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# Alliance and Outcomes in Counseling Canadian Aboriginal Peoples

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ALLIANCE AND OUTCOMES IN COUNSELING

CANADIAN ABORIGINAL PEOPLES

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DISSERTATION

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## Abstract

This study evaluated predictors of outcome in counseling with Canadian Aboriginal peoples. Participants in the study included 373 Canadian Aboriginal clients receiving outpatient counseling at Calgary Counselling Centre in Alberta, Canada between October 2004 and November 2011. Outcome in this study was measured using the Outcome Questionnaire 45 (OQ-45) and predictor variables consisted of client demographics, counselor training level, and client ratings of the therapeutic alliance. The alliance was measured using the Session Rating Scale (SRS). Outcome variables, as measured by the OQ-45, were most often analyzed categorically and consisted of four different possible categories of change as measured from first to last session. Client OQ-45 scores were also analyzed as a continuous variable to examine the relationship between therapeutic change and therapeutic alliance. The researcher found significant results in the following areas: 1) primary presenting problem predicted client level of distress at intake; 2) education level of the client was predictive of number of sessions attended; 3) client ratings of the alliance at the second and third sessions were predictive of therapeutic change. As hypothesized, there was no significant difference in outcome based on counselor training level. The results are discussed in the context of improving clinical practice in real-world clinical settings, considerations in working with Native peoples, and the need for ongoing outcome monitoring. Limitations of the study, implications of the findings, and recommendations for future research are discussed.

*Keywords:* outcome, therapeutic alliance, Canadian Aboriginal peoples

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## CHAPTER ONE

### INTRODUCTION TO THE STUDY

#### Introduction

Canadian Aboriginal peoples experience disproportionately high rates of mental health disorders in comparison to non-Aboriginal Canadians (Kirmayer, Brass, & Tait, 2000). However, quantitative counseling outcomes research specifically with Aboriginal peoples is lacking. This lack of empirical research makes it difficult to develop a clear plan for how to best serve Canadian Aboriginal clients. This section introduces initial considerations for outcome research with Canadian Aboriginal peoples and introduces the importance of the therapeutic alliance in research within the general population.

The importance of a strong therapeutic alliance or relationship in working with Aboriginal peoples is found throughout the scholarly literature (Duran, 2006; Nuttgens & Campbell, 2010; Smith & Morrissette, 2001). However, the therapeutic alliance has primarily been addressed from theoretical perspectives of working with Aboriginal peoples without empirical backing (Morrissette & Gadbois, 2006; Shepard, O'Neill, & Guenette, 2006; France, Hett, & Rodriguez, 2004). Within the general population quantitative outcome research has repeatedly indicated that the therapeutic alliance is one of the strongest predictors of outcome and this is supported by over 1,000 research findings (Orlinsky, Ronnestad & Willutzki, 2004).

The importance of understanding the active ingredients of successful counseling with Canadian Aboriginal peoples is underscored by the Health Canada Economic Action Plan 2012 indicating that \$100 million is allocated for Aboriginal Mental Health Programs (Government of Canada, 2012). Indeed, the growing focus on outcome and

accountability is an international trend in mental health care as insurance companies, policymakers, and clients increasingly seek evidence for the effectiveness of mental health services (Duncan, Miller, Wampold, & Hubble, 2010). This accountability focus has placed burdens of proof on counselors to demonstrate that specific services provided with specific populations and individual clients with unique problems are effective. Given the theoretical support for the importance of the alliance in working with Aboriginal peoples and empirical support for the alliance in the general population, a quantitative investigation of alliance factors in working with Aboriginal peoples is needed.

#### Statement of Problem

Aboriginal peoples in Canada comprise about 3.8% of the national population (Statistics Canada, 2006). When experiencing mental health problems 17% of Aboriginal peoples seek services as compared to 8% of the non-Aboriginal population (Government of Canada, 2006). Although Aboriginal peoples are frequent consumers of mental health services, quantitative outcome research specifically with this population is lacking. Outcome research in general populations has consistently found that the client's rating of the therapeutic alliance is one of the best predictors of client outcome (Duncan, Miller, & Hubble, 2007). With an increasing trend of accountability in the mental health field counselors working with Aboriginal clients are in need of empirical evidence to inform their work. A search of PsycINFO and PsychARTICLES yielded no quantitative studies measuring the relationship between therapeutic alliance and outcomes in counseling Canadian Aboriginal peoples.

## Purpose of the Study

The purpose of this study is to determine to what extent client ratings of the therapeutic alliance, as measured by the Session Rating Scale, correlate with outcome, as measured by the Outcome Questionnaire 45, in counseling with Canadian Aboriginal clients. Additionally, this study also aims to investigate client demographics and counselor training level as relates to client outcome. This is a non-experimental, quantitative study utilizing data collected over a seven year period at Calgary Counselling Centre in Calgary, Alberta. This study will add empirical research to the existing theoretical perspectives on predictors of outcome in counseling Aboriginal peoples.

## Research Questions and Hypotheses

### Research Questions

#### *Research Question One: Client Variables*

What is the relationship between client demographic variables and treatment outcome?

#### *Research Question Two: Alliance Variables*

What is the relationship between client ratings of the alliance and outcome?

#### *Research Question Three: Counselor Variables*

What is the relationship between counselor level of training and outcome?

### Hypotheses

#### *Hypothesis One: Client Demographic Variables*

- 1(a) Client demographic variables of age, gender, ethnicity, income level, education level and presenting problem category will predict statistically significant differences in first session OQ-45 category (clinical or non-clinical).



- The predictor variables are age, gender, ethnicity, income level, education level and presenting problem category
- The criterion variable is the first session OQ-45 total score.

1(b) There will be a statistically significant difference between single session attenders and clients that attended two or more sessions based on demographic variables.

- The predictor variables are age, gender, ethnicity, income level, education level, and presenting problem category.
- The criterion variable is the number of sessions; single session or two or more sessions.

1(c) Client demographic variables will predict statistically significant differences in final session OQ-45 categories of therapeutic change (recovered, improved, no change, deteriorated).

- The independent variables are age, gender, ethnicity, income level, education level, and presenting problem category.
- The criterion variable is OQ-45 categories of therapeutic change.

*Hypothesis Two: Client Ratings of Alliance*

There will be a significant negative correlation between client ratings of the alliance and client outcome on the OQ-45.

- The predictor variable is the SRS score with the first session OQ-45 score as a covariate.
- The criterion variable is the final session OQ-45 score.

*Hypothesis Three: Counselor Variables*

There will be no significant correlation between counselor training level and outcome.

- The predictor variables are the first session OQ-45 score and counselor level of training (graduate student, post graduate student, or registered professional).
- The criterion variable is the final session OQ-45 categories of therapeutic change.

Definition of Terms

*Therapeutic Alliance or Alliance* – The aspects of the relationship between counselor and client that include collaborative goal setting or agreement, collaboration on therapeutic tasks, and the relational bond between counselor and client (Bordin, 1979).

*Treatment Outcome or Outcome* – The degree of improvement, or lack thereof, experienced by the client from the first session until the final session (Duncan, Miller, Wampold, and Hubble, 2010).

*Aboriginal peoples or Aboriginal* – This includes two distinct, broad groups of Canadian Aboriginal peoples: First Nations and Métis. There are 614 First Nations bands—groups that share common values, traditions and practices. According to the Government of Canada:

“The term “Métis” applied to the children of French traders and Cree women in the Prairies, and of British traders and Dene women in the north. Today, the term is broadly used to describe a group of people of mixed First Nations and European ancestry who see themselves as distinct from First Nations, Inuit and non-Aboriginal people” (Government of Canada, 2006, p. 160).

*Counselor or Counseling and Therapist or Therapy* – There is some disagreement in the mental health field as to what are differences or similarities in counseling and therapy as well as the corresponding terms to describe the individual professional providing services (Sommers-Flanagan & Sommers-Flanagan, 2004). For the purposes of this study the terms are used interchangeably in accord with Patterson’s (1973) view that there are essentially no differences between the two. However, it is noteworthy that the term “counselor” is used in the current study except when citing research that specifically uses a different term such as “therapist.” This is to ensure accurate citing of the intent of authors who may or may not make a distinction between these terms. Thus, in chapter two the term “therapist” is prevalent.

*Efficacy* – According to Barlow (1996) efficacy refers to “the results of a systematic evaluation of the intervention in a controlled clinical research context. Considerations relevant to the internal validity of these conclusions are usually highlighted” (p. 1053).

*Effectiveness* – Barlow (1996) identified that effectiveness, or what he also referred to as “clinical utility”, research in psychotherapy has to do with “the applicability and feasibility of the intervention in the local setting where the treatment is delivered” (p. 1053). According to Barlow (1996) this aims to “determine the generalizability of an intervention with established efficacy” (p. 1053). According to Sternberg, Roediger, and Halpern (2007), “An effectiveness study is one that considers the outcome of psychological treatment, as it is delivered in real-world settings.” (p. 208)

### Delimitations

Delimitations in research are identified as factors that narrow the scope of the study (Creswell, 2003). This study is delimited by focusing the analysis on the following variables:

1. The sample only includes Canadian Aboriginal peoples living in the greater Calgary area.
2. The counseling services were delivered at one location.

### Limitations

Identifying, *a priori*, the limitations of a research study can be difficult (Creswell, 2003). Nevertheless, at the proposal stage the researcher identifies the following as limitations to this study:

1. The measurement of outcome and alliance are client self-report measures and these may suffer from limitations typical of self-report measures such as social desirability, demand characteristics, self-assessment bias, and shared method variance.
2. Alliance and outcome are purely measured with two measures respectively, the Session Rating Scale (SRS; Johnson, 1995) and the Outcome Questionnaire-45 or OQ-45 (Lambert et al., 1996). Thus, only one perspective on alliance and outcome is measured in the current study. Additionally, the SRS long version used in this study has not been validated though an abbreviated version (SRS V.3.0; Duncan et al., 2003) has been validated.

3. Regression to the mean is another possible limitation of the study. This refers to the statistical group phenomenon whereby extremely high or low scores regress toward the mean from pretest to posttest (Cozby, 2009).

### Significance of the Study

Research has consistently found that the therapeutic alliance between the counselor and client is one of the most powerful predictors of treatment outcome (Duncan, Miller, Wampold, & Hubble, 2010; Horvath & Bedi, 2002; Martin, Garske, & Davis, 2000). Over 1000 research studies support this finding (Orlinsky, Ronnestad & Willutzki, 2004). Yet, quantitative and empirical study of counseling outcomes with Canadian Aboriginal peoples is absent. In addition, the important role of relationship factors in working with Aboriginal peoples has been written about theoretically (Shepard, O'Neill, & Guenette, 2006; France, Hett, & Rodriguez, 2004) though not studied quantitatively. In broad terms, this study intends to investigate the degree to which predictors of counseling outcome commonly found in general population literature (i.e., the therapeutic alliance) are generalizable to counseling outcomes with Aboriginal peoples.

This study is also important in terms of placing an emphasis on “effectiveness” in contrast to “efficacy.” The relevance of effectiveness in clinical settings is underscored by the American Counseling Association Code of Ethics that indicates counselors “...continually monitor their effectiveness as professionals and take steps to improve when necessary” (ACA, 2005; C.2.d). Though efficacy and effectiveness studies are both important in accumulating research evidence in counseling, the current study has the potential of speaking to “patient-focused research” (Howard et al., 1996) in naturalistic

conditions that correspond more closely to every day counseling practice than efficacy studies.

The current quantitative study primarily analyzes the relationship between demographic factors and alliance and outcome in counseling Canadian Aboriginal peoples. The lack of quantitative study of counseling outcomes with Aboriginal peoples is a void in the existing literature that this study aims to fill. Additionally, high prevalence rates of mental health problems among Aboriginal peoples and resources devoted to providing services within this population add to the practical relevance of the current study.

