

The Effect of Predicate Matching on  
Clients' Experience of Being Understood

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#### Abstract

The primary purpose of this study was to explore the relationship between predicate matching and rapport, using the experience of being understood as the measurement of rapport. A methodology was developed that provided stricter experimental controls than had been evident in previous research.

Thirty females, from volunteer organizations in Victoria, participated in this study. They were randomly assigned to two treatment groups. In Group One, the subjects' predicates (their verbs, adjective and adverbs) were initially matched with a representational system of seeing, hearing, feeling, smelling, or tasting and then were mismatched. In Group Two, the predicates were matched throughout the interview. Each treatment group was approximately ten minutes in duration. Subjects completed the Interviewer's Verbal Response Scale-Client Form, rating each interviewer's match or mismatch, in terms of whether or not they had experienced being understood. Qualitative data were also collected. Another rating scale, the Interviewer's Nonverbal Response Scale, was used to control for the influence of interviewer's nonverbal behaviors on subjects' experience.

The data were analyzed by the Analysis of Variance (ANOVA) and the Analysis of Covariance (ANCOVA). Results indicated that subjects experienced being more understood when their predicates were matched than when their predicates were mismatched. Comments from subjects revealed similar themes, except for one theme that suggested that some subjects had obtained new perspectives from the mismatch.

Findings indicated that in short interviews, subjects experienced being more understood when their predicates were matched than when they were mismatched. Implications for counselling, limitations and recommendations for future research were discussed.

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CHAPTER 1  
INTRODUCTION

Rapport is a key ingredient in an effective counselling relationship. Developing rapport in counselling enhances the sharing of information between client and counsellor, increases the likelihood that clients will experience being understood, and also transmits to clients the message that their perspective of the world is being respected (Cormier & Cormier, 1983; Egan, 1986).

Counsellor training programs have explored the concept of rapport, also termed empathy, and have suggested several different ways for developing rapport. Egan's (1986) model trains counsellors to use empathic listening skills for developing rapport. Empathic listening skills involve identifying feelings and content of clients' messages and then responding with statements that reflect this understanding.

Cormier and Cormier (1983), in their training guide to counsellors, encourage counsellors to go beyond understanding clients' feelings and frame of reference. They suggest that counsellors also begin to understand how clients internally construct or represent their experiences. They recommend following the practice in Neuro-Linguistic Programming (NLP) of matching clients' verbs, adjectives, and adverbs

(their predicates) that describe not only clients' feelings, but also their internal pictures, sounds, tastes, or smells.

According to NLP theory (Bandler & Grinder, 1979), people obtain information from the outside world through their five senses of seeing, hearing, touching, smelling, and tasting. The information is then stored into five representational systems (which are also called modalities, modes, or sensory systems). The five representational systems are: visual (V) which stores internal pictures of images; the auditory system (A) which stores sounds; the kinesthetic system (K) which stores felt-bodily sensations as well as emotional experiences; the olfactory system (O) which stores odors; and the gustatory system (G) which stores tastes. In counselling sessions, clients' choices of words indicate which representational system they are using at that time. For example, clients processing in the V mode use visual words such as "see", "look", "picture", "observe"; clients processing in the A mode use auditory words such as "hear", "sounds to me", "listen", "dialogue"; clients processing in the K mode use feeling words such as "angry", "happy", "sad", "in touch with"; clients processing in the O system use smelling words such as "smells fishy", "whiff of", "scent"; and clients processing in the G mode use words such as "bit off more than I could chew", "left a sour taste in my mouth", and "a bitter pill to swallow". (For a comprehensive listing of predicates please refer to Appendix N.)

NLP theory recommends that counsellors match their clients' predicates by using the same representational systems in their own

speech, in their choice of predicates. Therefore, predicate matching could be thought of as an extension to empathic listening, where other representational systems than K (feelings) are also followed and matched.

Cormier and Cormier (1985) state that empathy involves "seeing with the client's eyes, hearing with the client's ears and feeling with the client's experiences" (p. 24). They recommend that counsellors demonstrate empathy by matching predicates, for "pacing clients' sensory systems emphasizes the importance of acknowledging aspects of their behavior and using their model of the world, not yours, to communicate" (p. 24). According to Lankton (1980), predicate matching allows the counsellor to be "literally speaking the client's language" (p. 19).

There has been support in the literature for predicate matching. Subjects perceived their interviewers as more empathic (Brockman, 1980; Hammer, 1980; Schmedlen, 1981, 1987), and trustworthy (Falzett, 1981). Reviews of the NLP literature by McCormick (1984) and Sharpley (1984, 1987) also recommend predicate matching. A few studies (Green, 1979; Frieden, 1981; Paxton, 1980) have provided nonsupportive data.

Unfortunately, both supportive and nonsupportive studies have been plagued with methodological errors. The following is a summary of these methodological problems.

Reviews of the literature by McCormick (1984) and Sharpley (1984, 1987) criticized studies by Falzett (1981) and Paxton (1980) for their method of tracking (following) and matching subjects representational systems. Falzett (1981) and Paxton (1980) classified subjects into

their Primary Representational System (PRS), their preferred system for categorizing information. Then interviewers matched this system, by only speaking in this system, during the interviews. According to Hammer (1983), if subjects were classified into their PRS's, they would still occasionally use predicates from other representational systems, and these would also need to be matched in the matched predicate group or mismatched in the mismatched predicate group. Otherwise, inaccuracy of treatment groups would result with each treatment group containing a mixture of matched and mismatched predicates.

Brockman (1980), Frieden (1981), Hammer (1980), and Schmedlen (1981, 1987) used a different method of tracking and matching subjects' representational systems than did Falzett (1981) and Paxton (1980). They used the method of ongoing tracking and matching of each subjects' predicates, which means that interviewers followed and matched clients' predicates as they occurred in speech. Critiques of the literature (McCormick, 1984; Sharpley, 1981, 1987), recommend using the ongoing tracking and matching method in future research.

Most studies used two treatment groups of matched predicates and mismatched predicates (Falzett, 1981; Frieden, 1981; Hammer 1980; Schmedlen, 1981, 1987). Yet some studies (Brockman, 1980; Green, 1979; Paxton, 1980) also used control groups. However, inadvertent matching or mismatching of predicates would have most likely occurred in these groups, decreasing their accuracy rate.

Duration of time in treatment condition can also influence the accuracy rate. According to Flaro, NLP trainer and practitioner

(personal communication, January, 1988), lengthy interview sessions increase the difficulty of maintaining accurate mismatching. In fact, according to Flaro, it is difficult to maintain accurate mismatching for longer than two minutes without clients experiencing extreme discomfort. However, the length of interviews on reported studies greatly exceeded his recommended duration. They ranged from regular counselling sessions of one to two hours in length (Frieden, 1981; Paxton, 1980; Schmedlen, 1981) to 30 minute interviews (Falzett, 1981; Schmedlen, 1987), and to 15 minute interviews (Hammer, 1980).

The most frequently used instrument in the reported studies was the Barrett-Lennard Relationship Inventory (BLRI), used by Brockman (1980), Frieden (1981), Paxton (1980), and Schmedlen (1981, 1987). Hammer (1980) used the Empathy Scale of the BLRI to develop his instrument, the Revised Empathy Scale (RES). These instruments asked subjects to rate the entire matched or mismatched interview. They did not control for content of interviewers' statements or for the possible influence of interviewers' nonverbal behaviors on subjects' experience. However, interviewers' nonverbal behaviors can affect subjects' experience of rapport (Bandler & Grinder, 1979; Cameron-Bandler, 1985; Cormier & Cormier, 1983; Egan, 1986; Lankton, 1980; Mauer & Tindall, 1983) as can the content of their statements (Cormier & Cormier, 1983; Egan, 1986). Therefore, it was difficult to ascertain in the studies reviewed (Brockman, 1980; Falzett, 1981; Frieden, 1981; Green, 1979; Hammer, 1980; Paxton, 1980; Schmedlen, 1981, 1987), whether it was the predicate

match that had established the rapport, or if it was the influence of nonverbal behaviors and/or the content of the interviewers' statements.

The purpose of this study was to explore the relationship between predicate matching and rapport. This study sought to determine whether or not the general support for predicate matching that has been found in the literature, would be confirmed under stricter experimental controls.

For this reason, a methodology that attempted to control for the interviewer's nonverbal behaviors and the content of her statements was developed. As well, shorter interviews of approximately ten minutes duration were used, and controls for accuracy of treatment conditions were implemented. This study followed the recommended method of ongoing tracking and matching of subjects' predicates. Also, this study used the standard treatment groups of matched and mismatched predicates rather than introducing control groups, which had proved ineffective in previous research.

This study also sought to extend the type of information, that had been gathered in the research. Previous studies (Brockman, 1980; Falzett, 1981; Frieden, 1981; Green, 1979; Hammer, 1980; Paxton, 1980; Schmedlen, 1981, 1987) had gathered only quantitative data. Yet according to Hersen & Barlow (1976), qualitative data may also furnish valuable information. This study developed a questionnaire for gathering both quantitative and qualitative data.

The development of rapport in the counselling relationship is a very broad topic. Yet in NLP theory, rapport is specifically defined as the matching of verbal and nonverbal behaviors (Bandler & Grinder,

1975). According to NLP therapist, Cameron-Bandler (1985), being understood is an integral component of being in rapport. Cameron-Bandler (1985) states "when you use the technique of matching, your clients will have the subjective experience of being really understood" (p. 53). Outside of the NLP model, Cormier and Cormier (1983), and Egan (1986), also stress the importance of being understood, as a component of being in rapport. Egan (1986) states "the understood client is influenced to move on, to explore more widely or more deeply". Egan (1986) encourages helpers to get in touch with their client's world and to communicate their understanding of this world back to the client. As the literature has indicated, predicate matching is one tool to increase understanding between client and counsellor. The relationship between predicate matching and rapport will be explored in this study.

## CHAPTER 2

### LITERATURE REVIEW

Following is a review of the literature investigating the components of rapport and critiquing the studies that have examined the relationship between predicate matching and rapport. A summary is also provided and the research hypothesis is stated.

#### The Components of Rapport

Rapport is defined in NLP research as the matching of behaviors (Bandler & Grinder, 1979). The terms empathy and rapport are used interchangeably in NLP theory. Developers of NLP, Richard Bandler and John Grinder, studied famous therapists such as Virginia Satir and Milton Erikson and found that their intense rapport with clients stemmed from matching their clients' nonverbal and verbal behaviors. Each therapist intuitively and unconsciously breathed in the same way as their client; each assumed a similar body posture; each varied their voice tone to match the client's voice; and each responded to their client's verbal statements (predicates) with language that matched the verbs, adverbs, and adjectives used by the client.

According to NLP author, Lankton (1980), when two people are in rapport their verbal and nonverbal behaviors will naturally begin to match. Verbal rapport is operationally defined as the matching of

predicates. When verbal rapport is established both parties will be using predicates of the same representational system, whether it is the V, A, K, O, or G sensory system. According to Cameron-Bandler (1985), when nonverbal rapport is established, counsellors' and clients' body postures become a mirror for each other. Hand gestures, breathing, voice tone and tempo, eye blinks, and pupil dilation also begin to match. Lankton (1980) claims that matching of behaviors during rapport is a universal concept. According to Hall (cited in Cameron-Bandler, 1985), studies across cultures also substantiate this claim. They found a matching of rhythms within cultures, rhythms that were generated by "gestures, breathing patterns, and in voice tones, tempo, and intonation patterns" (p. 35).

Nonverbal matching of body postures has been also studied outside of the NLP model. Mauer and Tindall (1983) found a positive relationship between postural congruence and client's perceived empathy, as measured by the BLRI. Cormier and Cormier (1983) recommend counsellors' overall nonverbal demeanor to be aligned with, or very similar to their client's. They call the matching of nonverbal behaviors synchrony. For example, "if the client is sitting back in a relaxed position with crossed legs, the counsellor matches and displays similar body posture and leg movements" (p. 83). They call the mismatching of nonverbal behaviors dissynchrony. As an example of dissynchrony, "a client is leaning back, very relaxed, and the counsellor is leaning forward, very intently" (p. 83). Cormier and

Cormier (1983) suggest that "the more nonverbal patterns you can pace, the more powerful the effect will be" (p. 83).

L. Flavo, NLP trainer and practitioner, (personal communication, September, 1985) extends the definition of rapport, from matching nonverbal and verbal behaviors, to also include matching content of clients' statements and to matching cultural contexts. He states that the more aspects that can be matched, the greater the opportunity that rapport will be developed.

Several counselling models have emphasized the importance of being understood as a component of rapport. According to NLP therapist, Cameron-Bandler (1985), the client's experience of being understood is an important indicator of whether or not the counsellor and client are in rapport. Egan (1986), in his counsellor training model, also described the importance of the client's experience of being understood. Barrett-Lennard (1981) also considered being understood to be an important component of empathy for he used the concept of understanding in his instrument, the BLRI. In the Empathy Scale of the BLRI, Barrett-Lennard divided empathy into three stages: understanding, communicating understanding, and receiving empathy.

#### Critique of the Literature

Most studies that have explored the relationship between predicate matching and rapport have been supportive of predicate matching (Brockman, 1980; Falzett, 1981; Hammer, 1980; Schmedlen, 1981, 1987). However, some studies have also been nonsupportive (Frieden, 1981; Green, 1979; Paxton, 1980). Both supportive and nonsupportive data have

several methodological errors. Following is a presentation of the literature that discusses these problems.

