had omitted several female items to balance the number of male items with female items (Olesker & Balter, 1972). Since no test items were omitted for this study, and since the observer-counselors scored higher on male items, it appeared that the female items omitted by Olesker were more difficult than the other test items and that this omission of items was probably the source of the conflict. Also, a low although significant correlation of \( r = .34 \) \((p < .01, df = 108)\) between the male and female video-taped client items indicated that the two subtests were only weakly related.

The second factor, less apparent although still possible, concerned the differences between the sample used in this study and the one used by Olesker (1971). The most obvious and relevant difference between samples was the empathic ability of male compared to female subjects. Olesker's (1971) findings were that there was no significant difference in empathic ability between males and females. The findings of hypothesis one of this study were, however, that females were more empathic than males.

This apparent difference between the findings of the present study and Olesker's (1971) study could be related to the results of hypothesis three. Assuming that male and female video-taped clients were equal in their emotional obviousness, speculation as to how this difference occurred
is offered as follows:

1. Since the objectives of this study were to determine if persons of higher empathic ability were more empathic with both sexes, while persons of lower empathic ability were more empathic with persons of the same sex and it is assumed as so;

2. And since females were more empathic than males as found in this study while there was no significant difference in empathic ability between them as found in Olesker's (1971) study;

3. Then, for this study, females should have been more empathic with male video-taped clients than males with female video-taped clients, and therefore it would be probable that observer-counsellors of both sexes should have been more empathic with male than female video-taped clients, as were the findings of hypothesis three.

4. And for Olesker's (1971) study, then, there should have been no significant difference in empathy between females with male video-taped clients and males with female video-taped clients, as well as between subjects and video-taped clients of the same sex, and therefore it would be probable that for subjects of both sexes there should have been no significant difference in empathy for subjects with male compared to female video-taped clients, as were Olesker's (1971) findings.

Either factor, test differences or sample differences, as speculated above, could have therefore accounted for the findings of hypothesis three. While the former appears more probable, a combination of both factors would have resulted in an enhancement to an extreme of one effect upon the other. The extreme significance of the results indicates that this may have occurred.

The final four null hypotheses tested the interactions of the three
dependent variables: sex of observer-counsellors, level of empathic ability, and sex of video-taped clients. The results failed to reject all four hypotheses. For hypotheses four, six, and seven, it is important to be aware that the results could probably be attributed to the lack of significant differences between the levels of empathic ability as indicated by the findings of hypothesis two.

For hypothesis four, it was hypothesized that there is no statistically significant interaction between the sex of the observer-counsellors and the empathic level of the observer-counsellors as measured by the Affective Sensitivity Scale. An analysis of the results indicated that no significant interaction occurred. Thus for each level of empathic ability—low, medium, and high—the female observer-counsellors were more empathic than the males, and the degree of difference was approximately the same.

For hypothesis five, it was hypothesized that there is no statistically significant interaction between the sex of the observer-counsellors and the sex of the video-taped clients as measured by the Affective Sensitivity Scale. An analysis of the results indicated that no significant interaction occurred. The sex of the video-taped clients had no significant effect on the difference between the empathy scores achieved by male and female observer-counsellors. Male video-taped clients received higher scores than female video-taped clients for either sex of observer-counsellors. Female observer-counsellors scored higher in empathy than male observer counsellors for each sex of the video-taped clients.

It was expected that the results of hypothesis five would clarify the role of sex similarity in empathy. If present, one would have expected similarity to be equally influential with both sexes. An analysis of the results, however, clearly indicated that either similarity was not an
important factor or that if it was a factor, the influence of the results of hypotheses one and especially three was even more important and masked the influence of similarity. As discussed for hypothesis three, if the Affective Sensitivity Scale used in this study was different from the version used by Olesker (1971) and if the test was therefore biased in favour of male video-taped clients, then the results of hypothesis five would have also been biased in favour of male video-taped clients. Such a bias, if strong enough, would have masked a similarity factor for higher empathy.