## CHAPTER TWO

### LITERATURE REVIEW

The following literature review summarizes research findings on therapeutic alliance, client feedback research, theoretical perspectives of working with Aboriginal peoples, and meta-theoretical models. The quantitative alliance and outcome research findings included in this review are of studies conducted with samples not representative of the exclusively Aboriginal sample used in the current study. As previously mentioned, data of this sort with Aboriginal peoples are absent. Thus, the literature review will include alliance and outcome studies from the general research literature and scholarly, non-quantitative articles on relationship factors in working with Aboriginal peoples. Additionally, though outcome research frequently focuses on the efficacy of specific therapeutic techniques, this “specific factors” approach is not the focus or intent of the current study. As found by Wampold (2001) in a meta-analysis of over 20 years of outcome research, the difference in efficacy between different therapeutic techniques is small and the overall contribution of specific techniques to outcome is also small (8%) in comparison to other factors. According to Wampold’s (2001) and several other meta-analyses (Imel, Wampold, Miller, & Fleming, 2008; Miller, Wampold, & Varhely, 2008), there is frequently no difference in efficacy among different treatment approaches, thus findings focusing on differential efficacy of treatment approaches are largely excluded from the current research review. This research review focuses on:

1. The Therapeutic Alliance
2. Client feedback and feedback effects
3. Theoretical perspectives on working effectively with Aboriginal peoples

#### 4. Meta-theoretical models of counseling: The medical model and contextual model

##### The Therapeutic Alliance

Much of the history of counseling outcome research and theory has focused on finding and illuminating specific therapeutic techniques to be used with specific diagnoses and treatment conditions (Hubble, Duncan, & Miller, 1999). Indeed, this specific techniques focus applied to therapy has become further systematized through the development of “manualized treatments” in which treatment manuals are used to guide therapists, step by step, in specific techniques to conduct at various stages of treatment (Barlow, Allen, & Choate, 2004). However, critics of manualized treatment and specific factors have declared that research support for the specific factors in counseling is scant. For instance, Hubble, Duncan, and Miller (1999) indicate that over 40 years of research has shown that the difference between treatment techniques, in terms of outcome, is very small and that the common factors shared by different treatment approaches is a much larger contributor to outcome variance. This finding, known as the “dodo bird verdict,” was acknowledged as early as 1936 by psychologist Saul Rosenzweig in which he noted that the elements that are common among differing treatment approaches are a more important determinant of outcome than the differences (Rosenzweig, 1936). Central among these common factors is the therapeutic alliance between the counselor and the client. The therapeutic alliance generally refers to the working relationship between counselor and client. More specifically, a commonly used definition of therapeutic alliance in the research literature includes the following interacting elements: the relational bond between the therapist and client, agreement between therapist and client



on the goals of therapy, and agreement or collaboration between therapist and client on the tasks or methods used in therapy (Bordin, 1979).

A frequently replicated finding in mental health outcome research is that the therapeutic alliance between therapist and client is a strong predictor of outcome (Norcross, 2010). Researchers have consistently found that a positive alliance between client and therapist correlates with a good client outcome (Horvath & Bedi, 2002; Martin, Garske, & Davis, 2000). Numerous studies have also found that, when surveyed, clients primarily attribute the effectiveness of mental health services to the relational qualities of the provider (Elliott & James, 1989; Bachelor, 1995). Over 100 studies have revealed that when clients are asked about what made services effective they primarily refer to the relationship with the therapist (Norcross, 2010).

In a comprehensive review of process-outcome research literature, Orlinsky, Rønnestad, and Willutzki (2004) examined all available studies from 1950 to 2001 and relationship factors were central to their findings. This research review investigated outcome research findings published in peer-reviewed journals from English speaking countries such as the United States, the United Kingdom, and Canada as well as journals from Germany, Austria, and several Scandinavian countries. The primary aim of the research review was to unite an immense body of outcome research in the existing literature and evaluate counseling process variables to determine the relationship of these variables to counseling outcomes. The variables that showed the strongest relationship to outcome included categories such as therapeutic operations (e.g., counseling techniques), therapeutic contract (e.g., norms and focus defined between counselor and client, such as treatment goals), in-session impact or therapeutic realizations (e.g., immediate positive or

negative impacts during the session), and the alliance or therapeutic bond. As defined in their review, the alliance consisted of collaborative and personal rapport aspects such as personal role investment, interactive coordination, communicative attunement, and mutual affirmation. Findings indicated high rates of positive association between alliance and outcome for both the therapeutic bond as a whole and its various elements. In total, they counted over 1,000 separate research findings indicating that the therapeutic bond or alliance was associated with positive outcome. In fact, of all the factors analyzed in this review the alliance was found to be the strongest factor linking process to outcome (Orlinsky, Rønnestad, & Willutzki, 2004).

At least two research studies have found counselors generally rely primarily on their own informal monitoring and clinical experience in evaluating their alliance with clients, client outcomes, and treatment decisions (Hannan et al., 2005; Stewart & Chambless, 2007). Unfortunately, numerous research and meta-analytic studies have found that *the client's view* of the alliance is a better predictor of outcome than the therapist's view (Horvath & Bedi, 2002; Bachelor & Horvath, 1999; Horvath & Symonds, 1991; Wampold, 2001). In addition, a meta-analysis of 53 studies regarding the correlation between client-therapist alliance ratings found a .36 degree of correlation (Tyron, Blackwell, & Hammel, 2007). Given these discrepancies between therapist and client views of the therapeutic alliance consistently found in the research literature, several researchers have called for the use of real-time feedback in order to minimize untoward effects of this discrepancy in views (Duncan, Hubble, Miller, & Wampold, 2010; Norcross, 2010).

Though empirical support for the client's view of the therapeutic alliance as a predictor of outcome is vast, the challenge of individualizing services is evident in the challenge of understanding the factors that contribute to a strong therapeutic alliance. In their empirical review of alliance research, Elvins and Green (2008) indicated that despite strong evidence supporting the potency of the alliance, less is known about its components. Among mental health professionals and in training programs there is general consensus regarding factors that comprise a good therapeutic alliance (e.g., empathy, respect, genuineness, congruence), but there is also significant individual client variability for types of alliances that clients find therapeutic (Bachelor, 1995). Furthermore, research findings illustrate that some clients benefit from an alliance based on deep nurturing and attentive listening, some based more on collaboration, and some on frank discussion and advice (Bachelor, 1995). Thus, clients have varying perspectives on what therapist behaviors or client therapist interactions constitute a positive alliance. This individual client variation in what is perceived as alliance-building behavior is further justification for the use of a formal method for understanding the client's perspective of the alliance (Duncan, Miller, & Sparks, 2004). Summarily, researcher John Norcross noted that "The empirical research on therapist empathy and the therapeutic alliance repeatedly informs us that it is the client's experience of empathy and collaboration that best predicts treatment success: the client's experience, not the therapist's experience" (Norcross, 2010, p. 117).

### *Empathy*

Integral to the definition of alliance provided earlier is the notion of counselor efforts towards empathic understanding. In the classic words of Carl Rogers (1957),

“Empathy is the therapist’s sensitive ability and willingness to understand the clients’ thoughts, feelings, and struggles from their point of view” (p. 98). As Rogers’ words indicate, central to the definition of empathy is to understand from the client’s perspective. Though client self-report alliance measures, such as the one used in the current study, are not empathy measures per se, the concept of empathy is embedded in the process of gathering client feedback about the alliance. In particular, client feedback is designed to increase “experienced empathy” for the client as counselors attempt to respond to client feedback. Similar to the client’s perspective of the alliance discussed previously, client-perceived empathy has been found in numerous studies to be a better predictor of outcome than counselor-rated empathy (Barrett-Lennard, 1981; Bohart, Elliott, Greenberg, & Watson, 2002; Gurman, 1977; Orlinsky, Grawe, & Parks, 1994). Additionally, in examining the correlation between empathy and outcome, a meta-analysis of 47 studies yielded an effect size of 0.32 for empathy indicating a small-medium effect size.

### *Goal Consensus*

Goal consensus is a component of the alliance that refers to degree to which the counselor and client agree on the goals of treatment. In a meta-analysis focusing on this component of the therapeutic alliance, Tryon and Winograd (2011) reviewed studies focusing on collaboration and goal consensus in psychotherapy. This meta-analysis examined articles published from 2000 through 2009 on goal consensus and psychotherapy outcomes. In total, this meta-analysis included data from 15 studies ( $n = 1302$ ) and yielded a moderate effect size of .34 for goal consensus-positive psychotherapy outcome. The authors noted that better outcomes were expected when

therapist and client come to a consensus on the goals of therapy and how those goals will be met (Tryon & Winograd, 2011).

### *Task Agreement*

Task agreement refers to the aspect of the alliance addressing how well the client agrees with the counselor on the tasks, techniques, or treatment approaches being used in sessions. As Hatcher & Barends (2006) noted, the therapeutic alliance cannot happen without techniques. The importance of tailoring the treatment approach, or ensuring a good fit of the approach, to the client is illustrated in the words of Frank and Frank (1991), “Ideally, therapists should select for each patient the therapy that accords, or can be brought to accord, with the patient’s personal characteristics and view of the problem” (p. xv). The Treatment of Depression Collaborative Research Program (TDCRP) offered empirical support for this notion of matching approach to client preferences.

The TDCRP was the largest randomized controlled trial on depression at the time it was published in 1989. The study randomly assigned 250 depressed patients to four different treatment conditions: Cognitive-Behavioral Therapy (CBT), interpersonal therapy (IPT), antidepressant plus clinical management, and a placebo pill plus clinical management (Elkin et al., 1989). An interesting finding was that clients’ perceptions of the treatment approach matching their pretreatment beliefs about the origin of their depression and what would be helpful (i.e., psychotherapy or medication) contributed to early engagement, continuation in treatment, and the development of a positive alliance (Elkin et al., 1989). In addition, empirical support for matching treatment to the client’s theory of change is supported by expectancy and attribution literature (Duncan & Miller, 2000).

## Client Feedback and Feedback Effects

Formal client feedback, as referred to here, involves a systematic and routine method for obtaining the client's view of the alliance and their view of whether or not the therapy service is proving helpful. This formal method of monitoring alliance and outcome with the client has also been referred to as "Practice-Based Evidence" (Duncan, Miller, & Sparks, 2004). As summarized, the client's view of the alliance is a good predictor of outcome in therapy and is generally a better predictor than the therapist's view, though obtaining the client's perspective requires a persistent and intentional focus. Consider a study in which therapists were separated into an "informal group," a formal feedback group (i.e., clinicians seeking standardized and formal client feedback using alliance and outcome measures), and a treatment as usual control group (Miller, Duncan, & Hubble, 2004). The "informal group" was simply instructed to check in with clients routinely about the alliance and treatment progress without using a formal feedback instrument or measure. The therapists in this group maintained when asked that they had regularly checked in with clients about the alliance and outcome, but videotape review indicated that they routinely did not ask clients for feedback. Similarly, one study found that treatment monitoring by therapists is largely based upon intuitive feelings, even though therapists are poor at appraising the client's response to treatment via these informal methods (Hannan et al., 2005).

Monitoring clients via feedback about the alliance and outcome has been found in the research literature to improve outcomes. This variable is sometimes referred to as "feedback effects" (Duncan, 2010). Indeed, Lambert (2010) found that effect sizes for treatment as usual (TAU) were .34 and that with client feedback effect sizes were .92. In

a summary of research to date on feedback effects, Miller (2010) identified 13 randomized clinical trials (RCT's) with a total of 12,374 clinically, culturally and economically diverse clients. The following results were found regarding formal client feedback in comparison to non-feedback groups:

- Feedback doubled the amount of reliable and clinically significant change
- Feedback decreased drop-out by half
- Decreased client deterioration (clients who get worse during treatment) by 33%
- Reduced hospitalizations and shortened length of stay by 66%
- Significantly reduced cost of care (Miller, 2010)

These findings offer robust empirical support for improvement in services when formal client feedback is sought. Furthermore, research on formal client feedback has indicated that when therapists are exposed to client feedback about the alliance and outcome that they generally respond by making necessary adjustments to services to better accommodate their clients (Duncan, Miller, Wampold, & Hubble, 2010). Alliance and outcome research is primarily correlational research and thus the evidence does not suggest that a good alliance means a good outcome for clients. However, the research reviewed includes randomized clinical trials as well as feedback in real-world clinical settings. In both cases, aggregate client outcomes improved simply by exposing therapists to client feedback.

### Working with Aboriginal Peoples

Quantitative outcome and alliance research with Canadian Aboriginal was not found in a search of PsycINFO and PsycArticles. Thus, much of the research review contained in this section will include theoretical articles and qualitative research.

Additionally, there are studies with Native American populations included in this literature review because Native Americans are the closest in ethnic orientation to Canadian Aboriginal peoples. Canadian Aboriginal peoples are composed of distinct and varied groups within First Nations and Métis subgroups and Native Americans are of course varied as well. The purpose of including supplemental Native American research as well is two-fold, (1) There is little research literature on alliance and outcome with Canadian Aboriginal peoples and (2) "...regardless of the colonial identity given in name, there is a unifying thread of identity for Original people all over the world and these different names have been used as a divisive tool of oppression" (Duran, 2006, p. 11). Duran's statement and further elaboration indicate that Original people share some commonalities as colonized people (e.g., historical trauma, internalized oppression) that create unique struggles and unique treatment needs Native peoples (Duran, 2006). Thus, including American Indian and Alaska Native (AI\AN) research in this literature review adds to alliance and outcome perspectives in the Canadian Aboriginal peoples' literature.

#### *Relationship Factors in Working with Native Peoples*

One qualitative study related to the current research questions was a study investigating cross-race therapeutic relationships. This study, a dissertation not published in a peer-reviewed journal, interviewed 12 participants about their experience as cross-race (non-Native) therapists working with AI/AN clients (Weinstein, 2007). One aim of the study was to clarify contributors to a good therapeutic alliance with Native Americans when the therapist is non-Native. Results indicated in cross-race therapy that contributors to a good therapeutic relationship included establishment of trust, appropriate self-



disclosure, respect and humility, involvement in the community, and awareness of cultural factors (Weinstein, 2007).

