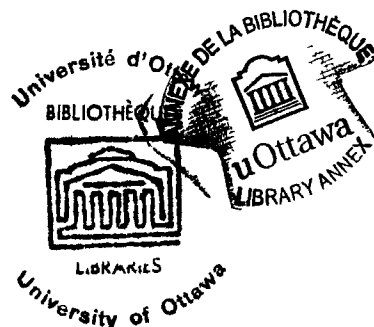


Egocentrism - Anxiety:
A Concept of Counselor Trainee Development

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Curriculum Studiorum

Robert E. Napier was born March 10, 1951 in Pittsburgh, Pennsylvania. He earned the Bachelor of Science degree from Michigan State University.

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Abstract

There has been very little exploration into the on-going processes transpiring in the counselor trainee which enables him to develop from an anxious beginner to a competent and effective psychotherapist. Extrapolating the developmental theory of Jean Piaget, the concept of egocentrism was applied to explain the observed counselor's anxiety which seems to force the trainee's attention from the client he is trying to help, to the thoughts and anxieties in himself. It was hypothesized that when a counselor trainee's anxiety rises in a role-playing situation, there will be a correlated rise in egocentric behaviour. Egocentricism was operationally defined through four scales (empathy, personal pronouns, following behaviour, and amounts of silence). Anxiety was measured by the Mahl Speech Disturbance Scale (1956) and the state form of the Spielberger State Trait Anxiety Inventory. Data obtained from tapes of role-played sessions of three groups of first year clinical graduate students divided on anxiety level was analyzed by a multivariate analysis of variance procedure. The Cattell Sixteen Personality Factor Inventory was administered to correlate personality factors with anxiety. No significant relationships between anxiety and the four egocentric scales, with the exception of a direct relationship between anxiety and personal pronouns, was found. Scales A, B, O, Q₃, and Q₄ of the Cattell 16 P.f. correlated with anxiety.

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Introduction

The training and development of qualified therapists has always been a major concern of educators of psychotherapy. Traditionally in the analytic school, one of the major aspects of becoming a qualified therapist is to have the student undergo personal analysis during training (Wolberg, 1967). The reason the student underwent therapy was to observe from a first hand basis the process of psychotherapy. It also enabled the student to overcome any personal difficulties that might be present. Finally, even though the psychoanalysts' fundamental assumption is that the student's qualities are fairly stable and neurotic free, the supervisor, through the student's analysis, is in a position to determine if the candidate is in fact ready to do therapy and eliminate those who should not or cannot do satisfactory therapeutic work.

This approach although admirable, does lead to a number of practical problems. First of all, the judgment by the supervisor on the ability of the student is subjective and not under the scrutiny of objective measurement.

Matarazzo (1971) said:

.....empirical confirmation of teaching efficacy is lacking, and student progress seems to be overly dependent upon the subjective judgment

of a supervisor with whom he is expected to be involved in a "countertransference" relationship.(p. 897)

Another problem related to student analysis is the cost in professional man hours and money. The fact that each student must undergo analysis drastically limits the number of students which can be enrolled in a training institution. With the great need for professionals in the mental health field, this approach used to determine if a therapist is ready to engage in therapy is no longer practical.

Unfortunately there is very little research in the problem of training individuals who engage in the therapeutic process (Matarazzo, 1971). Recently, however, the client-centered therapists have explored basic assumptions regarding both the dimensions of therapists behaviour and the "correlated therapeutic behaviour of traditional teaching programs."(p. 895)

Matarazzo (1971) does mention some of the reasons that this has been such a problem area to research and possibly why there has been so little investigating done. The first problem is that there is no clear definition of what a good therapist is. They are "poorly defined" and "incredibly

numerous". Another reason that the complex behavior - learning - change pattern is difficult to measure, in that it has only been recently that we are beginning to show what is effective therapeutic behavior.

It was not until 1957 that Carl Rogers and his colleagues developed a brief and well formulated workshop for the training of psychotherapists and also attempted to measure them effectively. He was also the first to emphasize the need for the training therapist to experience conditions also needed by the client in order to learn and grow so as to be able to produce these same needed conditions for his client during therapy. This was later demonstrated by Carkhuff and Berenson (1969). Rogers also elaborated on the necessary conditions to facilitate change in the Wisconsin Project in 1957. These being warmth, accurate empathy, genuineness and positive regard.

Even though the client-centered therapists have illustrated the need for the therapists to be trained in specific conditions, plus the need for the therapist to facilitate these conditions in order to help the client, a means of evaluating what kind of person makes an effective therapist has yet to be investigated. Also, what kind of changes or development in the student therapist must

transpire for him to become an effective change agent? In essence, no research has been done to explore the demands and adaptations that the therapists require to become effective counselors. There has been research in the training of skill acquisition or technique, but not of the actual process which transpires in the therapist to enable him to be more effective. Butler and Hansen (1973) found that raters could give a higher empathic response to a written statement but were unable to respond as empathically during an actual interview. What transpired in the therapist during the actual interview that would not allow him to respond as empathically as if he were responding to the written word?

Boulet (1975) in a further exploration of the area of empathy, demonstrated that beginning therapists can attain a higher level of empathy responses faster through role-playing experiences (didactic experience) than those being trained with written or recorded material. Here again the question remains, what were the actual processes which happened to, or in the therapist which enabled him to respond to counseling problems with higher levels of empathy when trained in an experiential setting? Again, there has been no research into the investigation of what process of adaptation and change occurs in the therapist which allows

him to be more effective.

Professor Yvon Bourbonnais, in charge of graduate training at the University of Ottawa, has observed during his ten years of training that students undergo a pattern of change as they gain experience and knowledge of counseling. Professor Bourbonnais, as well as other training staff at the university, have mentioned a need to understand through a new theory of development what is transpiring in the beginning therapist which transforms an anxious and ineffective beginning therapist into a more confident and facilitating counselor. In the review of the literature, there is no theory on the adaptation or personality characteristics of the beginning therapist. Vanden Bos and Karon (1971) have demonstrated a negative personality dimension (pathogenesis) in which those therapists possessing this characteristic tend to be less effective in working with hospitalized schizophrenic patients. But unfortunately even though this personality dimension has been identified, no research has been initiated to explore if this dimension is prominent in only specific stages that the therapist goes through, or is in fact more or less a permanent personality trait. Here again there is no research which postulates personality dimensions which appear to be so important in

determining a therapist's effectiveness.

At this point a theoretical basis is required to describe what is transpiring in the beginning therapist. A number of theories were studied from which an extrapolation could be used to describe the processes of development in the beginning therapist. Freud's theory could have been applied where the superego represented the therapist's formal learning (teachings, books etc.). The id could be the counselor's need or drive to help the client, and the developing ego, the incorporation of the id and the superego as the actual process of working with the patient. Or Hebb's Arousal theory (1966) could have been used, whereby the different levels of anxiety would determine the effectiveness of the therapist. If the therapist is too anxious, he will "freeze" and be unable to help the client, or if he has no anxiety he may have no motivation to help the client. If, however, there is some anxiety he will be motivated to help, yet not too anxious to be incapacitated.

Although these theories could have been applied to a new explanation of counselor adaptation, it was decided to use an extrapolation of Piaget's theory because his work is focused on development, and explains the process of adaptation (assimilation and accommodation).

Another reason Piaget's theory is being applied is because it appears to fit closely to the observations of a beginning therapist as mentioned by Professor Bourbonnais and the training staff at the University of Ottawa. That is, they have observed that the beginning therapist, when first confronted with a therapy situation becomes quite anxious and is no longer able to focus his attention on the client but appears entrapped in his own thoughts. It is as if the beginning therapist is in a state of egocentrism where he is no longer attending to the person he is trying to help, but is unintentionally listening to his own thoughts and anxieties. Piaget's theory employs the concept of egocentrism in his developmental schema.

In summary, a brief review of what research has been done in the area of therapy and the therapist was discussed. Also, an expressed need for a theory on the development of a beginning therapist was presented. The next section will cover the rationale of this study and then a review of the literature on Piaget's developmental theory in regards to egocentrism. Also included is a review of the literature and a rationale of the scales used to measure egocentrism.

CHAPTER I

Review of the Literature

The first chapter will present the rationale for the extrapolation of Piaget's model used to explain the counselor's egocentric behavior and its connection to anxiety. This is followed by the rationale for the four egocentric scales (empathy, silence, following behavior, and personal pronouns) employed to measure egocentrism.

The review of the literature will then cover Piaget's theory of egocentrism and its development from the biological theory of adaptation, through to Wolff's theorizing that egocentrism can exist in all stages of development. Egocentrism is then reviewed in the context of counseling and its effect on both client and therapist.

The final sections of the literature review are devoted to the four egocentric scales and to the two anxiety measures (Spielburgrer State Trait Anxiety Inventory and the Mahl Speech Disturbance Ratio).

Egocentrism has usually been associated with Piaget's description of a childhood stage whereby the child is the centre of his own universe. He is, therefore, totally unaware of the thoughts and ideas of others. It has been noticed, however, that the beginning therapists go through a similar stage when confronted with a personally novel and threatening situation, such as when they have their first experiences as counselors (Wyatt, 1962). It has been hypothesized that when anxiety in a beginning therapist increases, so does his egocentric behavior. That is, there is a direct relationship between the level of anxiety and the egocentric behavior in a beginning counselor. A hypothetical situation could be as follows. The new therapist finds himself in a situation for which there is often no immediate solution. As his anxiety rises, he becomes entrapped in trying to obtain a solution, so that he unintentionally becomes oblivious to the very person he is trying to help. An extrapolation of Piaget's developmental schema of egocentrism will be employed in this thesis to explain this concept in the development of a new therapist.

In order to test the utility of the above model as an explanation of the therapist's development, the relationship

between the anxiety of a new therapist in a role-playing counselor situation and measures of egocentricity was investigated.

Two measures of anxiety were used, the first being a self report measure (Spielberger State Trait Anxiety Inventory) and a behavioural measure, the content analysis of speech disturbance (SDR). Egocentrism was operationally defined as a combination of separate components measured in the following way: empathy, following behaviour, silence, and personal pronouns. The rationale for these scales was as follows.

Empathy vs. Egocentrism

Egocentrism is a state where the individual becomes entrapped in his own thoughts, ideas, and feelings. Chaplin (1970) defines egocentrism as a preoccupation with the self. The therapist is therefore totally unaware of the thoughts, ideas, and feelings of others. Empathy, conversely, is the concept in which the therapist is so attuned to another, that it is "as if" those feelings and thoughts were his own. He has become totally unaware of himself, and is concentrating on what is transpiring in the client. These concepts - empathy and egocentrism - therefore can be considered to be on opposite ends of a continuum which measures awareness of

another's being. It therefore follows that if a person, at a given time is very empathic, he cannot also be egocentric. The opposite also applies. Empathy therefore was designated as the first construct for the measurement of egocentrism, and Carkhuff's (1969) Empathic Understanding in Interpersonal Processes: A Scale for Measurement was scale 1 in this study. This scale measures the level of empathy the therapist expresses to the client during the therapy session.

Following Behaviour

According to Ivey (1971) attention is central to the interaction of the client and the therapist during the counseling session. The therapist must be able to listen to what the client is actually saying both explicitly and implicitly. It is therefore essential that the counselor not only follow but also comprehend the communication expressed by the client in order to be in the best possible position to aid the client. This attention or following behaviour should therefore require a great deal of concentration on the part of the therapist towards the client and what is being said, which should therefore, allow for little or no entrapment of the self brought on by anxiety. On the other hand, if the new therapist is egocentric as

postulated, he will be unable to concentrate on the client due to his own anxieties and preoccupations. From Ivey (1967) a scale was constructed for the measurement of following behaviour which will be called scale 2. This scale measures the amount of content the therapist does follow in the course of the session. If the therapist is not following the client, then egocentric behaviour is inferred.

Personal Pronouns

Anderson (1939), Sandford (1942) and Haines (1950) have all postulated that there is a link between the use of personal pronouns and egocentrism in some fashion. The definition of egocentrism as defined by Piaget is that the person is entrapped in his own thoughts and ideas being unable to differentiate his own concepts with that of the outside world. If one is entrapped in his cognitions, it is plausible that this entrapment may be revealed in his own language, i.e. I, me, myself, etc., as postulated by Elkind (1967). Since Wolff (1960) has said that egocentrism can be present in all periods of life, it is therefore possible that egocentrism will also be revealed through the speech of the developing therapist. Scale 3 attempts to measure the number of self-references expressed by the therapist

during the interview.

Silence

Mahl (1956) mentioned that anxiety is present in the speech of almost everyone including therapists. He also linked silence with anxiety by incorporating a silence ratio scale to detect anxiety. It has been hypothesized that anxiety causes egocentrism in the new therapist, and that it is therefore possible that this same anxiety which causes silence can also cause the hypothesized egocentrism, and that silence and egocentrism are linked. Scale 4 is therefore the measurement of silence during the interview. Siegman and Pope (1965) have suggested that anxiety can have both an activating as well as a disrupting effect on verbal behaviour so therefore, scale 4 will study not only the amount of silence during the interview, but also the lack of it.

Summary

Egocentrism, associated with Piaget's theory of childhood development, has been applied to the development of the beginning therapist. When the therapist starts to get anxious during the interview, he becomes egocentric and is not able to listen to the client. It could be said that the anxiety forces the therapist to redirect his

attention from the client and towards his own thoughts and fears. In order to test this hypothesis of counselor egocentrism, a study was conducted to measure the relationship between egocentrism and anxiety in a role-playing situation. Unfortunately, there were no applicable operational definitions of egocentrism available. Therefore, four different scales were devised in an attempt to measure different aspects of egocentrism. These scales are empathy, following behaviour, personal pronouns, and silence.

Piaget's concept of adaptation

In Piaget's theory on the development of the child, adaptation occurs when there is an organism-environment interaction. When this interaction occurs, two opposing processes occur (assimilation and accommodation), which, when combined, form the adaptation process. The first process is assimilation which occurs when the organism takes in the environment and changes its structure so that it can be incorporated into the structure of the organism. As Flavell (1964) said, the organism is assimilating the environment into its system. The opposing system to assimilation is that of accommodation whereby the organism accommodates itself to the environment. Each process goes hand in hand in the preservation of the organism.

Piaget also talked of these processes at the cognitive level as well as mentioned by Flavell.

Cognition, like digestion, is an organized affair. Every act of intelligence presumes some kind of intellectual structure, some sort of organization, within which it proceeds. The apprehension of reality always involves multiple interrelationships among cognitive actions and among the concepts and meanings which these actions express. (p. 46)

Adaptation, assimilation and accommodation are also

important with respect to the cognitive development of the individual. Piaget talked about "intellectual assimilation" which is not different in principle from that of the biological assimilation. "...in both cases the essential process is that of bending a reality event to the template of one's on-going structure."(p. 48)

Although assimilation and accommodation must be thought of as unique and individual processes, they sometimes become undifferentiated in the early cognitive years of the infant.