To elaborate further, it must be noted that the findings of hypothesis one were that female observer-counsellors were more empathic than males, and the findings of hypothesis three were that the observer-counsellors were more empathic with male video-taped clients than females. If, on the basis of these findings, similarity was of greater influence in a test for interaction of the two findings than either or both of the individual results, then an interaction would have occurred. If, however, similarity was not an important factor, then the result would have been the same as the non-interactional findings of hypothesis five. Even if similarity was important, but was less important than the findings of hypotheses one and three, the same results would have occurred. Thus the conclusion may be drawn that the findings of hypotheses one and three were critical factors in producing the findings of hypothesis five. Because the analysis of variance did not indicate the significance of the differences between the means of the various observer-counsellor/video-taped client matchings by sex, it was not possible to estimate the importance of each of the factors: similarity, sex of the observer-counsellors, and sex of the video-taped clients.

For hypothesis six, it was hypothesized that there is no significant interaction between the empathic level of the observer-counsellors and the
sex of the video-taped clients as measured by the Affective Sensitivity Scale. An analysis of the results indicated that no interaction occurred. The sex of the video-taped clients had no effect on the lack of significant difference between the scores achieved by the subjects of each level of empathic ability. Observer-counsellors of low, medium, and high empathic ability were more empathic with male than with female video-taped clients. Therefore the empathic ability of observer-counsellors did not alter the difference in empathy scored for male or female video-taped clients.

Finally, for hypothesis seven, it was hypothesized that there is no significant interaction between the sex of the observer-counsellors, the empathic level of the observer-counsellors, and the sex of the video-taped clients as measured by the Affective Sensitivity Scale. An analysis of the results indicated that no significant interaction occurred. There was no significant variation in the relationship of the sex of the observer-counsellors to the degree of empathy scored for either sex of video-taped clients at each level of observer-counsellors' empathic ability. Again, female observer-counsellors were more empathic towards the feelings of the video-taped clients, and the male video-taped clients received higher empathy scores, regardless of the level of empathic ability of the observer-counsellors.

As will be discussed in the additional analysis that follows, it appears that only the males were more empathically responsive to the feelings of video-taped clients of the same sex. As indicated by an analysis of the results of hypothesis seven, this appeared to be the case for all three levels of empathic ability for male observer-counsellors.

Additional Analyses

The data of hypothesis five directly concerned the major purpose of
In this study, the role of similarity in empathy. Specifically, the question was whether or not similarity, in terms of same sex matches, would result in greater empathy. According to sex, which observer-counsellors would be more empathic with which video-taped clients? What would be the order from highest to lowest of the same sex and opposite sex matches?

In order to answer these questions, the data from hypothesis five, concerning the interaction of the sex of the observer-counsellors and the sex of the video-taped clients, was subjected to a series of post hoc t tests. These tests determined the significance of the differences between the means of the various observer-counsellor/video-taped client matchings according to sex. A summary of these t tests is presented in Table 6.

### Table 6

Results of t Tests for Significance of Differences between Means of Observer-counsellor/Video-taped Client Matchings by Sex

<table>
<thead>
<tr>
<th>Group</th>
<th>Sex of observer-counsellors</th>
<th>Sex of video-taped clients</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Male</td>
<td>13.25</td>
<td>3.08</td>
<td></td>
<td>94</td>
<td>-1.57</td>
</tr>
<tr>
<td>Male</td>
<td>Male</td>
<td>12.33</td>
<td>2.61</td>
<td></td>
<td>94</td>
<td>2.64*</td>
</tr>
<tr>
<td>Female</td>
<td>Female</td>
<td>11.13</td>
<td>1.95</td>
<td></td>
<td>94</td>
<td>-3.05*</td>
</tr>
<tr>
<td>Male</td>
<td>Female</td>
<td>9.85</td>
<td>2.15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Maximum score for each sex of video-taped clients = 21

\[ n = 48 \]

\[ P < .05 \]

An analysis of the results of the t tests indicated that male and female observer-counsellors both scored highest with male video-taped clients.
The $t$ value of -1.57 indicated no significant difference beyond the .05 level between the means of the two. Female observer-counsellors matched with female video-taped clients scored next highest. The differences between the means of this group and the male observer-counsellor/male video-taped clients group was significant at the .01 level for a $t$ value of 2.64. The least empathy was shown by male observer-counsellors matched with female video-taped clients. The difference between means of this group and the female observer-counsellors/female video-taped clients group was significant at the .003 level for a $t$ value of -3.05. Bias in favour of the male video-taped clients as a result of the lack of equivalence demonstrated by the results of hypothesis three was probably a powerful factor here.