In a qualitative study conducted in the province of Alberta, Canada, researchers investigated the most salient themes for White male counselors working with First Nations clients (Smith & Morrissette, 2001). Five themes emerged from this study with one being establishing relationships. In reflecting on his work with First Nations clients, one counselor in the study noted, “I think my most challenging work here is not intervention, more [it is] engagement” (Smith & Morrissette, 2001, p. 79). On the theme of establishing relationships, one observation by the authors was the importance of understanding individual clients and developing an understanding of their families, communities, and cultural identity. Additionally, they noted that it can sometimes be a struggle to find a balance between the current helping relationship with the familial and community needs (Smith & Morrissette, 2001). In a summary of relationship factors in this study, the researchers indicated that the multicultural relationship is critical and developing multicultural relationship skills is central to working with First Nations clients (Smith & Morrissette, 2001).

A central model in multicultural counseling is the construct of “multicultural competency” defined in by Sue, Arredondo, and McDavis (1992). This tripartite model of multicultural competencies (MCC’s) identified three dimensions of competencies that are central in counselors working competently across cultures (Sue, Arredondo, & McDavis, 1992). Those three dimensions (awareness, knowledge, and skills of counselors) have become a common framework for understanding multicultural counseling, and principles of the tripartite model have also been widely adopted by training programs and

accrediting bodies. Despite the fact that a common three dimensional model for attaining cultural competence exists, there is also a lack of agreement of how best to educate culturally sensitive counselors (Fier & Ramsey, 2005). Additionally, it has been argued that for counselors to function effectively they must be multiculturally competent (Pope-Davis et al., 2002). Yet again, consensus around what it means to be “culturally competent” remains a challenging concept to evaluate. Even the term “culturally competent” carries with it some controversy as it perhaps implies an endpoint in a counselor’s development working cross-culturally. Luis Varga describes “cultural competence” as unattainable and thus prefers the term “cultural responsiveness” as it represents a constant striving by counselors as opposed to a point of arrival (Sommers-Flanagan & Sommers-Flanagan, 2004).

The relevance of developing a deeper understanding counselor MCC’s as related to relationship factors is evident in research findings from several empirical studies. These studies have shown that client perceptions of their counselor’s MCC’s are positively correlated with clients’ ratings of the therapeutic alliance, satisfaction with services, counselor empathy, and counseling outcomes (Owen, Tao, Leach, & Rodolfa, 2011). In this sense, there is empirical support for the importance of MCC’s to clients and to counseling outcomes. However, evidence also indicates that there is little convergence between counselor self-report of MCC’s and observer ratings of MCC’s as well as little convergence between counselor self-report of MCC’s and clients’ ratings of counselor MCC’s (Owen et al., 2011).

## Meta-theoretical Models of Counseling:

### The Medical Model and Contextual Model

Given that the process of counseling is complex, and that the current study does not focus on “specific factors,” a brief overview of “levels of abstraction” (Wampold, 2001) is essential to clarifying the focus of the current study. Wampold (2001) described four levels of abstraction in counseling as (1) therapeutic techniques, (2) therapeutic strategies, (3) theoretical approaches, and (4) meta-theoretical models (Wampold, 2001). Although in practice these levels are overlapping and not clearly delineated, the levels are proffered to provide further understanding of foci in the current study which primarily speaks to the meta-theoretical level. A brief definition of each level of abstraction follows:

1. Therapeutic techniques – The techniques and actions administered by the therapist.
2. Therapeutic strategies – “clinical heuristics that implicitly guide efforts during the course of therapy” (Goldfried, 1980, p. 994).
3. Theoretical approach – the theoretical framework of psychotherapy and underlying view human nature.
4. Meta-theoretical – theories about psychotherapeutic theories.

The medical model and contextual model described in the following section are two models at the meta-theoretical level. The current proposal emphasizes a contextual model.

## The Medical Model

The medical model as applied to counseling and psychotherapy can be traced back to the physician Sigmund Freud. In his early development of psychoanalysis Freud theorized that (a) symptoms of hysteria were caused by repression of events, (b) the nature of the symptoms are related to the events, and (c) the symptoms could be relieved by insight into the relationship between symptoms and the events (Freud, 1896). Though this model proposed by Freud would hardly be recognized today as a “medical treatment,” it does follow what has been described as the medical model as applied to counseling. This model is summarized in a basic form as: (a) a scientifically based explanation of a disorder, (b) a specific mechanism of change, and (c) a specific intervention that addresses the etiology of the disorder (Wampold, 2001).

Though very theoretically different than psychoanalysis, this basic sequence can also be identified in what has been described as the second force in psychology, behaviorism. The behavioral approach began to formally develop as behavior therapy in the 1950's and it laid claim to a more scientific explanation of mental disorders. Behaviorists presented their techniques of treatment as separate from the medical model in that interventions were geared towards re-learning as opposed to biology, though some researchers have made the case that behavioral treatment adhered to this sequence consistent with the medical model (Wampold, 2010). Later, in the 1990s, the medical model as applied to counseling and psychotherapy emerged via the American Psychological Association formation of the Task Force on the Promotion and Dissemination of Psychological Procedures (1995). This launched a new era in psychological treatments with the establishment of empirically supported treatment

(EST) lists (originally referred to as empirically validated treatments or EVT's). Core criteria for a treatment to be considered an EST included that the treatment was:

- superior to a control group or placebo as found in two independent studies
- the studies were conducted with a treatment manual or logical equivalent
- the studies were a randomized control trial, controlled single case experiment, or equivalent time-samples design (Chambless & Hollon, 1998).

This process of determining effective psychological treatments for specific disorders overlaps significantly with the FDA drug approval process (Wampold, 2010). Further, the establishment of EST criteria to discern which specific treatments were efficacious for specific disorders corresponded with an increased emphasis on the development of treatment manuals. The purpose of treatment manuals is to ensure a standardization of treatment in order to deliver the active ingredients of psychotherapy (i.e., techniques, strategies) and reduce variability between providers (Wampold, 2001). Thus, treatment manuals in practice and research are deeply rooted in the medical model and offer an additional example of the 3 steps in the basic form of this meta-theoretical model.

### The Contextual Model

The contextual model of counseling has been described as a “superordinate or meta-model of psychotherapy” (Anderson, Lunnen, & Ogles, 2010; p. 145). The contextual model has roots in the common factors model described by Frank and Frank (1991) and has more recently been articulated and researched by Wampold (2001). The contextual counseling model generally takes the view that different counseling orientations or models are roughly equivalent in effectiveness because of common factors shared by all approaches (Anderson, Lunnen, & Ogles, 2010). Those common factors

include: (a) a healing or therapeutic setting, (b) a rationale or conceptual framework providing an explanation and a method of treatment, (c) an emotionally charged, trusting, and confiding relationship, and (d) a ritual or procedure involving both client and counselor (Anderson, Lunnen, & Ogles, 2010; p. 145). At first glance, this model may appear to parallel the medical model described earlier. However, following are three defining clarifications of the contextual that differentiate the contextual model from the medical model (Anderson, Lunnen, & Ogles, 2010).

- a. The ritual or procedures of counseling must be consistent with shared cultural beliefs of counselor and client
- b. The theory is understood and accepted by the client
- c. The counseling is implemented in a way that promotes a positive outcome

An essential difference between the contextual model and medical model is in the domain of how counseling addresses the underlying etiology of the problem. The medical model is based on the notion that effectiveness is due to the technique addressing the etiology whereas the contextual model effectiveness resides more in the realm of counselor and client belief in healing context and belief in the methods.

#### Meta-models in the Current Study

Given that the data for the proposed study were collected in a naturalistic setting, it is difficult if not impossible to address the question of specific model effects. For instance, counselors in the current study were not using treatment manuals and therefore the purity of approach (e.g., CBT, Solution-Focused, etc.) cannot be determined.

Additionally, the percentage of therapists who identify as eclectic has tended to hover around 50% (Patterson, 1989) and therapists who identify with one particular orientation

frequently endorse techniques outside of their orientation (Thoma & Cecero, 2009). Thus, the design and data collected for the current study allow for an analysis that is more aligned with the contextual model than the medical model. Additionally, the question of specific models or techniques versus common factors has been pointed out to be “the wrong question” (Sommers-Flanagan & Sommers-Flanagan, 2004, p. 15) as it is impossible to disentangle common factors from the counseling models in which they appear. However, for the purposes of the current study, the more salient question is to what degree do Aboriginal clients benefit from services and how does the therapeutic alliance, a known strong predictor of outcome and a common factor, correlate with outcome? As an effectiveness study, the current study aims to quantitatively understand the relationship between alliance and outcome among Canadian Aboriginal peoples in a real-world clinical setting.

## CHAPTER THREE: METHODOLOGY

This chapter provides a description of the methodology of the study including the context and setting of the study, research participants, research design, instrumentation, and ethical considerations.

### Context and Setting: Calgary Counselling Centre

The Calgary Counselling Centre is a non-profit community-based organization guided by the following mission statement:

“With passion and dedication, Calgary Counselling Centre assists individuals and families to build better lives through counselling, training, research and community contribution” ([www.calgarycounselling.com](http://www.calgarycounselling.com), 2012).

Calgary Counselling Centre provides counselling services to clients of diverse economic sectors in the greater Calgary area. On average, the agency provides approximately 35,000 clinical hours of service to clients annually (Babins-Wagner, 2011). The center was founded in 1962 and currently provides counseling on a sliding fee scale. Calgary Counselling Centre receives client referrals from a variety of sources including physicians, school counselors, client self-referrals, and the Provincial Court of Alberta (Babins-Wagner, 2011).

### Research Participants

Research participants in the current study were clients identified as Aboriginal peoples who completed at least one OQ-45 during the time they received services at Calgary Counselling Centre. Though Calgary Counselling Centre provides services for clients of varied ethnic backgrounds, the current study utilized data from 373 clients 18 years of age or older who identified as Canadian Aboriginal peoples (First Nations or Métis). These clients were seen for counseling services between October 2004 and



November 2011. Clients included in this study completed the OQ-45 and SRS as a typical component of receiving services with the understanding that data from these measures would be used to improve clinical services (Babins-Wagner, 2011).

At the Calgary Counselling Centre counselors and clients engaged in the following data collection procedure. Clients completed the OQ-45 at the beginning of each session. The score or results of the OQ-45 were routinely shared and discussed with clients at the end of the first session and at the beginning of each subsequent session (Babins-Wagner, 2011). The SRS was completed by clients at the end of each session and reviewed by the counselor and discussed immediately with the client (Babins-Wagner, 2011). Data collected from these two measures, along with demographic data, were stored in an SPSS data file on site at the center. The Calgary Counselling Centre provided access to the data for this dissertation.

### Research Design

This was a non-experimental, quantitative study that measured the relationship between demographic variables, alliance, and outcome in counseling with Aboriginal clients. In contrast to studies that evaluate outcome from the beginning to the end of treatment, the current study utilized session by session outcome and alliance data to evaluate changes throughout the counseling service.

### Instrumentation

Measures used in this study were part of standard practice at Calgary Counselling Centre. The OQ-45 was selected for its ease of use for client and therapist as well as for its sound reliability and validity (Babins-Wagner, 2011). The primary intent of utilizing the SRS was to guide therapists and staff to attend more intentionally to the therapeutic alliance. These measures are described below.

### *The Outcome Questionnaire*

The Outcome Questionnaire (OQ-45) is a 45-item self-report measure targeting symptoms of psychological disturbance (primarily anxiety and depression), interpersonal relationships, and social role functioning (Lambert & Shimokawa, 2011). The OQ-45 generally takes about five minutes to complete. Common practice is for counselors to manually score the OQ-45 immediately after clients complete the questionnaire. The OQ-45 score then serves to guide session by session discussion between counselor and client regarding progress. Designed to monitor client functioning on a weekly basis, the OQ-45 consists of a Total Score (based on all 45 items), as well as 3 subscales: Symptom Distress, Interpersonal Relations, and Social Role (Lambert & Shimokawa, 2011). The Total Score range for the OQ-45 is from 0 to 180, with higher numbers indicating higher distress. It has demonstrated adequate test-retest reliability ( $r = .84$ ; Lambert, Burlingame, et al., 1996) and validity across varied settings in both clinical and normative populations and excellent internal consistency (Cronbach's alpha = .93; Lambert, Hansen, et al. 1996). The OQ-45 also has demonstrated strong concurrent validity ( $r = .55$  to  $.85$ ) with the Symptom Checklist 90R, Beck Depression Inventory, Zung Self-Rating Anxiety Scale, State Trait Anxiety Inventory, Inventory of Interpersonal Problems, and Social Adjustment Scale (Beckstead, Hatch, Lambert, Eggett, Goates, & Vermeersch, 2003). OQ-45 scores have been found to remain stable over time in untreated populations while also being sensitive to change in treated populations (Vermeersch, Lambert, & Burlingame, 2000).

In the current study, the OQ-45 total score was used as the outcome variable instead of utilizing each of the subscales as separate outcome variables. A primary reason

is that despite content differences among the subscales, it has been suggested that the subscales may not provide distinct information (Lambert et al., 1996). The total score provides an assessment of global functioning (Mueller, Lambert, & Burlingame, 1998). Data collected from the OQ-45 can be classified into four different categories (Kadera, Lambert, & Andrews, 1996). The four categories are as follows:

1. “Recovered” – Clients meet the criteria for clinically significant change by an improved OQ-45 score of at least 14 points as well as moving from the clinical to the non-clinical range.
2. “Improved” – Clients meet criterion for statistical reliability by improving at least 14 points while remaining within the same clinical or non-clinical range as when they began treatment.
3. “Deteriorated” – Clients change at least 14 points in the direction of increased distress.
4. “No change” – Clients do not change more than 14 points in the direction of either increased or decreased distress.