Early assimilation and accommodation are undifferentiated in that an object and the activity to which the object is assimilated constitute for the young infant a single, indivisible experience. Thus, the act of assimilation ... is hopelessly confused with, and undifferentiated from the accommodatory adjustments intrinsic to this act. It is not that the infant fails to take account of objects, i.e. accommodates his movements to their specific contours. This he does, and these clumsy accommodations produce changes in the assimilatory schemas. Rather, the infant has no way of distinguishing his acts from the reality objects

upon which these acts produce or the reality objects upon which they bear. In short, agent and object, ego and outside world are inextricably linked together in every infantile action, and the distinction between assimilation of objects to the self and accommodation of the self to object, simply does not exist.(p. 59)

Due to the undifferentiation of the two processes, the infant experiences frustration because he is unable to distinguish his actions from the environmental consequences which are necessary for the making of new and different accommodations. According to Piaget, there is a fundamental antagonism between the "conservative assimilation" and the "progressive accommodation".

In their initial directions, assimilation and accommodation are obviously opposed to one another, since assimilation is conservative and tends to subordinate the environment to the organism as it is, whereas accommodation is the source of changes and bends the organism to the successive constraints of the environment.(p. 352)

This state of undifferentiation and antagonism is called egocentrism by Piaget, where the infant sees the

world from only his own point of view. He is, in effect, unconscious of the existence of others and unaware that he is the prisoner of his own world. Egocentrism will increase whenever the child meets and tries to cope with a stimulus that he has not yet encountered. When this happens, the child falls back into himself and only begins to come out when he gains mastery of the new stimulus. Mastery is gained, therefore, by an equilibrium of the two opposing forces of assimilation and accommodation.

This is the process of egocentrism which, according to Wolff (1960), is present in all functioning.

Structural equilibrium is established and maintained by the "invariant" functions of assimilation and accommodation which appear at every level of organic and psychological functioning, and which direct development and guarantee adaptation.(p. 57)

In summary, the concept of adaptation was developed to describe the processes of assimilation and accommodation derived from the biological study of the survival of the organism. Piaget then applied the adaptation process to the cognitive realm, and in turn gave a theoretical explanation for egocentrism. Wolff then advanced the theory one step further by stating that the process of

adaptation (which causes egocentrism) can be applied to cognition at all periods of life. Due to the succession of progressive developments on the concepts of egocentrism and its possible existence throughout man's existence, it is therefore quite conceivable that it exists in the developmental stages of the beginning therapist.

Piaget's Concepts as Applied to Adolescence

In a review of Piaget's work, Elkind (1967) described the various stages of cognitive growth. In the adolescent stage, egocentrism is defined as the failure to differentiate between the cognitive concerns of others and those of the self. Elkind stated that egocentrism is of major interest because of its relation to the affective aspect of the adolescent's thought and behaviour. "...it is possible that the study of egocentrism may provide a bridge between the study of cognitive structure, on the one hand, and the explanation of personality dynamics on the other..." (p. 1025)

In the preoperational period, egocentricity in the child is evident in his linguistic behaviour. In explaining an object to another, the child tends to leave out important information.

Although this observation is sometimes explained by saying that the child fails to take the other person's

point of view. it can also be explained by saying that the child assumes words carry much more information than they actually do ... (p. 102)

Verbal behavior is therefore a means of detecting egocentrism. Furthermore this concept of one failing "to take the other person's point of view" is quite similar to the theory that the egocentric therapist can no longer attend to the client's thoughts, but only to his own thoughts and anxieties.

In the adolescent stage, the individual must conceptualize his own thoughts enabling him to reason. He is freed from the egocentrism of childhood, but becomes entangled in a new form of egocentrism characteristic of adolescence.

This egocentrism emerges because, while the adolescent can now recognize the thoughts of others, he fails to differentiate between the objects toward which the thoughts of others are directed and those which are the focus of his own concern. (p. 1029)

The adolescent is undergoing changes which are primarily concerned with himself. He fails to differentiate about what others are thinking, from his own mental preoccupations. He assumes that others are as obsessed with himself as he is. A consequence of this type of adolescent egocentrism is that

the individual starts to anticipate the reactions of others to himself. This is due to the premise that others are as admiring or as critical of himself as he is of himself.

In summary, the egocentrism of the adolescent is in the form of not having the ability to differentiate the thoughts of others and his own cognitions. It is possible that we could say the same thing of the beginning therapist, where he may feel that the emphasis of the session is for him to come up with instant solutions, rather than on the client who is in need of help and understanding. Elkind also stated that egocentrism is evident in the child's linguistic behaviour. This could then be a possible means of measuring egocentric behaviour of the beginning therapist.

Egocentrism as Applied to Counselling

The concept of egocentrism has also found its way into the therapeutic change of counselors. According to Hepner (1966), egocentrism is inferred in the observer when he is so tightly bound to his own personality, he cannot share directly the experiences of others.

In relation to patients, McPherson (1956) postulated that verbal disorganization, evident when one was given the Thematic Apperception Test was due to egocentrism. After classifying the different types of speech irregularities,

he suggested that these variations were due to a differentiation from the customary amount of attention to the listener. These variations were broken down into either over attention to the listener, or not enough, which, according to McPherson, suggested the elements of egocentrism.

In the first type the subject is unduly conscious of his audience, in the others he is failing to meet his listeners' expectations. This qualitative impression of degree of egocentrism was supported by the frequency data. (p. 235)

Weitz, in McGowan and Schmidt (1962), discussed the counselor's own needs through counseling and the possibility and danger of self-glorification at the expense of the patient. Wyatt (1962) mentioned that the counselor's therapeutic work will encounter two temptations. The first being the gratification of his own needs in the disguise of therapy which is "likely to follow along the repetition of certain subjective patterns of his own development." (p. 308) The second is the possibility of indulging in "narcissism", which the therapeutic situation tends to nurture. There is a close parallel between narcissism, defined psychoanalytically, and the theoretical presentation of counselor egocentrism in this thesis.

Feldman and Rand (1965) put egocentrism on a continuum ranging from egocentrism, or self-concern with no concern for others; through cocentrism, concern for self and others; to altercentrism, denial of self-concern, for needs of others. They help demonstrate the concept that egocentrism or self-concern is the opposite to empathy and the denial of the self. This is one of the basic concepts for the use of empathy in measuring egocentrism. If one is denying self-concern, he cannot be caught up in himself. This is further demonstrated by a personality inventory developed by Comrey (1968) where one of his scales which was devised through factor analysis has empathy opposing egocentrism. He concluded that these two concepts are on opposite ends of a spectrum reasoning that if one is empathic, he cannot be egocentric.

Summary of Egocentrism

Egocentrism can be considered the inability to differentiate one's ideas with that of others due to the antagonism of assimilation and accommodation in the adaptation process of the individual. Apparently, it may occur in all stages of life (Wolff, 1960), and has now been shown to be one of the research concerns regarding developing psychologists (Wyatt, 1962).

According to Feldman and Rand (1965) and Comrey (1966), empathy and egocentrism are at opposite ends of a continuum. If one is empathic or denying of oneself, then he cannot be egocentric or thinking only of himself.

Empathy

The concept of empathy is studied because the scale for measuring empathy (Empathic Understanding in Interpersonal Processes: A Scale of Measurement) is being employed for the measurement of egocentrism. This section will discuss the definitions and meanings of what empathy is so that it may be compared to the concept of egocentrism which was previously discussed. A discussion on the validity of the empathy scale is in the methodology section.

The term empathy was first used by Titchener in his translation of Lipps (1897) "Einfühlung", which was used to describe an observer losing his own self-awareness as he examines a work of art. It is the actual lending of the observer to fuse with the object that absorbs his attention to the extent that the observer becomes the object imitated.

The psychoanalytic interpretation of empathy is to "take of the role of the other in order to understand what is foreign to the therapist's ego".¹² He must however be able to stay aware of differentiation from the client

(Bergin and Garfield, 1971). Hinsie and Campbell define empathy as

Putting oneself into the psychological frame of reference of another, so that the other person's thinking, feeling, and acting are understood and, to some extent, predictable. (p. 262 - 263)

Fox and Goldin said that "It appears that empathy involves a temporary affective identification with another person in order to understand him. (p. 324) They then mention three phases of empathy. The first is experiencing the client's feelings, then submitting those feelings to close scrutiny, and finally communicating this to the client.

The client-centred therapists advocate that the therapist experience the client's world "as if" it were his own. Carl Rogers (1957) stated that

...to sense the client's private world as if it were your own, but without ever losing the "as if" quality - this is empathy and this seems essential to therapy. To sense the client's anger, fear, confusion as if it were your own, yet without your own anger, fear or confusion getting bound up in it... (p. 99)

Truax and Carkhuff extended the concept of empathy by saying you must not only be able to get into the client's

shoes, but you must have the ability to transmit this to the client.

In essence then, empathy is the abandoning of one's self in order to experience the other's being. If one is empathic e.g. feeling the other person's emotion "as if" they were his own, then his centre of attention is totally away from himself. Egocentrism is, however, the focusing of attention on oneself and having no awareness of the other. These two concepts are then opposed to each other as hypothesized by Feldman and Rand (1965) and Comrey (1968).

Self Reference (Personal Pronouns)

The literature on self reference in relation to egocentrism is quite limited. Sanford (1942), in a review on egocentrism, said that although the idea of personal pronouns has received attention in connection with egocentrism, the actual relationship has never been examined. He quoted Anderson (1939) as having said that "an invariant egocentrism of the individual is expressed in varying ways, only one of which, and maybe an unimportant one, is the use of personal pronouns." (p. 821) Sanford then concluded:

We can keep the hypothesis that personal pronouns are an index of egocentrism, and extrapolating again from

children's speech, it is possible to reason that "action" words, adverbs, nouns, and adjectives are either positively or negatively correlated with first personal pronouns and with egocentrism.¹¹ (p. 825) Haines (1950) said that egocentricity should reveal itself in communication by greater personal self-reference.

In conclusion, the use of personal pronouns in connection with egocentrism is by no means new, and according to the literature, has some validity.

Another behaviour related to egocentrism is that of following behaviour. Derlega, Bayma and Shaw (1975) have shown that neurotics tend to be so preoccupied with their own defences, that they do not notice the cues of others for what is considered appropriate self-disclosure. This concept is taken one step further and it is suggested that not only does the egocentric not follow cues for proper self-disclosure, but may not even follow the client in content either. This paper does not wish to imply that beginning therapists are neurotic, but that they may possess a strong defence mechanism of blocking out the client while in an egocentric state. The next section will discuss the development of the following behaviour scale.

The Following Behaviour Scale

The scale for following behaviour used in this research

was constructed from writings by Ivey (1971) which will be discussed below. It is the intention of this review to define what following behaviour is and how it is used.

Ivey (1971) in his book on microcounseling, discussed the process of attention and how it applies to therapy in relation to understanding the client.

Attention is central to the interaction between interviewer and client. Unless the interviewer listens and attends to the client, little in the way of understanding will occur. Too many beginning counselors and interviewers fail to listen to their clients. (p. 40)

According to Ivey, attending is therefore listening to their clients.

In order to engage in the skill of attending to clients' comments, the person must listen to the content. To follow communications of feeling by appropriate changes in voice timber and quality and by appropriate statements, one must attend to the feeling that is being communicated. The person who is incongruent or attending to himself rather than the client will be unable to listen. (p. 40)

in addition:

Our experience has been that individuals may sometime begin attending in an artificial deliberate manner. However, once attending has been initiated, the person to whom one is listening tends to become more animated, and this in turn reinforces the attender who very quickly forgets about attending deliberately and soon attends naturally. (p. 40)

According to Ivey, attending can be broken down into three behaviours: 1) eye contact; 2) body posture and relaxation; and 3) verbal following. Verbal following is where the therapist responds to the last comment of the client without introducing new data. Topic jumping or asking questions in a random pattern is a common occurrence among beginning therapists. If the interviewer attends to the client's comments and does not add new information, it is surprising how well the therapist can get to know the client. According to Ivey, few people in society really listen to one another, and when someone attends to us, it is a powerful reinforcer to keep talking. Attending behaviour is also, according to Ivey, directly observable.

Brammer and Shostrom (1968) said that they have found that it is a common error for an inexperienced counselor to actually put words into the client's mouth or in some way

to take the conversational initiative away from the client.

In conclusion, following behaviour is not only a reinforcer to talk more, but also allows for more interpersonal communications to follow. A beginning therapist may not only attend to the client in an artificial manner, (Ivey 1971), but may also go as far as to put words into the client's mouth (Brammer and Shostrom, 1968). This is what is predicted of a beginning egocentric therapist who might want to follow the client, but is unable to due to the fact that he is caught up in himself.

Another behaviour associated with egocentrism is silence, although this concept could have a double meaning. It is believed that if a person is caught up in his own egocentrism, he will not know what to say or do. He is in effect lost, causing great gaps of silence. On the other hand, if the anxiety, which produces egocentrism is sufficiently intense, the therapist might have increases in verbal activity, utilizing the defence of talk to mask his tensions. This would decrease amounts of silence.

Silence

In Fromm-Reichman's book (1971) Principles of Intensive Psychotherapy, the patient has been conditioned to speak not with the idea of communicating, but rather to

cover up insecurity. In terms of a therapeutic silence, it could be interpreted as a sign of helplessness or hostility which can be harmful to the patient who is seeking help.

Brammer and Shostrom (1968) classified silence into the following categories:

- 1) Negative or Rejecting
 - a) to reject or ignore
 - b) hostility - motivated resistance
 - c) foot dragging
- 2) Positive or Accepting
 - a) thinking over what was just said
 - b) recovery from fatigue
 - c) loss of what to say
 - d) and "experiencing silence"
 - e) reached an end of an idea and wondering what to say next (p. 191 - 217)

Robinson (1947) classified the pauses of the counselors into three categories: deliberate (for emphasis), organizational (for transitions), and natural termination (to close counseling).

Mahl (1956) used silence as part of his scale for speech disturbance ratios (patient-silence quotient).

Theoretically silence (and perhaps speech disturbance) may be regarded as a defence motivated by anxiety by ideational events or by the nature of the interpersonal relation. (p. 2)

Mahl felt that the patient-silence quotient as well as the speech disturbance ratio could be useful in measuring anxiety.

Siegman and Pope (1965) also used silence in their study of anxiety in interviews. They found that the less specific the interviewer got, the more there would be silent pauses. "These findings indicate that low-specificity interviewer remarks elicit more cautious and hesitant speech in the interview than high-specificity remarks". (p. 528)

In a 1971 review of the literature on Talk, Silence, and Anxiety, Murray concluded that verbal productivity tends to be measured positively by verbal quantity and speed rate, although negatively by the silence measures. He also concluded that there is a good relationship between high situational anxiety and silence.

Also in the review, Pope and Siegman (1970) divided the measure of silence into two categories. The first being the measurement of pauses and hesitation during speech, and the other of the length of time before a person starts

talking. Studies (Siegman and Pope, 1970) have shown that silence and anxiety are highly correlated. It was also found that in situational anxiety, high anxiety subjects were more silent in anxiety-producing situations than low anxiety subjects.

Rosenwein (1971) suggested that silence could represent the person being fixated at a previous stage of development or is involved in a regression when faced with a stressful internal or external situation. He also says that according to the literature, silence is associated with speech defects when there is inner conflict and states of anxiety.

Ferullo (1963), Clevines (1961) and Schwartzberg (1964) have all shown that individuals who were rated as poor speakers are significantly less socially and emotionally adjusted; displaying more manifest anxiety and lacking in self-confidence. Hirsch (1966) pointed out that silence may be a self-imposed ego constriction resulting from the fear of being unable to control one's impulses. Horney (1945) has suggested that the silent person adopts a stance of detachment or withdrawal in relation to others. She suggested that the "moving away" from others represented an attempt by the person to resolve his conflicts by putting himself in situations where he does not have to feel any

feelings towards other human beings.