Much of the Review of the Literature was devoted to the question of how the role of similarity, particularly sex similarity, is related to empathy. The literature was clearly divided over this question. The results of the $t$ tests neither substantiated nor refuted earlier research. Considering the possibility of bias mentioned above, while it does appear that for males similarity was an important factor for empathy, closer examination reveals that it may have been far less important than is readily apparent. The lack of significant difference between the male observer-counsellor/male video-taped client and the female observer-counsellor/female video-taped client matches indicated that the influence from the counsellor-observers' empathy was probably equal to the influence of the sex of the video-taped clients. These findings, however, do not clarify the role of similarity—it may have been a factor here, or it may not. If it was a factor it may have only been a factor for males, since the female observer-counsellor/male video-taped client match was much higher than the female observer-counsellor/female video-taped client match. Some basic questions
remain unanswered. Is similarity a factor in empathy? For which sex is similarity a factor? And, are females, who are more empathic than males, better able to empathize with the opposite sex than males are?

It may be important to note that whereas Olesker (1971) reported that 23 percent of her sample demonstrated more empathy with the opposite sex, the raw scores of this investigation indicated that 1.792 percent of the sample demonstrated more empathy with the opposite sex (see Appendix G). Percentages were calculated from the number of subjects scoring higher with same sex as opposed to opposite sex video-taped clients. Using the raw score percentages, a significant difference also appeared between males and females. While 42.71 percent of the male observer-counsellors were more empathic with their own sex, only 9.38 percent of the female observer-counsellors were more empathic with their own sex.

Summary

The purpose of this study was to investigate the relationship between the sex of the observer-counsellors, empathic ability of the observer-counsellors, and the sex of the video-taped clients. In summary, the results for the most part failed to clarify with any degree of conclusiveness the questions asked in the introduction.

An analysis of the results indicated that as a group, female observer-counsellors demonstrated greater empathy than did males. Since the results of this hypothesis were not dependent upon the possible testing flaws of the second and third hypotheses, their interpretation and generalization to the problem area is all the more meaningful.

Speculation was offered to explain possible causes for the findings of the second and third hypotheses. An analysis of the results of hypothesis two indicated that the Affective Sensitivity Scale was unable to replicate the differentiation of observer-counsellors into groups of high,
medium, and low empathic ability that were generated from the ranking of observer-counsellors' scores on the Discrimination Empathy Test. These results may have been attributed to regression to the mean, problems of instrument response style, or measurement of different constructs by the instruments. An analysis of the results of hypothesis three indicated that all observer-counsellors scored higher in empathy with the male video-taped clients than with the females. This finding was attributed to one or both of two factors: the male and female video-taped client subtests of the Affective Sensitivity Scale were not equivalent, or the greater empathic ability of females, assuming that persons of higher empathic ability are equally empathic with persons of both sexes while persons of lower empathic ability are not, would lead to more empathy with male video-taped clients than females.

The results failed to reject the final four null hypotheses. All demonstrated no interaction between each of the three independent variables: sex of the observer-counsellors, level of empathic ability of the observer-counsellors, and sex of the video-taped clients. No one variable or a combination had a significant effect on another. However, for hypothesis five an analysis of the results indicated the possibility that sex similarity may not have been an important variable.