The clinical cutoff for the OQ-45 represents cutoff between a score in the “dysfunctional” range that is indicative of a clinical population and a score typical of a “functional” non-treated population (Kendall, Marrs-Garcia, Nath, & Sheldrick, 1999). A score of 64 or higher falls within the dysfunctional (clinical) range and a score of 63 or lower falls within the functional (non-clinical) range (Kendall, Marrs-Garcia, Nath, & Sheldrick, 1999).

The OQ-45 has a Reliable Change Index (RCI) of 14 points based on clinical and normative data. Consequently, clients who change by 14 points in a positive or negative

direction are considered to have made “reliable change” (Lambert, Hansen, et al., 1996). This 14-point change in outcome is a high standard of change and was adopted by the Calgary Counselling Centre to promote this high standard and reduce the likelihood that client changes occurred by chance (Babins-Wagner, 2011). The OQ-45 has been identified as the “gold standard of outcome assessment for outpatient practice” (Duncan, Miller, & Sparks, 2004, p. 87) and given its rigorous study is well suited to tracking treatment response. Though OQ-45 data can be analyzed categorically as listed above, the current study also analyzed OQ-45 total scores as continuous variables to gain a clearer understanding of change that does not fall within the described categories.

#### *The Session Rating Scale*

Developed by Lynn Johnson (1995), the Session Rating Scale Version 3.2 (SRS) was designed as a clinical tool to track therapeutic alliance with clients. SRS development was influenced by several other alliance measures including the Working Alliance Inventory (Horvath & Greenberg, 1986), the Session Evaluation Questionnaire (Stiles & Snow, 1984), and the Empathy Scale (Burns & Norlen-Hoeksema, 1992). The SRS is a 10-item, client self-report measure with each item consisting of a 5-point Likert scale. Domains addressed in the SRS include Bordin’s (1979) description of the alliance (relational bond, agreement on goals, and agreement on the tasks of therapy), depth and smoothness of the session, and the therapeutic relationship (Duncan et al., 2003).

In an examination with 39 clients, an item analysis of the SRS demonstrated a Cronbach’s alpha reliability coefficient of .89. The first 6 items, measuring the alliance, yielded a high alpha (.86) while items 7, 9, and 10, measuring session impact, provided an alpha of .75 (Stanford, 1999). Concurrent validity of the SRS has not been measured.

The SRS was designed to be given to clients at the end of each session; clients complete the measure in the presence of the counselor. The counselor then scores the responses provided and discusses these responses in the moment with the client. The intent of this real-time feedback is to insure that counselors engage in constant, reliable dialogue with clients regarding their experience of the alliance and the session. SRS scores can range from 0 to 40; a score of 35 or less suggests the alliance may be at risk and the counselor is advised to review the client's feedback at that time (Babins-Wagner, 2011).

#### Data Collection Procedures

The Calgary Counselling Centre has a policy that all clients complete the OQ-45 measure at the beginning of every session and that all clients complete an SRS alliance measure at the end of every session. These data are collected and entered into a database for the purposes of tracking individual client outcome and for aggregate analysis to determine overall outcomes of the center.

## CHAPTER FOUR: RESULTS

This chapter presents the data analysis and it consists of four sections: (a) description of main demographic characteristics of clients in the study, (b) analysis of demographic variables, (c) analysis of alliance and outcome, and (d) analysis of counselor training level variables. Each section includes the hypotheses and the statistical test used to evaluate the variables.

### *Demographic Characteristics*

This research study included the collection of alliance and outcome data collected in routine daily practice at the Calgary Counselling Centre. Participants included 373 clients 18 years of age or older who identified as Canadian Aboriginal peoples (First Nations or Métis). As is typical in clinical settings, clients were free to respond to requests for demographic information as they chose, thus missing data occurs in the study. There was missing age data for 7 participants (1.9%); for gender there was missing data for 6 participants (1.6%). There was a minimum age of 18 and a maximum of 62 (see Table 1). The total sample included 200 First Nations and 173 Métis clients (see Table 2).

Table 1

### *Age Category and Gender*

Age	Male	Female	Not reported	Total
18-24	23 (33.3%)	43 (62.3%)	3 (4.3%)	69 (18.5%)
25-29	21 (29.6%)	50 (70.4%)	0 (0.0%)	71 (19.0%)
30-39	54 (39.4%)	81(59.1%)	2 (1.5%)	137 (36.7%)
40-49	19 (32.2%)	39 (66.1%)	1 (1.7%)	59 (15.8%)
50-59	9 (33.3%)	18 (66.7%)	0 (0.0%)	27 (7.2%)

60+	2 (66.7%)	1 (33.3%)	0 (0.0%)	3 (.8%)
Not reported	4 (57.1%)	3 (42.9%)	0 (0.0%)	7 (1.9%)
Total	132 (35.4%)	235 (63.0%)	6 (1.6%)	373 (100.0%)

Differences in attendance of counseling based on gender is consistent with existing literature indicating that men typically comprise approximately one-third of clients who attend counseling services (Vessey & Howard, 1993). According to 2006 census data, the Aboriginal population in the metropolitan Calgary area is composed of 14,770 Métis (56%), 10,875 First Nations (41%), and 3% of respondents identified as other Aboriginal (Statistics Canada, 2006). In the study sample First Nations peoples appear in greater numbers (200) than Métis (173).

Table 2

*Gender and Ethnicity*

Ethnicity	Male	Female	Not Reported	Total
First Nations	80 (40%)	117 (58.5%)	3 (1.5%)	200 (53.6%)
Métis	52 (30.1%)	118 (68.2%)	3 (1.7%)	173 (46.4%)
Total	132 (35.4%)	235 (63.0%)	6 (1.6%)	373 (100.0%)

*Client Demographic Variables*

The first hypothesis is separated into three parts, all of which address demographic variables. The first part of this hypothesis focused on the relationship between age, gender, ethnicity, income level, and presenting problem category with OQ clinical cutoff category (clinical or non-clinical) in the first session. The second part of this hypothesis examined the potential difference between single session attenders and

those who attended more than one session based on demographic variables. The third part of this hypothesis examined the final session OQ category (recovered, improved, no change, or deteriorated) based on demographic variables. Each part of hypothesis one is stated first followed by a description of the statistical analysis and findings and a table for visual understanding of the findings.

A Pearson's chi-square test was used to explore the relationship between the variables of this hypothesis as this is an appropriate test for categorical variables (Field, 2005). The chi-square test compares observed frequencies with expected frequencies, given chance distribution (Field, 2005). Hence, the Pearson's chi-square is a test of statistical significance and does not provide a measure of magnitude of effect. However, to get a more sensitive evaluation of the relationship between categories, standardized residuals are examined as post-hoc tests and these residuals are reported as z-scores (Field, 2005).

Additional post-hoc analyses were calculated for all significant Chi-square findings. These post-hoc analyses included Cramer's V, which is calculated when a chi-square yields significant results (Field, 2005). Cramer's V measures the strength of association between categorical variables and is used when one of those variables contains more than two categories (Field, 2005). Steinberg (2011) recommended the following guidelines for Cramer's V interpretation: less than .30 is small; .30 - .50 is medium; and more than .50 is large.



## Hypothesis One: Client Demographic Variables

### *Hypothesis 1(a)*

*Client demographic variables of age, gender, ethnicity, income level, education level and presenting problem category will predict statistically significant differences in first session OQ-45 category (clinical or non-clinical).*

- The predictor variables are age, gender, ethnicity, income level, education level and presenting problem category
- The criterion variable is the first session OQ-45 total score.

Age was the first demographic variable analyzed in relation to OQ clinical category at the first session. Though there were apparent differences between age groups (e.g., 25 to 29 year olds and 50 to 59 year olds had higher percentages of clients within the clinical category at session one), there were no statistically significant differences between age groups at the  $p < .05$  level. As indicated in Table 3, all clients in the 60 and over age group were in the clinical range at the first session, though there were only 2 clients in this age range. A chi-square analysis was conducted and yielded no significance:  $\chi^2 (6) = 8.478, p = .205$ .

Table 3

### *Age and First Session OQ Clinical Categories*

Age	Clinical	z-score	Non-clinical	z-score	Total
18-24	34 (58.6%)	-.6	24 (41.4%)	.8	58 (21%)
25-29	40 (75.5%)	1.0	13 (24.5%)	-1.3	53 (19.2%)
30-39	60 (60.6%)	-.5	39 (39.4%)	.6	99 (35.9%)
40-49	28 (68.3%)	.3	13 (31.7%)	-.4	41 (14.9%)
50-59	14 (70.0%)	.3	6 (30.0%)	-.4	20 (7.2%)

60+	2 (100.0%)	1.5	0 (0.0%)	-1.1	2 (.7%)
Not reported	2 (66.7%)	.0	1 (33.3%)	-.1	3 (1.1%)
Total	98 (35.5%)		178 (64.5%)		276 (100.0%)

*Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$*

Data on gender and clinical category revealed no statistically significant difference between males and females in regard to first session category (see Table 4). The chi-square analysis was not significant:  $\chi^2 (2) = 5.941$ ,  $p = .051$ . This trend of a higher percentage of males entering counseling in the non-clinical range raised questions during subsequent statistical analyses that lead to a post hoc analysis of referral source and gender shown in Table 5. These findings showed that of the 17 possible referral source categories there was a significant proportional difference between males and females within one category; court/probation. Significantly more male clients were court/probation referred than females (71.2% male; 28.8% female). The corresponding standardized residuals were 4.6 for males and -3.3 indicating significance at the  $p < .001$  level for both. The chi-square analysis found that  $\chi^2 (16) = 51.566$ ,  $p < .0001$  and small effect size with a Cramer's V of .264.

Table 4

*Gender and First Session OQ Clinical Categories*

Gender	Clinical	z-score	Non-clinical	z-score	Total
Male	61 (56.0%)	-1.1	48 (44.0%)	1.5	109 (39.1%)
Female	115 (69.7%)	.8	50 (30.3%)	-1.1	165 (59.1%)
Not reported	4 (80.0%)	.4	1 (20.0%)	-.6	5 (1.8%)
Total	99 (35.5%)		180 (64.5%)		279 (100.0)

*Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$*

Table 5

*Referral Source and Gender*

Referral Source	Male	Z	Female	z	Not reported	z	Total
Outreach/Advert.	3 (33.3%)	-.1	6 (66.7%)	.1	0 (0.0%)	-.4	9 (2.4%)
Employer/school	0 (0.0%)	-1.7	8 (100.0%)	1.3	0 (0.0%)	-.4	8 (2.2%)
Word of mouth	4 (40.0%)	.2	6 (60.0%)	-.1	0 (0.0%)	-.4	10 (2.7%)
Family/friend	10 (38.5%)	.2	16 (61.5%)	-.1	0 (0.0%)	-.6	26 (7.0%)
Ext. Prof./Doctor	12 (22.6%)	-1.6	41 (77.4%)	1.3	0 (0.0%)	-.9	53 (14.3%)
Child Welfare	7 (29.2%)	-.5	17 (70.8%)	.5	0 (0.0%)	-.6	24 (6.5%)
Self	26 (29.2%)	-1.0	59 (66.3%)	.4	4 (4.5%)	2.1	89 (24.0%)
Court/Probation	42 (71.2%)	4.6***	17 (28.8%)	-3.3***	0 (0.0%)	-1.0	59 (15.9%)
Other/unknown	28 (30.1%)	-.9	63 (67.7%)	.6	2 (2.2%)	.4	93 (25.1%)
Total	132 (35.6%)		233 (62.8%)		6 (1.6%)		371 (100%)

Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$

As seen in Table 6 there was no significant association between ethnic group and first session clinical category:  $\chi^2(1) = .171$ ,  $p = .679$ . Similarly, there was also no significant association between income level and first session clinical category (See Table 7):  $\chi^2(4) = 1.946$ ,  $p = .746$ .

Table 6

*Ethnicity and First Session OQ Clinical Category*

Ethnicity	Clinical	z-score	Non-clinical	z-score	Total
First Nations	88 (63.3%)	-.2	51 (36.7%)	.2	139 (50.4%)
Métis	90 (65.7%)	.2	47 (34.3%)	-.2	137 (49.6%)
Total	178 (64.5%)		98 (35.5%)		276 (100.0%)

*Note: p < .05\*, p < .01\*\*, p < .001\*\*\**

Table 7

*Income Level and First Session OQ Clinical Category*

Income Level	Clinical	z-score	Non-clinical	z-score	Total
\$0-\$35,000	146 (64.9%)	.2	79 (35.1%)	-.3	225 (83.0%)
\$35,001 – \$65,000	20 (62.5%)	-.2	12 (37.5%)	.1	32 (11.8%)
\$65,001 - \$100,000	6 (60.0%)	-.2	4 (40.0%)	.2	10 (3.7%)
\$100,001 and up	1 (25.0%)	-1.0	3 (75.0%)	1.3	4 (1.5%)
Total	173 (63.8%)		98 (36.2%)		271 (100.0%)

*Note: p < .05\*, p < .01\*\*, p < .001\*\*\**

As presented in Table 8, a chi-square analysis of educational level and first session OQ category yielded no significant association between these variables:  $\chi^2(7) = 7.071, p = .422$ .