There are then basically two major types of silence - positive and negative. Silence has been correlated with anxiety (Mahl 1957, Siegman and Pope 1965) and speech disturbance (Mahl, 1957). Rosenwein connected silence with either a fixation or a regression to a previous stage of development. Ferullo (1963), Clements (1960), and Schwartzberg (1964) equated it with emotional maladjustment, lack of self-confidence and manifest anxiety. Since many authors have connected silence to anxiety, and, it also may by a developmental factor (Rosenwein), it could also be connected with egocentrism.

Anxiety is a major factor when one is seeing a client for the first time. This thesis takes the position that it is anxiety which determines the amount of egocentrism in the beginning therapist. If a therapist is highly anxious, he will be entrapped in his own fears, and in turn will be egocentric. In order to correlate anxiety with egocentrism, there must be means of assessing the degree of anxiety the therapist reaches during the sessions. One of the measures used is the Spielberger State Trait Anxiety Inventory which will be discussed next.

Anxiety

State trait. In 1961 Cattell and Scheir empirically isolated two distinct anxiety factors - state and trait. Spielberger (1966) published a theoretical conceptualization of anxiety that also had two anxiety constructs. The constructs followed that of Cattell's and Scheir's, and were labelled state anxiety (A-State) and trait anxiety (A-Trait). Spielberger defined (A-Trait) as an acquired behavioural disposition based on residues of past experiences and reflected in behaviour by relatively stable individual differences in anxiety proneness in response to stress. (A-State) anxiety is the transitory state or condition of the organism characterized by subjective, consciously perceived feelings or apprehension and tension which are accompanied by or associated with activation of the autonomic nervous system.

Hodges (1968), one of Spielberger's co-workers, suggested that the performance differences of those who differ in (A-Trait) anxiety are most often found under conditions of ego involvement (Spence & Spence, 1966; Spielberger, 1962; Spielberger and Smith, 1966). Spielberger (1966) suggested that (A-Trait) anxiety may reflect a fear of failure and that threats to self-esteem (ego-threat) induce

more intense levels of A-State anxiety in a person high in A-Trait anxiety than in those low in A-Trait anxiety. Also those who differ in levels of A-Trait will not necessarily respond with different intensities of A-State anxiety to situations involving physical danger or threat of pain. Hodges concluded that A-Trait anxiety appears to reflect differences in disposition to manifest A-State anxiety, but only in response to stress situations that contain threats to self-esteem or ego threat.

In a 1969 study, Hodges and Spielberger used the Taylor Manifest Anxiety Scale in looking at the digit span (DS) subtest on the Wechsler Adult Intelligence scale. Their findings were consistent with Spielberger's theory of anxiety.

The finding of greatest theoretical importance in this study was the statistically significant decrement in DS performance for Ss who reported a high level of A-State. The fact that high A-State Ss had lower DS scores than low A-State Ss in the test period but not in the performance period is consistent with the interpretation that decrements in DS performance are produced by elevations in A-State. This finding is also consistent with Trait-State Anxiety Theory Spielberger and Lushine, in Press. (p. 433)

Speilberger, and colleagues started the contruction of the State Trait Anxiety Inventory in 1964 with the aim of providing a self-report scale which would provide an objective measure of both state and trait anxiety. The test itself was finally published in 1968. It is comprised of two self report scales measuring two different anxiety scales. The trait scale is made of twenty statements which ask people to describe "how he feels in general". The state scale is also comprised of twenty statements which ask how they feel at a particular moment in time. The authors mentioned that the instructions can be altered to enable the questionnaire to fit a particular situation.

Johnson (1968) used the STAI in studying the effects of interviewer stress on anxiety. He concluded that his data empirically supported Speilberger's 1966 theoretical conceptualization.

Diblin (1969) in a Ph.D. dissertation studied anxiety in counselor trainees during a simulated counseling interview. She divided her subjects into experienced and inexperienced and then looked at Galvanic Skin Response, Heart Rate, and the STAI among others. Diblin found a significant relationship between the STAI, heart rate and galvanic skin response. She also found that almost all of

her measures (13 out of 16) measured more anxiety in the inexperienced than in the experienced group.

Levitt (1967) after examining the major clinical instruments used to measure anxiety concluded that the STAI was the most carefully developed and sophisticated instrument in existence from both the methodological and theoretical point of view.

Speilberger further tested his hypothesis on anxiety with patients about to undergo surgery, and obtained similar results supporting his theory on anxiety.

There are then two types of anxiety. Trait anxiety which is a relatively stable acquired behaviour, and state anxiety which is a more transitory condition activated by the autonomic nervous system. The STAI, devised by Speilberger measures both anxieties and has been correlated with the Taylor Manifest Anxiety Inventory as well as many physiological measures. It is worth noting that since anxiety has been related to ego functioning, (Hodges, 1968) it could also be connected to egocentrism.

Another measure used to study anxiety is the Speech Disturbance Ratio developed by Mahl (1956). Due to the fact that the STAI is a self report measure, it was felt that an objective verbal behaviour measure should also be

employed. The next section will review the literature in this area.

Speech Disturbance

One of the initial articles to be written on the area of speech disturbance in relation to anxiety was by Dollard and Mowrer (1947). Their study covered the aspects of tension in written documents which depends heavily upon the concept of discomfort and relief employing the hypothesis that a comparison of alterations in tension in case-work records would reveal the progress being made.

A discomfort-relief quotient (DRQ) was devised by taking segments of a transcript and then rating them as an expression of discomfort, relief, or lacking in tension. They divided the number of discomfort units by discomfort units plus relief units for any portion of the written documents.

$$\frac{\text{discomfort units}}{\text{discomfort units} + \text{relief units}}$$

In 1948, Raimy used a completely different orientation although he did employ a similar approach. Instead of using the concept of tension and relief, he advocated an evaluation dependent upon the client's manifest self-approval or self-disapproval. Raimy set forth the theory

that by measuring the differences in self-evaluation in counseling interviews, one could measure changes quantitatively. This approach was accomplished by what Raimy call a PNAvQ where the quotient is obtained by having trained judges classify all counselor responses into three categories: P-positive self-reference; N-no self-reference; Q-non-rhetorical questions; and Av-ambivalent self-reference. The PNAvQ is then obtained like Dollard and Mowrer's study, where, like the tension index, one divides the number of N units plus the number of Av units by the number of N-units plus Av-units plus P-units.

$$\frac{N\text{-units} + Av\text{-units}}{N\text{-units} + Av\text{-units} + P\text{-units}}$$

Kauffman and Raimy (1949) investigated the two methods mentioned previously by applying them simultaneously to the same protocols. They found a very high correlation in the results between the two methods but since the two scales were developed from different sets of postulates (Dollard and Mowrer - learning theory, Raimy - client-centred), Kauffman and Raimy stated that there are a number of theoretical questions to be raised. One is that since the two methods are derived from different theories, one would

assume that either one set of postulates or the other would be more adequate than the other, and that it seems unlikely that they would produce similar results. This, according to Kauffman and Raimy, is not necessarily so. They claimed that it is quite possible that although the theories were formulated from different aspects of analysis, they produce certain operations which render essentially the same quantitative results. This, according to Kauffman and Raimy, appeared to be true with this situation. They then concluded with the following statements.

Nonetheless, the results of the present study do indicate that those who are interested in approaching personality change from the phenomenological standpoint can rely with some degree of certainty upon the possibility of making practical use of data originating in the subjective report of immediate experience. Both DRQ and PVAvQ seem to trace in a similar fashion changes from maladjustment to adjustment. Both make use of operations which deal with subjectively reported experience. In the current struggle to find suitable orientations for gauging adjustment the approach via subjective reports seems as deserving of consideration as do

other procedures concerned with objectively observed "behaviour" and physiological measures.

The next major contribution to be made in the area of anxiety and speech was made by Mahl (1956). Mahl stated that the study of the psycholinguistics of anxiety should greatly enhance the objective investigation of psychotherapy especially in the description of changes in the clients during the course of psychotherapy or in the evaluation of the effectiveness of different types of psychotherapy. This is done by measuring changes of anxiety in a patient through content analysis. The use of content analysis is different from determining "characteristic anxiety reactions, defences, etc." in that it is measured immediately in the therapeutic sessions. One is therefore able to assess the current behavioural states of the patient in a monitor-type fashion during a single interview where anxiety can fluctuate a great deal (Mahl, 1956). The procedure allows a more accurate continuous measure as compared to a single measure of anxiety which monitors only large periods of time.

As a result, procedures giving only measures of anxiety for large segments of interviews or for entire sessions taken as the units might obscure more precise co-variations that inevitably would

be of interest. (p. 1)

The use of content analysis can also be used temporally by employing an averaging or summation technique. Mahl also stated that the use of a recording or record adds additional information in that one can also employ the behavioural or "expressional" aspect of the client's speech rather than relying on only the written word.

As to the connection of anxiety to speech disturbance, Mahl said that anxiety does in fact distort all complicated on-going behaviour in the individual, such as speech.

Speech disturbances...may...be conceived as predominantly indirect linguistic consequences of anxiety that do not have instrumental function of reducing anxiety. This notion is based on the assumption that one effect of anxiety, regardless of its source, is to disrupt all complicated on-going behaviour, irrespective of its behavioural relation to the source of the anxiety. (p. 2)

Mahl's study then attempted to develop an accurate speech disturbance ratio scale which could reliably discriminate different measures of anxiety through the use of content analysis.

All of Mahl's research was based on the assumption

that expressive measures are apt to be less influenced by the "learning process in socialization" and therefore are much less variable in meaning and have less a chance to be misinterpreted than the manifest content. A working assumption is that the most valid measure will be based on the expressive aspects of speech rather than on manifest content measures.

According to Mahl, speech disturbances do not have any conventional semantic functions and are not a part of the intentional conscious communication occurring between people. These disturbances are found in all people from "psycho-neurotic patients, therapists, Yale undergraduates, and faculty members alike".

Mahl (1956) later reported that not all categories of his speech disturbance scale were related to anxiety. Although there are two types of speech disturbances (speech fillers such as "ah", and all other types of disturbances), Mahl concluded that only the latter type was related to anxiety.

Mahl (1958) in a paper presented to the American Psychological Association convention cites a study where speech disturbance correlated positively with an independent assessment of anxiety.

The results showed a very significant increase in speech disturbance from neutral to anxiety interviews for the experimental subject. The difference between the control and the experimental group was also significant. (p. 78)

Boomer and Goodrich (1961) tried to replicate Mahl's work on speech disturbance, but met with limited success.

Their study looked at three hypotheses:

- 1) High anxiety interview phases, as judged by the therapist, have a greater mean speech disturbance ratio (SDR) than low anxiety interview phases. (therapist judge)
- 2) High anxiety interview phases, as judged by persons other than the therapist, have a greater mean SDR than low anxiety interview phases. (Does the judgement of anxiety require the first hand knowledge of the patient seen only by the therapist?) Mahl did not study this.)
- 3) Independent judgements by different judges demonstrate substantial agreement as to the identification of phases of high and low anxiety. This tests the link between SDR and anxiety in that since A is measured by B, then both A and B must have acceptable reliability and that they co-vary systematically. Boomer and Goodrich attempted to obtain data to demonstrate the reliability with which fluctuations

of anxiety within an interview can be judged.

The first hypothesis was supported, but the last two were not. In the second hypothesis, none of the non-therapists judged the predicted SDR level. Although the last hypothesis was also not supported, the authors added the difficulty in measuring the validity of the scale. The judges had to come up with their own forms of measuring anxiety and therefore there were no established units of measurement. In the discussion, it was mentioned that the patient's anxiety fluctuations may not have been reflected in the written transcripts, or that the SDR reflected the anxiety, or the judges were not sensitive enough to discern anxiety fluctuations. The conclusion is that there is no highly reliable measure of anxiety through one single scale. The authors also said that the SDR is, however, a promising measure of certain aspects of anxiety in "certain classes of people" under certain situations.

Dibner (1956) in a study similar to Mahl's used speech as one of his scales for measuring anxiety. He stated that most of the previous studies concerned with anxiety assumed that anxiety is more of a permanent concept while he looked at it as a situational phenomenon. (This is similar to Spielberger's state trait model.)

Dibner used an interview situation and measured speech disturbance, Galvanic Skin Response, patients and therapists self-reports. Dibner's speech disturbance scale is not too unlike Mahl's scale, but is computed differently. His results supported the hypothesis that anxiety was not unidimensional, but can be evidenced by activation of various physiological and/or behavioural systems in individuals. Dibner concluded that the scale for speech disturbance was related to situational anxiety and not to that of a personality trait. Dibner did a more sophisticated study in 1958 and obtained basically the same results. In both of Dibner's studies, it appears that the raters of speech anxiety were not the therapist who did the interview on the tapes which points towards the conclusion that rater reliability can be obtained.

Krause (1961) did a correlational study between Dibner's and Mahl's research. He said that their validity claims were relatively weak. However, he also said that "different measures may be valid for different persons and that what measurement values indicate anxiety or non-anxiety may also be idiosyncratic." (p. 272) Krause concluded that the measurement of verbal responses was not any less troublesome to validate than are physiological measures of

anxiety. This was basically what Boomer and Goodrich said.

In another article submitted two months later by Krause and Pilisuk (1961) there was an attempt to combine both Dibner's and Mahl's scales into a single measure of verbal anxiety due to the feeling that there was so much overlap between the two scales. They came to the conclusion that intrusive non-verbal sounds such as laughs and sighs were the most correct predictors of anxiety.

In a later study, Siegman and Pope (1965) studied the effect of high and low specificity questions upon patients in an initial interview. They examined ah and non-ah speech disturbance, silent pauses and rate of articulation. Their results show that low specificity as compared to high specificity was correlated with ah speech disturbances, a slow articulation rate, and silent pauses. This meant that a low-specificity interview elicited more cautious and hesitant speech or as Siegman and Pope said "information uncertainty". They also found that during high-specificity segments, anxiety reduced the occurrence of ahs although it had no effect on silence and articulation rate. This brought them to the conclusion that anxiety can have both an activating as well as a disruptive effect on verbal behaviour. "Its disruptive effect is clearly noted in its

association with non-ah speech disturbance. Its activating effect is noted in its association with an accelerated articulation rate." (p. 529) The authors then concluded that both low-specificity and high-specificity interfered with verbal fluency although each condition caused different changes. Anxiety-arousing topics were correlated with disruptive speech, as manifested in non-ah speech disturbances, while low-specificity remarks tended to create cautious and hesitant speech rather than disruptive speech.

This study as reported by Siegman and Pope differed from the conclusions of Brunner (1963) who reported a correlation between uncertainty and non-ah speech disturbances. They also disagreed with Goldman and Eisler (1961) who found no significant results, although this study was conducted on different conditions.