The majority of studies (Falzett, 1981; Frieden, 1981; Hammer, 1980; Schmedlen, 1981, 1987), used the two treatment groups of matched and mismatched predicates to determine the relationship between predicate matching and rapport. As an example of matched predicates, a subject might say "I can't see (V) any options", the interviewer would then match the V representational system of the subject by stating a V predicate, such as "You can't visualize (V) any choices". Conversely, if the treatment group was mismatched predicates, the interviewer would then respond in any other representational system than V. For example, the interviewer might have replied with an A predicate such as, "You can't get in tune (A) with what you want".

However, three studies (Brockman, 1980; Green, 1979; Paxton, 1980) did not use the treatment groups of matched and mismatched predicates. Instead, they compared matched predicate groups with control groups. These studies are described as follows.

Brockman (1980) used the treatment group of matched predicates, but instead of comparing this to a mismatched group, he used a generic, human relations approach to empathy. Twenty undergraduate students met with two interviewers in a counterbalanced order for an analogue of a beginning counselling interview. He found that interviewers who matched predicates were perceived by subjects and judges to be more empathic, on the Empathy Scale of the BLRI, than generic empathy interviewers. Subjects also preferred the predicate matching interviewer by a ratio of

three to one. While these results seem impressive, and Brockman does suggest implications for training of counsellors in matching predicates, the results must be treated with caution. There is one important concept regarding rapport that was not considered. According to Lankton (1980), when there is rapport predicates naturally match. Therefore, in the generic empathic treatment condition matching may have naturally occurred. In any case, the generic empathic interviewer would most likely have matched for feelings, the K system.

In a similarly designed study, Green (1979) found no significant difference in trust between a treatment group of matched predicates and a control group, that could use any other method they chose in gaining trust. It is important to note, that using any method for gaining trust may also have included predicate matching. Therefore, the same issues regarding the possibility of matched predicates not being controlled for in the control group may have wiped out any treatment effect. Sixty-three undergraduate students were subjects in Green's study. He used Jourard's Questionnaire for Measuring Trust Between Subjects and Experimenters. Trust was operationally defined as self-disclosure. Another possible reason for Green's nonsupportive results could be his choice of instrument for Brockman(1980) had also used Jourard's Questionnaire and it was the only measure in his study that failed to show results.

Paxton (1980) also used a control group. He had three treatment groups in his study: matched predicates, mismatched predicates, and non-matched. In the non-matched group the interviewers used unspecified

words. Examples of unspecified words are: think, know, understand, sense, learn, change, believe (Bandler & Grinder, 1979; Cameron-Bandler, 1985). According to Cameron-Bandler (1985), when clients use unspecified words they are still processing information in a representational system. However, counsellors are not aware of which system is being used since no predicates are reflected in their speech. In Paxton's (1980) study, 48 subjects completed the BLRI instrument after their treatment condition. Results showed that both matched and mismatched groups were superior to the non-matched group, but that the matched and mismatched groups were not significantly different from each other. These results seem to suggest that the subjects preferred interviewers to use predicates and that it didn't matter whether the predicates were matched or mismatched. However, these results must be treated with caution for there could still be matching or mismatching of the unspecified words. For example, if a subject had used an unspecified word, such as, "I think . . ." and the interviewer had responded with "I think . . ." then the interviewer would have inadvertently matched the subject. Similarly if a subject had used a kinesthetic predicate, for example, "I feel . . ." and the interviewer had replied with "I think . . .", then the interviewer would have inadvertently mismatched the subject. Therefore the effectiveness of using unspecified words as a control group is questionable.

Two methods for matching subjects' predicates have been used in the literature. One method used initial classification of subjects into their primary representational system (PRS), and then matched subjects

by speaking only in this system during the interviews (Falzett, 1981; Paxton, 1980). PRS is operationally defined as the representational system that a person prefers to use. It is usually more developed than their other representational systems (Bandler & Grinder, 1979).

The second method of matching predicates used ongoing tracking and matching of each subject's predicates during their interviews (Brockman, 1980; Frieden, 1981; Green, 1979; Hammer, 1980; Schmedlen, 1981, 1987). The method of ongoing tracking and matching is operationally defined as matching a series of predicates that may be used by subjects (Cameron-Bandler, 1985). As an example, a subject might say, "I can see (V) an end to my project and that makes me feel (K) great". The interviewer would respond by matching both systems with, "You can now picture (V) its completion and that makes you feel (K) really good", matching the V and K representational systems.

Both Paxton (1980) and Falzett (1981) used the method of initial classification of subjects into their PRS before application of an intervention. Paxton (1980) determined subjects' PRS by the type of predicates they had used in initial, short interviews. The subjects were then randomly assigned to a PRS matched condition, or to a PRS mismatched condition, or to a control group. He found that both matched and mismatched groups were superior to the control group, but the matched and mismatched groups were not significantly different from each other. As has been previously discussed, caution needs to be used in interpreting Paxton's results due to the nature of his control group, the non-matched group, which consisted of unspecified words.

Conversely, Falzett (1985) found significant results when subjects were initially categorized into their PRS before applying the intervention. Falzett's (1981) study used matched and mismatched predicates as treatment groups. He measured subjects' perceptions of counsellors' trustworthiness by using the Trustworthiness Scale of the Counsellor Rating Form. However, caution needs to be used in interpreting Falzett's results since he used subject's eye movements to categorize them into their PRS, and according to Buckner, Meara, Reese, and Reese (1987), only predicates can be used for this purpose.

Critiques of the literature (McCormick, 1974; Sharpley, 1984, 1987), recommend using the method of ongoing tracking and matching of clients' predicates in future research rather than initial classification of subjects into their PRS. According to Hammer (1983), care must be taken in interpreting Paxton's (1980) results. If subjects were classified into their PRS, they still occasionally use predicates from their other representational systems. For example, if subjects were classified as having an auditory PRS, they would still most likely use V, K, O, or G predicates in their speech. These predicates would then need to be matched or mismatched according to treatment group. If these predicates were not tracked and matched in an ongoing fashion then treatment groups would contain a combination of both matched and mismatched predicates, which would adversely affect the accuracy rate of treatment groups.

Bandler and Grinder (1979) suggest that the process of pacing (a NLP term for ongoing tracking and matching) is consistent with the

contextual nature of the PRS and the shifting of attention that occurs. This means that a person's PRS can change according to the situation. Therefore different representational systems are used to describe changing situations. For example, if a client was describing a sunset, then he/she would most likely use V predicates and if a client was describing an argument, he/she would probably use A predicates.

Bandler and Grinder (1979) recommend ongoing tracking and matching for another reason. They claim that people have preferred strategies for processing information. This means that people may habitually use more than one representational system, in a sequence pattern. For example, a person may visualize an experience and get a feeling about it (V-K). A different person may visualize an experience and obtain an internal dialogue which could then lead to an emotional response (V-A-K). Therefore, pacing clients' predicates, by using the method of ongoing tracking and matching, also enables counsellors to follow clients' sequences of their representational systems.

The method of ongoing tracking and matching of predicates was used by Brockman (1980), Frieden (1981), Green (1979) Hammer (1980), and Schmedlen (1981, 1987). Supportive data were found (Hammer, 1980; Schmedlen, 1981, 1987) and nonsupportive data were found (Green, 1979). Brockman (1980) and Frieden (1981) found both supportive and nonsupportive results, dependent upon which instruments they had used. As well, other factors, that have already been discussed in the literature, such as accuracy of control groups, may have affected

Brockman's (1980) and Green's (1979) results, and therefore these results need to be interpreted with caution.

One of the first studies that used ongoing tracking and matching of predicates was conducted by Hammer (1980). Hammer (1980) randomized 63 female, English native-speaking, undergraduate students into two treatment groups, of matched and mismatched predicates. A significant difference was found on the RES with subjects perceiving their interviewers as more empathic in the matched treatment group.

It is interesting to note that Hammer (1980) described his tracking method as ongoing which implied that each predicate was matched or mismatched. However, in reality, he used the guideline of matching only the last representation system that had been evident in subjects' statements. Therefore, if subjects used more than one representation system in their speech, Hammer only partially matched their representational systems, rather than totally matching each of their predicates.

Hammer (1980) used 15-minute counselling interviews. He provided the three interviewers with a list of possible questions to be asked. According to Einspruch and Forman (1985), using prepared questions is a distortion of the NLP approach to therapy, which is generative by nature. As well, using a prepared list may have allowed the interviews to continue in the mismatched group longer than would usually be experienced in regular counselling sessions. The accuracy rate for inclusion of audiotapes into Hammer's (1980) sample was only 25% pure treatments of matched or mismatched predicates.

At the same time that Hammer (1980) was experimenting with the methodology of ongoing tracking and matching of subject predicates, Brockman (1980), Frieden (1981), Green (1979) and Schmedlen (1981) were developing the same methodology.

Two subjects participated in Frieden's (1981) study. They were undergraduate female students in therapy, over an eight-session duration. Subjects' predicates were matched in one session and then alternatively mismatched in the following session. Frieden (1981) used the ongoing tracking and matching method of matching predicates. Frieden (1981) found no significant changes in subject's rating on "relationship", as measured by the BLRI after each session. Yet, when Frieden (1981) measured outcome after the eight sessions, each participant experienced improvements in all three identified symptom areas. Addressing the issue of change is an important concept to be studying, and Frieden is to be commended for this examination. However, Frieden did not separate the effects of the two treatment groups, and therefore it cannot be determined which treatment group produced the changes in behaviors. As well, the behavioral changes were measured by the use of a paper and pencil test, the Target Complaints Scale, rather than using actual observations of behavior. This scale has its limitations for the subjects are talking about their changed behaviors rather than demonstrating the changes.

Of the reported studies, Schmedlen (1987) has provided the most recent study in ongoing tracking and matching of predicates. Schmedlen (1987) presented a paper to the Annual Meeting of the Western

Psychological Association. The paper described a study that he had recently conducted which replicated his previous study of 1981. This study provided further support to ongoing tracking and matching of the client's predicates to enhance client's perception of the empathic component in the therapist. Sixteen volunteer subjects participated in two 30-minute counselling analogues. Empathy was measured by the Empathy subscale of the BLRI. The treatment groups were matched and mismatched predicates. The level of Regard, as measured on the BLRI, and the measures of Depth/Value, Smoothness/Ease or Positive Feelings indices of the Stiles instrument, failed to show significant differences between the two treatment groups. In his previous study, Schmedlen (1981) suggested that the Stiles measure was more dependent on session context than interactional, process factors. As matching predicates is an interactional process (Bandler & Grinder, 1979), the Stiles measure may, therefore, not have been an adequate instrument for this study.

Various instruments have been used in the literature. As has been indicated, Schmedlen (1981, 1987) used the Stiles measure. The Trustworthiness Scale of the Counsellor Rating Form was used by Falzett (1981). Both Brockman (1980) and Green (1979) used Jourard's Questionnaire for Measuring Trust Between Subjects and Experimenters. The most widely used instrument has been the BLRI, used by Brockman (1980), Frieden (1981), Paxton (1980), and Schmedlen (1981, 1987). Hammer (1980) adapted the Empathy Scale of the BLRI to produce the RES, to use with his shorter interviews.

The instruments have several aspects in common. They asked for ratings of entire interviews rather than subjects' responses to each matched or mismatched statement. Each of the instruments provided only quantitative data, with no qualitative data being provided. As well, these instruments did not control for content of interviewers' statements nor for the effect of interviewers' nonverbal behaviors.

Of the studies reviewed, the only one that measured nonverbal behaviors was Frieden's (1981). It is important to note that nonverbal behaviors of subjects and interviewer were measured rather than controlled. Videotapes from the eight therapy sessions were viewed and coded by judges. Subjects' nonverbal behaviors of head to head distance, angle of lean, facial observation (eye contact) and facial pleasantness were measured. Frieden's (1981) study is also unique in its measurement of subjects' verbal behaviors. Length of utterance, self-exploration, speech errors and subjects' requests for rephrasing were measured. When the data were averaged, predicate matching increased eye contact and also increased head to head distance.

Finally, most of the studies (Brockman, 1980; Falzett, 1981; Frieden, 1981; Green, 1979; Hammer, 1980) used undergraduate students as their subjects. Only Paxton (1980) chose subjects from a community counselling setting. His subjects were intake clients at a Family and Children's Service Clinic, mainly women between 26 and 35 years of age, who had agreed to participate in an agency evaluation of services. Therefore, his results had greater generalizability to the population,

because subjects of varied ages and possibly educational backgrounds had participated.

#### Summary

The review of the literature has shown that predicate matching increases rapport. Rapport can be achieved in a number of ways. The most common method used to develop rapport, in NLP theory, has been the matching of verbal and nonverbal behaviors. The concept of being understood is an integral component of being in rapport.

The literature review has also indicated that both supportive and nonsupportive studies have been plagued by methodological errors. Following is a summary of these problems. Although most studies have used treatment groups of matched and mismatched predicates, some studies have also used control groups. Control groups were found to be ineffective as control groups since predicates would still be matched or mismatched. Even if unspecified words had been used in the control groups, rather than predicates, inadvertent matching or mismatching of unspecified words would still have occurred. The method of ongoing tracking and matching of subjects' predicates was the recommended strategy for matching subjects' representational systems, instead of the initial classification of subjects into their PRS before intervention.