Table 8

*Education Level and First Session OQ Clinical Category*

Education Level	Clinical	z-score	Non-clinical	z-score	Total
Grades 0 - 8	13 (72.2%)	.4	5 (27.8%)	-.6	18 (6.6%)
Grades 9 - 12	78 (58.6%)	-.8	55 (41.4%)	1.0	133 (48.9%)
Vocational/Technical	16 (61.5%)	-.2	10 (38.5%)	.2	26 (9.6%)
College/University	66 (71.0%)	.8	27 (29.0%)	-1.1	93 (34.2%)
Not specified	1 (50.0%)	-.2	1 (50.0%)	.3	2 (.7%)
Total	174 (64.0%)		98 (36.0%)		272 (100.0%)

*Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$*

A chi-square was conducted to investigate the association between presenting problem category and first session OQ category (Clinical or Non-clinical). The results showed the chi-square was significant:  $\chi^2(7) = 38.773$ ,  $p < .001$  and a Cramer's V of .373 indicating a moderate effect size. The z-scores indicated significant associations between three of the presenting problem categories: spouse abuse, legal problems, and depression/loss. Specifically, the proportion of clients in the non-clinical category within the spouse abuse primary presenting problem category was significantly higher than the other problem categories ( $p = .002$ ) at the first session. Similarly, clients attending counseling with the primary presenting problem of legal problems were also significantly more likely to have a first session OQ score in the non-clinical range ( $p = .015$ ). In contrast, those presenting at first session with the problem of depression/loss were in a significantly ( $p = .013$ ) higher proportion within the clinical category (See Table 9). These data are represented visually in Figure 1.

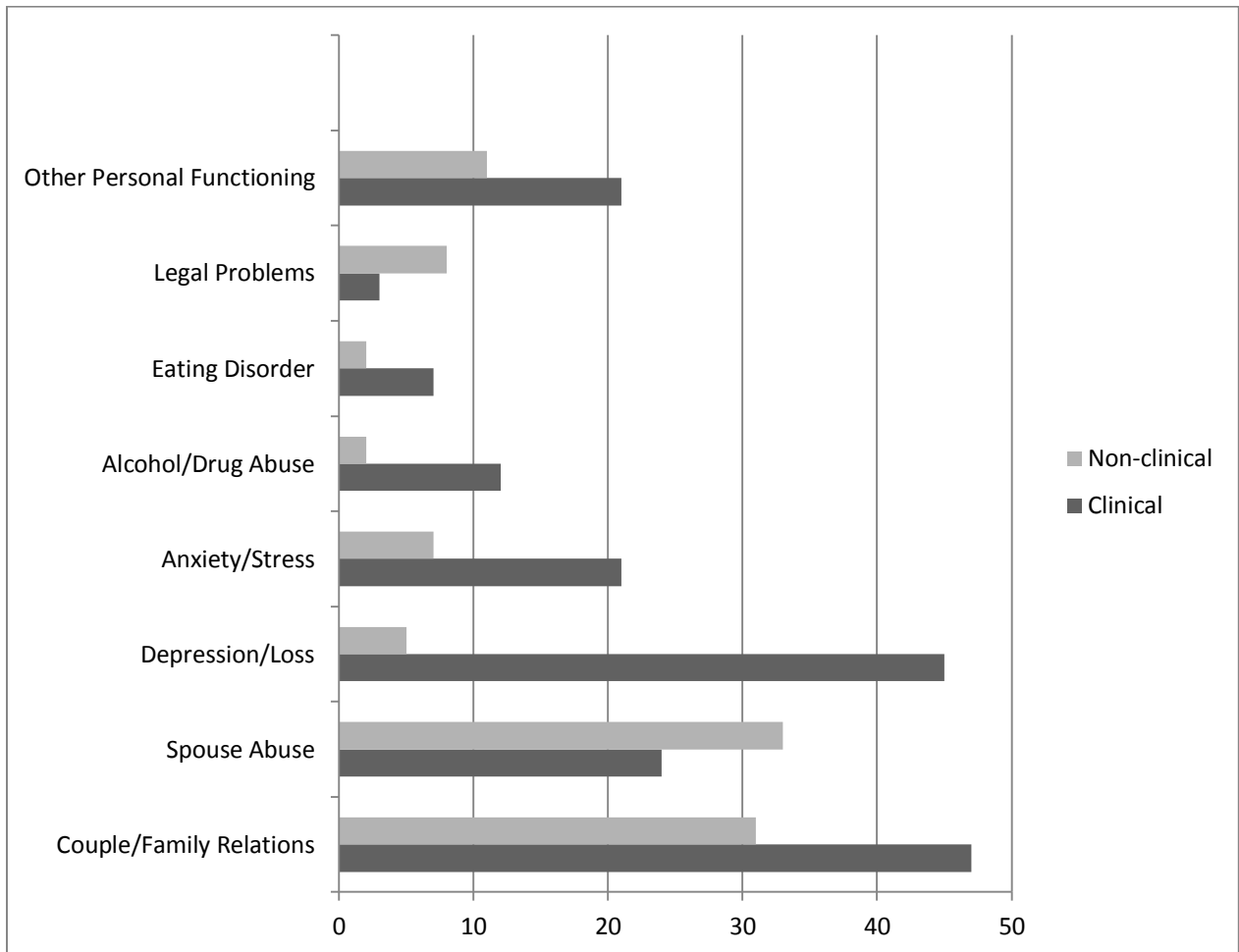
Table 9

*Problem Category and First Session OQ Clinical Category*

Problem Category	Clinical	z-score	Non-clinical	z-score	Total
Couple/Family Relations	47 (60.3%)	-.5	31 (39.7%)	.6	78 (28.0%)
Spouse Abuse	24 (42.1%)	-2.1*	33 (57.9%)	2.8**	57 (20.4%)
Depression/Loss	45 (90.0%)	2.2*	5 (10.0%)	-3.0**	50 (17.9%)
Anxiety/Stress	21 (75.0%)	.7	7 (25.0%)	-.9	28 (10.0%)
Alcohol/Drug Abuse	12 (85.7%)	1.0	2 (14.3%)	-1.3	14 (5.0%)
Eating Disorder	7 (77.8%)	.5	2 (22.2%)	-.7	9 (3.2%)
Legal Problems	3 (27.3%)	-1.5	8 (72.7%)	2.1*	11 (3.9%)
Other Personal Functioning	21 (65.6%)	.1	11 (34.4%)	-.1	32 (11.5%)
Total	180 (64.5%)		99 (35.5%)		279 (100.0%)

*Note: p < .05\*, p < .01\*\*, p < .001\*\*\**

Figure 1



*Hypothesis 1 (b)*

*There will be a statistically significant difference between single session attenders and clients that attended two or more sessions based on demographic variables.*

- The predictor variables are age, gender, ethnicity, income level, education level, and presenting problem category.
- The criterion variable is the number of sessions; single session or two or more sessions.

The demographic variable of age was analyzed to determine the potential associations with single session or two or more session attenders. As indicated in Table 10, no z-scores indicating significance at the  $p < .05$  level were found:  $\chi^2 (6) = 1.566, p = .955$ .

Table 10

*Age and Single Session and Two or more session attenders*

Age	Single Session	z-score	Two or more Sessions	z-score	Total
18-24	14 (20.3%)	-.3	55 (79.7%)	.2	69 (18.5%)
25-29	16 (22.5%)	.1	55 (77.5%)	.0	71 (19.0%)
30-39	32 (23.4%)	.3	105 (76.6%)	-.1	137 (36.7%)
40-49	14 (23.7%)	.2	45 (76.3%)	-.1	59 (15.8%)
50-59	4 (14.8%)	-.8	23 (85.2%)	.4	27 (7.2%)
60 and up	1 (33.3%)	.4	2 (66.7%)	-.2	3 (.8%)
Not reported	2 (28.6%)	.4	5 (71.4%)	-.2	7 (1.9%)
Total	83 (22.3%)		290 (77.7%)		373 (100.0%)

*Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$*

A chi-square analysis was conducted to determine the relationship between gender and single session or two or more session attenders. Results (see Table 11) indicated no significant difference between males and females. However, the chi-square analysis revealed that clients in the category of “not reported” for gender attended one session only in significantly greater proportions than males or females ( $\chi^2 (2) = 11.994, p = .010$ ).



Table 11

*Gender and Single Session or Two or more session attenders*

Gender	Single Session	z-score	Two or more Sessions	z-score	Total
Male	37 (28.0%)	1.4	95 (72.0%)	-.8	132 (35.4%)
Female	42 (17.9%)	-1.4	193 (82.1%)	.8	235 (63.0%)
Not reported	4 (66.7%)	2.3*	2 (33.3%)	-1.2	6 (1.6%)
Total	83 (22.3%)		290 (77.7%)		373 (100.0%)

Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$

Ethnicity and number of sessions attended was analyzed with a chi-square and there was no significant association (see Table 12). However, it is noteworthy that 81.5% of First Nations client attended two or more sessions compared to Métis clients at 73.4%. This difference was not significant as revealed in the following chi-square results:  $\chi^2 (1) = 3.509$ ,  $p = .061$ . Additionally, there were no significant findings regarding number of sessions attended and income level:  $\chi^2 (3) = 4.467$ ,  $p = .215$  (see Table 13).

Table 12

*Ethnicity and Single Session or Two or more session attenders*

Ethnicity	Single Session	z-score	Two or more Sessions	z-score	Total
First Nations	37 (18.5%)	-1.1	163 (81.5%)	.6	200 (53.6%)
Métis	46 (26.6%)	1.2	127 (73.4%)	-.6	173 (46.4%)
Total	83 (22.3%)		290 (77.7%)		373 (100.0%)

Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$

Table 13

*Income Level and Single Session or Two or more sessions*

Income Level	Single Session	z-score	Two or more Sessions	z-score	Total
\$0-\$35,000	69 (22.8%)	.1	234 (77.2%)	-.1	303 (83.0%)
\$35,001 – \$65,000	6 (14.0%)	-1.2	37 (86.0%)	.6	43 (11.8%)
\$65,001 - \$100,000	6 (40.0%)	1.4	9 (60.0%)	-.8	15 (4.1%)
\$100,001 and up	1 (25.0%)	.1	3 (75.0%)	-.1	4 (1.1%)
Total	82 (22.5%)		283 (77.5%)		365 (100.0%)

*Note: p < .05\*, p < .01\*\*, p < .001\*\*\**

Table 14 includes the results for education level and associations with single session or two or more session attenders. One educational level (Grades 0 to 8) resulted in a significantly greater proportion of clients attending one session only. This finding was significant at the .05 level and chi-square results indicated that education overall was significantly related to a client attending one session or two or more sessions. Chi-square results were as follows:  $\chi^2(4) = 12.419, p = .014$ . The post hoc analysis utilized a Cramer's V and this analysis indicated a small effect size of .183.

Table 14

*Education Level and Single Session or Two or more session attenders*

Income Level	Single Session	z	Two or more Sessions	z	Total
Grades 0 - 8	13 (48.1%)	2.9**	14 (51.9%)	-1.5	27 (7.3%)
Grades 9 - 12	36 (21.2%)	-.3	134 (78.8%)	.2	170 (46.1%)
Voc/Technical	9 (25.0%)	.4	27 (75.0%)	-.2	36 (9.8%)
Univ./College	23 (17.7%)	-1.1	107 (82.3%)	.6	130 (35.2%)
Not Specified	1 (16.7%)	-.3	5 (83.3%)	.2	6 (1.6%)
Total	82 (22.2%)		287 (77.8%)		369 (100.0%)

*Note: p < .05\*, p < .01\*\*, p < .001\*\*\**

A chi-square was performed to examine the relationship between problem category and single session attenders or two or more session attenders (See Table 15). The category of “Other Personal Functioning” was significant ( $p = .013$ ) with a higher proportion attending a single session in comparison to other categories. However, the overall chi-square analysis was not significant;  $\chi^2 (7) = 13.250, p = .066$ .

Table 15

*Problem Category and Single Session or Two or more session attenders*

Problem Category	Single Session	z-score	Two or more Sessions	z-score	Total
Couple/ Family Relat.	22 (16.4%)	-1.5	112 (83.6%)	.8	134 (36.5%)
Spouse Abuse	13 (19.4%)	-.6	54 (80.6%)	.3	67 (18.3%)
Depression/Loss	16 (26.2%)	.6	45 (73.8%)	-.3	61 (16.6%)
Anxiety/Stress	7 (23.3%)	.1	23 (76.7%)	.0	30 (8.2%)
Alcohol/Drug Abuse	7 (38.9%)	1.5	11 (61.1%)	-.8	18 (4.9%)
Eating Disorder	1 (11.1%)	-.7	8 (88.9%)	.4	9 (2.5%)
Legal Problems	3 (23.1%)	.0	10 (76.9%)	.0	13 (3.5%)
Other Personal Func.	14 (40.0%)	2.2*	21 (60.0%)	-1.2	35 (9.5%)
Total	83 (22.6%)		284 (77.4%)		367 (100.0%)

*Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$*

*Hypothesis 1 (c)*

*Client demographic variables will predict statistically significant differences in final session OQ-45 categories of therapeutic change (recovered, improved, no change, deteriorated).*

- The independent variables are age, gender, ethnicity, income level, education level, and presenting problem category.
- The criterion variable is OQ-45 categories of therapeutic change.