In 1965, Mahl and Kasl published another study using this speech disturbance ratio. This time they explored the speech ratio and added that there were basically two different approaches to the study of human speech. The first approach being a study of the manifest content of messages emitted where one must rely on face validity and the second manner of examination is to emphasize the "instrumental function of language and speech" which

possibly may have signal properties "which lie beyond the symbolic nature". (p. 529)

Language is seen as an expressive behaviour system with instrumental and reactive properties; the speech disturbances, the flustered speech are taken to be nonlexical attributes that are relatively free from both linguistic and general social control. That is, these aspects of speech are assumed to be linguistically irrelevant. (p. 425)

In "normal" people, Mahl has found that on the average, for every sixteen words spoken, there is at least one disturbance. "This is equivalent to one disturbance for every 4.6 seconds the individual spends talking." (p. 425)

In the experiment itself, the individual was not only rated for speech disturbance, but also palmar moisture was recorded five times during the interview, and an MMPI was administered at the end of the interview. The results revealed a mild positive association between speech anxiety and palmar sweating. There was also a slight curvilinear relationship with the MA scale of the MMPI which had been corrected for defensiveness.

In investigating the characteristics of subjects who are highly labile, it was found that subjects who are labile

on the palm moisture test (show high intraindividual variation during various scoring sessions) tend to be stable in their speech disturbance profiles and vice versa. "The relationship suggests that palmar sweat and disruption of speech may be alternate ways of measuring how each subject reacted to anxiety fluctuations which occurred during the experiment." (p. 425)

Boomer (1963) found a "moderate but substantial" positive relationship between Mahl's SDR and body movement during an interview. Also in the area of speech anxiety and physiological connections, Panek and Martin (1959) confirmed their hypothesis that speech disturbances show an increase at points of emotion arousal as defined by the Galvanic skin response. They also confirmed Mahl's position that their ahs and repetitions were differently related to points of emotional arousal.

Cook (1968) looked at the non-ah aspect in speech disturbance and studied it in relationship to the length of anxiety and verbal productivity. Murray (1971) found that the studies examining the relationship between anxiety and verbal productivity lacked consistency. In forty-four studies, thirteen showed a significant positive relationship, sixteen a significant negative relationship, and fifteen no

significant relationship at all. Murray then came to the conclusion that there is a positive relationship between verbal quantity and "dispositional and concurrent anxiety" and a negative correlation with situational anxiety although there is a curvilinear rather than rectilinear relationship between verbal productivity and anxiety.

Saunders (1974) looked at the non-content verbal behavioural aspect of measuring anxiety. Using the Speilberger State Trait Anxiety Inventory, he divided his subjects into three groups according to how they scored on the test. The categories were high anxiety, medium anxiety, and low anxiety. Saunders also introduced a standardized interview which few people had done before. The results were that the non-content speech measure demonstrated a relationship with anxiety, and that a U-curve connection exists between anxiety and temporal speech patterns. The low anxiety group had the greatest amount of speech disturbance, the high anxiety group came next, and the medium anxiety group had the least amount of overall speech disturbance of all.

In conclusion, the literature on verbal behaviour is quite extensive and far from conclusive. Mahl (1956) has developed a speech disturbance ratio to measure amounts of

anxiety in on-going behaviour. It has been correlated with other indices of anxiety such as physiological and self report measures. There appears to be a correlation between speech disturbances and anxiety, but a number of researchers have not yet come to any agreement on its relationship. Regardless of their criticism, the worst thing said about the speech disturbance ratio is that it is no easier to validate than any physiological measures. The most recent literature (Saunders, 1974) demonstrates a reliable connection between non-content speech disturbance and anxiety, which appears in a U-shaped curve.

Summary

Egocentrism has been associated with Piaget's stage of childhood development when assimilation and accommodation become undifferentiated in the process of the adaptation of the infant. As well as being applied to the biological processes, Piaget had also associated adaptation to the cognitive process of the infant (Flavell, 1964). Wolff (1960) extended the concept of adaptation and egocentrism one step further by saying that these constructs may be present at all periods of life, and Elkind (1967) expressed the belief that egocentrism is evident in linguistic behaviour.

Hepner (1966) suggested that egocentrism could be

inferred in the observer when he is so tightly bound to his own thoughts and feelings, he is unable to directly share his experiences with others. McPherson (1956) postulated from the Thematic Apperception Test that verbal disorganization was due to egocentrism. Wyatt (1962) expressed the danger of the presence of egocentrism in the counselor during the therapy session.

Unfortunately, there were no previously researched operational definitions which could be applicable to this thesis. Therefore, a number of scales were prepared in an attempt to measure some aspect of egocentrism. These measures were empathy, following behaviour, self-reference, and silence.

Empathy was defined by the client-centred therapist whereby the therapist experiences the client's world "as if" it were his own. Truax and Carkhuff added that the therapist must not only have the ability to be empathic, but must also be able to communicate the "accurate empathy" to the client. This is therefore, the opposite of egocentrism where the individual is not with the client's being, but entrapped in his own world and oblivious to the thoughts of others.

A review of the literature on the validity of empathy

was also conducted due to the objections brought forth by Chinsky and Rappaport (1970). They claimed that the scale was measuring not only empathy, but also the "global characteristics" of a counselor such as warmth, genuineness, and unconditional positive regard. They also questioned the rater reliability of the empathy scale. Bogarth and Krauft (1973) reviewed the literature in this area and concluded that with stringent controls, the problem with rater reliability could be overcome. They did however, find that empathy could be thought of as a general counselor characteristic. They concluded that empathy and the other characteristics were independent if studied at the same time.

In studying self-reference, Sandford (1942) said that although the idea for measuring egocentrism by personal pronouns is not new, it has never really been explored. In the same review Anderson (1939) said that it could be an unimportant way of discovering egocentrism but Sandford concluded that it is quite possible that there is a relationship. Haines (1950) expressed the belief that there was a relationship between egocentrism and personal pronouns.

The scale for following behaviour was developed by Ivey (1971). He stressed that attention was central for the relationship between the therapist and client. In

order for one to attend to the client, he must follow what the client says. He also warned that some counselors may attend to the client in an artificial way which is not beneficial to the client. Brammer and Shostrom (1968) said that a new therapist may even go as far as to put words in the client's mouth.

The last scale for measuring egocentrism is silence, which has been categorized by a number of different authors; Brammer and Shostrom (1968), Fromm-Reichman (1970), and Robinson (1947). Mahl (1956) linked silence with anxiety by employing it in a patient-silence quotient. He regarded it as a defence motivated by anxiety. Siegman and Pope (1956) have correlated anxiety and silence especially in terms of situational anxiety. Rosenwein (1971) connected silence with either a fixation or regression to a stage of development, and Furullo (1963), Clements (1961), and Schwartzberg (1964) equated it with emotional maladjustment, lack of self-confidence, and manifest anxiety. In conclusion, silence appears related to anxiety and it is hoped that it will help measure some aspect of egocentricity in relation to anxiety.

In order to measure the relationship between anxiety and egocentrism, two measures were utilized. The

Speilberger State Trait Anxiety Inventory and a speech disturbance ratio.

The Speilberger STAI was designed after the Cattell and Schier model of two isolated distinct anxiety factors, state and trait. Speilberger defined trait anxiety (A-trait) as an acquired behavioural disturbance based on past experience. State anxiety (A-state) is a transitory condition consciously perceived with activation of the autonomic nervous system. This has been supported both physiologically as well as with other written measures of anxiety (Spence and Spence, 1966; Hodges, 1968; Johnson, 1969; and Speilberger and Smith, 1966).

The speech disturbance ratio (SDR) was developed by Mahl in 1956. Previous researchers Dollard and Mowrer (1947) and Raimy (1947) also developed content analysis methods which are similar to Mahl's. Mahl felt that the study of psycholinguistics would greatly enhance the objective research in psychotherapy. That is, psycholinguistic measures could be used in an on-going evaluation of anxiety during the course of therapy. Mahl mentioned that speech disturbance is an indirect measure in that it studied the expressive measures of language, rather than the manifest content of speech which can

consciously be controlled. Mahl (1956) later reported that only certain types of speech disturbance were related to anxiety. The speech filler or "ah" disturbances evidently were not predictors of anxiety.

Boomer and Goodrich (1961) raised the question of rater reliability in that, did the rater of speech disturbances have to also be the therapist? They concluded that besides this difficulty, speech disturbance showed promise in measuring anxiety in certain circumstances.

Dibner (1956) introduced a speech disturbance ratio very similar to Mahl's with slightly different measures. Krause (1961) conducted a correlational study between Mahl's and Dibner's measures and found that there was some problem in their validity claim but concluded that they were no more difficult to use in the measure of anxiety than physiological measures.

Boomer (1963) and Panek and Martin (1959) found a connection between speech disturbance and physiological measures such as GSR and body positions during an interview. Murray (1971) in a review of the literature found inconsistencies among the reports on speech disturbance and anxiety, but concluded that there is a positive correlation between speech disturbance and concurrent anxiety. Saunders (1974)

found a U curve connection between anxiety and temporal speech patterns.

Hypotheses

Wolff (1960) hypothesized that egocentrism may be present at all levels of development. Wyatt (1962) presented the theory that there is a danger of the therapist becoming egocentric during the therapy session. It is therefore hypothesized that when the anxiety level of a beginning therapist rises, so will his level of egocentric behavior. Four scales have been devised for the measurement of egocentrism, resulting in four research hypotheses:

- 1) When the level of anxiety in the beginning therapist increases during the role-playing therapy session, the level of empathy will decrease.
- 2) When the level of anxiety in the beginning therapist increases during the role-playing session, there will be an increase in the number of personal pronouns given by the therapist.
- 3) When the level of anxiety in the beginning therapist increases during the role-playing therapy session, there will be a decrease in the number of following behavior responses in relation to the number of non-following behavior responses given by the therapist.

4) When the level of anxiety in the beginning therapist increases during the role-playing therapy session, there will be either a significant increase or a significant decrease in the amounts of silence during the interview.

Since the hypotheses were tested with a multivariate analysis of variance (see p. 70), the research hypotheses were combined to form two main null hypothesis as presented below. The alpha level chosen for the rejection of the null hypothesis was .05.

Null Hypotheses

- 1) During an initial counseling session, there will be no statistically significant differences in egocentric behavior among the three groups of trainees who differ in their level of anxiety (speech disturbance).
- 2) During an initial counseling session, there will be no statistically significant differences in egocentric behavior among the three groups of trainees who differ in their level of anxiety (state anxiety).

Method

This study was divided into two different parts. The object of the first study was to determine if there was a relationship between trainee levels of anxiety and egocentrism. The second study was a replication of the first with additional measures of anxiety and personality characteristics.

Experiment One

Subjects: The first study involved thirty first year Master's students (group I), who were studying at the University of Ottawa (Class of 1975). The group was equally divided with regard to sex and linguistic background (Francophone or Anglophone). The ages ranged from twenty-two to thirty-six. Due to the anonymity of the subjects, it was not possible to determine exact statistics for age. The mean age was estimated at approximately twenty-six. Of the thirty students in the group, the data from ten subjects could not be used due to mechanical difficulties with the recording equipment, resulting in a total of twenty in group one. When the data was collected, none had yet received any systematic empathy training.

Apparatus: The recording devices were Sony reel to reel tape recorders, model number TL105. Also employed was an

automatic stop clock (Lafayette Instrument Co. model 5912).

Setting: The tapings of the session were conducted in a furnished counseling room with two chairs angled towards each other, and a table between the chairs holding a visible tape recorder. The rooms themselves were located in two different counseling centres (The Guidance Centre and Counseling Services), which are equipped with rooms for the purpose of counseling.

Procedure: The subjects or role-playing counselors were assembled in a waiting room until their randomly assigned number was called out by their randomly assigned role-playing client. The client and counselor then proceeded to an assigned therapy room as described before. The tape recorder was then turned on and the ten minute interview was initiated. The only instructions given to the subjects was "to be the best therapist you know how to be". The data was gained from the ten minute interviews recorded as described above.

All of the subjects or "therapists" entered the situation blindly, not knowing who their role-playing client would be or what problem would be presented to them. The only manipulation of client-therapist interaction was that it was pre-arranged that a client was randomly assigned to a

counselor of the same language.

The role-playing clients were advanced graduate students in Clinical Psychology also at the University of Ottawa who had gone through the same experience the year before. They had been trained to be the type of client they were to represent and also had experienced approximately twelve hours of previous role-playing. They were also given typed scenarios describing the problem and background they were to portray.

Data Preparation: The ten minute tapes taken from the interviews were divided into thirds consisting of three and a third minutes per segment or two hundred seconds. The first third was then eliminated due to the possibility that it consisted mostly of the formalities of getting acquainted and the presentation of the problem. (Carkhuff, 1969) Of the last two sections, two minute segments were randomly extracted and then carefully individually analyzed. The process of randomly obtaining the two minute segments from the second and third portions of each tape was done by randomly picking a number from zero to eighty. These eighty-one numbers represented the first seconds of each two minute segment. The reason for this procedure was that if the starting point for the randomly extracted two

minute segment was beyond the 80 second point, the two minute segments would not have been confined to the designated third of the tape. In all, there were forty two minute segments of 120 seconds in length. The procedure was done to ensure that there would be at least one client-therapist-client interaction. (When this was later confirmed by listening to all of the segments, it turned out that on the average, there were many more than just one of such interactions.) Using portions of the last two-thirds of each interview also meant that each subject would be rated twice for each scale.

For the sake of clarity, tape segments extracted from the second third of the tapes to test the hypotheses, will be referred to as segment one. The tape segments extracted from the last third of the tapes will be referred to as segment two.

The tape segments were then randomly recorded on a master tape to ensure blind ratings. Four raters (two Francophones and two Anglophones) were employed for the ratings due to the fact that half of the subjects were French and the other half were English. Before any of the raters did any judging on any of the actual tapes they were to rate, all raters went through a training period on

all scales with the trainer. The French raters were trained in English on English tapes due to the unilingualism of the English trainer. All raters had to reach a specific proficiency in the use of all scales before they were given the actual tapes to rate. When the inter-rater reliability was calculated, both the English and French raters judged an English practise tape. This was due to the fact that the French raters were bilingual, while the English raters and English trainer were unilingual.

When the training was finished, the French and English raters were given their respective master tapes. Each rater was given a completely different set of master tapes for each scale to be rated in order to prevent biasing of one scale onto the next. Also the order of segments on each tape was different so as to prevent anticipation of one segment to the next.

Each rater was also given specially prepared forms to code data on, for each scale. Each judgement for each scale of each segment was placed on a separate form. All raters received ample amounts of forms and were instructed to put no more than one rating or set of ratings (depending on the scale) on a form. Besides the ratings, the judges were also instructed to include the tape number, side number,

track number, and segment number for later identification. They were also instructed to work alone, and not to do all of the scoring at once due to fatigue.

After the ratings were completed and collected, the forms were then assessed for inter-rater reliability. When the actual coding was finally computed, the two raters of each language were assessed. If there was disagreement between the two English raters of the English tapes or between the two French raters on the two French tapes, an average between the two scores was obtained and used for that particular tape segment. The manner of the rating of the different scales was as follows.

Empathy: The measurement of empathy was scored by the employment of Carkhuff's (1967) revised Empathic Understanding in Interpersonal Processes: A Scale for Measurement. Each rater, after becoming well-acquainted with the scale was instructed to listen to each two minute segment in its entirety and then rate it as a whole. Like all the other scales, if the rater wished, the segment could be replayed at will. The raters also had a copy of all the scales (see Appendix A) in case they wanted to refer to them. The scores were then placed on the special scoring sheet provided. Again only one score per sheet was used. Information

on the validity of the empathy scale will be discussed later in this chapter.