Finally, three post hoc \( t \) tests were performed on the data from hypothesis five. These \( t \) tests examined the role of similarity, specifically sex similarity in relation to empathy. Considering the possible bias in favour of male video-taped clients that was found in hypothesis three, the \( t \) test findings were that for male observer-counsellors, same-sex matching resulted in a significantly higher empathy mean. The findings for female observer-counsellors, however, were the opposite. Opposite-sex matching
produced a significantly higher mean that same-sex matching. It is significant to note, however, that male and female observer-counsellors did not significantly differ in their empathy when matched with male video-taped clients. Male observer-counsellors matched with female video-taped counsellors produced the lowest mean score.
Chapter 6

SUMMARY AND CONCLUSIONS

Empathy is probably the most important dimension in the counselling process (Carkhuff, 1969). Research into its components is essential for further understanding. In this study it was proposed that there be an investigation into the relationship of one possible component, sex similarity between counsellors and clients and empathy.

It is important to ascertain the degree to which empathy is predicated upon the sex similarity between counsellors and clients. Keeping the goal of effective counselling in mind, there are major practical implications in the assignment of clients to counsellors, especially on the basis of sex. If sex similarity is an important condition of empathy, then opposite sex client-counsellor matching may lead to ineffective counselling. If similarity of sex is not a significant factor with counsellors of high empathic ability, then training in counsellor empathy could result in overcoming barriers to counselling effectiveness.

The problem, in order to gain a more comprehensive understanding, was investigated along two fronts. The first was a more general investigation of the nature of the relationship between sex and empathy. More specifically, three independent variables—sex of the observer-counsellors, sex of the video-taped clients, and the level of empathic ability of the observer-counsellors—and the interactions among them were studied. The level of empathic ability was determined by ranking subject scores from the Discrimination Empathy Test and assigning the subjects into groups of high, medium, and low empathic ability. The score achieved by the observer-counsellors on the Affective Sensitivity Scale served as the
dependent measure of empathy and was used for comparative purposes.

The second front examined the question of the need for sex similarity for a high degree of empathy to occur. Two objectives were advanced in the Statement of the Problem section of the Introduction. They were to determine: (a) if counsellors of moderate or low empathic ability were more empathically responsive to the feelings of clients of the same sex than to clients of the opposite sex, and (b) if counsellors of high empathic ability were equally empathic with clients of both sexes.

From an original group of 325 University of British Columbia students, 109 volunteered to serve as the sample for this study. After writing the Discrimination Empathy Test, 96 subjects—48 males and 48 females—were divided equally into three levels of empathic ability. These subjects, the observer-counsellors, empathized with the male and female video-taped clients on the Affective Sensitivity Scale. The 13 subjects not included were randomly eliminated.

Seven null hypotheses were advanced. A $2 \times 3 \times 2$ Three-factor Experiment with Repeated Measures (Case II) design (Winer, 1962, pp. 337-344) was employed. The data were analyzed and the hypotheses tested by means of BMDP2V—Analysis of Variance and Covariance with Repeated Measures (U.C. L.A., 1977) program. The $F$ Ratio was employed to determine whether or not to reject each hypothesis.

Only hypotheses one and three were rejected. Both tested a main effect. The findings of hypothesis one were that the female observer-counsellors were more empathic than the male observer-counsellors. The findings of hypothesis three were that all observer-counsellors were more empathic with the male video-taped clients than with female video-taped clients. Speculation was offered that the male and female video-taped
client subtests of the Affective Sensitivity Scale were not equivalent. It was also demonstrated that the findings of hypothesis one, assuming that persons of higher empathic ability are equally empathic with persons of both sexes while persons of lower empathic ability are not, could have accounted for these findings.

The results of hypothesis two, like those of hypothesis three, proved problematic. The results failed to reject the null hypothesis and an analysis of these results indicated that the Affective Sensitivity Scale was unable to replicate with significance the division of the observer-counsellors into groups of high, medium, and low empathic ability as designated by the ranking of subject scores from the Discrimination Empathy Test. These groups, when tested on the Affective Sensitivity Scale, demonstrated similar degrees of empathy. This result could be explained by statistical regression to the mean, inappropriate instrument response style, the unforeseen problem of the "Action" component of the Discrimination Empathy Test's ranking of alternate responses, and the possibility that each test might be measuring a completely different construct.

The four interaction null hypotheses were also not rejected by the results. Of the three independent variables, no one variable or a combination had a significant effect on the other.