As described in the method section, final session client outcomes can be categorized into four separate categories: deteriorated, no change, improved, and recovered. Overall results indicated that 5.1% of clients deteriorated, 52.5% experienced no significant or reliable change, 22% improved, and 20.3% recovered ( $N = 177$ ). The first two demographic variables analyzed in regard to categories of therapeutic change were age and gender. As indicated in Tables 16 and 17 neither age nor gender was significantly associated with final session OQ category of therapeutic change. The chi-square results for age were,  $\chi^2(15) = 12.733, p = .623$  and chi-square results for gender were:  $\chi^2(6) = 4.714, p = .581$ .

Table 16

*Age and Final Session OQ Category of Therapeutic Change*

Age	Deterior.	z	No change	z	Improved	z	Recovered	z	Total
18-24	1 (2.4%)	-.8	24 (57.1%)	.4	11 (26.2%)	.6	6 (14.3%)	-.9	42 (23.7%)
25-29	0 (0.0%)	-1.3	16 (48.5%)	-.3	7 (21.2%)	-.1	10 (30.3%)	1.3	33 (18.6%)
30-39	5 (8.3%)	1.1	31 (51.7%)	-.1	14 (23.3%)	.2	10 (16.7%)	-.6	60 (33.9%)
40-49	2 (8.0%)	.6	10 (40.0%)	-.9	5 (20.0%)	-.2	8 (32.0%)	1.3	25 (14.1%)
50-59	1 (6.3%)	.2	11 (68.8%)	.9	2 (12.5%)	-.8	2 (12.5%)	-.7	16 (9.0%)
60+	0 (0.0%)	-.2	1 (100.0%)	.7	0 (0.0%)	-.5	0 (0.0%)	-.5	1 (0.6%)
Total	9 (5.1%)		93 (52.5%)		39 (22.0%)		36 (20.3%)		177 (100.0%)

Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$

Table 17

*Gender and Final Session OQ Category of Therapeutic Change*

Gender	Deterior.	z	No change	z	Improved	z	Recovered	z	Total
Male	1 (1.5%)	-1.3	38 (58.5%)	.7	13(20.0%)	-.3	13 (20.0%)	-.1	65 (36.7%)
Female	8 (7.3%)	1.0	54 (49.1%)	-.5	25 (22.7%)	.2	23 (20.9%)	.1	110 (62.1%)

Not report.	0 (0.0%)	-.3	1 (50.0%)	.0	1 (50.0%)	.8	0 (0.0%)	-.6	2 (1.1%)
Total	9 (5.1%)		93 (52.5%)		39 (22.0%)		36 (20.3%)		177 (100.0%)

*Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$*

A chi-square analysis was conducted to evaluate the relationship between ethnicity and final session OQ therapeutic change category. Ethnicity was not a significant predictor of final session OQ category:  $\chi^2(3) = 5.787$ ,  $p = .122$  (See Table 18).

Table 18

*Ethnicity and Final Session OQ Therapeutic Change Category*

Ethnicity	Deterior.	z	No change	z	Improved	z	Recovered	z	Total
First Nat.	7 (7.6%)	1.1	44 (47.8%)	-.6	18 (19.6%)	-.5	23 (25.0%)	1.0	92 (52.0%)
Métis	2 (2.4%)	-1.1	49 (57.6%)	.6	21 (24.7%)	.5	13 (15.3%)	-1.0	85 (48.0%)
Total	9 (5.1%)		93 (52.5%)		39 (22.0%)		36 (20.3%)		177 (100%)

*Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$*

A chi-square analysis was conducted to evaluate the relationship between income level and education level to determine the level of association these variables had with final session OQ category. Income level (See Table 19) and educational level (See Table 20) were not significantly associated with final session OQ category of therapeutic change. Chi-results for income level and final session OQ category were:  $\chi^2(12) = 9.586$ ,  $p = .652$ . The chi-square analysis for education level and final session OQ category yielded results approaching significance though still non-significant:  $\chi^2(21) = 19.073$ ,  $p = .580$ .

Table 19

*Income Level and Final Session OQ Therapeutic Change Category*

Income	Deterior.	z	No change	z	Improved	z	Recovered	z	Total
0 - 35K	6 (4.2%)	-.5	75 (52.1%)	.1	32 (22.2%)	.0	31 (21.5%)	.2	144 (82.8%)
35K – 65K	2 (9.1%)	.8	12 (54.5%)	.2	4 (18.2%)	-.4	4 (18.2%)	-.3	22 (12.6%)
65K - 100K	1 (20%)	1.5	2 (40.0%)	-.4	1 (20.0%)	-.1	1 (20.0%)	.0	5 (2.9%)
100,001+	0 (0.0%)	-.4	1 (33.3%)	-.4	2 (66.7%)	1.6	0 (0.0%)	-.8	3 (1.7%)
Total	9 (5.2%)		90 (51.7%)		39 (22.4%)		36 (20.7%)		174 (100%)

*Note: p < .05\*, p < .01\*\*, p < .001\*\*\**

Table 20

*Education Level and Final Session OQ Therapeutic Change Category*

Education	Deterior.	z	No change	z	Improved	z	Recovered	z	Total
0 - 8	0 (0.0%)	-.6	4 (57.1%)	.2	1 (14.3%)	-.5	2 (28.6%)	.5	7 (4.0%)
9-12	5 (5.8%)	.3	47 (54.7%)	.4	18 (20.9%)	-.3	16 (18.6%)	-.4	86 (49.4%)
Voc/Tech	1 (6.3%)	.2	7 (43.8%)	-.4	7 (43.8%)	1.8	1 (6.3%)	-1.3	16 (9.2%)
Univ/Coll	3 (4.7%)	-.2	32 (50.0%)	-.2	12 (18.8%)	-.6	17 (26.6%)	1.0	64 (36.8%)
Not spec.	0 (0.0%)	-.2	0 (0.0%)	-.7	1 (100.0%)	1.6	0 (0.0%)	-.5	1 (.6%)
Total	9 (5.2%)		90 (51.7%)		39 (22.4%)		36 (20.7%)		174 (100%)

*Note: p < .05\*, p < .01\*\*, p < .001\*\*\**

The association between problem category and final session OQ category was evaluated with a chi-square analysis and no significant relationship was found (See Table 21):  $\chi^2 (21) = 21.830, p = .409$ .

Table 21

*Problem Categories and Final Session OQ Therapeutic Change Category*

Problem	Deterior.	z	No change	z	Improved	z	Recovered	z	Total
Couple/Fam	4 (8.9%)	1.1	22 (48.9%)	-.3	6 (13.3%)	-1.2	13 (28.9%)	1.3	45 (25.4%)
Sp. Abuse	2 (4.7%)	-.1	25 (58.1%)	.5	8 (18.6%)	-.5	8 (18.6%)	-.3	43 (24.3%)
Dep/Loss	0 (0.0%)	-1.3	17 (50.0%)	-.2	8 (23.5%)	.2	9 (26.5%)	.8	34 (19.2%)
Anx/Stress	1 (5.0%)	.0	9 (45.0%)	-.5	7 (35.0%)	1.2	3 (15.0%)	-.5	20 (11.3%)
Alc/Drug	0 (0.0%)	-.3	1 (50.0%)	.0	1 (50.0%)	.8	0 (0.0%)	-.6	2 (1.1%)
Eating Dis.	0 (0.0%)	-.6	3 (42.9%)	-.4	3 (42.9%)	1.2	1 (14.3%)	-.4	7 (4.0%)
Legal Prob.	0 (0.0%)	-.6	6 (75.0%)	.9	0 (0.0%)	-1.3	2 (25.0%)	.3	8 (4.5%)
Pers. Func.	2 (11.1%)	1.1	10 (55.6%)	.2	6 (33.3%)	1.0	0 (0.0%)	-1.9	18 (10.2%)
Total	9		93		39		36		177
	(5.1%)		(52.5%)		(22.0%)		(20.3%)		(100%)

Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$

**Hypothesis Two: Alliance Factors**

*There will be a significant negative correlation between client ratings of the alliance and client outcome on the OQ-45.*

- The predictor variable is the SRS score with the first session OQ-45 score as a covariate.
- The criterion variable is the final session OQ-45 score.

The initial analysis of outcome examined the mean difference between first session and last session OQ scores. A paired samples t-test indicated statistically significant improvement overall based on a client OQ mean score of 73.25 (SD = 29.656) at first session and a mean score of 64.92 (SD = 30.925) at the final session,  $t(275) = 7.111$ ,  $p < .0001$  (See Table 22). These findings indicate an overall change in OQ score

from first session to last session of -8.33 points. This indicates a strong significant change statistically but the change does not meet the reliable change index for the OQ of 14 points, nor does it show the average OQ moving from the clinical range ( $\geq 64$ ) to the non-clinical range (63 or less).

Table 22

*Mean difference between first session and last session OQ score*

OQ Total Score	Mean	<i>N</i>	Std. Deviation	Std. Error of Mean
Session 1	73.25	276	29.656	1.785
Last session	64.92	276	30.925	1.861

A Pearson *r* was used to analyze the relationship between client ratings of alliance and client outcome. The alliance, as measured at the third session, was negatively correlated with outcome ( $r = -.246$ ;  $p = .022$ ). Thus, higher alliance scores on the SRS at the third session had a small correlation with decreasing scores on the OQ from first session to last session, indicating decreased client distress ( $N = 86$ ). Similarly, the alliance measured at the second session yielded a correlation of  $-.222$  ( $p = .019$ ) with OQ change from first to last session ( $N = 113$ ). No significant correlation ( $r = -.079$ ;  $p = .408$ ) was found for the first session alliance and OQ change from first session to last session. Given the finding in the current study that court/probation referred clients disproportionately began counseling in the non-clinical range, a post-hoc analysis was conducted excluding the clients from the sample. This analysis was intended to understand any potentially skewing effect resultant of court/probation referred clients. In



specific, the alliance at the second and third session was re-analyzed with a Pearson  $r$ . Results indicated a notable change in second session alliance and outcome ( $r = -.345$ ;  $p = .001$ ;  $N = 89$ ) and only a very small change for the third session alliance-outcome correlation ( $r = -.249$ ;  $p = .044$ ;  $N = 66$ ).

Sessions 1, 2, & 3 were chosen as sessions to assess the alliance as relates to outcome because prior research has revealed that early alliance is more predictive of treatment outcomes than alliance scores later in treatment (Hersoug, Monsen, Havik, & Hoglend, 2002; Levin, Henderson, & Ehrenreich-May, 2012). Additionally, the quality of the therapeutic alliance early in counseling is associated with alliance quality later (Hilsenroth, Peters, & Ackerman, 2004).

A post-hoc analysis was conducted to examine the relationship between first session OQ category (clinical or non-clinical) and final session OQ categories of change. This chi-square post-hoc test was conducted because analysis of alliance outcome data pointed towards potential significant findings in the relationship between first session and last session OQ categories. Chi-square results indicated  $\chi^2(3) = 25.095$ ,  $p < .0001$  (See Table 23). A Cramer's V analysis revealed a medium effect size of .377. However, the significant results apply only to the "recovered" category which by definition can only be obtained by clients who score in the clinical range at the first session. Therefore, the results are questionable because there are no significant differences in the other three OQ therapeutic change categories (i.e., deteriorated, no change, improved).

To further understand the relationship between first session OQ score and last session OQ score a Pearson correlation was conducted to examine OQ as a continuous variable. Indeed, findings revealed a highly significant correlation of .794 ( $p < .0001$ ).

Table 23

*First Session OQ category and Final Session OQ Category*

OQ	Deterior.	z	No change	z	Improved	z	Recovered	z	Total
Clinical	5 (4.3%)	-.4	50 (43.5%)	-1.3	24 (20.9%)	-.3	36 (31.3%)	2.6*	115 (65.0%)
Non-clin.	4 (6.5%)	.5	43 (69.4%)	1.8	15 (24.2%)	.4	0 (0.0%)	-3.6**	62 (35.0%)
Total	9 (5.1%)		93 (52.5%)		39 (22.0%)		36 (20.3%)		177 (100%)

*Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$*

**Hypothesis Three: Counselor Training Level***Hypothesis Three: Counselor Variables*

*There will be no significant correlation between counselor training level and outcome.*

- The predictor variables are the first session OQ-45 score and counselor level of training (graduate student, post graduate student, or registered professional).
- The criterion variable is the final session OQ-45 score.

A Pearson chi-square was used to analyze the relationship between counselor level of training and final session OQ-45 change category. As hypothesized, there was no significant difference in client final session OQ change category based on counselor training level (See Table 24). Thus, the researcher failed to reject the null hypothesis. As seen in Table 25, the mean client OQ score at session one was highest for clients seen by Interns followed by Resident counselors. Additionally, the mean income of clients seen by Interns was \$10,108.33 whereas the mean client income for Residents and Licensed Counselors was \$17,738.59 and \$24,870.10 respectively.