Following Behaviour: The scale for following behaviour was scored by instructing the raters to determine if the therapist followed the actual content of what the client had just said each time the client spoke. If, for example, the counselor changed the topic this would have been scored as a non-following response. If the counselor did follow, this also was tabulated. After each segment, the number of following, as well as non-following behaviour responses by the therapist, was tabulated into different columns. In the statistical analysis of this scale, a ratio was constructed by dividing the total number of non-following behaviour statements by the number of following statements. This procedure was followed for each two minute segment. The rationale for this procedure is similar to that of the Speech disturbance ratio developed by Mahl (1956), which will be discussed later in this chapter. The only difference in the calculation of this scale being that the non-following phrases were divided by following phrases instead of total number of words as was employed by Mahl.

Silence: The score for silence was obtained by attaching an automatic timer (Lafayette stop clock number 5807)

to a tape of talking done in each segment. At the end of each segment the total time talking was subtracted from the 120 second (length of each interview) segment. This was then the amount of silence per segment.

Personal Pronouns: The scale for self-reference was obtained by a summation of all personal pronouns by the therapist during the interview. Even if the therapist referred to himself more than once during the client-therapist interaction, they were all included. At the end of each segment, the number of self references by the therapist was calculated and recorded on the appropriate scoring sheet.

Speech Disturbance (Anxiety): The speech disturbance scale was determined by instructing the raters to summate the number of actual speech disturbances made by the therapist. This meant any sound or word which does not belong to a normal sentence such as a stutter, incoherent sound, repetition, etc. The raters were also instructed to record speech disturbances which were also space fillers, such as ahs, but to list them separately. (In Appendix A the list of speech disturbances provided for the raters is presented.) After all of the speech disturbances were obtained, the raters then counted the total number of words

spoken by the therapist in the segment and included it on the scoring sheet as well. The data used to test the hypotheses was obtained by calculating the number of speech disturbances (speech filler or non-ah not included) by the number of words spoken by the therapist.

After the data for the scales was obtained, it was assigned to the appropriate subject, and then transferred to computer cards for a multivariate analysis of variance (Finn, 1968). The actual statistical analysis will be described at the end of experiment two.

Experiment Two

As was mentioned earlier, study two was a replication of experiment one with the addition of two questionnaires, administered at the end of the taping of the interviews.

Subjects: The subjects (Group 2) used in this study were the class of 1976 first year Master's students in psychology at the University of Ottawa, or the class following group one. These subjects will be referred to as group 2. Their stratification is as follows: ten males and twelve females, nine Anglophones and seventeen Francophones. The age statistics are similar to that of group one, but as in study one, due to the anonymity, actual means could not be obtained. There were originally thirty

subjects, but due to mechanical difficulties, the final number of subjects in group two was twenty-two.

Apparatus: The measures employed in experiment one were also employed in experiment two, with the addition of the Speilberger State Trait Anxiety Inventory (STAI) and the Cattell Sixteen Personality Factor Inventory (16 P.F.).

Setting: The setting employed in experiment two was duplicated as close as possible to that of experiment one. The procedures for assigning random numbers for anonymity, assignment of counselors to clients, interviewing offices, and presentation of the same problem were the same as in experiment one. The role-playing clients were different due to graduation, but those who did role-play had similar experiences and training in the counseling situation. They were also given the same typed scenario. The only major difference was the administration of the STAI and the Sixteen Personality Factor Inventory after the taping session. They were also asked to write down on their STAI forms if they had had any previous experience in counseling adults in a one-to-one therapeutic situation.

Procedure: The procedure for scoring the tapes was the same as that used with group one employing the same raters and scoring methods. This information was also

transferred onto computer cards in the same fashion.

The STAI (Speilberger, Gorsuch, Lushene, 1970) which was administered included both the X-1 (state) and the X-2 (trait) forms. The instructions for the state anxiety were altered so that the subjects reported their state anxiety while they were actually in the taping session. According to the manual for the STAI, this modification was quite acceptable. The instructions were as follows:

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you felt with specific reference with your experience in the 15 minutes of role-playing which you have just completed.

Statistical Analysis: Several multivariate analyses of variance were used to test the hypotheses. The independent variable was anxiety which was broken down into three groups - high, medium, and low anxiety. The procedure for dividing the groups was done by first ranking the subjects in order from least anxious to most anxious and then breaking them up into equal thirds. If this caused a division between two anxiety scores which were the same, the similar scores were placed in the medium anxiety group. The dependent variables were the four egocentric scales.

The hypotheses were analyzed separately for each group (group one and group two, speech disturbance versus the four egocentric scales and state anxiety versus the four egocentric scales). Finally, a multivariate analysis of variance was performed for each of the two groups combined, as outlined below:

state and speech disturbance anxiety	group one (class of '75)	study one
state and speech disturbance anxiety	group two (class of '76)	study two
state and speech disturbance anxiety	groups 1 & 2	

After the analysis of the three studies, the statistical tests were repeated separately for the French and English groups, to see if there was any statistical difference between the two language groups. A Scheffe' (Kirk, 1968) post hoc analysis was implemented on all of the significant F-Ratios (both multivariate and univariate). Finally, a Pearson correlation matrix (Nie Hull, Jenkins, Steinbrenner, and Bent, 1975) was calculated between the scores from the Cattell Personality Factor Inventory and the anxiety measures.

Summary and Discussion of Results

Results

The first section of this chapter presents the rater reliabilities followed by the statistical tests of the hypotheses. These tests involved multivariate analyses of variance, univariate analyses of variance, and the corresponding post hoc tests. The next section contains the correlations between anxiety and the Cattell Sixteen Personality Factors.

The inter-rater reliabilities (Zuwaylif, 1970) for the two French raters were as follows: empathy .89; following behaviour .76; personal pronouns .70; and, speech disturbance ratio .70. The inter-rater reliability for the two English raters were: empathy .95; personal pronouns .90; following behaviour .92; and, speech disturbance .80. Since the French and English raters scored different tapes, no actual inter-rater reliability could be obtained for all four raters. Fortunately, the French raters were bilingual (French and English), which was not the case for the English raters and trainer. Therefore, all the training of both English and French raters was done in English. The inter-rater reliability of all the raters on an English training tape was .80. The inter-rater reliability for all four individual raters averaged .75, with a range of .70 to .82.

Multivariate Analysis of Variance Results

The hypotheses were tested separately with scores from the second and third segments of the tapes. In essence, the hypotheses of each study were tested twice. For the sake of clarity, as was mentioned in Chapter Two, the second third of the tape segments scored will be called segment one, and the third third of the tape segments scored will be referred to as segment two.

Null Hypothesis I: During an initial counseling session, there will be no statistically significant differences in egocentric behavior among the three groups of trainees who differ in their level of anxiety (speech disturbance). Egocentrism was measured by four scales: empathy, silence, personal pronouns, and following behavior. Therefore, the statistical tests of hypothesis I involved a multivariate analysis of variance (manova) and a univariate analysis of variance (anova).

With reference to the first study (Group I, Class of 1975), segment one, the multivariate F-ratio for the differences in mean vectors was .53 (p .91). Therefore, there were no significant differences among the three anxiety groups as measured by the four egocentric scales (see Table 1). That is, hypothesis I was not rejected.

In segment two of study one, the mean vectors were not equal F 3.38 (p .01), meaning that there was a statistically

significant difference among the three anxiety groups as measured by the four egocentric scales (see Table 2). Furthermore, the differences among the mean vectors was probably attributable to only one of the egocentric measures that is, personal pronouns, where the univariate F-ratio was found to be 8.34 ($p < .01$) indicating that the three groups differed significantly on the basis of personal pronouns (see Table 3). A Scheffe' post hoc analysis indicated that there was a significant difference between the medium anxious group and the high anxious group, as well as between the low anxious and the high anxious groups. Therefore, there was a significant difference among the three anxiety groups (speech disturbance anxiety) as measured by personal pronouns. That is, the null hypothesis concerning personal pronouns and speech disturbance was rejected for study one, segment two.

In study two (Group 2, Class of 1976), segment one, there were no significant differences (see Table 1) among the three anxiety groups (speech disturbance) on the four measures of egocentrism. The multivariate F-ratio for the differences in mean vectors was .91 ($p < .52$). Therefore, hypothesis I was not rejected.

In segment two of study two there were no significant differences (see Table 2) among the three anxiety groups

TABLE II

75 Summary of Multivariate Analysis of Variance for the Effects of Counselor's Anxiety
(Speech Disturbance Anxiety and State Anxiety) on the Four Measures of Egocentrism
in Segment One of Each Study

Source		F-Ratio for Difference between mean vectors (Comprised of Four Egocentric Scales)	Level of Significance
Study I: Anxiety (3 Levels of Speech Disturbance)	Sample I French and English (n=20)	.53	.91
	Subsample II French (n=8)	.79	.82
	Subsample III English (n=12)	4.23	.01
Study II: Anxiety (3 Levels of Speech Disturbance)	Sample I French and English (n=22)	.91	.52
	Subsample II French (n=13)	.52	.82
	Subsample III English (n=9)	.88	.58
Study III: Anxiety (3 Levels of Speech Disturbance)	Sample I French and English (n=42)	.79	.61
	Subsample II French (n=22)	1.43	.23
	Subsample III English (n=20)	.81	.60
Study II: Anxiety (3 Levels of State Anxiety)	Sample I French and English (n=22)	1.40	.23
	Subsample II French (n=13)	1.09	.42
	Subsample III English (n=9)	1.82	.24

TABLE 2

Summary of Multivariate Analysis of Variance for the Effects of Counselor's
Anxiety (Speech Disturbance) on the Four Measures
of Egocentrism in Segment Two of Each Study

Source		F-Ratio for Differences between mean vectors (Comprised of Four Egocentric Scales)	Level of Significance
Study I: Anxiety (3 Levels of Speech Disturbance)	Sample I French and English (n=20)	3.38	.01
	Subsample II French (n=8)	.42	.56
	Subsample III English (n=12)	.35	.93
Study II: Anxiety (3 Levels of Speech Disturbance)	Sample I French and English (n=22)	.82	.59
	Subsample II French (n=13)	.86	.57
	Subsample III English (n=9)	.34	.93
Study III: Anxiety (3 Levels of Speech Disturbance)	Sample I French and English (n=42)	1.30	.26
	Subsample II French (n=21)	.69	.69
	Subsample III English (n=21)	.93	.51
Study II: Anxiety (3 Levels of State Anxiety)	Sample I French and English (n=22)	.67	.71
	Subsample II French (n=13)	.69	.60
	Subsample III English (n=9)	.93	.51

TABLE 3

Univariate Analysis of Variance: French and English Groups Combined,
 Study One, Segment Two -
 Effects of Speech Disturbance (Anxiety) on Counselor Trainee Egocentric Behaviour

Variable	Univariate F	P Less than	Step Down F	P Less than
Empathy	.92	.42	.92	.42
Silence	.02	.98	.04	.96
Personal Pronouns	8.34	.01	10.57	.01
Following Behaviour	.48	.48	3.12	.08

(speech disturbance) on the four measures of egocentrism. The multivariate F-ratio for the differences in mean vectors was .82 (p .59). Therefore, hypothesis I was not rejected.

In study three (Groups 1 and 2 combined), segment one, there were no significant differences among the three anxiety groups (speech disturbance) on the four measures of egocentrism (see Table 1). The multivariate F-ratio for the differences in mean vectors was .79 (p .61). Therefore, hypothesis I was not rejected when tested with the data from segment one.

In study three, segment two, there were no significant differences among the three anxiety groups (speech disturbance) on the four measures of egocentrism (see Table 2). The multivariate F-ratio for the differences in mean vectors was 1.30 (p .26). Therefore, hypothesis I was not rejected when tested with data from segment two.

The following section will cover the second hypothesis concerning state anxiety and the four egocentric scales.

Null Hypothesis II: During an initial counseling session, there will be no statistically significant differences in egocentric behavior among the three groups of trainees who differ in their level of anxiety (state anxiety). Egocentrism was measured by four scales: empathy, silence, personal pronouns, and following behavior. Therefore, the statistical tests of hypothesis

II involved a multivariate analysis of variance (manova), and a univariate analysis of variance (anova). It should also be noted that this hypothesis was tested only in study two.

With reference to the second study, segment one, the multivariate F-ratio for the differences in mean vectors was 1.40 ($p < .23$). Therefore, there were no significant differences among the three anxiety groups as measured by the four egocentric scales. That is, hypothesis II was not rejected when tested with data from segment two.

Along with the manova of the French and English subjects combined, a series of manovas was calculated for each individual language group (see Tables 1 and 2). Generally, the differences in mean vectors were statistically insignificant except in study I, segment one, English, speech disturbance, where the multivariate F-ratio was 4.23 ($p < .01$) meaning that there was a significant difference among the three anxiety groups as measured by the four egocentric scales (see Table 4). Furthermore, the differences among the mean vectors was probably attributable to only one of the egocentric scales, that is, silence, where the univariate F-ratio was found to be 13.07 ($p < .01$), indicating that the three groups differed significantly on the basis of silence.

A Scheffe' post hoc analysis indicated that there was a significant difference between the medium anxious group and the high anxious group, as well as between the low anxious and high anxious groups.

In general, null hypotheses I and II could not be rejected, however, data from study one, segment two, gave some indication that speech disturbance (anxiety) was related to an increased use of personal pronouns (egocentric behaviour). In view of these results, a final decision on hypothesis I will be made after the discussion in the next chapter.

After the major statistical tests of the hypothesis were calculated, the data was graphically represented as shown in Figure 1. The only suggestion of a curvilinear relationship was between empathy and state anxiety.

The partitioning of the between groups sum of squares into linear and non-linear components is represented in Table 5. The partitioning indicated that the relationship between state anxiety and empathy was primarily curvilinear as shown in Figure 1. A test to estimate the respective strengths of the linear and curvilinear relationships indicated that approximately 4% of the variance of the empathy of the subjects may be attributable to a linear

TABLE 4

Univariate Analysis of Variance
for English Study One, Segment One

Variable	Univariate F	P Less Than	Step Down F	P Less Than
Empathy	.89	.44	.89	.44
Silence	13.07	.01	13.05	.01
Personal Pronouns	1.91	.20	1.28	.34
Following Behaviour	.27	.77	3.28	.11

relationship with anxiety, and 46% of the variance may be attributable to a curvilinear relationship (see Table 6).

Correlations with the Sixteen Personality Factor Inventory

The Cattell Sixteen Personality Factor Inventory was correlated with both speech disturbance and state anxiety in study two (see Table 7). Those with the most significant correlations ($p < .01$) are listed below. Speech disturbance segment one, study two: nothing significant at the .01 level. Speech disturbance segment two, study two: Scale C (Emotional Stability versus Dissatisfied Emotionality) .56; Scale M (Absent Minded versus Concerned with Facts) -.39. State Anxiety study two: Scale A (Cyclothymia versus Schizothymia) .61; Scale N (Shrewdness versus Naivete) -.39. The interpretation of the above correlations will be discussed in the next chapter.