Of the studies reviewed, the BLRI has been the most widely-used instrument. All instruments provided quantitative data with no qualitative information being collected. The instruments asked for ratings of the entire interview. As the interviews were usually quite lengthy, there is the possibility that other variables than

representational systems were evaluated. For example, the content of the session or interviewers' nonverbal behaviors may have influenced subjects' ratings. However, the instruments did not control for content of interviewers' statements nor for the influence of interviewers' nonverbal behaviors. Finally, the subjects chosen for these studies were mainly undergraduate students, which limited generalizability to the population.

#### Research Hypothesis as Developed by Literature Review

The literature review has shown a relationship between predicate matching and rapport. Most studies indicated that predicate matching increased rapport.

The researcher developed questionnaires and used stricter experimental controls than had been evidenced in previous research. The researcher anticipated that the findings of previous research would be replicated in this study by the new methodology. Therefore, it was hypothesized that subjects would experience greater rapport in the matched predicate treatment group than in the mismatched predicate group. The subjects' experience of rapport was measured by their experience of being understood as indicated by their scores on the Interviewer's Verbal Response Scale (IVRS) Client Form.

For the purposes of experimental research, the hypothesis was stated in the following null form:

There will be no significant difference between matched and mismatched predicate groups on the subject's experience of being

understood, as measured by subjects' scores on the Interviewer's Verbal Response Scale (IVRS) Client Form.

CHAPTER 3  
METHODOLOGY

Subjects

Forty volunteer counsellors were recruited from local volunteer helping organizations. Only females were recruited as other studies have found that gender had a differential effect on client perceived empathy (Herbert's study, cited in Litwak, Geston & Saltzman, 1968). Only subjects whose native language was English were selected for two reasons. First, Hammer's (1980) selection criteria was followed since Hammer mentions that the link between representational systems and predicates may be questionable when English is a second language. Second, as has been described in the literature review, matching cultural contexts is one way to obtain rapport. Therefore, native English-speaking subjects were recruited in an attempt to match for cultural contexts. In this way, a more homogeneous sample could be selected for rapport development, and some of the influence of cultural context could be controlled.

The researcher contacted five volunteer helping organizations in the Greater Victoria region, by telephone, to request written permission for an advertisement regarding the study to be placed in their work site

(see Appendix A, for telephone call). A free training program entitled "Develop Your Counselling Skills" was offered by the researcher to attract participants for the study (see Appendix C, for Advertisement and Appendix M for Participants Training Program).

Advertisements were then displayed in the various volunteer organizations. Interested subjects telephoned the researcher to participate in the study. They received a telephone speech informing them of the study and the researcher's qualifications (Appendix D).

During the telephone conversation, the researcher randomly assigned subjects to groups. When the first person telephoned and agreed to participate in the study, she selected a preferred interview time and was assigned the treatment group of match-match predicates. When the second person telephoned and agreed to participate in the study, she selected a preferred interview time and was assigned the treatment group of match-mismatch predicates. The third person selected a preferred interview time and was assigned the match-match predicates treatment group. The fourth person selected a preferred interview time and was assigned the treatment group of match-mismatch predicates. The random assignment of subjects continued in this manner until 40 subjects were equally distributed over 10 days, totalling four interviews per day.

In the initial telephone conversation, subjects were not told the nature of the research for it was anticipated that if they knew the purpose of the study before their participation in the experiment they would not respond naturally. Therefore, it was important that subjects

remained "blind" to the nature and purposes of the study until after the videotaping was completed.

Of the 40 subjects that had been recruited for the study, 10 subjects were omitted from the sample. The first two subjects were omitted from the sample because the researcher still required two more pilots before commencing data collection. Five more subjects were then eliminated due to videotaping and scheduling difficulties. One subject was from Holland and, therefore, did not meet the criteria that had been established in the selection procedures for subjects having English as their native language. Another two were eliminated because they did not consider the interviewer's nonverbal behaviours to be positive. As a result of these selection procedures, 30 subjects were retained for the sample, which met the required 15 subjects per treatment group needed for statistical analysis.

Demographics on the sample were obtained using the Demographics Questionnaire (see Appendix H). Of the 30 female subjects, 26 were volunteer counsellors, two worked as counsellors in a volunteer agency, one worked in a clerical position in a volunteer agency, and one subject was a volunteer secretary. The sample ranged in age from 21 years to 69 years of age. The mean age was 42 years. The subjects varied in their educational level. Eleven subjects had high school education, six had college education and 13 had completed university.

#### Development of Questionnaires

Four questionnaires were developed for implementation in this study. Their development and use in the study are explained as follows.

Development of the Interviewer's Verbal  
Response Scale (IVRS)-Client Form

The Interviewer's Verbal Response Scale (IVRS-Client Form) (see Appendix I) measured the dependent variable, the subject's experience of being understood. The IVRS-Client Form was developed by the researcher as a result of pilot studies that had used the RES, an instrument developed by Hammer (1980).

Hammer (1980) adapted the RES from the Empathy scale of the BLRI to use with his interviews that were shorter in duration (15 minutes), than studies which had used the BLRI (interviews of one to two hours in length). The researcher had initially planned to use the RES in her study because short interviews were also conducted. However, pilot work uncovered some inherent problems in using the RES. These are listed as follows.

First, the RES was used to measure empathy in an entire interview. Yet it is difficult to ascertain which components of the interview the subjects had actually rated. Several subjects in the pilot studies reported that they had not based their rating on the entire interview. Instead, they had based their ratings on selected statements that they had experienced as significant. Second, some items on the RES did not have content validity for empathy. For example, the item, "Her own attitudes toward some of the things I said, or did, stop her from really understanding me" reflected the counsellor's attitudes and not their empathy. Another item, "She could be fully aware of my feelings without being distressed or burdened by them herself" reflected the counsellor's

ability to empathize as if she were the client and did not measure empathy as an understanding of the other's representational systems. Third, one item combined two representational systems with "she understood my words but not the way I felt". This is a compound statement, and therefore confusing, because subjects could respond to the first or second predicate. Fourth, the instrument contained an unequal distribution of the five representational systems. As people have different preferred representational systems, it is important that there be an equal number of systems distributed. However, the RES contained only one V predicate, two auditory predicates, and six kinesthetic predicates. Fifth, the remaining four items of the RES used predicates that were unspecified, not reflecting a representational system, such as the words "understood", "believe", "knew". According to Flaro (personal communication, March, 1988), the items need to reflect representational systems to accurately measure clients' responses.

Finally, the RES needs to be used under conditions of equal interview times, otherwise the rating score could be a reflection of the time in interview and not a reflection of the treatment. As it is difficult to continue in the mismatched condition once rapport has been lost, without resorting back to matching predicates, or to a list of prepared questions as Hammer (1980) had used, the treatment groups with mismatched predicates may have contained interviews of unequal length. Therefore, the RES could not be used.

As the treatment conditions occurred consecutively within a few minutes of each other in this study, test-retest of the RES would need

to have been conducted, which would have decreased the validity of the instrument. A similar instrument to the RES, the BLRI, was used in a test-retest situation, only after a series of therapy sessions had lapsed between testing points (Barrett-Lennard, 1981). Therefore, the researcher was reluctant to use the RES in a test-retest fashion in this study.

As a result of the difficulties experienced using the RES, the IVRS-Client Form was developed (see Appendix I). It allowed for the rating of each interviewer's response rather than a rating of the entire interview. Therefore it was anticipated that the IVRS-Client Form would allow for a more controlled measurement of the dependent variable, the subject's experience of being understood.

The IVRS-Client Form was in the format of a questionnaire. The subjects were asked to rate their experience to each interviewer's statement that contained a predicate. Each client rated approximately eight interviewer statements. For each statement, the subject was asked to respond to the question "Did you experience being understood when Karen said . . .?" Their response was measured in two ways. The first part of the instrument measured their response quantitatively on a four point Likert scale. Interval data was assumed on this rating scale. Response categories ranged from one to four, and represented the client's experience of being understood, from Very Little (#1) to Very Much (#4). A neutral category was not used on this form, for subjects of pilot studies had stated that they had experienced being understood or not being understood. Therefore, a neutral category had only allowed

them the opportunity of not making a decision. The second part of the questionnaire asked for qualitative data. Subjects were asked to respond to their experience of being understood or not being understood by providing a written comment.

The IVRS-Client Form was shown to professional audiences and to subjects of the pilot studies. They provided support for its format.

The question that was asked in the IVRS-Client Form, "Did you experience being understood when Karen said . . .?" is a direct measurement of the client's experience. Therefore, this question was a valid measurement of the concept of being understood. In this study, the subject's experience of being understood was chosen as an indicator of rapport because the literature (Bandler & Grinder, 1979; Cameron-Bandler, 1985; Cormier & Cormier, 1983; Egan, 1986) acknowledges that being understood is an important component of rapport. "Being on the same wavelength," is an expression that has been used in NLP literature to mean understanding (Knowles, 1983), and was, therefore, also included on the directions to subjects for completion of the IVRS-Client Form.

The researcher determined reliability of the questionnaire, during the study, by conducting test-retest reliability checks. Four subjects were randomly assigned to a return visit for a second rating of the IVRS-Client Form. Two subjects from the matched group were selected and two subjects from the mismatched group were selected. Three of the four subjects returned four days after their initial interview and one person returned five days later. There was high test-retest reliability since subjects gave the same rating for 84% (26/31) of their responses and

only 16% (5/31) of the responses received a different rating. Of these 16%, the rating changed only one level, for example, from a #3 (Much Understood) to a #4 rating (Very Much Understood).

Development of the Interviewer's Verbal

Response Scale (IVRS)-Rater Form

The IVRS-Rater Form (see Appendix J) contained a transcription of subjects and interviewers' responses, and a rating of the interviewer's response as a match or mismatch. The IVRS-Rater Form was completed by the raters prior to subjects completion of the IVRS-Client Form, and therefore experimental bias was decreased, with raters being "blind" to subject's scores. The ratings were required for the identification of treatment groups in the analysis of data. As the interviewer had made approximately eight responses per interview, approximately eight ratings per subject were obtained.

Development of the Interviewer's Verbal

Response Scale (IVRS)-Compilation of Data Form

The IVRS-Compilation of Data Form (see Appendix K) contained all of the information from the IVRS-Client Form and from the IVRS-Raters Form. Therefore, all the information that was obtained in this study, from client and raters' ratings, were compiled onto this form. Consequently, the IVRS-Compilation of Data Form was used to collect data for its analysis. Again, information from approximately eight ratings of interviewers' responses were collected per interview.

Development of the Interviewer's Nonverbal Response Scale (INVRS)

The INVRS form is another questionnaire that required subject completion. The Interviewer's Nonverbal Response Scale (INVRS) (see Appendix L) was developed by the researcher to provide further control for the interviewer's nonverbal behaviours, as only the treatment effect of matched and mismatched of predicates was analyzed in this study. Subjects rated the nonverbal behaviours of the interviewer, using the videotape without sound, so that the verbal component could be controlled and not influence the rating. The subject was asked to rate the interviewer's nonverbals in terms of whether or not any of the interviewers' nonverbal behaviors, such as body posture, facial expression, head nods, gestures, eye contact, etc., had prevented them from expressing themselves in the interviews. Judges were not used to rate the interviewer's nonverbal behaviours, as subjects may have experienced the interviewer's behaviours differently than judges would have observed them on videotapes. For example, matching of breathing rates, hand gestures, and eye blinks may not be visible on the video equipment, and yet according to NLP theory (Cameron-Bandler, 1985), these can affect the development of rapport.

NLP theory states that clients' and counsellors' verbal and nonverbal behaviours naturally begin to match when they are experiencing rapport. They may also begin to mismatch when rapport is no longer experienced.

To minimize the effect of nonverbal behaviors on subjects' experiences of rapport, the interviewer attempted to control her

nonverbal behaviours, in the positive direction. Positive was defined in two ways. First, positive was defined as the interviewer nonverbally matching the subject's body posture, since NLP theory advise nonverbal matching of the other's posture to develop rapport (Bandler & Grinder, 1979). Second, if the interviewer could not sustain the matching of nonverbal behaviors because the predicates had begun to mismatch then the following method was used. The interviewer maintained positive nonverbal behaviors by adopting the "open-posture" position that has been recommended in many counsellor training courses of leaning forward, using eye contact, and head nods (Egan, 1986).

The researcher conducted test-retest reliability checks on the INVRS. The same four subjects who had participated in the test-retest check of the IVRS-Client Form, were asked to also rate the INVRS for a second time. Test-retest reliability rate was 100%. Therefore, each of the four subjects experienced the interviewer's nonverbal behaviours as positive for the initial and return visit interviews.

#### Treatment Groups

Two treatment groups were used in this study. Group One was designated as match-mismatch and Group Two was designated as match-match. None of the reported studies had used the format of changing the treatment within each group. The method of matching predicates, at the beginning of each treatment group, was chosen to provide an introductory phase to all subjects. However, only the latter four responses, the last portion in each treatment group were used in the statistical analysis. The following is a description of the two treatment groups.