Based on the data from hypothesis five, three t tests were constructed between the means. The object was to examine the role of similarity, specifically sex similarity, in relation to empathy. The findings were that the greatest empathy occurred when either male observer-counsellors or female observer-counsellors were matched with male video-taped clients. The female observer-counsellor/female video-taped client match resulted in a significantly lower degree of empathic understanding. The male observer-counsellor/female video-taped client match resulted in the lowest degree of
empathy. In terms of the role of similarity in relation to empathy, it appears that for the male observer-counsellors, sex similarity may have been a significant factor while for the female observer-counsellors, similarity was not a factor at all. This interpretation must, however, be tempered by the fact that with the results of hypotheses one and especially three, the findings of hypothesis five and the results of the t-tests can be produced without similarity being a factor at all. From the results of this study, it is not possible to safely conclude whether or not similarity plays a significant role in empathy.

Additional (Post Analysis) Limitations

In light of the results, several limitations should be recognized in evaluating the conclusions and results of the study. These limitations have been discussed, particularly throughout the interpretation of the results in the Discussion. Most relate to the results of hypotheses two and three. Their effect possibly involved all other hypotheses' results, except those of hypothesis one. Briefly, the limitations are as follows:

1. Statistical regression to the mean may have operated by negating the division of observer-counsellors into groups of low, medium, and high empathic ability. A group of subjects who scored at extremes on one test would naturally tend to migrate statistically toward the mean with subsequent testings.

2. Due to defection from the original volunteer sample of 325, a final sample from which to draw subjects was a less than preferred 109. Such a low sample limited the number of subjects who scored either very low or very high.

3. There were several problems with the instruments used in this study. Speculation included the following possible causes of the problems:
a) the multiple-choice response style may have been more accurate in determining high empathic ability.

b) the presence of the "Action" component in the Discrimination Empathy Test probably resulted in subjects of moderate and moderately high empathic ability being assigned to low or moderate empathic ability groups. The Discrimination Empathy Test could only discriminate empathy to two levels, not three as used in this study.

c) the male and female video-taped client subtests of the Affective Sensitivity Scale were probably not equivalent. They correlated at a low although significant \( r = .34 \) (\( p < .01, df = 108 \)).

d) the male video-taped client subtest of the Affective Sensitivity Scale had a Hoyt estimate of reliability value of \( r = .45 \), a rather low level for internal consistency.

e) subjects reported that the Affective Sensitivity Scale was long and tedious, requiring intense concentration in observing a video-tape of relatively poor visual quality. This problem may have influenced outcome without affecting reliability.

Recommendations for Further Research

Analyses of the results, for the most part, failed to clarify with any degree of conclusiveness the questions asked in the Introduction. This is not to say that the investigation failed to make any contributions toward resolving the problem. Rather, previous unforeseen problems and flaws have become more apparent and many questions have been raised. It is these questions which are left for future researchers to attempt to resolve.

Two major areas of concern have emerged from the findings. The first is the topic area examined in this study, that of the relationship between sex similarity and empathy. The second concerns the problems encountered
with the empathy tests. Ultimately, however, both areas of concern must return to the major theoretical question of what is empathy. A number of suggested research possibilities follow.

First, a replication along the line of this study is recommended. The result that the female observer-counsellors were more empathic than the males, while in conflict with previous studies, appears to be in line with more recent analyses of the topic. Also, considering the test problems, replication with better instruments could clarify with a greater degree of conclusiveness many of the other results of this study. Perhaps a replication could clarify, refute, or support the finding that male and female observer-counsellors are equally empathic with male video-taped clients, a finding which appears to show that similarity may be a factor in empathy for males but not for females.

Finally, since it has been demonstrated that the results may have occurred without influence from sex similarity, the whole issue of a relationship between sex similarity and empathy remains open and in need of further study.

To carry out a replication, it is recommended that: (a) the subjects should be tested, then re-tested with the same instrument, (b) if the same instruments are used again, then the "Action" component of empathy in the Discrimination Empathy Test be dropped or accounted for, (c) only two levels of empathic ability, high, and low, be utilized, and (d) equality of video-taped client subtests of the Affective Sensitivity Scale be ensured.