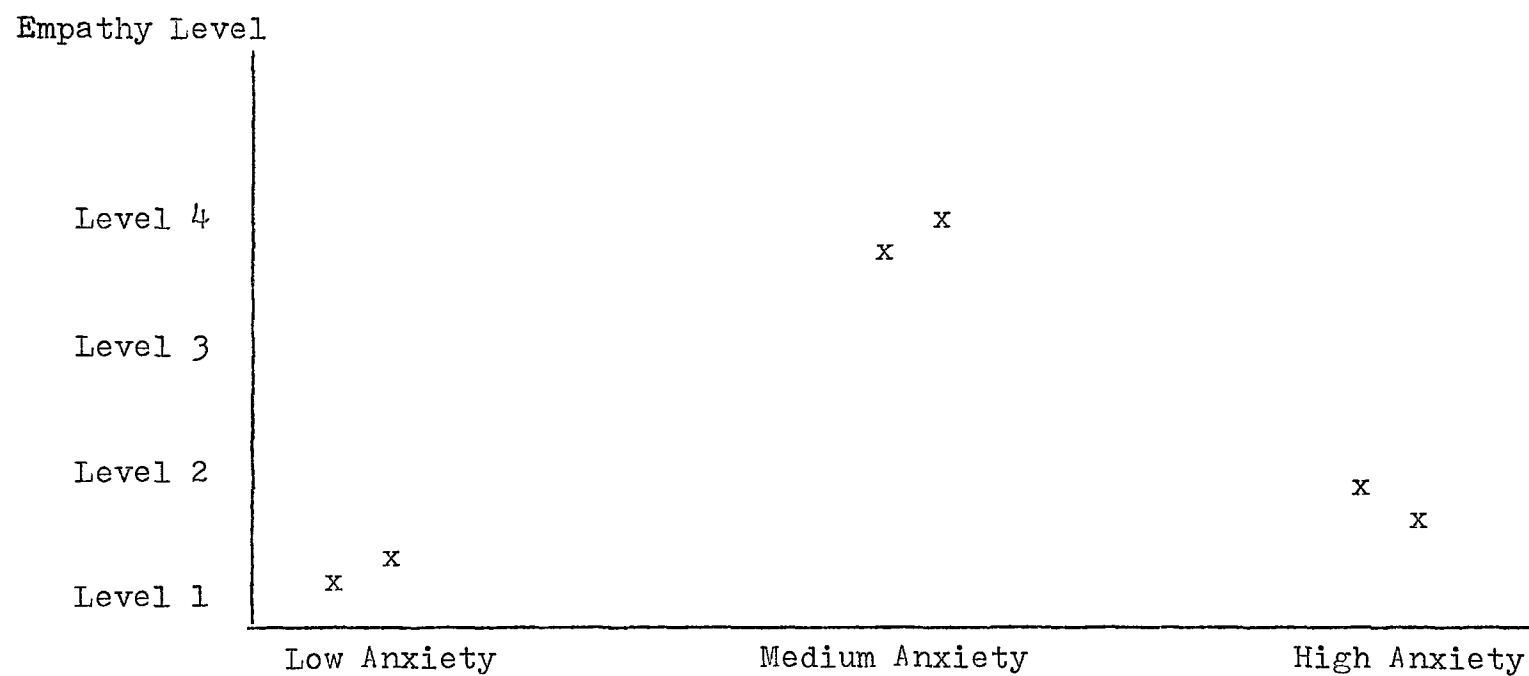


Figure I

Graphic representation of English State Anxiety as plotted against Empathy in Segment 1, Study 2.

TABLE 5

Multivariate and Univariate Analysis of Variance
of English State Anxiety Study Two, Segment Two

Variable	Univariate F	P Less Than	Step Down F	P Less Than
Empathy	4.20	.07	4.20	.07
Silence	1.83	.24	.91	.46
Personal Pronouns	.60	.58	2.00	.25
Following Behaviour	.89	.46	1.19	.42

TABLE 6

Analysis of Variance for the Relationship
Between State Anxiety and Empathy
for the English Portion of Segment One, Study Two

Source	SS	df	MS	F
Between Groups	1.17	2	-	-
Linear reg.	.05	1	.05	.35
Dev. from lin.	1.12	1	1.12	8.00 *
Error	.82	6	.14	
Totals	1.99	8		

* .05 level

TABLE 7

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Correlations Between
the Cattell Sixteen Personality Factors and the Anxiety Measures
(State Anxiety, Speech Disturbance Segment One
and Speech Disturbance Segment Two)

Scales of Cattell Sixteen Personality Factor Inventory	State Anxiety	Speech Disturbance (Segment 1)	Speech Disturbance (Segment 2)
A) Cyclothymia versus Schizothymia	.61 ⁺	.31	.12
B) Intelligence (Bright) versus (Dull)	.40 [*]	.34	.08
C) Stability versus instability	.00	.34	.5 ⁺
E) Dominance versus Submission	.02	.15	.24
F) Enthusiastic versus Sober	.30	-.15	-.1
G) Determined versus Quitting	-.27	.24	.14
H) Adventurous versus Timid	.13	.24	.17
I) Sensitive versus Tough	.14	-.21	-.04
L) Suspecting versus Trustful	.23	-.30	-.34

TABLE 7
(continued)

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Scales of Cattell Sixteen Personality Factor Inventory	State Anxiety	Speech Disturbance (Segment 1)	Speech Disturbance (Segment 2)
M) Unconventional versus Conventional	.21	-.33	-.60 ⁺
N) Sophisticated versus Unpretentious	-.55 ⁺	-.10	-.09
O) Timid versus Confident	.22	-.25	-.38 [*]
Q ₁ Critical versus Noncritical	-.18	.29	.38 [*]
Q ₂ Self-Sufficiency versus Group Dependent	-.26	-.35	-.36
Q ₃ Controlled versus Uncontrolled	-.39 [*]	.16	.15
Q ₄ Tense versus Composed	.33	-.39 [*]	-.38 [*]

⁺ (p < .01)

^{*} (p < .05)

Discussion

The following chapter will discuss the results as reported in Chapter Three, and their implications in the area of counselor development.

In general, when considering all four egocentric scales in relation to both state anxiety and speech disturbance anxiety, there was a failure to reject the null hypothesis. A discussion of each hypothesis will now be given, followed by an overall discussion of the study as a whole.

Summary of Results for Hypothesis I

Hypothesis I: During an initial counseling session, counselor trainee anxiety (speech disturbance) is not related to egocentric behaviour.

The global analysis of hypothesis I indicated that there was no relationship between speech disturbance and the four egocentric scales. The manova for segment one of studies one, two, and three indicated non-significant differences among the mean vectors for the three anxiety groups. There were significant differences among the mean vectors in segment two of study one ($F=3.38$, $p < .01$). However, in study two and three, there were no significant differences among the mean vectors. Therefore, the statistical tests did not indicate any relationship between counselor trainee anxiety and egocentric behaviour.

Summary of Results for Hypothesis II

Hypothesis II: During an initial counseling session, counselor trainee anxiety (state anxiety) is not related to egocentric behaviour.

In the test of hypothesis II, there were no significant differences in the mean vectors in any of the segments. Therefore, the statistical tests did not indicate any relationship between counselor trainee anxiety and egocentric behaviour.

General Discussion and Objectives

Before entering upon the general discussion, it is felt that a brief review of the objectives of this research should be restated. It was postulated through both observation and theory that there is some relationship between anxiety and egocentric behaviour which the beginning therapist demonstrates during the novel counseling experience. The objective of this thesis was to test the foregoing theoretical interpretation of early counseling development. Because of the originality of this theoretical interpretation, no previous measures of counselor trainee egocentric behaviour existed. Therefore, it was necessary to operationally define egocentric behaviour with the use of four rationally related scales. Although there was no significant relationship between anxiety and egocentrism, this research did accomplish its objective of

exploring a theory of counselor development.

There are a number of aspects about this study which should be covered to aid in a better understanding of the results. This next portion of the chapter will discuss aspects of the methodology and the study as a whole in relation to the implications for a theory of the development of a beginning counselor.

Subjects: The first topic of consideration is the subjects. One half of the subject population was Francophone with the remaining half Anglophone. There is the possibility that one of the languages or cultures were more verbose during the interview. It appeared that both the French clients and counselors may have talked more during the interviews, which could have affected the amounts of silence. Note that there was a significant relationship detected between silence and speech disturbance anxiety in the French portion of study one, segment one, yet none for the English. The English counselors did demonstrate a trend between empathy and state anxiety in study two, segment one.

Another aspect about the subjects which should be taken into consideration is the subjects' background. It is true that none of the subjects had any systematic training on the skills of therapy. However, one's background, outlook on the

role of a therapist in therapy, and his orientation to a specific type of therapy may have influenced the outcome of the study. If, for example, one of the therapist's orientation is towards behaviour modification, he may be less empathic because behaviour therapists generally do not stress the use of empathy as much as other orientations. Even if this individual should become more anxious as hypothesized, the empathy scale might not detect this, due to the fact that he is already responding with lower levels of empathy to begin with.

Although there remains the possibility that subjects background and outlook may have altered the data, it should be mentioned that the process of randomization of subjects, role-players, and tape segments should have minimized these influences given a large enough sample. Since the sample was not considered large, these factors remain a source of error for this study.

Method: One aspect of this study which should be taken into consideration is the methodology of the study. Regardless of the stringent controls used in this research, it was difficult to obtain strict measurements when exploring behaviour outside the confines of the laboratory situation. Gormally and Hill (1970) and Matarazzo (1971) have discussed

the very difficult nature of researching clinical areas. A number of their suggestions for minimizing error were incorporated into this research, such as the standard problem presented, standard interviewing room, and standard use of scales.

Raters: One factor which could affect the data was the raters. Although the raters did have the same training, and were reliable on the English training tapes, an inter-rater reliability could not be established due to the different languages. It was hoped that the French raters would transfer their training and knowledge of the scales to the French tapes. There was no real way of determining how successful this transfer was, even though they did have a thorough knowledge of the English scales as represented by their inter-rater reliability on the practise English tapes.

The following portion of this chapter will discuss the four scales which were employed to test the hypothesis between egocentrism and anxiety.

Measurement of Egocentrism

Empathy: It was postulated that empathy would measure some aspect of egocentrism, that is, when one is not in an egocentric state (less anxious), there would be a higher level of empathic responses. From the results of the anova, it can

be concluded that there was no relationship between empathy and anxiety. However, it must be realized that high levels of empathy do not come naturally, but are obtained through training, and one must acquire a skill to respond with high levels of empathy. Since the subjects had no previous systematic empathy training, it is quite possible that differential levels of empathy could not have been demonstrated because all the subjects were low in empathy to begin with, and that the drop in empathy levels due to anxiety was too small to detect.

There is evidence to suggest that speech disturbance anxiety and the state anxiety inventory measures different aspects of anxiety ($F = -.18$, $p < .13$). Therefore, the demonstrated trend between state anxiety and empathy was not replicated with the speech disturbance scale (English - STAI Anxiety, study two, segment two).

Silence: In testing the hypothesis on silence, it was postulated that the amounts of silence would be either quite low or quite lengthy in the anxious counselor, as compared to the non-anxious counselor. The results as reported in Chapter Three, in general, failed to support this two-tailed hypothesis. A number of suggestions explaining these results are as follows. First there is the possibility that there is

no connection between silence and anxiety. This is not consistent with the studies of Mahl which found a relationship between anxiety and silence. A possible reason that no significant results were found could be due to the fact that two different language groups were involved. The differences in speech patterns and modes of expression when combined, could have nullified any effects in the predicted direction. When the language groups were studied separately, the English state anxiety (study one, segment one) did show significance ($F=10.57$, $p .01$) in relation to silence. It appears that silence becomes more prominent as the anxiety rises. Although most of the other studies revealed a similar trend, none were significant. Another factor which should be considered is that the total amount of silence was measured. This includes those silences invoked by the client as well as the therapist. It was found that some of the clients were more talkative than others. In conclusion, although the scale of silence was not shown to be related to anxiety, it may have real potential in clarifying the process transpiring in the beginning counselor.

Following Behaviour: The hypothesis that the more anxious therapists would follow the client less was not

supported. This may be due to the way the scale was calculated. When the scale was first devised, it was concluded that the scale should be constructed similarly to Mahl's speech disturbance scale which took the number of disturbances and divided it up by the number of words spoken. The present following behaviour scale was devised by taking the number of non-following behaviour phrases spoken by the therapist, and dividing this number by the amount of following responses. This decision was made after listening to the tape segments and noting that in those listened to, the number of following responses far out-numbered the number of non-following responses. It is realized now that strictly following Mahl's procedure by using the total number of responses and not just following responses could have changed the results, giving possibly a more realistic picture of how well the therapist followed the content of the client. It is felt that further research is warranted in this area.

Self References: Self references was the only scale to reveal any significant results ($p < .01$) when combining the French and English together in study one, segment two. It should be mentioned that when the French and English were studied separately in that particular segment, the above

relationship was not obtained.

It is felt that this scale is the most objective of the four scales measuring egocentrism because only a count of personal pronouns was involved. In addition, it is the only scale which was directly given theoretical and empirical support in the literature in regards to egocentrism, although not in relation to counselor development. Therefore, it is felt that this scale has the most promise in developing a method of measuring egocentrism and warrants further research.

Relationships Among the Four Scales

It was noticed that there was only one significant correlation among the four egocentric scales. This may be explained by the reason that the scales could be measuring different and independent aspects of egocentrism. This same phenomenon is present for the two scales used to measure anxiety. That is, speech disturbance and the state anxiety inventory also were not significantly correlated, although it is accepted that they both measure some type of anxiety. Therefore, there remains the possibility that the four scales may be independent measures of egocentrism.

Discussion of the Cattell Sixteen Personality Factor Inventory

The 16 P.F. was administered for the purpose of determining if any other personality factors were related to

the counselor trainee's anxiety. More information of each scale is in Appendix B.

Pearson Product Moment Correlations

The correlations between state anxiety (study two) and the Cattell Inventory, Scale A was .61 ($r = .01$). People who score high on this scale, tend to be warm, kindly, soft-hearted, and attending to people as compared with those who score low, who are critical, rigid, suspicious, and cold. It is interpreted that those who are soft-hearted, trustful, and kindly could possibly be anxious when they saw the client in distress and become anxious over their inability to help. Those that were aloof, hard, and critical were too busy judging than actually getting into the clients' problems.

Scale B correlated .40 ($r = .05$) with state anxiety. Along with general intelligence, this scale measures conscientiousness. This appears to correspond with the idea that a therapist does want to be effective and to help the client. However, if he has not yet learned the needed skills to help, he may become anxious because he is not yet able to function effectively. This could possibly lead to anxiety. This scale may also measure some aspect of self-concept, or how the therapist sees himself in a role of a helping person.

Scale Q₃ was negatively correlated with state anxiety

-.39 ($r = .05$). Cattell stated that this scale measures socially approved character responses, self-control, persistence, considerateness of others and conscientiousness.

There was only one significant correlation with speech disturbance (segment one) and the 16 P.F. There was a negative correlation between Scale Q_4 which measures tension, irrationality and anxiousness, and speech disturbance of -.39 ($r = .05$). This negative correlation was unexpected because theoretically Scale Q_4 and speech disturbance should be measuring similar variables.

In terms of speech disturbance anxiety segment two, Scale M correlated negatively, $r = -.60$ ($p < .01$). Cattell associated this scale with "cheerful" versus "concerned or worried". It was hypothesized that if a person is concerned or worried he would be more anxious than those who were more "frivolous" and "immature in practical needs". The therapist who is concerned about helping a client should become anxious if he were unable to help the client. This supports the basic ideas of this thesis.