### Group One (Match-Mismatch Predicates)

One ten-minute (approximate duration) interview was conducted. The interviewer tracked and matched, in an ongoing fashion, the first four responses. The remaining responses, approximately four responses, were then mismatched. In the mismatched condition, the interviewer followed Hammer's (1980) procedure of introducing predicates that implied any representational system other than the ones that had been last used by the subject. Only one mismatched predicate was used even if the subject had used several types of representational systems in their last statement. As an example of a mismatch, the subject might say "I can't get in touch with what I want" representing a K system, and the interviewer might mismatch the client by responding with "You can't see what you want," representing a V system. The interviewer could also mismatch by responding with an A predicate, "You can't get in tune with what you want." The O and G systems were particularly useful systems to use for mismatching predicates, because some subjects used the V, A and K systems fluently in their speech, and the O and G systems were needed to provide the mismatch.

### Group Two (Match-Match Predicates)

One ten-minute (approximate duration) interview was conducted with the interviewer tracking and matching predicates in an ongoing fashion. For example, the subject might say "I keep telling (A) myself that I can't do it." The interviewer might respond with "You hear (A) yourself saying it's impossible," matching the A system that had been used by the subject.

According to NLP theory (Cameron-Bandler, 1985), matching predicates would also mean matching a series of representational systems that may be used by subjects in their responses. As an example, a subject might say "I can see (V) an end to my project and that makes me feel (K) great." The interviewer could respond with "You can picture (V) its completion and that makes you feel (K) really good," matching the V and K representational systems.

Matching a series of representational systems, in a subject's statement, is defined as a total match. The interviewer attempted to totally match subjects' predicates. However, if she was unable to totally match all of the subject's representational systems in their last response, she would then concentrate on tracking and matching the last representational system used in the subject's previous statement, and then perform a partial match. A partial match is operationally defined as responding to only a few of the systems that had been apparent in the subject's previous statement. The interviewer used the last representational system in the subject's statements, for her partial match, for the following reasons. First, according to NLP theory (Bandler & Grinder, 1979), the last system is the most recent one in the subject's consciousness and is therefore an important one to track. Second, this study used Hammer's (1980) recommendations regarding partial matching. Hammer (1980) told his interviewees that "if a student uses two perceptual predicates within one phrase or paragraph, you should use the last identified predicate as the one which indicates her representational system" (p. 126).

### Equipment and Rooms

Thirty videotapes (3/4") and 30 audiotapes from the Curriculum Library, Faculty of Education, were used in the sample. An interview room at the Counselling Services Centre, at the University of Victoria, provided the setting for the taping. Therefore, an authentic counselling setting was established. The videotaping and audiotaping equipment were in a separate room behind a one-way mirror, which was expected to have minimized the affect of taping on subjects' experience. Only the interviewer was videotaped, which again was anticipated to have minimized the affect of the taping procedure.

### Interviewer, Raters and Judge

Three people were involved with the implementation of this study. Following is a description of their roles.

#### Interviewer

The researcher acted as an interviewer. Using a female interviewer followed the procedure by Hammer (1980) of maintaining the same-sex ratio of interviewers with their clients. The interviewer had undergone extensive training in NLP and had obtained a certificate as a "Certified Practitioner." Einspruch and Forman (1985) support researchers being trained in NLP, to ensure accuracy in delivering treatment conditions.

#### Raters of Matched and Mismatched Treatments

The rater was a female counsellor, who works in a study skills program for adults. A female rater had been selected to maintain the same sex-ratio with subjects. She was unfamiliar with the theory of NLP and was only instructed in the procedures of identifying predicates in

speech, and in rating them, as matched or mismatched. She used the IVRS-Rater Form for this rating.

The training program for the rater is described in Appendix E. Pilot work was conducted with four subjects, prior to data collection. During her training, the rater and researcher independently rated each interview. By the completion of the training period, the researcher and rater had obtained 90% consistency in ratings.

The rater performed the following five functions. First, the rater listened behind a one-way mirror to the interview as it was being conducted. She identified phrases by the subject and by the interviewer that contained predicates and recorded these onto the IVRS-Rater Form. During this time, she was videotaping the session. Second, she listened with the researcher to audiotapes of the interviews and rated each interviewer's predicate as matched or mismatched. She discussed her rating with the researcher until consensus was established. She then recorded her ratings on the IVRS-Rater Form. Third, she supervised the subject's completion of the IVRS-Client Form. To decrease possible experimenter's bias, it was only after the subjects' completion of their form that she was told the type of treatment that had been used for that interview. Her fourth function involved debriefing subjects (please refer to Appendix O for the debriefing script). Her final function involved conducting a test-retest reliability check of the IVRS-Client Form with four subjects.

As has been mentioned, the researcher also performed the function of rater for this study. She listened to the audiotape of the interview

with the rater, and completely transcribed each response made by the subject and herself. She then rated each interviewer's predicate as matched or mismatched and discussed her ratings with the rater until consensus was reached. She also recorded her ratings on the IVRS-Rater Form.

### Judge

The judge for the results was a Certified Psychologist with a private practice in Alberta. He had a "Masters Trainer" certificate in NLP, which was one level above the interviewer's "Certified Practitioner" level. He had used NLP techniques in his practice and had taught courses in NLP at the University of Alberta Extension Program.

The judge validated: the rating of predicates as matched or mismatched, the selection of partial or total matches, the identification of interviewer's responses that were inappropriate in content to clients' meaning, and the grouping of themes in client's comments.

## Procedures

### Procedures for Data Collection

#### Interviews

In total, 40 counselling interviews were scheduled for the data collection. Four interviews were booked each day, over a 10 day period. Each interview was allowed one and a half hours for completion of forms, even though the actual interview took approximately only ten minutes.

Subjects had been told in their recruitment telephone speech (see Appendix D) that they would be asked to discuss a concern that was of a

minor nature, and yet had some importance and feeling for them. They were requested to only discuss as much of the issue as they wished. Examples of suggested issues to be discussed were: assertiveness, weight loss and time management.

Before their interview began, subjects completed the Informed Consent Form, which provided confidentiality and the right to withdraw from the experiment at any time. The form also encouraged subjects to discuss their experience in being interviewed, at any time during interview. Please refer to Appendix G for further details on this form.

During the interview, the interviewer conducted the treatment of Group One (Match-Mismatch) or of Group Two (Match-Match) depending upon which group the subject had been assigned. At this time, the interviewer also attempted to match the content of subjects' statements and their nonverbal behaviours. Matching content and nonverbal behaviours are methods for obtaining rapport, as has been discussed in the literature review. Therefore, these were matched to control for their influence on subjects' ratings. As has been mentioned, the rater videotaped the interview in process, and listened behind the one-way mirror, recording phrases with predicates. Upon completion of the interview subjects were requested to take a one-half hour break.

#### Completion of IVRS-Rater Form by Raters

During the subject's one-half hour break, the rater and researcher, listened to an audiotape of the previous interview. The researcher transcribed each subject and interviewer response onto the IVRS-Rater Form. Predicates were then identified. If the interviewer's predicate

matched the subject's it was rated as a match, and if the interviewer's predicate mismatched the subject's it was rated as a mismatch. Consensus of ratings was achieved. Only appropriate interviewer's responses were selected to be rated. The criteria for appropriateness were based on Hammer's (1980) procedures in analyzing audiotapes. According to Hammer (1980), an interviewer's response was deemed appropriate if it met two conditions. First, there was a representational system apparent in the subject's and interviewer's response. Second, the interviewer's response was required to "follow" the subject's response, and not to have introduced a representational system with a question. An example of a question that could have been asked by the interviewer, but not rated, was "Could you tell me about this a bit more?" using an auditory predicate.

#### Completion of IVRS-Client Form by Subjects

Once the IVRS-Rater Form had been completed and the subject had returned from her break, the rater met with the subject in the interview room for completion of the IVRS-Client Form. The rater played the audiotape of the previous interview for the subject. An audiotape was played, rather than a videotape, to focus the subject's ratings on the interviewer's verbal, rather than her nonverbal behaviors. After each selected interviewer's response, the rater stopped the tape and repeated the phrase with the interviewer's predicate. She asked the subject to rate the response, using the IVRS-Client Form, as to whether or not they had experienced being understood by the interviewer. Therefore, only the portions of the interviewer's response that contained predicates

were played. Depending on the location of the predicates in the response, sometimes the entire interviewer's response was rated and sometimes only part of the response. Requesting subjects to rate only the predicates, rather than the entire interviewer statement, was conducted in an attempt to minimize the effect of the statement's content on subject's ratings. The subject was asked to record her ratings on the form, rather than to say them out loud, because the interviewer (the researcher) was listening behind the one-way mirror and it was important to keep her "blind" to subjects' scores, as a means for reducing experimenter bias in subsequent interviews.

#### Completion of Interviewer's Nonverbal Response Scale (INVRs) by Subjects

When the subject had completed her ratings on the IVRS-Client Form, she was asked to comment on her experience of the interviewer's nonverbal behaviours. If they were seen by the subject as positive, the subject was asked to review selected portions of the videotape to verify her decision. If they were rated as not positive, the subject was also asked to review the videotape to verify her decision. If they were still not considered to be positive, then her responses on the IVRS-Client Form were eliminated from the data base. She was thanked for her participation and offered the opportunity of attending the Participant's Training Program (see Appendix M).

#### Debriefing of Subjects

The subjects were debriefed in two ways. First, upon completion of the two questionnaires, the IVRS-Client Form and the INVRs, the subjects were debriefed. The same person who had acted as rater conducted the

debriefing of the study. She conducted the debriefing rather than the researcher, in a further effort to keep the researcher "blind" to subjects' scores during the interviewing process. A structured debriefing session was conducted to explain the design and purpose of the study (see Appendix O for the information that was provided to subjects in their debriefing). If additional time was required for the debriefing, arrangements were made for an individual session with the researcher. Subjects could also discuss their concerns in the subsequent three-hour training program that was offered to participants of the study (see Appendix M for Participant's Training Program). No one requested the individual interview. After the debriefing, the researcher enrolled participants into the training program and completed, with the subject, the demographic questionnaire.

The second debriefing occurred in the three hour training program in predicate matching and mismatching to all interested participants on June 15, 1988 and June 18, 1988. Eighteen people attended on June 15, 1988 and six people attended on June 18, 1988 (see Appendix M for Participant's Training Program). Although most participants had been subjects in the study, several staff members of volunteer organizations and participants of pilot studies also attended.

### Procedures for Data Analysis

#### Preparation for Data Analysis

Development of treatment groups. Subjects were randomly assigned into Group One (match-mismatch) predicate treatment or into Group Two (match-match) predicate treatment. The second portion of the treatment

group started soon after the fourth matched interviewer response and continued for approximately four interviewer responses. The average rating of the last four mismatched responses of Group One (match-mismatch), for each subject, was then compared with the average rating, for each subject, in the last four matched interviewer's responses of Group Two (match-match). Time frames varied slightly in these groups. Four matched interviewer's responses were used in the early portion of Group Two (match-match), as this was the average number of responses in the early matched responses of Group One (match-mismatch). Yet for Group One (match-mismatch), to maintain accuracy in the treatment group, all the initial matched responses were used for the average rating, even if more than four interviewer responses had been given.

Development of accuracy in treatment groups. Accurate treatment groups were achieved by using a number of methods. One of these methods was the accurate rating of predicates as matched or mismatched. The rating of predicates involved two stages. First, raters arrived at consensus on their ratings and then recorded these on the IVRS-Rater Form. Second, a judge reviewed all completed IVRS-Rater Forms and relabelled any predicates that had been incorrectly labelled by the raters.

Once the predicates had been accurately rated and categorized into their treatment groups, the researcher made some adjustments to the data to increase accuracy rate. Any interviewer's responses that did not contain a predicate or follow subjects' content were omitted. As well, the researcher omitted any matched responses that should have been

mismatched, and any mismatched responses that should have been matched. All omissions were validated by the judge.

### Analysis of Data

In this study, the independent variables were the treatment groups of matched and mismatched subjects' predicates. The dependent variable was the subject's experience of being understood as measured by subjects' scores on the Interviewer's Verbal Response Scale (IVRS)-Client Form.

Statistical procedures. The null hypothesis was examined by use of the statistical measures, Analysis of Variance (ANOVA) and Analysis of Covariance (ANCOVA). Analysis of data were completed at the Statistics Laboratory, Faculty of Education, University of Victoria, using the Statistical Package for the Social Sciences (S.P.S.S.X.). The level of significance was set at .05 for the statistical tests.

Content analysis of subjects' comments. Content analysis of comments was a method used by Kerlinger (1964) for categorizing and sorting subjects' descriptive comments into themes. It is a method of analyzing communications in a systematic and quantitative way.

Comments of subjects from the IVRS-Client Form were reviewed by the researcher and groupings of themes were identified. These themes were validated by the judge. The themes were then summarized into the researcher's words. Frequency counts per theme were also established by the researcher. All matches and mismatches, from both treatment groups, were used for the frequency count. Therefore every match or mismatch in

the study was included, even if it had occurred in the inappropriate treatment group.

## CHAPTER 4

### RESULTS AND DISCUSSION

The following chapter is divided into three parts: results of quantitative data using subjects' ratings on the IVRS-Client Form; results of qualitative data using subjects' comments on the IVRS-Client Form; and structural analysis of responses according to partial or total match using the IVRS-Compilation of Data Form.