Table 24

*Counselor Level of Training and Final Session OQ Therapeutic Change Category*

Training	Deterior.	z	No change	z	Improved	z	Recovered	z	Total
Licensed	5 (8.2%)	1.1	35 (57.4%)	.5	10 (16.4%)	-.9	11 (18.0%)	-.4	61 (34.5%)
Resident	1 (1.3%)	-1.4	41 (54.7%)	.3	17 (22.7%)	.1	16 (21.3%)	.4	75 (42.4%)
Intern	3 (7.3%)	.6	17 (41.5%)	-1.0	12 (29.3%)	1.0	9 (22.0%)	.2	41 (23.2%)
Total	9 (5.1%)		93 (52.5%)		39 (22.0%)		36 (20.3%)		177 (100%)

*Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$*

Table 25

*Counselor Training Level and Mean OQ score of Session One*

Training	N	Mean	Std. Deviation
Lic. Counselor	101	64.95	30.124
Resident	109	75.41	28.504
Intern	66	82.38	27.846
Total	276	73.25	29.656

*Note:  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$*

A post-hoc, one-way Analysis of Variance (ANOVA) was conducted to compare the means of first session OQ score across the different counselor training levels. Results revealed that the between group variance was significant:  $F(2) = 7.733$ ,  $p = .001$ . In addition, the Welch and Brown-Forsythe Robust test of equality of the means was conducted and both were significant at  $p = .001$  (Welch = 7.632; Brown-Forsythe = 7.826). A post-hoc Tukey HSD was conducted as a multiple comparison to examine differences in means across counselor training level. As indicated in Table 26 significant differences in the means across counselor training was found in comparing Licensed

Counselors with Residents, Licensed Counselors with Interns, but not in comparing Residents with Interns.

Table 26

*Session one means comparison by Training Level*

Training Level	Mean	Lic. Counselor	Resident	Intern
Lic. Counselor	64.95	NA	10.462* ( $p = .025$ )	17.428* ( $p = .001$ )
Resident	75.41	-10.462* ( $p = .025$ )	NA	6.966 ( $p = .273$ )
Intern	82.38	-17.428* ( $p = .001$ )	-6.966 ( $p = .273$ )	NA

*Note:  $p < .05^*$ , NA = Not Applicable*

## Discussion

To broadly summarize, many of the results herein yielded non-significant findings and some of these non-significant findings were as hypothesized but many were not hypothesized. This section includes an overview of all significant findings, a description of the findings for each hypothesis, and a discussion of findings including implications.

### **Hypothesis One: Client Demographic Variables**

Lambert (1992) suggested that the largest proportion of the variance of outcome in counseling (40%) is accounted for by client characteristics and Wampold (2001) later provided empirical support for this notion through meta-analysis. Indeed, Wampold's (2001) findings suggest that as much as 87% of variance is attributable to client factors or extratherapeutic factors. These factors include client strengths, motivations, elements of the client's environment, and unexplained and error variance (Duncan, 2010). Given that research supports the notion that much of therapeutic change is associated with client factors occurring outside of counseling, this study examined demographic factors as they were the primary client factors available.

#### *Hypothesis 1(a)*

*Client demographic variables of age, gender, ethnicity, income level, education level and presenting problem category will predict statistically significant differences in first session OQ-45 category (clinical or non-clinical).*

For hypothesis 1 (a) the results were non-significant for all demographic variables as predictors of first session OQ category (clinical or non-clinical), except for presenting problem category. Analysis of this variable yielded significant differences among problem categories in terms of clients presenting at first session within the clinical or

non-clinical category. In particular, clients attending counseling for depression/loss and spouse abuse differed significantly from other problem categories for clients entering counseling in the clinical or non-clinical range. For instance, 90% of clients attending counseling due to depression/loss were within the clinical range whereas overall (within all problem categories combined) 64.5% of all clients began counseling in the clinical range. In contrast, 57.9% of clients presenting for the primary problem of spouse abuse were in the non-clinical range compared to 35.5% of clients in all problem categories combined beginning counseling in non-clinical range. These two categories prompted a post-hoc analysis utilizing a Cramer's V and a moderate effect size (.373) was obtained for primary presenting problem category as a predictor of first session OQ category.

The finding that clients who reported attending counseling due to the problem of spouse abuse also reported significantly less distress on the OQ-45 was an interesting finding that led to specific post-hoc analyses. A chi-square analysis was conducted to examine the primary presenting problem of spouse abuse as it related to referral source and gender. This analysis revealed that a high percentage of clients attending counseling for spousal abuse (64.2%;  $N = 43$ ) were male as compared to 39.1% male in the study overall. Additionally, 71.2% of clients referred to counseling by probation or the court were male. Further investigation indicated that 76.19% of males presenting with the primary problem of spouse abuse were court/probation referred and 41.66% of females presenting with the primary presenting problem of spouse abuse were court/probation referred.

Although it is beyond the scope of the current study to investigate these findings further, one possible explanation is that mandated clients may be either experiencing less

distress or reporting less distress. Additionally, given the presenting problem is spouse abuse and that the majority of clients in this problem category are male and court/probation referred, lower personal distress may be partially explained by these factors. Several studies have found that clients mandated to counseling frequently report low distress on outcome measures (Mee-Lee, McMillan, & Miller, 2009; Miller et al. 2005). This is a potential area of further study within this population. The difference in males and females attending counseling with the referral source of court or probation is highly significant ( $p < .0001$ ) and a small effect size (Cramer's  $V = .264$ ) was found for differences in referral sources overall as associated with gender.

*Hypothesis 1 (b)*

*There will be a statistically significant difference between single session attenders and clients that attended two or more sessions based on demographic variables.*

Results for hypothesis 1 (b) indicated that 22.2% of clients attended only one session and 77.8% attended more than one session. Overall, only two demographic variables were associated with longer-term counseling participation. Specifically, clients with less than 9 years of formal education were more than twice as likely to attend only one session as compared to those with 9 or more years of formal education. Educational level overall had a small effect size (Cramer's  $V = .183$ ) on number of sessions attended.

The other demographic variable showing significance regarding number of sessions attended was within problem category. The only category within primary presenting problem significantly associated with number of sessions was "other personal functioning." Forty percent of clients presenting within this primary problem category attended only one session. However, the other categories did not differ significantly from

the overall percentage of clients attending only one session and the chi-square for problem category overall was non-significant ( $\chi^2(7) = 13.250, p = .066$ ). No specific research literature was found to assist in explaining this finding. It is noteworthy however that Simon and Ludman (2010) found overall single session only attenders to be of a comparable percentage (21%) of those found in the current study. Simon and Ludman (2010) also found that sex, age, and ethnicity were modestly associated with first session dropout, but these were not significant associations in the current study. Additionally, severity of depression was also a dropout predictor after the first session in Simon and Ludman's study (2010); again, these findings were not replicated in the current study.

*Hypothesis 1 (c)*

*Client demographic variables will predict statistically significant differences in final session OQ-45 categories of therapeutic change (recovered, improved, no change, deteriorated).*

The current study found that 5.1% of clients deteriorated, 52.5% demonstrated no reliable change, 22.0% improved, and 20.3% recovered. These findings are very similar to a previous study in the same setting (Babins-Wagner, 2011). None of the six demographic variables (age, gender, ethnicity, income level, educational level, and primary problem category) in the current study were significantly associated with final session outcome categories. Although client factors have been theorized as a significant contributor to outcome (Lambert, 1992) and meta-analytic research has indicated that client or extratherapeutic factors account for the bulk of the variance in outcome, demographic variables in the current study were not significantly related to treatment outcome. It is noteworthy that demographics gathered and categorized in typical clinical



practice may not tap client factors that contribute highly to outcome. For instance, demographic variables such as gender have been found to not be significantly associated with outcome in previous outcomes research (Petry, Tennen, & Affleck, 2000; Parker, Blanch, & Crawford, 2011). Additionally, Lambert et al. (2006) reported that different ethnic group members did not differ in outcomes when matched with a Caucasian control group, suggesting no difference in outcomes across ethnic groups in the study. It is noteworthy however that in at least one study of depression treatment it was reported that clients of lower socioeconomic status (SES) experienced less improvement from treatment than those of higher SES (Falconnier, 2009). To summarize, the findings of the current study are supported by Clarkin and Levy (2004) who report that findings on demographic variables as predictors of counseling outcomes is mixed and minimally significant.

### **Hypothesis Two: Alliance Factors**

*There will be a significant negative correlation between client ratings of the alliance and client outcome on the OQ-45.*

A number of individual studies and meta-analyses have revealed that the therapeutic alliance is a consistent predictor of positive counseling outcomes (Bachelor, 1995; Horvath & Bedi, 2002; Martin, Garske, & Davis, 2000; Norcross, 2011; Wampold, 2001). In addition, it has been shown in a number of studies that a positive therapeutic alliance early in the counseling relationship (within the first 3 to 5 sessions) was a good predictor of overall treatment outcome (Arnold et al., 2013; Gullo, Lo Coco, & Gelso, 2012; Horvath & Symonds, 1991). Additional researchers have reported that the alliance, as rated before session 5, predicts symptom reduction in PTSD and Bulimia Nervosa

(Cloitre, Chase Stovall-McClough, Miranda, & Chemtob, 2004; Constantino, Arnow, Blasey, & Agras, 2005).

In the current study a significant correlation between second and third session alliance scores ( $r = -.222$  and  $r = -.246$  respectively) and outcome from first to last session was found. Horvath and Bedi (2002) reviewed 90 studies to examine the correlation between alliance and outcome their results yielded a correlation of .21. The current study alliance-outcome findings are on par with Horvath and Bedi's (2002) findings as well as other studies with similar correlations between alliance and outcome (Martin, Garske, & Davis, 2000; Horvath, Del Re, Flückiger, & Symonds, 2011). Though the alliance-outcome correlation in the current study, as well as previous studies cited, may seem modest, it is important to emphasize that the correlations found at session 2 and 3 ( $r = -.222$ ;  $r = -.246$ ) translate into approximately 7% of the overall variance of treatment outcome. Wampold's (2001) meta-analysis of over 300 studies found that factors related to treatment or counseling contributed to approximately 13% of the variance in outcome with the remaining 87% being comprised of client/extratherapeutic factors and unexplained variance. Thus, the correlations found at session 2 and 3 represent significant findings within the greater context of explained variance in the current study.

The post-hoc analysis of the second and third session alliance-outcome correlation, excluding clients referred by the court or probation, is also an interesting finding. The significantly increased alliance-outcome correlation ( $r = -.345$ ) for session 2 in this post-hoc highlights the potential for a sub-sample to influence results of clients attending counseling voluntarily. Consistent with previous research, mandated clients

frequently report low distress on outcome measures (Mee-Lee, McMillan, & Miller, 2009; Miller et al. 2005) and in this way may be considered a distinct sub-sample within the overall sample.

It is noteworthy that session 1 alliance yielded a non-significant finding ( $r = -.079$ ) in relation to overall outcome from first session to last session. Although early alliance has been examined in numerous studies, fewer studies have specifically investigated the alliance at the first session. Kokotovic and Tracey (1990) and Plotnicov (1990) reported that first session alliance scores were predictive of counseling dropouts. Other literature on the early alliance has indicated that the alliance is thought to peak at the third session (Horvath & Luborsky, 1993) with earlier sessions potentially reflecting a greater degree of client transference (Gelso & Carter, 1985). Additionally, a study of couple counseling found that first session alliance was not predictive of outcome in contrast to later alliance scores that were predictive (Anker, Owen, Duncan, & Sparks, 2010). Although the research literature on the first session alliance is mixed, it is clear that early alliance (but not necessarily first session alliance) is a consistent predictor of overall client outcome (Arnold et al., 2013; Gullo, Lo Coco, & Gelso, 2012; Horvath & Symonds, 1991).

A post-hoc analysis examining the first session OQ category (clinical or non-clinical) and its association to final session therapeutic change categories was conducted. As noted in the results (See Table 23) the chi-square was significant and a Cramer's V revealed a medium effect size of .377. This finding is consistent with previous research literature indicating that higher OQ scores at intake predicted lower OQ scores at the final session (Hansen & Lambert, 2003). Haas, Hill, Lambert, and Morrell (2002) reported

similar findings to the current study in that clients with higher OQ scores at the beginning of counseling tend have OQ scores at the end of counseling that represent greater reductions in symptom severity. Regression to the mean could also provide an explanation for clients with high OQ scores at the initial session showing the greatest drop in OQ scores between the first and last session.

### **Hypothesis Three: Counselor Training Level**

*There will be no significant correlation between counselor training level and outcome.*

The chi-square analysis results confirmed this hypothesis in that no significant differences in client outcome were associated with different counselor training levels. This finding is representative of previous findings in the research literature. For instance, Nyman, Nafziger, and Smith (2010) examined client outcomes across counselor training level and found no significant differences in outcome between professional staff and trainees. Similarly, Atkins and Christensen (2001) also found no differences in outcomes between counselors of varying training levels. Indeed, researchers have found that client outcome is not related to counselor variables such as type of training, sex, or theoretical orientation and that counselors' facilitative interpersonal skills (FIS) account for significant variance in outcome between counselors (Anderson, Ogles, Patterson, Lambert, & Vermeersch, 2009).