It is also recommended that the findings of hypothesis three be re-examined. It was found that the observer-counsellors were more empathic with male than with female video-taped clients. This finding, at least in part, can be attributed to the female video-taped client items being more difficult than the male video-taped client items. Olesker (Olesker and Balter, 1972), in her research, had eliminated several female video-taped client items to
equalize the number of male and female items. No items were eliminated in this study. It is recommended, therefore, that Wendy Olesker be contacted to find out which items she had eliminated. With this information, the same items could be eliminated from the present data and the revised data could then be re-analyzed and the findings compared with those of Olesker (1971). All other hypotheses could also be re-tested with the revised data.

Further research is recommended in the development of highly related empathy instruments. As stated earlier, while low, the correlation of $r = .24$ ($p < .02, df = 108$) between the instruments used in this study is encouraging. Correlation between the Discrimination Empathy Test and the female videotaped clients is an even more encouraging $r = .32$ ($p < .01, df = 108$). Control of many of the limitations discussed above may raise the degree of correlation between the instruments.

Research into the instrument response style is also strongly recommended. The problem here appears to be as much theoretical as it is mechanical. A clear understanding of the nature of empathy and consistency in definition are probably prerequisite to deciding whether to use multiple choice, ranking, rating, or some other system to assess empathic discrimination.

A review of recent research (Goleman, 1978) suggests that scientists are on the threshold of new understanding about the relation between empathy and sex. It appears that there are significant sex differences in brain functioning, particularly in terms of brain hemispheric arousal and specialization and in electrical response levels, all of which play a role in a person's ability to empathize with another's feelings.

The need for research into empathy and its relationship with other variables such as the sex variable investigated in this study is beyond question. Since it is a most critical dimension in the helping process, understanding of this complex phenomenon is imperative.
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APPENDIXES
APPENDIX A

MASTERS THESIS RESEARCH PROJECT

The test that you will shortly be writing is the first part of a two-part study on empathy. The purpose of this research is to fulfill the requirements of an MA thesis for the researcher, Mr. Ian Hunt, Dept. of Counselling Psychology, Faculty of Education.

In a nutshell, empathy is the ability of a person to understand the feelings of another person, and for this project, the emphasis is on empathy as found in a counselling or helping situation, or in a teaching situation.

The second part of the research will consist of another, but similar empathy test. The total time involved for this second test will be approximately one hour. This second part will take place in the last week of March and may continue throughout April. Subjects for this second test will be selected from those who agree to writing the first test. Thus, only about one-third of those who write the first test will be asked to write the second test.

Your cooperation and consent to participate in the research is greatly appreciated. If, however, you feel that you are unable to participate or would rather not participate in both parts, please feel free to exercise that right and do not sign the consent form. For those who do wish to participate, please read and sign the following Agreement of Participation.

AGREEMENT OF PARTICIPATION

I, ________________________________, do hereby give consent (Name-Please Print)

to my participation in both parts of Mr. Ian Hunt's MA thesis research project. I understand that any risks involved will be minimal and that all results will remain confidential to the researcher, Mr. Hunt. Finally, I understand that I may withdraw from the project at any time, as provided by the stipulations of the Office of Research Administration.

Signature: __________________________

Date: ______________________________
APPENDIX B

Table A
Summary of Test Statistics

<table>
<thead>
<tr>
<th>Statistics&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Discrimination Test</th>
<th>Affective Sensitivity Scale</th>
<th>Male videotaped clients</th>
<th>Female videotaped clients&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Total Test&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of items</td>
<td>14</td>
<td></td>
<td>21</td>
<td>66 (21)</td>
<td>42</td>
</tr>
<tr>
<td>Highest score</td>
<td>14</td>
<td></td>
<td>19</td>
<td>35 (15.98)</td>
<td>32.15</td>
</tr>
<tr>
<td>Lowest score</td>
<td>0</td>
<td></td>
<td>5</td>
<td>11 (5.02)</td>
<td>14.13</td>
</tr>
<tr>
<td>Mean</td>
<td>7.45</td>
<td></td>
<td>12.81</td>
<td>22.66 (10.34)</td>
<td>23.15</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>3.07</td>
<td></td>
<td>2.83</td>
<td>4.88 (2.23)</td>
<td>4.16</td>
</tr>
<tr>
<td>Hoyt estimate of reliability</td>
<td>.69</td>
<td></td>
<td>.45</td>
<td>.60 (.72)</td>
<td>.72</td>
</tr>
<tr>
<td>Standard error of measurement</td>
<td>1.64</td>
<td></td>
<td>2.04</td>
<td>3.07 (4.13)</td>
<td>4.13</td>
</tr>
<tr>
<td>Cronbach's alpha for composite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.50</td>
</tr>
</tbody>
</table>