#### Subjects' Ratings on the IVRS--Client Form

Two data bases were used in the analysis. First, all subjects' ratings of interviewer's responses were analyzed. This was called the "all data" base. Second, a "modified data" base, that contained only pure treatment groups were analyzed. For the modified data base, accurate treatments of matched and mismatched predicates were obtained by eliminating, from the all data base, any matched interviewer responses that should have been mismatched and any mismatched interviewer responses that should have been matched. Both data bases had undergone initial adjustments to further increase their accuracy rate. Any interviewer's responses that did not contain a predicate had been eliminated and any responses did not follow subjects' content had also been eliminated.

Both data bases had used the statistical procedures of Analysis of Variance (ANOVA) and the Analysis of Covariance (ANCOVA). Following is a more detailed account of these statistical procedures.

Subjects' ratings were analyzed using the ANOVA on early and late scores. The term, early scores refers to the initial portion of each treatment group. The term, late scores refers to the last portion of each treatment group. The initial portion in Group One (match-mismatch) was the average rating per subject of the entire number of matched interviewer responses. The initial portion of Group Two (match-match) was the average rating per subject of the first four interviewer responses. The term late scores refers to all of the remaining scores (the last portion) in Group One, and all of the remaining scores (the last portion) in Group Two.

Then the ANCOVA was used on the late scores, using the early scores as the covariates. According to W. Muir (personal communication, June 16, 1983), there was a significant difference between early scores, the covariates at the significance level of  $p=.03$ , as shown in Table 1, which supported the use of the ANCOVA as a statistical procedure for comparing adjusted late scores.

Results from the ANOVA and the ANCOVA on all data are shown in Table 1. The results indicate that the null hypothesis must be rejected. A significant difference was found [ $F(1,27) = 15.56, p = .0005$ ] indicating that there was a significant difference between matched and mismatched predicate groups on subjects' experience of being understood, as measured by subjects' scores on the Interviewer's Verbal

**Table 1**  
**Analyses of Variance and Covariance on All Data Between Treatment Groups**

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Group Means on Early, Late and Adjusted Scores				
	Early	Late	Late (Adjusted)	
Group 1	3.31	2.61	2.68	
Group 2	3.62	3.66	3.59	

  

Analysis of Variance on Early Scores (Covariate)					
Source of Variance	df	SS	MS	F	p
Between	1	.69	.69	5.07	.03
Within	28	3.81	.14		
Total	29	4.50			

  

Analysis of Variance on Late Scores					
Source of Variance	df	SS	MS	F	p
Between	1	8.34	8.34	23.25	.000
Within	28	10.01	.38		
Total	29	18.36			

  

Analysis of Covariance on Late Scores				
Source of Variance	df	MS	F	p
Between	1	5.29	15.56	.0005
Within	27	.34		

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Note: Group 1 = Early (match) - Late (mismatch)  
Group 2 = Early (match) - Late (match)

Response Scale (IVRS)-Client Form. Group means on Table 1 indicate that subjects experienced being more understood in Group Two (match-match), than in Group One (match-mismatch). This supports the conclusion that subjects felt more understood when their predicates were matched than when their predicates were mismatched.

The second data base, the modified data, found an even higher level of significance [ $F(1,27) = 20.39, p = .0001$ ]. Results are shown in Table 2. Therefore, with more accurate data, there was an even greater significant difference between the matched and mismatched treatment groups. Subjects experienced being more understood when their predicates were matched than when their predicates were mismatched.

#### Subjects' Comments on the IVRS-Client Form

Qualitative data was compiled from subjects' comments on the IVRS-Client Form. The comments were reviewed by the researcher, and groupings of themes were identified. These themes were validated by the judge. The themes are shown in Table 3 for matched predicates and in Table 4 for mismatched predicates. Frequency of theme occurrence was established. All mismatches and matches, from both treatment groups, were included.

For the matched responses as shown in Table 3, most of the comments (88.36%) were positive as they expressed the experience of being understood. The following are examples of comments made: "I felt as though she was listening and understanding clearly"; "I felt clear about my thoughts when they were reflected back to me"; and "Hit the nail on the head here!" Some subjects (5.48% of the responses), preferred to

Table 2  
Analysis of Variance and Covariance on Modified Data Between Treatment Groups

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Group Means on Early, Late and Adjusted Scores					
	Early	Late	Late (Adjusted)		
Group 1	3.34	2.54	2.60		
Group 2	3.62	3.70	3.63		

  

Analysis of Variance on Early Scores (Covariate)					
Source of Variance	df	SS	MS	F	p
Between	1	.57	.57	4.03	.05
Within	28	3.93	.14		
Total	29	4.50			

  

Analysis of Variance on Late Scores					
Source of Variance	df	SS	MS	F	p
Between	1	10.14	10.14	28.08	.00001
Within	28	10.11	.36		
Total	29	20.25			

  

Analysis of Covariance on Late Scores				
Source of Variance	df	MS	F	p
Between	1	6.89	20.39	.0001
Within	27	.34		

---

Note: Group 1 = Early (match) - Late (mismatch)  
 Group 2 = Early (match) - Late (match)

Table 3 Subjects' Comments for Matched Predicates by Percentage

<u>THEMES</u>	<u>FREQUENCY</u>
A. <u>Positive</u> (Total 88.36%)	
1. Experienced being totally understood	77.40(113)
Examples (quotes):	
- I felt as though she was listening and understanding clearly.	
- I felt she heard accurately what I was saying.	
- I felt clear about my thoughts when they were reflected back to me.	
- I think Karen's comment was "right on."	
- I perceived Karen being very much present to everything--thoughts and feelings I was expressing.	
- She was able to quickly focus on what I was trying to express.	
- Felt she understood my meaning; expressed empathy.	
- Like the comment "in touch with feelings"--felt there was an understanding.	
- Hit the nail on the head here!	
2. Experienced being understood by interviewer repeating subjects' exact words.	5.48(8)
Examples (quotes):	
- Yes, she actually repeated some of my words.	
- Yes, she was trying to understand my "problem" and was asking appropriate questions by repeating some of my words.	

Actual number of responses are in brackets.

- The repetition of my words made me feel understood--I felt she was listening.
3. Experienced being understood when interviewer used the same representational system, but used her own words. 5.48(8)

Examples (quotes):

- I felt more understood because the words Karen used were familiar to me and thus weren't just my words repeated.
- I had not thought of "talking to myself" but this was appropriate. Karen understood.

B. Negative (Total 11.70%)

1. Experienced being "parroted" as the interviewer repeated their exact words. 3.42(5)

Examples (quotes):

- Could have used more meaningful words to show that she understood rather than my own.

2. Preferred another choice of word, one that was more similar in intensity to the predicate used. 8.28(12)

Examples (quote):

- Yes, she identified what I was feeling. Maybe the "bit" down-played it a little.
- I felt she was trying to understand but emphasizing "warmer" and "cozier" was not exactly what I meant.

Total Responses 146

Actual number of responses are in brackets.

Table 4 Subjects' Comments for Mismatched Predicates by Percentage

<u>THEMES</u>	<u>FREQUENCY</u>
A. <u>Positive</u> (Total 39.21%)	
1. Experienced being totally understood	29.41(15)
Examples (quotes):	
- That summary was appropriate.	
- I think so--I didn't feel put off by her comment "see it."	
- This is a good way to re-interpret what I was trying to say.	
2. Initially "jarring" but helped them to further clarify the problem.	9.80(5)
Examples (quotes):	
- No, that wasn't the feeling or thought that I'd wanted to express but her response/question caused me to clarify for her and myself what I was feeling.	
- It was really a discord, but then that word got me thinking/exploring again.	
B. <u>Negative</u> (Total 60.79%)	
1. Experienced being NOT understood.	52.94(27)
Examples (quotes):	
- I don't know if the phrase "being in time" is empathic enough when someone is really suffering.	
- I wasn't expressing a thought that I was broadcasting. I was expressing a feeling I have about myself.	
- Good reflective listening but I don't think she had tuned into the way I felt.	

Actual number of responses are in brackets.

- No, "smell fishy" was not at all what I was describing. I did not feel understood.
- Somehow "see" did not fit just right in this case--the situation/emotion did not have form to me.
- "Hear each other"--I felt understood with a reserve--an adaptation to Karen's way of describing, not mine.
- I have never used "smell words" to describe my feelings--I am a very visual person and think and speak quite visually.

2. Subjects experienced not being understood and accepted the responsibility for the miscommunication.

7.85(4)

Examples (quotes):

- I meant something different, but maybe I didn't explain myself very well.
- I felt that she sort of knew what I was talking about but also felt that I hadn't made myself totally clear.

Total responses: 46

Actual number of responses are in brackets.

have their own words repeated back to them, for example: "The repetition of my words made me feel understood--I felt she was listening," while just as many (5.48% of the responses) indicated that they preferred to have the interviewer use her own words rather than repeat their own. For example, "I felt more understood because the words Karen used were familiar to me and thus weren't just my words repeated." Therefore, there appears to be differences whether subjects like to have their own words reflected to or have the interviewer use her words.

Only 11.70% of subjects' comments for matched predicates were negative, as they expressed not being understood. Their comments were related to the content of the predicate rather than to the type of representational system. This finding indicates that it was important to subjects that the content of predicate used by the interviewer was consistent with their own meaning. Within the 11.70% responses, there were two themes. Some subjects (8.28% of responses) preferred a word that would have been more similar in intensity to their own. For example, if they had said "angry" they would have preferred a word of similar intensity to be reflected back to them, such as "mad" rather than "rage." The other 3.42% responses preferred that the interviewer use different predicates than their own, to lessen a possible "parrotting" effect by the interviewer. For example, "Could have used more meaningful words to show that she understood rather than my own." For these people, it was important that they did not have their exact words repeated back to them. This finding relates back to the theme

previously discussed in the positive comments section for matched predicates, when 5.48% of the responses also indicated that they had preferred the interviewer to use her own words rather than to just repeat theirs back to them. Therefore, when themes from positive and negative comments were combined, 8.90% of the comments preferred the interviewer to use her own words and 5.48% preferred a repetition of their own words.

For mismatched predicates, as indicated on Table 4, only 39.21% of the comments indicated being understood. Examples of these comments were: "This was a good way to reinterpret what I was trying to say," to an ambivalent position, "I think so. I didn't feel put off by her comment 'see it'".

Most of the comments of the mismatched predicates (60.79%) had negative themes. Three themes were apparent. The first theme (52.94% of the responses) indicated not being understood. Examples of their comments were: "I don't know if the phrase, 'being in tune,' is empathic enough when someone is really suffering"; "hear each other--I felt understood with a reserve--an adaptation to Karen's way of describing, not mine"; "I have never used 'smell words' to describe my feelings--I am a very visual person and think and speak quite visually"; and "good reflective listening, but I don't think she had tuned into the way I felt." The second theme (7.85% of the responses) expressed that they had not been clear enough and so took responsibility for the miscommunication, for example, "I meant something different, but maybe I didn't explain myself very well." The third theme showed an interesting

trend. The comments indicated that while the predicate was initially "jarring" it did help them to clarify their situation further. For example, "No, that wasn't the feeling or thought that I'd wanted to express but her response/question caused me to clarify for her and myself what I was feeling."

#### Structural Analysis on Partial and Total Match

##### Using IVRS-Compilation of Data Form

When reviewing subjects' comments in the matched predicate group, the researcher observed a trend beginning to emerge. Subjects appeared to experience being more understood when all of their representational systems in their last response were matched by the interviewer (total match) than when only a few systems were matched (partial match). When reviewing the structure of the interviewer's responses, most of the responses (64.38%) were total matches and only 35.62% were partial matches. It also became apparent that the partial match most often reflected the last representational system in subjects' statements. To determine if this trend had statistical significance a Chi square analysis was performed on ratings in the matched predicate group. Statistical significance was found [ $X^2 = 6.77$ ;  $df=1$ ,  $p < .01$ ] as indicated on Table 5. Therefore, there was a significant difference in subjects' ratings when a total match was used, as compared to when the interviewer used a partial match. Subjects gave higher ratings when they were totally matched than when they were only partially matched. Of the responses that had received high ratings, 72.83% had been totally matched and only 27.17% had been partially matched. A high rating is a

Table 5 Subjects' Ratings for Totally and Partially Matched Predicates on IVRS-Client Form by Percentage

	Total	Partial	Row Total
High Rating	72.83(67)	27.17(25)	100%(92)
Low Rating	50.00(27)	50.00(27)	100%(54)
Column Total	94	52	146

Actual number of responses are in brackets.

Note:

High = Very Much Understood (#4 rating)

Low = Much Understood (#3 rating) and Little Understood (#2 rating)

Total Match = Matched on all representational systems in response

Partial Match = Matched on a few representational systems in response,  
mostly subjects' last representational system

#4 rating, which means being "Very Much Understood." A lower rating is a #3 rating, which means being "Much Understood" or a #2 rating, which means being "Little Understood." Of the total number of lower ratings, 45 of the responses had received a #3 rating and only nine had received a #2 rating.

## CHAPTER 5

### IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS

Following are the implications of this study. Limitations are acknowledged and recommendations for future research are provided.