Scale O correlated with speech disturbance segment two $r = -.38$ ($p < .05$). This correlation is perhaps one of the hardest scales to explain because the scale measures guilt proneness, anxiety, and depression (low scores) versus

cheerful, and self-confidence. The negative correlation with speech disturbance anxiety suggested that if the therapist was self-confident, tough and given to simple action, and is unable to help the client readily, he may become frustrated, lose his self-confidence and become anxious; whereas the opposite tendencies would logically be expected.

The Scale Q_4 was the only scale which also correlated with speech disturbance segment two $-.38$ ($r=.05$) which again measures socially approved character responses, self-control, persistence, considerateness of others, and conscientiousness. It should be mentioned that out of the possible 48 correlations ten were significant. Therefore, there remains the possibility that those correlations which were significant may be due to chance alone.

In conclusion, there was a failure to support the theoretical predictions that there is a relationship between anxiety and an egocentric state in the beginning therapist. However, failure to reject the null hypothesis does not necessarily imply that there is no relationship between egocentrism and anxiety. There are a number of various changes and additions which should be attached to future studies. The reader must consider the very nature of the study. This was an entirely new area under study, and there was until now, no

existing data or theory on the actual development of the therapist. Although the amount of literature in associated areas is large, as testified by the first chapter, there was no actual research which lent direction to the theory or measurement of a counselor development. The researcher was forced to rely on strictly theoretical and hypothetical extrapolations to develop scales which it was hoped, would measure some aspects of the hypothesized egocentrism which was observed in a beginning therapist. Some of the scales used (empathy and amounts of personal pronouns) were borrowed from other areas of research with the intention that they could theoretically and empirically measure certain aspects of egocentrism. The two remaining scales (amounts of silence and following behaviour) were developed through theory and observations to also hopefully measure some aspects of egocentrism which was caused by anxiety. The new experiences gained from this research should give valuable guidance and information in further research which is warranted in this area.

Following Behaviour

- 1) An open invitation to talk
 - open ended questions
 - help client clarify own problems (not gain information for interviewer)
- 2) Encouragement to talk more - "um hmm"
 - shows interest and involvement
 - also reinforces for clients behaviour
- 3) Reflection and/or Summerization
 - I am with you...I am accurately sensing the world as you feel and perceive it.
 - Level 3 or above.
- 4) Summerization
 - integrating the various responses of the client
 - re-statement of content (when stuck go back to something that was said previously)
- 5) None of the above

A characteristic of good following behaviour is the interviewer's use of comments which follow directly from what the interviewer is saying. He does not jump from subject to subject or interrupts.

Attention is central to the interaction between interviewer and client. Unless the interviewer listens

or attends to the client, little in the way of understanding will occur. Too many beginning counselors and interviewers fail to listen to their clients.

In order to engage in the skill of attending behavior, the person must listen to content. To follow communication of feeling by appropriate statements, one must attend to the feeling that is being communicated. The person who is incongruent or attending to himself rather than the client will be unable to listen.

Verbal following behavior demands that the counselor respond to the last comment or some preceding comment of the client without introducing new data. Topic jumping or asking questions in a random pattern is a common occurrence among beginning interviewers.

(Ivey, 1971)

Appendix B

Instructions to Raters

The purpose of the rating is to take two-minute segments from each tape and do a content analysis for anxiety. This will be done by making a Speech-Disturbance Ratio:

$$\frac{\text{N Speech Disturbances}}{\text{N "Words" Spoken by Therapist}}$$

This will be done by counting the number of completed words, the number of "sounds" and the number of "ah's". This number will go into the denominator or words spoken category. The Numerator will be comprised of those words which fall in the Disturbance category listed below.

Disturbance Categories

1. "Ah". Wherever the definite "ah" sound (as distinguished from "er", "um", etc.) occurs, it is scored.
2. Sentence Correction. A correction in the form or content of the expression while the word-word progression occurs. To be scored, these changes must be sensed by the listener as an interruption in the word-to-word sequence.
3. Sentence Incompletion. An expression is interrupted, clearly left incomplete, and the communication proceeds without correction (unintentional).
4. Repetition. The serial superfluous repetition of one or

more words - usually of one or two words.

5. Stutter.

6. Intruding Incoherent Sound. A sound which is absolutely incoherent as a word to the listener. It merely intrudes without itself altering the form of the expression and cannot be clearly conceived of as a stutter or omission.

7. Tongue-slip. This category includes neologisms, the transposition of words from their correct serial position, and the substitution of an unintended for an intended word.

8. Omission. Parts of words, or rarely entire words, may be omitted. Contractions are exempted. Most omissions are of terminal syllables or words.

(Mahl, 1956)

Appendix C

Empathic Understanding in Interpersonal Processes:

A Scale of Measurement

Level 1

The verbal and behavioural expressions for the helper either do not attend to or detract significantly from the verbal and behavioral expressions of the helpee(s) in that they communicate significantly less of the helpee's feelings and experiences than the helpee has communicated himself.

EXAMPLE: The helper communicates no awareness of even the most obvious, expressed surface feelings of the helpee. The helper may be bored or disinterested or simply operating from a preconceived frame of reference which totally excludes that of the helpee(s).

In summary, the helper does everything but express that he is listening, understanding, or being sensitive to even the most obvious feelings of the helpee in such a way as to detract significantly from the communications of the helpee.

Level 2

While the helper responds to the expressed feelings of the helpee(s), he does so in such a way that he subtracts noticeable affect from the communications of the helpee.

EXAMPLE: The helper may communicate some awareness of

obvious, surface feelings of the helpee, but his communications drain off a level of the affect and distort the level of meaning.

The helper may communicate his own ideas of what may be going on, but these are not congruent with the expressions of the helpee.

In summary, the helper tends to respond to other than what the helpee is expressing or indicating.

Level 3

The expressions of the helper in response to the expressions of the helpee(s) are essentially interchangeable with those of the helpee in that they express essentially the same affect and meaning.

EXAMPLE: The helper responds with accurate understanding of the surfact feelings of the helpee but may not respond to or may misinterpret the deeper feelings.

In summary, the helper is responding so as to neither subtract from nor add to the expressions of the helpee. He does not respond accurately to how that person really feels beneath the surface feelings; but he indicates a willingness and openness to do so. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4

The responses of the helper add noticeably to the

expressions of the helpee(s) in such a way as to express feelings a level deeper than the helpee was able to express himself.

EXAMPLE: The helper communicates his understanding of the expressions of the helpee at a level deeper than they were expressed and thus enables the helpee to experience and/or express feelings he was unable to express previously.

In summary, the helper's responses add deeper feeling and meaning to the expressions of the helpee.

Level 5

The helper's responses add significantly to the feeling and meaning of the expressions of the helpee(s) in such a way as to accurately express feeling levels below what the helpee himself was able to express or, in the event of on-going, deep self-exploration on the helpee's part, to be fully with him in his deepest moments.

EXAMPLE: The helper responds with accuracy to all of the helpee's deeper as well as surface feelings. He is "tuned in" on the helpee's wave length. The helper and the helpee might proceed together to explore previously unexplored areas of human existence.

In summary, the helper is responding with a full awareness of who the other person is and with a comprehensive and accurate

empathic understanding of that individual's deepest feelings.
(Carkhuff, 1969, 315-317).

Appendix D
Problem Outline

- 1 - Reason for seeking counselling - fed up with being lonely,
saw poster for counselling
 - lonely, none or few social contacts
 - passive participant, does not initiate
 - anxiety, fear of not being accepted
 - low risk taker

 - nobody interested in him or her
 - tends to project difficulties on other people and situations

 - very demanding, perfectionistic
 - self-conscious
 - careful in conversation, dress, actions
 - likes to carefully plan his or her life
 - inflexible, rigid

- 2 - Age: 21
Birth Order: Second-born, has an older brother or sister
Faculty: Science, 3rd year
Educational Background: above average achiever

- 3 - Parents: subtly demanding
relatively cold (interpersonally)
middle class
hard working
driving
successful

Appendix E

Validity of the Measurement of Empathy

Due to the recent controversy on the validity of the empathy scales (Chinsky and Rappaport, 1970), it was decided to review the relevant information in this area.

The actual empathy scale was primarily designed for use with both live observations and/or tape recorded counseling interviews. The scale has also been used with both live and/or tape recorded counseling interviews. The scale has also been used with typewritten manuscripts with only a slight loss of reliability. The duration of tapes used have been from two minutes to sixteen, and in both group and single therapy sessions. It has been used to assess teacher-student relationships, marriage relationships, and parent-child relationships.

The accurate Empathy Scale delineated nine stages or degrees of accurate empathy which were derived from Roger's theory of "necessary and sufficient conditions to effect personality change" (Rogers, 1957).

In 1969, Carkhuff and his colleagues altered the scale to five points which gave greater reliability and comprehension. It measures the degree that the therapist is with the client. The therapist response could not only represent the amount of sensitivity or understanding of the client's feeling, but

could also help to clarify and expand the client's awareness of himself. This according to Truax is a high level response rating. On the other hand, a low level of accurate empathy by the therapist could represent a pre-occupation with his own intellectual interpretations and a lack of awareness of the client's being, or simply the therapist failing to sense the client's feelings and experiences.

There has been some criticism on the validity of the accurate empathy scale. Chinsky and Rappaport (1970) said that there is a possibility that the scale is responding to some global quality other than that which the scale defines. They also questioned the number of raters used per study and the actual reliability of raters used in studies done by Truax.

Truax (1972) in a rejoinder to Chinsky and Rappaport (1970) said that although he did not agree with the three points made, he would deal with the objection of the scale measuring a global quality. He said that the scale was not difficult to use, and that there was either a negative or an insignificant relationship between non-possessive warmth, genuineness (the global qualities) and empathy. Truax also noted studies done by Shapiro (1968) who found adequate construct validity.

Bogarth and Krauft (1973) looked at all three objections stated by Chinsky and Rappaport earlier i.e.,

- 1) Are raters responding to a more general counselor

characteristic other than accurate empathy as defined by Truax? 2) Is high reliability less likely to be found when large numbers of therapists are used? 3) Is the reliability of the accurate empathy scale inflated by lack of independent raters? Their results were as follows: In question one, Bogarth and Drauft did find a relationship between empathy and the more general counselor characteristics. However, they did add "...empathy and the other two characteristics seem to be relatively independent when one considers that all three characteristics were rated at the same time". In other words, when you rate empathy, warmth, and genuineness together, you will obtain scores representing an independence between three constructs. In question two, it was discovered that the rating of more than one segment per therapist did not inflate the reliability ratings. In question three, it was concluded that randomization of segments effectively safeguarded against rater biases due to knowledge of sequence.

In conclusion then, if controls are stringent, the empathy scale is valid although the influence of global characteristics has not yet been cleared up entirely.

Appendix F
Training of "Clients"

The training of the role-playing clients consisted of a group meeting with the "clients" in which they were given a typed scenario of the type of problem they were to present, type of character they were to portray and background information they were to give to the "counselor". These students had experienced the same situation they were to produce the previous year, and therefore had an understanding of the characteristics of the role they were to portray. The scenario was then discussed by the experimenter and all questions were answered. The questions were concerned with the intensity of the problem they were to present.

Appendix G

TABLE OF MEAN SCORES FOR STUDY I, SEGMENT I FOR THREE
LEVELS OF ANXIETY: HIGH, MEDIUM, AND LOW SPEECH DISTURBANCE

	EMPATHY	SILENCE	FOLLOWING BEHAVIOR	PERSONAL PRONOUNS
COMBINED				
High	2.68	090.86	0.14	02.00
Medium	2.42	077.65	3.66	04.17
Low	2.50	079.67	0.43	05.00
FRENCH				
High	2.58	094.03	0.17	02.75
Medium	1.75	080.20	0.58	06.78
Low	3.00	088.26	1.03	05.17
ENGLISH				
High	2.80	087.30	0.20	02.80
Medium	2.50	093.33	6.67	08.33
Low	2.25	058.92	1.25	06.25
STUDY I - SEGMENT II - SPEECH DISTURBANCE				
COMBINED				
High	2.46	084.81	1.71	12.71
Medium	2.63	084.18	1.50	14.67
Low	2.07	085.49	7.14	27.29
FRENCH				
High	2.67	082.20	7.33	08.33
Medium	2.38	084.95	9.00	16.50
Low	2.33	094.00	7.67	44.33
ENGLISH				
High	2.31	085.17	0.50	14.00
Medium	1.94	080.92	0.75	08.25
Low	2.69	083.60	0.75	22.00

TABLE OF MEAN SCORES FOR STUDY II, SEGMENT I FOR THREE
LEVELS OF ANXIETY: HIGH, MEDIUM, AND LOW SPEECH DISTURBANCE

	EMPATHY	SILENCE	FOLLOWING BEHAVIOR	PERSONAL PRONOUNS
COMBINED				
High	2.68	090.86	0.14	02.00
Medium	2.42	077.65	3.67	04.17
Low	2.50	079.66	0.43	05.00
FRENCH				
High	1.81	102.58	0.00	00.00
Medium	2.15	090.20	0.20	00.00
Low	2.25	094.60	0.25	25.00
ENGLISH				
High	1.92	084.30	0.33	00.00
Medium	1.58	067.00	1.00	52.66
Low	2.00	082.53	0.67	00.00

STUDY II - SEGMENT II - SPEECH DISTURBANCE

COMBINED				
High	1.97	086.49	1.38	24.75
Medium	2.21	095.53	3.33	10.17
Low	2.09	085.25	1.63	06.25
FRENCH				
High	1.88	099.82	4.50	29.00
Medium	2.25	089.54	1.60	10.00
Low	1.94	085.55	1.25	0.00
ENGLISH				
High	2.31	085.18	0.50	14.00
Medium	1.94	080.92	0.75	08.25
Low	2.69	083.60	0.75	22.00

TABLE OF MEAN SCORES FOR STUDY II, SEGMENT I FOR THREE
LEVELS OF ANXIETY: HIGH, MEDIUM, AND LOW STATE ANXIETY

	EMPATHY	SILENCE	FOLLOWING BEHAVIOR	PERSONAL PRONOUNS
COMBINED				
High	1.86	089.47	0.14	16.97
Medium	2.43	089.26	0.29	00.00
Low	1.69	086.24	0.63	17.75
FRENCH				
High	2.13	099.92	0.00	25.00
Medium	2.45	091.94	0.20	00.00
Low	1.56	095.07	0.25	00.00
ENGLISH				
High	1.50	075.53	0.33	05.33
Medium	2.33	089.83	0.67	00.00
Low	1.67	068.40	1.00	47.33
SEGMENT II - STATE ANXIETY				
COMBINED				
High	1.89	085.97	1.00	20.43
Medium	2.36	092.23	3.43	16.14
Low	2.00	087.46	1.63	06.63
FRENCH				
High	1.63	075.00	0.33	05.33
Medium	1.89	085.76	0.58	00.00
Low	1.32	069.55	1.00	03.33
ENGLISH				
High	1.50	075.00	0.33	05.33
Medium	2.33	089.00	0.67	00.00
Low	1.67	067.66	1.00	47.33

TABLE OF MEAN SCORES FOR STUDY III, SEGMENT I FOR THREE
LEVELS OF ANXIETY: HIGH, MEDIUM, AND LOW SPEECH DISTURBANCE

	EMPATHY	SILENCE	FOLLOWING BEHAVIOR	PERSONAL PRONOUNS
COMBINED				
High	2.00	084.78	0.42	14.33
Medium	2.28	089.56	1.47	01.67
Low	2.40	082.65	0.47	09.00
FRENCH				
High	2.00	099.49	0.00	00.00
Medium	2.43	087.81	0.29	00.00
Low	2.32	090.84	0.00	15.71
ENGLISH				
High	2.36	084.81	0.29	22.29
Medium	2.21	082.00	3.14	02.29
Low	2.14	069.40	1.14	07.14
STUDY III - SEGMENT II - SPEECH DISTURBANCE				
COMBINED				
High	2.21	086.21	1.64	20.50
Medium	2.46	088.89	2.14	10.64
Low	1.98	085.21	4.43	17.21
FRENCH				
High	2.33	094.50	5.33	23.50
Medium	2.34	088.66	3.88	04.13
Low	1.93	087.33	4.43	26.14
ENGLISH				
High	1.93	084.01	0.43	16.14
Medium	2.11	080.99	1.43	13.43
Low	2.68	085.96	1.44	16.14

Reference Notes

Boulet, Donald B. A comparison of two training approaches, role-playing and audio training, on the communication of empathic understanding. Unpublished Ph.D. Dissertation, University of Ottawa, 1974.