<sup>a</sup> n = 109

<sup>b</sup> Numbers in parentheses indicate statistics for female video-taped clients weighted at .456522 and are comparable to the statistics for male video-taped clients.

<sup>c</sup> Total test is a composite of male and weighted female video-taped clients.
## APPENDIX C

### Table B

**Correlations between Empathy Measuring Instruments**

<table>
<thead>
<tr>
<th>Empathy Measuring Instruments</th>
<th>Pearson Product Moment Correlation Coefficientsa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discrimination Empathy Test</td>
<td>Affective Sensitivity Scale (A.S.S.)</td>
</tr>
<tr>
<td>Discrimination Empathy Test</td>
<td>Male video-taped clients (A.S.S.)</td>
</tr>
<tr>
<td>Discrimination Empathy Test</td>
<td>Female video-taped clients (A.S.S.)</td>
</tr>
<tr>
<td>A.S.S.</td>
<td>Male video-taped clients (A.S.S.)</td>
</tr>
<tr>
<td>A.S.S.</td>
<td>Female video-taped clients (A.S.S.)</td>
</tr>
<tr>
<td>Female video-taped clients (A.S.S.)</td>
<td>Male video-taped clients (A.S.S.)</td>
</tr>
</tbody>
</table>

*a* df = 108

*P < .02

**P < .01
APPENDIX D

Table C
Empathy Means and Standard Deviations for
Male and Female Observer-counsellors

<table>
<thead>
<tr>
<th>Observer-counsellors</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>22.19</td>
<td>3.95</td>
</tr>
<tr>
<td>Female</td>
<td>24.38</td>
<td>4.30</td>
</tr>
</tbody>
</table>

Note: Maximum score = 4.2

n = 48 for each sex
### APPENDIX E

#### Table D
Empathy Means and Standard Deviations for Observer-counsellors of High, Medium, and Low Empathic Ability

<table>
<thead>
<tr>
<th>Empathic ability of observer-counsellors&lt;sup&gt;a&lt;/sup&gt;</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>24.32</td>
<td>3.54</td>
</tr>
<tr>
<td>Medium</td>
<td>23.04</td>
<td>4.44</td>
</tr>
<tr>
<td>Low</td>
<td>22.49</td>
<td>4.48</td>
</tr>
</tbody>
</table>

<sup>a</sup> Maximum score = 42

<sup>n = 32</sup> for each level of empathic ability.
APPENDIX F

Table E

Empathy Means and Standard Deviations Scored by Observer-counsellors for Male and Female Video-taped Clients

<table>
<thead>
<tr>
<th>Video-taped clients</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>12.79</td>
<td>2.28</td>
</tr>
<tr>
<td>Female</td>
<td>10.49</td>
<td>2.11</td>
</tr>
</tbody>
</table>

Note: Maximum score for each sex of video-taped clients = 21.
APPENDIX G

Table F
Percentage of Observer-counsellors More Empathic with Same Sex of Opposite Sex Video-taped Clients

<table>
<thead>
<tr>
<th>Observer-counsellors</th>
<th>n</th>
<th>Same sex (%)</th>
<th>Opposite sex (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>48</td>
<td>42.71</td>
<td>7.30</td>
</tr>
<tr>
<td>Female</td>
<td>48</td>
<td>9.38</td>
<td>40.62</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>52.08</td>
<td>47.92</td>
</tr>
</tbody>
</table>