#### Implications

This study found a relationship between predicate matching and rapport. Subjects experienced being more understood when their predicates were tracked and matched than when their predicates were mismatched. This finding is consistent with results reported in other studies. Clients perceived their counsellors as more empathic (Brockman, 1980; Hammer, 1980; Schmedlen 1981, 1987) and trustworthy (Falzett, 1981) when predicates were matched.

The significance of these findings relate back to Satir's and Erickson's modeling of rapport with their clients when they were observed by Bandler and Grinder (Coleman, 1979). Bandler and Grinder determined their success strategies to be their extreme sense of rapport with their clients (Coleman, 1979). One of the ways Satir and Erickson had achieved rapport was by an unconscious matching of their client's predicates.

These findings also concur with Cormier and Cormier's (1983) recommendation that counsellors demonstrate empathy by matching their

clients' predicates. By following predicates, counsellors can begin to understand how their clients categorize information from their external world. By matching their representational systems, counsellors can then demonstrate this understanding back to their clients.

There are many ways to use predicate matching in counselling. As has been mentioned, predicate matching may be used to develop rapport in the counselling relationship, to begin to understand the client's world as he experiences it, and to relay that understanding back to the client. NLP therapist, Cameron-Bandler, also uses the concept of matching, which she terms being "in sinc", in family therapy. She observes the "degree to which couples are out of sinc when they are miscommunicating, in contrast to how they are in sinc when doing well with one another" (p. 35). She suggests that therapists can determine the success of their intervention by observing the number of matching behaviors in a couple before and after therapy. It is expected that more matching will be an indicator that a positive change has occurred.

The significance of predicate matching in counselling has demonstrated the importance of counsellors being flexible in all representational systems. Therefore it is important to begin to listen to one's own habitual patterns of speech that may use a limited number of representational systems. For example, some people might introduce a sentence habitually with "It sounds like..." or they might use only one representational system in their speech, for example, feelings.

NLP offers the opportunity of making the process of matching or mismatching predicates, which is ordinarily an unconscious process

outside of one's awareness, into a conscious process within one's awareness. This enables the counsellor to have a choice of whether or not to match or mismatch predicates.

As discussed, predicate matching can be used in counselling interviews to develop rapport (Bandler & Grinder, 1979). Yet, according to NLP theory, once rapport has been developed, a counsellor may wish to lead the client into a new awareness (Bandler & Grinder, 1979; Cameron-Bandler, 1980; Lankton, 1980). The counsellor does this by introducing a different representational system than has been used by the client, a mismatch, into the conversation. This technique is called "leading" in NLP theory (Bandler & Grinder, 1979; Cameron-Bandler, 1980; Lankton, 1980). If the client follows the lead and subsequently uses this new representational system, then the counsellor knows that rapport has been established (Bandler & Grinder, 1979; Cameron-Bandler, 1980; Lankton, 1980). Leading is a concept that is similar to Egan's (1986) microskills counselling model. It is the transition period from Stage 1, Step 1(a), where relationship building is central to the counselling process of helping the client to tell her/his story, to Stage 1, Step 1(c) where the counsellor's task is to help the client develop new perspectives on a problem situation. Perhaps matching would be a useful tool in Stage 1, Step 1(a), for relationship building and rapport, and mismatching a useful tool for Stage 1, Step (c), in offering the client a new way of experiencing the situation.

Flaro (personal communication, May 23, 1988) uses the concept of leading in his counselling. He purposely introduces a mismatch, once

adequate rapport has been established, to shift the client into a new perspective on their problem. Yet he cautions against extended use of mismatches for he claims that repeated mismatches rapidly decreases rapport. Rather, in counselling practice, he introduces a single mismatch and if the client follows this new representational system, then he continues matching in that new system.

The unique design of this study, with matching predicates as the initial condition for each treatment, introduced the concept of leading. Findings from this study provide some support for the use of mismatching predicates, as a technique for leading clients into new awarenesses. Of the responses that had been mismatched, 9.80% of the comments indicated that the mismatch had helped them to experience the problem in a new way. Therefore, the effect of an early match may have introduced a carry-over effect of continued rapport into the subsequent treatment of mismatched predicates. Although 9.80% of the comments may seem a small amount, more clients may have experienced the mismatch more positively, if they had been in an initial matched condition for a longer period of time. A longer period of matching may have developed greater rapport so that clients would have followed their interviewer's lead. Therefore, a possible interpretation for the low scores in the mismatched condition could be that insufficient rapport had been developed in the matched condition, due to the short duration, creating insufficient carry-over effect. However, another interpretation could be that too many mismatches had been used after the lead, and rapport had been readily lost. Therefore, it would be interesting for future research to explore

whether or not the initial mismatch, in a series of mismatches, has higher subject ratings than subsequent mismatches.

One of the main contributions of this study was in the development of a methodology for a more accurate measurement of predicate matching than had been used in previous research (Brockman, 1980; Falzett, 1981; Green, 1979; Hammer, 1980; Paxton, 1980; Schmedlen, 1980, 1987). According to L. Flaro (personal communication, June 1985), rapport can be obtained in a number of ways other than by matching verbal behaviors. Rapport can be obtained by matching nonverbal behaviors, by matching cultural contents and by matching the content of subject's statements. This study attempted to manipulate only the verbal behavior of the interviewer, and all of the other ways were matched, in an effort to control for the influence of these extraneous variables. The implications of these procedures are discussed as follows.

An instrument, the IVRS-Client Form, was developed to measure subjects' ratings of each interviewer's matched or mismatched predicate. By requesting subjects to rate only the interviewer's predicate, the effect of content on subjects' experience was minimized. Other studies have not controlled for the content of the interview. They have generally used the BLRI instrument (Brockman, 1980; Frieden, 1981; Paxton, 1980; Schmedlen, 1981, 1987) or the RES instrument (Hammer, 1980), which rate the entire interview.

The format of the IVRS-Client Form, with subjects' ratings for each interviewer's response, increased accuracy of treatment groups in another way. As each statement was rated, any interviewer's response

that was inaccurate could be eliminated. Therefore, the content of interviewer's responses could be further controlled by eliminating any inappropriate statement. Also, any statement that did not contain a predicate could be eliminated. As well, any statement that had been matched that should have been mismatched, or any statement that had been mismatched that should have been matched, could be eliminated. Therefore only pure treatment groups of accurately matched or mismatched predicates were used in the data analysis. Therefore, the accuracy rate of this study, with its pure treatment groups, greatly exceeded Hammers' (1980) accuracy rate of only 25%, for inclusion of tapes in his sample.

This study was also unique for its control of the interviewer's nonverbal behaviors on the subject's experience of being understood. Using audiotapes and requesting subjects to rate predicates, focused their attention on the interviewer's verbal behaviors rather than the interviewer's nonverbal behaviors. To further control for the influence of the interviewer's nonverbal behavior, the INVRS was developed. Control of the interviewer's nonverbal behavior, in a positive direction, was maintained in this study for 30 of the 32 subjects. Only two clients were omitted from data analysis on this basis. This study indicated that nonverbal behaviors can be controlled in order to explore, in a more controlled manner, the effect of predicate matching. Future research may wish to use a similar procedure for controlling the impact of nonverbal behaviors.

The method of ongoing tracking and matching of predicates was used in this study, rather than classifying and matching subjects according

to their PRS, based on the recommendations by Hammer (1983) and by recommendations from reviews of the literature by McCormick (1984) and Sharpley (1984, 1987). For the matched treatment, the interviewer attempted to track and match each of the subject's predicates. This has been defined as a total match. In practice, though, sometimes only a partial match was made, with the interviewer reflecting only a few of the subjects' representational systems. If the interviewer could not match each representational system, she often matched the last system in each subject's statement. The findings (see Table 5) support the use of total matching rather than partial matching, for subjects experienced being more understood when they were totally matched.

In this study, significant results were obtained from very short interviews of approximately 10 minutes in duration, demonstrating the power of the treatment groups. Shorter interviews may be an advantage for future research, as they may be more efficient and less expensive than lengthy counselling sessions. Also, according to L. Flaro (personal communication, January 1988), shorter interviews may be desirable since lengthy mismatched conditions may be extremely uncomfortable for subjects to experience. Yet all other reported studies used interviews of longer durations. Most interviews have been one to two hours in length (Frieden, 1981; Paxtin, 1980; Schmedlen, 1981). Schmedlen (1984) used 30-minute interviews and Hammer (1980) had the shortest interviews, of 15-minute duration.

Another advantage to this methodology was that the length of time in an interview could be modified because averages of subject's ratings

per treatment were used. This flexibility allowed the interviewer to terminate a mismatched condition earlier, if needed for client's comfort. Other studies in predicate matching have rated the entire interview, with the BLRI or RES instruments. Therefore, they needed to control for equal time in interviews, which decreased the opportunity for flexibility in terminating interviews.

Of the previous studies reviewed, only quantitative data has been collected. The present study gathered qualitative as well as quantitative data. Subjects' comments on the IVRS-Client Form were classified into themes, to provide interpretations for the rating scores on the IVRS-Client Form. See Tables 3 and 4 for a description of these themes.

This study's findings have generalizability to actual counselling sessions, since subjects discussed their own personal issues. While it was suggested that issues be of a "minor" nature due to the short interview length, all issues encompassed emotional topics and, therefore, resemble typical counselling sessions. Examples of issues discussed were assertiveness, self-image and weight control, relationship enhancement.

#### Limitations

Several limitations of the study need to be considered in the interpretation of the results. These are described as follows.

The shortness of the interviews, approximately 10 minutes, limits generalizability to short counselling sessions rather than to standard one-hour counselling sessions. However, results may be generalizable to

the initial stages of an interview, similar to the relationship building in Stage 1 of Egan's three stage counselling skills model.

While attempting to control for the variable of content, by asking subjects to only respond to the interviewer's predicates, it is still impossible to know whether or not content of the interviewer's responses had contributed to the ratings given. However, when subjects' comments were analyzed, only 11.70% (17/192) of the comments indicated that content of predicates had been inappropriate. Therefore, content is not expected to have greatly affected the results. One of the procedures in this study was for the interviewer to track content as well as subjects' predicates. This appears to be reflected in the results.

Another factor to consider is social desirability of subjects even though care was taken to eliminate this factor by having a rater, rather than the researcher, assist the subject in their completion of the IVRS-Client Form and the INVRS forms. However, in the participants' training sessions, subjects of the mismatched predicate treatment indicated that they were trying to be not too "hard" on the interviewer in their ratings or comments and, therefore, they may have inflated their ratings. In the mismatched treatment, participants said that they were trying to help the interviewer who did not seem to understand what they had said. This attitude coincides with comments on the IVRS-Client Form (7.85%) that indicated subjects felt that they weren't being clear and so took the responsibility to become clearer, in order to help the interviewer.

While a naturalistic counselling setting was used, a counselling office of the University Counselling Center, the evidence of videotaping and audiotaping may have created an artificiality to the interviews. Although it is difficult to ascertain the effect of this taping on subjects' experience, effect appears to be minimal since only one subject commented that her responses were inhibited by the procedures.

#### Recommendations for Future Research

Future research could replicate this study with males as subjects, to increase generalizability of findings to males. Only females were used in this study following Hammers' (1983) suggestion to avoid cross-sex interview situations.

Subjects did vary in their ages and educational levels in this study, permitting more generalizability of the sample to the population than was possible from other studies (Brockman, 1980; Dowd & Petty, 1982; Falzett, 1981; Frieden, 1981; Green, 1919; Hammer, 1980) that had used only university students in their samples. However, data on employment status of subjects could have been obtained in this study, to provide a basis for even more generalizability of findings to the population.

Time in treatment condition could be varied in future research, to determine the effect of the length of interview on clients' experience of rapport. Order of treatment using the ABAB design of single-case experimental designs (Kazdin, 1980) could also be explored.

As indicated by L. Flaro (personal communication, September, 1985), rapport can be achieved on many levels, behaviorally (verbally and

nonverbally), culturally and by following content. There has been no research to determine if all of these areas need to be matched or if matching in one area would compensate for mismatching in the other areas. Future research could explore the combination and the amount of matching that may be required for the development of rapport.

Another area for future research is examining the content of predicates used in the interviewer's response and their effect on rapport. An equal number of comments in the matched condition (5.48%) said that they liked their exact words being reflected, although just as many comments (5.48%) disliked their exact words being reflected and experienced the response as "parroting." Therefore, while following adequate procedures for effective matching or mismatching of predicates, the type of predicate used seemed to also influence subjects' ratings. In a similar vein, the intensity of the predicates used may also affect subjects' experience of being understood. In this study, 8.28% of the comments in the matched condition indicated that the intensity of the predicates had affected their ratings. For example, "feeling glad" and "feeling exuberant", while both being kinesthetic representational systems, are of varying intensities, and therefore, have separate meanings. Qualifiers such as a "little bit" or "somewhat" also varied the intensity of the predicates, and their effect on ratings needs to be considered.

The type of representational system used to mismatch predicates is an area for future research. According to L. Flaro (personal communication, May 24, 1988) the G and O predicates are not as commonly

used in everyday language as are the V, A and K predicates. Therefore, mismatching predicates with G and O words may produce a more extreme mismatch than mismatching in V, A and K systems and result in lower subject ratings. This hypothesis needs to be examined in further research.