Lipps in Empathy by Burke Harley, in an unpublished paper presented to York University, 1974.

References

- Allen, George J. M. Effects of three conditions of administration on "Trait" and "State" measures of anxiety. Journal of Consulting and Clinical Psychology, 34 (3), 355-359.
- Anderson. In Sanford, F. H. (Ed.), Speech and Personality Psychological Bulletin, 1942, 39, 818-841.
- Bachrach, Henry. Adaptive regression, empathy and psychotherapy: theory and research study. Psychotherapy: Theory, Research and Practice, 1968, 5 (4), 203-209.
- Baer and Wright. Developmental psychology. Annual Review of Psychology, 1974, 25, 60-62.
- Bergin, A. E. and Garfield S. (Eds.), Handbook of Psychotherapy and Behaviour Change. New York: Wiley, 1971.
- Beutler, Larry E. Some sources of variance in "Accurate Empathy" ratings. Journal of Consulting and Clinical Psychology, 1973, 40 (2), 167-169.
- Bogarth, J. D. and Krauft, C. C., Accurate empathy ratings: some methodological considerations. Journal of Clinical Psychology, 1973, 28 (4), 408-410.
- Boomer, Donald S. Speech disturbance and body movement in interviews. Journal of Nervous and Mental Disorders, 1963, 136, 263-266.

- Boomer, Donald S. and Goodrich, D. Wells. Speech disturbance and judged anxiety. Journal of Consulting Psychology, 1961, 25 (2), 160-164.
- Brammer, L. M. and Shostrom, E. L. Therapeutic Psychology. New Jersey: Prentice-Hall, Inc., 1968, 1-191.
- Brenner, Jerome S. Affrontement et defense. Journal of Psychology, 1961, 58 (1), 33-56.
- Butler, Edward R. and Hansen, James C. Facilitative training: acquisition, retention, and modes of assessment. Journal of Counseling Psychology, 1973, 20 (1), 60-68.
- Carkhuff, Robert. Helping and Human Relations (Vol 1). New York: Holt, Rinehart and Winston, 1969, xix-298.
- Carkhuff, Robert. Helping and Human Relations: A Primer for Lay and Professional Helpers (Vol 2). New York: Holt, Rinehart and Winston, 1969, 315-317.
- Carkhuff, Robert R. and Berenson, Bernard G. The nature, structure and function of counseling. Journal of Rehabilitation, 1969, 35 (5), 13-14.
- Chaikin, Alan L., Derlegra, Valerian J., Bayma, Benjamin, and Shaw, Jacqueline. Neuroticism and disclosure reciprocity. Journal of Consulting Psychology, 1975, 43 (1), 13-19.
- Chaplin, J. P. Dictionary of Psychology. New York: Dell Publishing Co. Ltd., 154.

- Chinsky, J. M. and Rappaport, J. Brief critique of the meaning and reliability of "accurate empathy" ratings. Psychological Bulletin, 1970, 73 (5), 379-382.
- Clements, Sam D. The predictive utility of three delinquency proneness measurements. Dissertation Abstracts, 1960 (March), 20, 3827.
- Comrey, Andrew L. and Backer, Thomas E. Construct validity of the Comrey personality scales. Journal of Multivariate Behavioural Research, 1970 (October), 469-477.
- Comrey, Andrew L. and Duffy, Kirt E. Cattell and Eyesenck factor scores related to Comrey personality factors. Multivariate Behavioural Research, 1968 (October), 3, 379-392.
- Cook, Mark. Anxiety, speech disturbance and speech rate. British Journal of Social and Clinical Psychology, 1969, 8, 13-21.
- Derlega, A., Bayma, B., and Shaw, J. Neuroticism and disclosure reciprocity. Journal of Consulting Clinical Psychology, 1975, 43 (1), 12-19.
- Diblin, Joan E. Anxiety in counselor trainees. Dissertation Abstracts International, 1970, 30 (9-A), 3721, Vol 44: 19450.
- Dibner, Andrew S. Cue counting: a measure of anxiety in interviews. Journal of Consulting Psychology, 1956, 29 (6), 475-478.

- Dibner, Andrew S. Ambiguity and anxiety. Journal of Abnormal and Social Psychology, 1958, 56, 165-174.
- Dollard, J. and Mowrer, O. H. A method of measuring tension in written documents. Journal of Abnormal and Social Psychology, 1947, 42, 3-32.
- Elkind, David. Egocentrism in adolescence. Child Development, 1967, 38, 1025-1034.
- Feldman, Harold and Rand, Martin E. Egocentrism - altercentrism in the husband-wife relationship. Journal of Marriage and the Family, 1965, 27 (28), 380-391.
- Ferullo, Robert J. The self-concept in communication. Journal of Communication, 1963, 13 (2), 77-86.
- Finn, Jeramy D. Multivariate, Version 4, Fortran IV. Ontario Institute for Studies in Education, 1968 (June), Toronto, Ontario
- Flavell, J. H. The Development of Jean Piaget. Princeton, N.J.: D. van Nostrand Company, Inc., 1964.
- Fox, R. and Goldin, P. The empathic process in psychotherapy: a survey of theory and research. Journal of Nervous and Mental Disease, 1964, 138 (4), 323-331.
- Fromm-Reichman, Frieda. Principles of Intensive Psychotherapy. Chicago: The University of Chicago Press, 1971.
- Goldman-Eisler, F. Continuity of speech utterances, its determinants and its significance. Journal of Language and Speech, 1961, 4 (4), 220-231.

- Gormally, James and Hill, Clara E. Guidelines for research on Carkhuff's training model. Journal of Counseling Psychology, 1974, 21 (6), 539-547.
- Haines, Miriam S. Egocentric responses in normal and behaviour-problem children. The Journal of Psychology, 1950, 29, 259-261.
- Hebb, D. O. A Textbook of Psychology, Philadelphia, Pa.: W.B. Sanders, 1966.
- Hepner, Harry Walker, Psychology Applied to Life and Work. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1966, 126, 271.
- Hinsie, L. and Campbell, R. Psychiatric Dictionary, Oxford University Press, New York. In, Fox, R. and Goldin, P., The empathic process in psychotherapy: a survey of theory and research. Journal of Nervous and Mental Disease, 1964, 138 (4), 323.
- Hirsch, Ernest A. Basic mistrust and defensive omnipotence in a severely disorganized child. Journal of the American Academy of Child Psychiatry, 1966, 5 (2), 243-254.
- Hodges, W. F. Effect of ego threat and threat of pain on state anxiety. Journal of Personality and Social Psychology, 1968, 8 (4), 364-372.
- Hodges, William F. Effects of ego threat and threat of pain on state anxiety. Journal of Personality and Social Psychology, 1968, 8 (4), 373-376.

- Hodges, William F. and Spielberger, Charles D. Digit span: an indicant of trait or state anxiety? Journal of Consulting and Clinical Psychology, 1969, 33, 430-434.
- Horney, Karen. Our Inner Conflicts: A Constructive Theory of Neuroses. New York: W.W. Norton and Company, Inc., 1945.
- Ivey, Allen. Microcounseling: Innovations in Interviewing Training. Springfield, Illinois: Charles C. Thomas, 1971, xxi-206.
- Johnson, Dale T. Effects of interview stress on measures of state and trait anxiety. Journal of Abnormal Psychology, 1968, 73 (3), 245-251.
- Kauffman, P. E. and Raimy, V. C. Two methods of assessing therapeutic progress. Journal of Abnormal and Social Psychology, 1949, 44, 379-385.
- Kirk, Roger E. Experimental Design: Procedures for the Behavioural Sciences. Belmont, California: Brooks and Cole, Co., 90-91.
- Krause, Merton S. Anxiety in verbal behaviour: an intercorrelational study. Journal of Consulting Psychology, 1961, 25 (3), 272.
- Krause, Merton S. and Pilisik, Marc. Anxiety in verbal behaviour: a validation study. Journal of Consulting Psychology, 1961, 25 (3), 414-419.
- Langer, J. Theories of Development. New York: Holt, Rinehart and Winston, Inc., 1969.

- Lay, Clarry H. and Paivio, Allan. The effects of task difficulty and anxiety on hesitation in speech. Canadian Journal of Behaviour Science, 1 (1), 25-37.
- Levitt. Stability of state and trait anxiety. In Newmark, Charles S. Psychological Reports, 1972, 30, 196-198.
- McPherson, Marion White. No title. Journal of Clinical Psychology, 1956, 12, 229-235.
- Mahl, George F. Disturbances and silences in the patient's speech in psychotherapy. Journal of Abnormal and Social Psychology, 1956, 53, 1-15.
- Mahl, George. Verbal behaviour. American Psychologist, 1958, 349.
- Mahl, George F. and Kasl, Stanislav V. The relationship of disturbances and hesitations in spontaneous speech to anxiety. Journal of Personality and Social Psychology, 1965, 1 (5), 425-433.
- Matarazzo. Research on teaching and learning of psychotherapeutic skills. In Bergin and Garfield (Eds.), Handbook of Psychotherapy and Behaviour Change. New York: Wiley Press, 1971, 895-924.
- Monke, Robert H. Effects of systematic desensitization on the training of counselors. Journal of Consulting Psychology, 1971, 18 (4), 320-323.
- Murray, David C. Talk, silence and anxiety. Psychological Bulletin, 1971, 75 (4), 244-260.

- Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K. and Bent, D. H. Statistical Package for the Social Sciences. New York: McGraw-Hill Book Company, 1970, 276.
- Panek, David M. and Martin, Barclay. The relationship between GSR and speech disturbances in psychotherapy. Journal of Abnormal and Social Psychology, 1959, 58, 402-405.
- Piaget, J. The Construction of Reality in the Child. New York: Basic Books, 1954.
- Pope, Benjamin and Siegman, Aron W. The effect of therapist verbal activity level and specificity on patient productivity and speech disturbance in the initial interview. Journal of Consulting Psychology, 1962, 26 (5), 480.
- Pope, B., Blass, T., Siegman, A. W. and Rather, J. Anxiety and depression in speech. Journal of Consulting and Clinical Psychology, 1970, 35 (1), 128-133.
- Pope, Benjamin and Siegman, Aron W. Interviewer warmth in relation to interviewee verbal behaviour. Journal of Consulting and Clinical Psychology, 1968, 32 (5), 588-595.
- Raimy, Victor C. Self-reference in counseling interviews. Journal of Consulting Psychology, 1948, 12, 153-163.
- Rappaport, J. and Chinsky, J. M. Accurate empathy: confusion of a constant. Psychological Bulletin, 1972, 77 (6), 400-404.
- Robinson, F. P. The use of silence as a technique in counseling. Journal of Clinical Psychology, 1947, 3 (2), 136-141.

- Rogers, Carl. The necessary and sufficient conditions of therapeutic personality change. Journal of Consulting Psychology, 1957, 21 (2), 95-103.
- Rosenwein. Determinants of low verbal activity rates in small groups: a study of the silent person. Dissertation Abstracts International, 1971 (June), 31 (12-B), 7578-7579.
- Sanford, Fillmore H. Speech and personality. Psychological Bulletin, 1942, 39, 818-841.
- Saunders, Thomas R. Effects of trait anxiety on non-content verbal behaviour in a standardized interview. Journal of Clinical Psychology, 1974, 30 (2), 137-142.
- Schwartzburg. Speech disruption as a function of the statistical structure of language. American Psychologist, 1963, 18, 376 (Abstract).
- Siegmán, Aron Wolfe, and Pope, Benjamin. Effects of question specificity and anxiety-producing messages on verbal fluency in the initial interview. Journal of Personality and Social Psychology, 1965, 2 (4), 522-530.
- Spence, J. T. and Spence, K. W. The motivational components of manifest anxiety drive and drive stimuli. In Spielberger (Ed.), Anxiety and Behaviour. New York: Academic Press, 1966.
- Spielberger, C. D. The effects of manifest anxiety on the academic achievement of college students. Mental Hygiene, 1962, 46, 420-426.

- Spielberger, C. D. Theory and research on anxiety. In
 Spielberger, C. D. (Ed.), Anxiety and Behaviour. New York:
 Academic Press, 1966.
- Spielberger, Charles D., Gorsuch, Richard D. and Lushene,
 Robert E. STAI Manual, 1970, Consulting Psychologists
 Press, Inc.
- Spielberger, C. D. and Smith, C. H. Anxiety (~~dr~~ive) stress
 and serial-position effects in serial-verbal learning.
Journal of Experimental Psychology, 1966, 72, 589-595.
- Truax, Charles B. The meaning and reliability of accurate
 empathy ratings: a rejoinder. Psychological Bulletin,
 1972, 77 (6), 397-399.
- Truax, Charles B. and Carkhuff, Robert T. Client and
 therapist transparency in the psychotherapeutic encounter.
Journal of Counseling Psychology, 1965, 12 (1), 3-9.
- Truax, Charles, and Carkhuff, Robert. Towards Effective
 Counseling and Psychotherapy. Chicago: Aldine Press,
 1967, xiv-416.
- Truax, Charles B. and Lister, James L. Effects of short-term
 training upon accurate empathy and non-possessive warmth.
Counselor Education and Supervision X, 1971 (Winter), 120-125.
- Vanden Boss, Gary R. and Karon, Bertram P. Pathogenesis:
 a new therapist personality dimension related to therapeutic
 effectiveness. Journal of Personality Assessment, 1971,
135 (3), 252-260.

- Weitz, Henry. Counseling as a function of the counselor's personality. In McGowan, John F. and Schmidt, Lyle D. (Eds.), Counseling: Reading in Theory and Practicum. New York: Holt, Rinehart, 1962, 297-303.
- Wolberg, Lewis R. The Technique of Psychotherapy. New York: Grune and Stratton, Inc., 1967, 111-1054.
- Wolff, Peter H. The developmental psychologies of Jean Piaget and psychoanalysis. Psychological Issues, 1960, 2 (1), Monograph 5.
- Wyatt, Frederick. The self-experience of the Psychotherapist. In McGowan, John F. and Schmidt, Lyle D. (Eds.), Counseling: Readings in Theory and Practicum. Holt, Rinehart, 1962, 303-308.
- Zuwaylif,, Fadil H. General Applied Statistics. Reading, Mass.: Addison-Wesley Publishing Company, 1970, 228-243.