The instrument, the IVRS-Compilation of Data Form, provided an ideal format for studying structural components of subject-interviewer statements since a transcript of responses was obtained, and subjects' ratings and comments were given for each interviewer response. One structural component that was examined in this study was the evidence of total and partial matches. It was found that subjects' ratings were higher for total matches than for partial matches, (see Table 6 in the Results and Discussion section) suggesting benefit in matching each representational system used in the subject's response. The IVRS-Compilation of Data Form allowed for a review of these components. This finding is important to consider when reviewing the literature in ongoing tracking and matching of predicates, because although Hammer (1980) described his method as ongoing, in reality he utilized the method of only partial matches. Hammer (1980) had used the guideline of matching only the last representational system, of possibly several systems that had been evident in a client's statement. This factor may have affected his results, with the partial matching techniques, suppressing his findings. Other studies that used the method of ongoing tracking and matching (Brockman, 1980; Frieden, 1981; Hammer, 1980;

Schmedlen, 1981, 1987) need to be reviewed to determine if partial or total matching had occurred.

Other structural components relevant to theoretical constructs in NLP, could be examined in future research using the IVRS-Compilation of Data Form, with its format of transcript and subject ratings for each interviewer response. One construct that has received much debate in NLP research is the existence of a Preferred Representational System (PRS) (Sharpley, 1987). Its possible existence and effect on subject ratings could be explored in future research by using the IVRS-Compilation of Data Forms. A cursory review of the results of this study revealed, that in the mismatched condition, the interviewer may indeed have mismatched the subject's last response. Yet at other times, she may have inadvertently matched the subject's representational system, from a previous subject response, which may have been the subject's PRS. These interviewer's statements typically received higher ratings of being understood than was expected for mismatched predicates, indicating the importance of tracking the PRS.

Studies in predicate matching (Falzett, 1981; Paxton, 1980) have either initially determined the PRS and then matched this system by only speaking in this system for the entire interview, or have used a method of ongoing tracking and matching of predicates for each subject response (Brockman, 1980; Frieden, 1981; Hammer, 1980; Schmedlen, 1981, 1987). Of the studies reviewed, no study had combined the PRS concept with ongoing tracking and matching. A study that used this combination would provide a more adequate test of predicate matching, within the NLP

model, since both concepts are used in NLP practice (Cameron-Bandler, 1985). Therefore, it is recommended that future research consider the existence of a PRS in its procedure of ongoing tracking and matching of predicates. To demonstrate this procedure, in the mismatched treatment, only representational systems that have been rarely or not at all used by the client during the interview, would be used to mismatch. In contrast, in the matched condition, the representational system that has been most commonly used by the client (their PRS) may be used in conjunction with ongoing tracking and matching of each client's response.

The use of unspecified words, for example, "think", "believe", "know", and their effect on rapport, could also be examined in future research using the IVRS-Client form. According to Cameron-Bandler (1985), unspecified words do not indicate a representational system for they are unspecified as to how the information is being processed by the client. Therefore, in the mismatched condition when the subject used an unspecified word, for example, "I think that I'm seeing it more clear", they may really be meaning "I feel (K) that I'm seeing it more clearly". If the interviewer attempted to mismatch this statement with a K system, she would in fact have matched a system used by the client, and the rating scores would be inflated correspondingly. Of the studies reviewed, it appears that they have not considered the effect of the unspecified words. Therefore it may be very important to uncover the representational system behind the unspecified word with questions such as "How do you specifically know?", before a match or mismatch is

introduced. NLP theory (Bandler & Grinder, 1979) stresses the importance of uncovering the representational system of unspecified words, and research is needed to test this assumption.

In conclusion, it is hoped that predicate matching will be considered an option in counselling practice for developing rapport within the building stages of the counsellor-client relationship. Matching predicates could be considered a tool for understanding the client's world as she/he experiences it and for communicating that understanding back to the client. This technique could be incorporated within the Egan's (1986) microskills counsellor training model for developing rapport in the initial stages of an interview, for it communicates respect for the client's method of representing the world, and not the counsellor's.

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**APPENDIX A**

**TELEPHONE SPEECH TO ORGANIZATIONS REQUESTING**

**THEIR PERMISSION TO DISPLAY ADVERTISEMENTS**

**IN THEIR WORK AREA**

Hello, my name is Karen Baugh.

I am a graduate student in Counselling in the Faculty of Education at the University of Victoria. For my M.A. Thesis I am conducting a research project in the area of counselling effectiveness and training. The ultimate goal of my study will be to determine more effective ways of helping clients in a counselling situation.

As subjects for my study I am using volunteers who have basic counselling skills. Therefore, I am phoning you to request the privilege of displaying an advertisement in your work place regarding my study, so that interested persons can contact me.

Would you like some more information about the study?

(If yes) The subjects for the study will be asked to participate as a client in a ten-minute videotaped counselling interview with myself as the interviewer. I have been trained in a specific counselling technique. After completing two short questionnaires the subjects will then be debriefed as to the nature and purpose of the study. Their videotapes will be used as data for my research.

Following the videotaped interviews a free, three-hour workshop will be offered to all participants in the study. The workshop is designed to provide training in the communication skills that were used in the research. Therefore, for approximately one hour of their time, a three-hour training program will be offered. The videotaped interviews and training program will occur in May. The results of the study will be explained to all interested participants in June.

May I display an advertisement regarding my study in your work place?

(If yes, thank them for thier cooperation and arrange to deliver, personally, the advertisement.)

(If no, thank them for their time in listening to my request.)

**APPENDIX B**

**WRITTEN PERMISSION FROM ORGANIZATION GRANTING PERMISSION  
TO DISPLAY ADVERTISEMENTS IN THEIR WORK AREA**

Karen M. Baugh:

Permission is granted to display an advertisement at our organization that allows for the recruitment of subjects from our organization to your study.

Name of Organization: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

**APPENDIX C**

**"DEVELOP YOUR COUNSELLING SKILLS" WORKSHOP**

by

Karen M. Baugh

Skilled Counsellor. Trainer in Communication Skills.

Completing Master's in Counselling at University of Victoria

Offering: **FREE:** 3 hour Training Program for participation in Thesis Research.

Requests: Subjects for research: As clients for short interview.

Who: Volunteer counsellors: Females, English as native language.

When: May, 1988

Where: University of Victoria

**BENEFIT:**

Contribute: 1 hour of your time (10 min. interview, questionnaire, debriefing)

Receive: 3 hour free program to increase skill development.  
Discussion of Thesis Results.

To Register: Phone Karen M. Baugh at 382-1835 from 7:00-9:00 p.m.  
If unavailable please leave message. Our machine is friendly....

## APPENDIX D

### TELEPHONE SPEECH TO INTERESTED SUBJECTS

Hello, my name is Karen Baugh. Thank you for calling.

I am pleased that you have shown an interest in participating in this research, with its training program. May I ask you a few questions?

Where did you see the advertisement? Are you working as a volunteer counsellor with them? Have you had a basic counselling course in listening and in paraphrasing?

I have developed a speech that will tell you a bit about me and the training program so that you can then let me know if you're interested in participating. Okay?

I am a graduate student in counselling in the Faculty of Education at the University of Victoria. For my M.A. Thesis I am conducting a research project in the area of counsellor effectiveness and training. The ultimate goal of my study will be to determine more effective ways of helping clients in a counselling situation. I hope to be able to share this knowledge with counsellors, educators and students. I would be very interested in having you participate in my study.

There are two parts to the study. The first part involves participating as a client in a ten-minute counselling interview that will be videotaped, followed by completion of a short questionnaire. Data from the videotaping will be used in my research. The second part of the study involves a workshop offered at a later date. It is designed to provide you with training in the communication skills that were used in the research. Therefore, for approximately one hour of your time, you have the opportunity of receiving a three-hour training program. The videotaping and training program will both occur in May.

Are you still interested in finding out more information on the study? (If yes, I will continue with the following information. If no, I will thank them for their phone call.)

Thank you for your continued support. For the videotaping you will be asked to discuss an issue that has some importance and feeling for you, discussing only as much as you wish. You may choose a happy or sad issue. I am the interviewer for the study.

If at any time in the interview you wish to discuss your experience of being interviewed, feel free to do so. At no time, however, will you be asked to engage in any embarrassing interactions. You are also free to withdraw your participation at any time.

Following the interview, you will be asked to review the videotape with a research assistant and complete two short questionnaires. Then you will be informed as to the purpose of the study and I will be available to answer any questions that you may have.

You can withdraw from this research at any time. Data collected from the videotapes, prior to your withdrawal, will not be used in this research.

Details of the three-hour training program will be provided to you upon completion of your videotaped interview.

In June, after the results of the research have been compiled and analyzed, I will be offering a short information session to all participants who are interested in knowing the results.

Do you have any questions?

Can we set up a time for your interview? (I will give details on time and place for the interview.)

**APPENDIX E**  
**RATERS TRAINING PROGRAM**

Objectives:

At the end of the training program raters will be able to:

1. Identify predicates in speech.
2. Select interviewer's responses that contain predicates.
3. Rate interviewer's responses for matched or mismatched condition.
4. Use videotape and audiotape equipment proficiently, starting and stopping the machines as required.
5. Debrief the client using a structured question format.

Outcome:

Raters will provide the researcher with completed IVRS-Rater Form at the end of all data collection interviews.

Training Session:

Session 1

(3 hrs.) Introduction to NLP and to predicate matching.

Session 2

(3 hrs.) Completion of Informed Consent Forms for Rater. Practice rating videotapes from researcher's previous pilot studies.

Discuss procedures for subject rating, form completion and debriefing of subjects.

## Session 3

(3 hrs.) Pilot--Conduct "dry run" of completed procedures with four client interviews.

Rater and researcher obtain 90% consistency of ratings on the IVRS-Rater Form.

Discuss modifications required.

## Session 4

(3 hrs.) Reliability check of instruments with return visit of the four clients from the pilot work.

Review of all procedures and discuss.

TOTAL HOURS

12 hours

**APPENDIX F**

**INFORMED CONSENT FORM FOR RATER OF THE STUDY**

Hello, my name is Karen M. Baugh.

I am a graduate student in Counselling in the Faculty of Education at the University of Victoria. For my M.A. Thesis I am conducting a research project in the area of counselling effectiveness and training. The ultimate goal of my study will be to determine more effective ways of helping clients in a counselling situation. I hope to be able to share this knowledge with counsellors, educators and students. I would be very interested in having you participate in my study as a rater.

As an rater you will be asked to attend a training program to identify predicates in speech, assist subjects in their ratings of videotapes and audiotapes, conduct debriefing sessions and record data on forms for statistical analysis.

The raters' training program is 12 hours in length. During this time you will obtain practice in the procedures to be followed in the study by participating in pilot work and by rating practice videotapes. An interrater reliability coefficient of 90% will need to be achieved in these practice sessions before data collection can begin.

It is required that you maintain strict confidentiality of the counselling analogues, in terms of protecting the anonymity of the subjects.

Karen M. Baugh:

I understand the procedures and implications of being a rater in this study. I agree to participate in the above stated study as a rater.

Signature: \_\_\_\_\_

Print name: \_\_\_\_\_

## APPENDIX G

### INFORMED CONSENT FORM FOR SUBJECTS OF THE STUDY

Hello, my name is Karen Baugh.

I am a graduate student in Counselling in the Faculty of Education. For my M.A. Thesis I am conducting research in the area of counselling effectiveness and training. The ultimate goal of my study is to determine more effective ways of helping clients in a counselling situation. I hope to be able to share this knowledge with counsellors, educators, and students. I would be very interested in having you participate in my study.

The study involves the subject (yourself) participating as a client in an interview of ten minutes, that will be videotaped and audiotaped. I will be your interviewer. For the videotaping you will be asked to discuss an issue (happy or sad) that has some importance and feeling for you, discussing only as much of the issue as you wish. If at any time in the interview you wish to discuss your experience in being interviewed, please do so. At no time, however, will you be asked to engage in any embarrassing or harmful interactions. You are in complete control of what you want to say and you are free to withdraw your participation at any time.

Following the interview, you will be asked to review the videotape and audiotape with a research assistant and complete two short questionnaires. Then you will be informed as to the purpose of the study and I will be available to answer any questions that you may have.

Data from the videotape and audiotape will be used in my research. Confidentiality of the videotape and audiotape will be maintained by erasing them upon completion of my thesis requirements, and I will personally supervise the erasing of the tapes. At no time will your name be revealed. I would like to retain selected examples from the videotapes to show to my research supervision committee and to use as demonstrations of the technique.

You can withdraw from this research at any time. Data collected from the videotape and audiotape, prior to your withdrawal, will not be used in this research.

As a result of your participation in the interview, a free, three-hour workshop will be offered by myself, to provide you with training in the communication skills used in the research.

You are asked to maintain confidentiality of the purpose of the study until the three-hour workshop. This means not discussing this study with other participants who have not yet had their interviews. Thank you for your participation.

Sincerely,

Karen M. Baugh

Karen M. Baugh:

I understand the procedures and implications of being in this research as detailed on the previous pages, and I agree to voluntarily participate in the above stated research experiment. I will maintain confidentiality of the study's purpose until the day of the training program.

Signature \_\_\_\_\_

If interested in participating in this research, please answer the following question:

1. I wish to attend the free, three- hour workshop in communication skills. YES \_\_\_ NO \_\_\_

Please indicate below the way(s) in which we may use the videotape and audiotape made during this experiment. You may select some and not others--or none at all. Your experimenter will explain in detail what each might consist of.

Your videotape and audiotape will be identified only by subject number. The sheet that connects your name with this subject number will be kept separately in a secure place. Obviously, videotapes and audiotapes are not anonymous to anyone who knows you.

- \_\_\_ analysis by the research team (Baugh and assistants)
- \_\_\_ viewing by other subjects who rate various verbal and nonverbal aspects.
- \_\_\_ playing as an example for research supervisory review
- \_\_\_ all of the above
- \_\_\_ none of the above; please erase the tapes.

Signature \_\_\_\_\_

Print Name \_\_\_\_\_

Date \_\_\_\_\_

Subject Number \_\_\_\_\_

(adapted from form developed by Dr. J. B. Bavelas and Dr. P. H. Stephensen)

**APPENDIX H**

**DEMOGRAPHIC QUESTIONNAIRE**

Would you please answer the following questions about yourself. This information will remain anonymous and confidential. It will only be used to describe the participants of this study.

1. Age: \_\_\_\_\_
2. Education (please check \_\_\_ highest level completed)

Elementary

Junior High

High School

College

University undergraduate

3. Are you a volunteer?            \_\_\_ YES        \_\_\_ NO

If yes, what type of volunteer work?

---

If no, what is your work position?

---

THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY.

## APPENDIX I

### INTERVIEWER'S VERBAL RESPONSE SCALE (IVRS)—CLIENT FORM

#### Directions

The interview that you just had was also recorded on audio-cassette. I am going to play it back for you so that you can hear again what the interviewer had said. I will stop it occasionally so that I can ask you to comment on her words. I will probably stop it each time that the interviewer speaks. You will use this questionnaire for your comments.

First I will give you a quick overview of the questionnaire and then I will explain in detail what you will be doing with the questionnaire.

Notice that the questionnaire has two parts. The first part is a question with a choice of four responses. You will be asked to comment \_\_\_\_\_ times. The second part of the questionnaire is a place for you to provide additional thoughts regarding your responses in the first part.

Now I will explain what you will be doing with the questionnaire. For the first part, each time that I stop the tape I would like you to think about the words that the interviewer had used by asking yourself "Did I experience being understood?" In other words, was she on the same wavelength? Then circle the response on the questionnaire that best rates this experience.

For the second part of the questionnaire, the comments section, please reflect on your rating and comment on your experience of being understood or not understood.

Sometimes you may have to listen to a long stretch of conversation before I stop the tape. I will read out the question and identify the words for you to rate.

It is important that you base your ratings on what it was like for you in the actual interview and not on what it is like to hear it on tape. There are no right or wrong answers. Please be honest.

Interviewer's Verbal Response Scale (IVRS)--Client Form  
 Subject # \_\_\_\_\_

1. Did you experience being understood when Karen said...?

4	3	2	1
Very Much	Much	Little	Very Little

Please reflect on your rating and comment on your experience of being understood or not understood.

Comments:

2. Did you experience being understood when Karen said...?

4	3	2	1
Very Much	Much	Little	Very Little

Please reflect on your rating and comment on your experience of being understood or not understood.

Comments:

3. Did you experience being understood when Karen said...?

4	3	2	1
Very Much	Much	Little	Very Little

Please reflect on your rating and comment on your experience of being understood or not understood.

Comments:

4. Did you experience being understood when Karen said...?

4	3	2	1
Very Much	Much	Little	Very Little

Please reflect on your rating and comment on your experience of being understood or not understood.

Comments:

**APPENDIX J**

**INTERVIEWER'S VERBAL RESPONSE SCALE (IVRS)-RATER**

**FORM**

Subject Number \_\_\_\_\_

1. Response:  
Client:  
Counsellor:  
Match/Mismatch:
  
2. Response:  
Client:  
Counsellor:  
Match/Mismatch:
  
3. Response:  
Client:  
Counsellor:  
Match/Mismatch:

**APPENDIX K**

**INTERVIEWER'S VERBAL RESPONSE SCALE (IVRS)—COMPILATION DATA**

Subject Number \_\_\_\_\_

1. Response:

Client:

Counsellor:

Match/Mismatch:

Client Rating:

Comment:

2. Response:

Client:

Counsellor:

Match/Mismatch:

Client Rating:

Comment:

APPENDIX L

INTERVIEWER'S NONVERBAL RESPONSE SCALE (INVR)

The interview was recorded with this video-equipment. I am going to have you watch the video of the interview, without sound, so that you can see again the interviewer's nonverbal behaviours. Then you will be asked to comment on these.

Nonverbal behaviours are defined as communication without words, for example, body posture, facial expression, head nods, gestures, eye contact, etc.

As you watch the video, get ready to answer the following question. In answering this question, think back to what it was like for you during the actual interview, not what it is like to watch it on video.

Did the interviewer's nonverbal behaviours, e.g., her body posture, facial expression, head nods, gestures, eye contact, etc. prevent you in expressing yourself in the interview?

YES \_\_\_ NO \_\_\_

Please explain. \_\_\_\_\_  
\_\_\_\_\_

## APPENDIX M

### PARTICIPANTS TRAINING PROGRAM

Session  
(3 hours)

- |         |              |   |
|---------|--------------|---|
| 20 min. | Introduction | <ul style="list-style-type: none"><li>- Briefly discuss study. Verbal matching and mismatching of predicates will be addressed.</li><li>- Introduce self-background.</li></ul>  |
| 20 min. | Introduction | <ul style="list-style-type: none"><li>- Participants (Game)</li></ul>   |
| 45 min. | Lecturette   | <ul style="list-style-type: none"><li>- Introduction to NLP.</li><li>- Introduction to Representational Systems</li><li>- Define Rapport</li><li>- Give Predicate Lists</li><li>- Mention Unspecified words</li><li>- Mention Ongoing tracking and matching</li></ul> |
| 15 min. | Break        |   |
| 25 min. | Exercise     | <ul style="list-style-type: none"><li>- Identify predicates in speech (group squeezing hands)</li><li>- Debrief</li></ul>   |
| 15 min. | Questions?   |   |

## APPENDIX N

### PREDICATE PHRASES

PREDICATES are the process works (verbs, adverbs, adjectives) which people use in their communication to represent their experience internally, either visually, auditorially or kinesthetically. Below are listed some of the more commonly used predicated (phrases).

#### VISUAL (see)

An eye-ful  
Appears to me  
Beyond a shadow of a doubt  
Bird's eye view  
Catch a glimpse of  
Clear cut  
Dim view  
Eye to eye  
Flashed on  
Get a perspective on  
Get a scope on  
Hazy idea  
Horse of a different color  
In light of  
In person  
In view of  
Looks like  
Make a scene  
Mental image  
Mental picture  
Mind's eye  
Naked eye  
Paint a picture  
Photographic Memory  
Plainly see  
Pretty as a picture  
See to it  
Short-sighted

#### AUDITORY (hear)

After-thought  
Blabber-mouth  
Clear as a bell  
Clearly expressed  
Call on  
Describe in detail  
Earful  
Express yourself  
Give an account of  
Give me your ear  
Grant an audience  
Heard voices  
Hidden message  
Hold your tongue  
Idle talk  
Inquire into  
Key-note speaker  
Loud and clear  
Manner of speaking  
Out-spoken  
Pay attention to  
Power of speech  
Purrs like a kitten  
Rap session  
Rings a bell  
State your purpose  
Tattle-tale  
To tell the truth  
Tongue-tied  
Tuned in/tuned out  
Unheard of

#### KINESTHETIC (feel)

All washed up  
Boils down to  
Chip off the old block  
Come to grips with  
Control yourself  
Cool/calm/collected  
Firm foundation  
Floating on thin air  
Get a handle on  
Get a handle on this  
Get a load of this  
Get in touch with  
Get the drift of  
Get your goat  
Hand-in-hand  
Hang in there!  
Heated argument  
Hold it!  
Hold on!  
Hot-head  
Keep your shirt on!  
Know-how  
Lay cards on table  
Light-headed  
Moment of panic  
Not following you  
Pull some strings  
Sharp as a tack  
Slipped my mind  
Smooth operator  
So-so

Showing off	Utterly	Start from scratch
Sight for sore eyes	Voiced an opinion	Stiff upper lip
Staring off into	Well-informed	Stuffed shirt
Take a peek	Within hearing	Too much of a hassle
Tunnel vision	Word for word	Topsy-turvey
Under your nose	Within hearing range	Underhanded
Up front	Word for word	
Well-defined		

The object in "matching" predicates is to "match" the language in which your listener speaks, thus creating an atmosphere of rapport and understanding.

Obtained from Lee Scout, 1986, The Excellence Principle. Oregon: Metamorphosis

### Matching Predicates

As a listener, you can determine what portion of experience a person is attending to and representing consciously by the words they use. People tend to speak in predicate sets (predicates are verbs, adverbs and adjectives) and such words usually specify the processes of seeing, hearing, feeling, talking and smelling.

For instance, when a person is talking about a particular experience in visual terms, the following words may be used:

perspective	new way of looking at
see, look, observe, image	appear, watch
get the picture	paint a picture
frame	visualize
clear, vivid	flash, focus
brilliant	light, dark
vague	hazy, foggy
shine, bright	sparkling
glazed	colorful
hues	scene
horizon	photographic

An experience may be related in auditory terms:

sounds like	harmonize
hear, speak	listen
tell, talk, say	question
tune in, tune out	scream, shrill screech
volume, frequency	shout, amplify
give an ear to	cacophony of sound
rhythm, melody	raucous noise
musical	dialog
symphony	tone

A person may talk about something using kinesthetic words (feeling predicates):

made contact with	in touch with, out of touch with
have a handle on	get a grasp of the situation
toughened, softened	smooth, rough
shook me up	stumbling block
tripped me up	connect with
geared up for	keep abreast of
tight, tense	sensitive, a feeling person
bond	stuck, cemented
warm	flowing
loaded, unloaded, dumped	solid
excited	hurt

Words that specify the processes of tasting and smelling includes:

odor, scent	that left a sour taste in my mouth
get my teeth into	bitter pill to swallow
pungent	bit off more than he could chew
smell, sniff	sweet, sour
salty	fishy
stale	fresh

Obtained from Dr. Lloyd Flaro's workshop, September, 1985.

Differences in Digital Presentation of  
Representational Systems

<b>Meaning</b>	<b>Kinesthetic</b>	<b>Visual</b>	<b>Auditory</b>
I understand you.	What you are saying feels right to me.	I see what you are saying.	I hear you clearly.
I want to communicate something to you.	I want you to be in touch with something.	I want to show you something.	I want you to listen carefully to what I say to you.
Describe more of your present experience to me.	Put me in touch with what you are feeling at this point in time.	Show me a clear picture of what you see at this point in time.	Tell me in more detail what you are saying at this point in time.
I like my experience of you and me at this point in time.	This feels really good to me. I feel really good about what we are doing.	This looks really good and clear to me.	This sounds really good to me.
Do you understand what I am saying?	Does what I am putting you in touch with feel right to you?	Do you see what I am showing you?	Does what I am saying to you sound right to you?
I want your experience of leisure to be your choice.	I want you to sense a good feeling about what you do with your leisure time.	I want you to see your way clear to pinpoint your leisure activities that seem fun to you.	You must learn to tell yourself what you enjoy doing in your leisure, rather than listening to other people.

Being afraid to try new things is under- standable.	I sense how uptight you are about jump- ing into some- thing new.	I can see clearly how scary the vision of new experiences can be.	I hear you saying that trying new things is frightening. Think of what others may say.
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Obtained from Lee, Scout, 1986. The Excellence Principles, Utilizing  
Neuro-Linguistic Programming. Oregon: Metamorphosis.

## APPENDIX O

### DEBRIEFING SCRIPT FOR SUBJECTS OF STUDY

In this study the interviewer used a counselling technique from the theory of Neuro-Linguistic Programming (NLP). Have you heard of this?

#### Short History

- 1970s - from California
- Originators - Bandler and Grinder

#### Definition

- Neuro - How the brain works
- Linguistics - Language/words
- Programming - brain works like a computer

For the counselling technique, the interviewer listened to your words, specifically the feeling, seeing, hearing, smelling or tasting words. The interviewer may have replied with a similar seeing, hearing, feeling, smelling or tasting word. This is called "matching." For example, if you had said "I can see an end to my project." The interviewer may have responded with "You can picture its completion", matching the visual word. For some subjects she may also have replied in a way that would mismatch the type of word you had said. For example, she may have said "You can feel the end coming" using a feeling word rather than a visual word. Here is a short listing of some examples of these words. (Handout Matching Predicates.)

During the interview, the interviewer attempted to match or mismatch these words. The purpose of this study was to explore whether participants felt more understood when they were matched or when they were mismatched. This study will test this out. The audio-cassette with the questionnaire you had completed helped to measure this. We had asked about the nonverbal behaviour to eliminate its influence.

Any questions? Karen will be able to answer further questions at the workshop.

Karen would like to meet with you again to have you complete a short questionnaire and to discuss the workshop.



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Title of Thesis

The Effect of Predicate Matching on Clients' Experience of Being Understood

Author



(Signature)

MARGUARITE K. BAUGH

(Name in block letters)

December 2, 1988.

(Date)

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