In regard to counselor training level the current study yielded several interesting findings. For instance, although there was no significant difference in outcome across counselor training levels, interns had the highest percentage of clients ending counseling in the "recovered" and "improved" categories in comparison to counselors with higher levels of training. In addition, clients receiving counseling from interns began counseling

with higher OQ scores (i.e., the highest level of distress) than clients of licensed counselors or residents. An ANOVA and Tukey found that there were significant differences in first session OQ scores across the training levels (See Table 26). Also, clients of interns had a lower average income than clients working with more highly trained counselors. Thus, counselors with the least amount of training were working with the clients with the lowest income and experiencing highest distress. This may in part be explained by case assignment in which clients with higher incomes are employed with extended health insurance benefits and those benefits may require a licensed professional to be the service provider (Babins-Wagner, 2011).

### **Limitations, Implications, and Future Research**

#### *Limitations*

As is the case with all research, a number of limitations are to be acknowledged and noted. One limitation is the use of self-report measures of both outcome and alliance. Though the outcome measure in this study (OQ-45) has been studied extensively and is considered the “gold standard” for outcome measures, this measure also has its limitations. For instance, self-report measures such as the two in the current study are susceptible to social desirability bias. Clients could realize over time that it is desirable to rate the SRS with increasingly high scores and the OQ with increasingly low scores if they suspect this is the desired outcome. Additionally, the SRS Version 3.2 used in this study has been researched in only one small study and there is little evidence of its psychometric properties.

There were also missing data in this study. For instance, of 373 clients total at the first session, only 276 completed an OQ at the first session. There is no way to know the

reason for these 97 clients not completing an initial OQ, but this is a potential limitation to consider in the study. Because gathering baseline data, before any intervention has taken place, is foundational to outcomes research, clients without a first session OQ score were excluded from analyses of outcomes and were included only in demographic data reported. An additional limitation of this study is the potential for regression toward the mean. In this study, regression towards the mean may be reflected in higher OQ scores at the first session being lower at the final session simply due to extreme first scores tending to regress closer to the mean over time.

Another limitation or consideration of this study involves generalizability. Though the sample size is reasonably large, there are considerations in generalizing these findings to other populations or to Aboriginal populations. For instance, all services were provided in the greater Calgary area and this limits generalizability to Aboriginal client populations living in more rural settings.

One final limitation to consider in this study involves multicultural considerations, multicultural competence, and other specific therapist variables. Much has been written about the importance of multicultural competence (MCCs) in counseling (Owen, Tao, Leach, & Rodolfa, 2011; Pope-Davis et al., 2002; Sue, Arredondo, & McDavis, 1992). However, data relating to counselor MCCs were not collected in this study. Additionally, the measures in the current study (SRS; OQ-45) have not been evaluated specifically with Native peoples and so their cultural relevance and validity are unknown. Although the OQ has been used in at least one study of Native American clients, this study was in a University Counseling setting and the focus was on outcomes, not on the cultural validity of the measure (Lambert, et al., 2006).

### *Implications*

Despite these limitations, empirical findings from this study have implications for counseling and working with Aboriginal peoples. First, the findings in this study of improvement in outcome during the course of counseling are similar to those found within the general population. Although there are important cross-cultural considerations not discernible from this data set it also seems that some common therapeutic factors are related to multicultural client outcomes. For example, the correlation between alliance and outcome in the current study is consistent with theoretical literature on the importance of alliance in working with Native peoples.

Overall implications of this study for counseling practice include the need for counselors and clinic settings to engage in practice-based evidence. The outcome data utilized in the current study was collected in a real-world clinical setting and was an integral part of service delivery. This “practice-based evidence” has significant empirical support for improving outcomes in daily practice (Lambert, 2010; Miller, 2010). The findings from the current study demonstrate one type of information a clinic can collect about predictors of outcome in their particular setting and this data can be used to inform treatment decisions. For example, in this study court/probation referred clients tended to report lower distress at intake; these clients also were disproportionately male with a high percentage attending counseling with the presenting problem of spouse abuse. One potential way practice-based evidence could be used to improve accountability and counseling services would be to track and respond to specific data collected within a specific treatment setting. For example, in this study, there is evidence that clients who endorse “spouse abuse” as their primary reason for referral within this particular setting

might benefit from being engaged in treatment differently than other clients.

Subsequently, as further practice based data are collected in this setting and on this specific subgroup, additional information could be obtained to refine specific treatment approaches for this sub-group within this clinic setting. These recommendations for engaging in “practice-based evidence” extend to counselor education as well. With the increased emphasis on accountability counselor education programs need to provide training for students in systematic monitoring of outcomes. Indeed, our ethical mandate as counselors is to “...continually monitor their effectiveness as professionals and take steps to improve when necessary” (ACA, 2005; C.2.d).

#### *Future Research & Recommendations*

The findings in this study led the researcher to identify several areas of need for further research. The first area of concern is regarding the use of alliance and outcome measures with unknown cultural validity. As reported by Chang, Hays, and Tatar (2005), results from psychological measures can be misleading if the constructs measured are manifested differently in the culture being studied. One recommendation to address this concern is to utilize test adaptation methods. Advantages to adapting a test or measure to a particular cultural group include increased cultural validity and fairness in assessment (Chang, Hays, & Gray, 2010). A disadvantage is that adapting a measure may detract from its content validity (Chang, Hays, & Gray, 2010). However, to increase cultural validity of measures a dialogue and collaboration with stakeholders of that particular culture is recommended in future research.

Eduardo Duran (2007) noted that culturally incompetent research can be implemented as means of social control. In particular, Duran referred to Sinha (1984)



who indicated that empirical research lacks applicability when applied to communities of color. Duran (2007) makes the cogent argument that interventions follow research and that multicultural literature can serve to promote stereotyped views by providing oversimplified and generalized views of a particular culture. However, Sue and Sue (2008) argued that research can also be a means to combat stereotypes and social scientists can conduct research in a culturally competent manner to facilitate deeper understanding of culture. The possible beneficial or damaging outcomes of multicultural research underscores the need for steps to increase culturally competent research. Additionally, given Villanueva's (2003) report of frequent misunderstandings between tribes and research entities, it is recommended that researchers collaborate with Canadian Aboriginal communities in research planning and implementation for future study within this population.

Some of the implications and limitations of quantitative research with Aboriginal peoples was considered in the current study though, as with any study, understanding of those implications and limitations is partial. Given that no previous quantitative outcome research specifically with Canadian Aboriginal peoples was identified in the research literature, my aim was to develop further understanding of predictors of outcome and highlight the Native voice in the quantitative literature. Future research on cultural applicability of outcome and alliance measures with Native peoples, social desirability on self-report measures, and qualitative research to better understand counselor qualities that promote strong alliances with Native peoples would all contribute greatly to the existing literature. For example, specific recommendations to address these limitations include empirical validation of alliance and outcome measures with Aboriginal peoples,

qualitative studies to further understand the alliance from an Aboriginal framework, and multicultural competency training for researchers working with Aboriginal communities. Additionally, it is recommended that researchers work with the tribal community to generate an alliance measure from within the tribal community. Although the current study was conducted in an urban setting nearly half (549,320 of 1,172,790) of all Aboriginal peoples in Canada live outside urban settings. It is recommended that future research include mixed-methods studies done in collaboration with tribal communities, in rural or urban settings if possible, at every stage of the process.

Recent alliance research has emerged analyzing session-by-session changes in the alliance score and the relationship of these fluctuations with outcome (Crits-Christoph, Gibbons, Hamilton, Ring-Kurtz, & Gallop, 2011). This seems to represent a trend of aiming to understand the nuances of how alliance relates to outcome. With this in mind, it is recommended that alliance research investigate changes in alliance throughout the treatment process and not just alliance within the first 4 or 5 sessions. Limitations with client-rated alliance measures include social desirability, ceiling effects, and unknown cultural validity. Thus, future research is needed on social-desirability bias and controlling for this factor in client-rated alliance measures. The Marlowe-Crowne Social Desirability Scale is one possible measure to use in adjusting for social desirability in client-rated alliance research (Fitch, 2011). As mentioned previously, research to culturally validate outcome and alliance measures is needed and following published guidelines for cultural validation can be helpful (Chang, Hays, & Gray, 2010). Consistent with recommendations by Heppner, Wampold, and Kivlighan (2008) for research with minority cultural groups, I recommend pilot testing of protocols and instruments when

conducting future quantitative research with Aboriginal peoples. Pilot testing allows for early identification of flaws or limits with instruments or procedures (Heppner, Wampold, & Kivlighan, 2008) and it also can serve to empower the group being studied by making their feedback and voice central to the research development.

Understanding between counselor variability in outcomes is an important area of future research. Results of the current study are similar to previous studies in that researchers found no significant differences in outcome between groups of counselors of varying training levels (Nyman, Nafziger, & Smith, 2010; Atkins & Christensen, 2001). Indeed, further investigation of counselor variables is needed. The work of Anderson et al. (2009) in examining counselor facilitative interpersonal skills seems promising to further unveil elements contributing to variability in effectiveness between counselors.

A final area of recommendations for future research is regarding client factors. Given that meta-analytic research has found that approximately 87% of the variance in outcome is attributable to client factors (Wampold, 2001), it is incumbent upon the research community to continue investigating these factors. The current study found that very few demographic factors predicted outcome. As suggested by Duncan (2010), salient client factors may be idiosyncratic to each client. Duncan (2010) mentioned broad areas such as client strengths, supportive elements in their environment, motivations, and even chance events as client factors important to outcome. Thus, it is recommended that future research examine what effective counselors do to enlist and potentiate client factors that are operating in a client's life outside of the consulting room. One possible method for such a study would be a sequential explanatory mixed-methods design. In this type of study researchers would first examine outcomes quantitatively from a sufficiently

large sample of counselors and identify counselors with the highest outcomes. The qualitative component would follow-up with these effective counselors by exploring ways in which they report utilizing client factors.

### Conclusion

This study yielded significant findings in some demographic factors and alliance factors. There were also non-significant but interesting findings in the realm of counselor factors. This real-world setting research underscores the importance of “patient-focused research” or “practice-based evidence.” Specifically, the counseling profession espouses a scientist-practitioner model and in the spirit of this model the field must embrace two competing and paradoxically complimentary paradigms.

The first paradigm is empirically supported treatment which aims to understand some degree of universality among treatment approaches and client problems and characteristics. This paradigm rests on the notion of matching counseling approaches to clients based on *a priori* assumptions about clients and their presenting problems. The second paradigm, practice-based evidence, guides counselors to engage in ongoing outcome monitoring and utilization of client feedback to guide services. To truly embody the scientist-practitioner model counselors need to balance the use of nomothetic data to inform practice while not losing sight of idiographic data specific to the individual client. In addition, given the increasing diversity of society, researchers and counselors need to collaborate with diverse populations in order to understand universal and individual characteristics of clients and communities.

Native cultures worldwide that have been colonized experience significant social challenges and health problems (Ellison & Pearce, 2006; Kirmayer, Brass, & Tait, 2000;

Silburn, et al., 2007). In North America quantitative research with Native peoples is lacking and the need for such research is clear. However, as indicated by Duran (2007) such research needs to be conducted with caution due to the potential for further colonization or social control exercised over marginalized ethnic groups. As with most interventions or counseling relationships, the manner in which a particular method or relationship is approached is of significant import. It seems that at the heart of practice-based evidence and the consistent use of alliance and outcome measures, is a client-focused stance. However, the use of systematic feedback from clients can be presented in a way that does not promote client empowerment. Additionally, there is controversy over the use of client-centered or client-directed approaches with Native peoples and that these approaches may be counterproductive (Miller, 1983; Trimble & LaFramboise, 1985). Specifically, some scholars have noted that client-centered approaches are highly individualistic and that more systemic non-directive approaches are more appropriate for Native peoples (Duran, 2007). However, the process of practice-based evidence inherently pushes counselors to focus their attention on the client's progress or lack thereof.

This study adds empirical support for the alliance in working with Aboriginal peoples and these findings can be generalized to inform counselors work in Native communities. In particular, the use of a formal method for counselors to evaluate the alliance in Native communities is indicated. This study provided quantitative support for the previous qualitative research that has lamented the importance of the alliance in working with Native peoples. Practice-based evidence can have an effect that helps equalize disparities between counselor and client and this is particularly important with

marginalized populations (Sue & Sue, 2008). The findings herein can be somewhat generalized to guide treatment with other marginalized populations as the alliance-outcome correlation found within the current study is consistent with findings in much larger, more ethnically heterogeneous samples. Indeed, when implemented effectively, practice-based evidence serves as one guidepost to make decisions about how counseling is unfolding with a particular client within the context of their preferences and cultural context.

Emphasis on research in counseling continues to grow and, according to the ACA consensus issues for advancing the future of counseling, the profession should emphasize outcome research (Kaplan & Gladding, 2011). The wellness perspective that forms the foundation of the counseling profession blends well with a practice-based evidence approach to outcome research in that both models aim to empower the client's voice. The use of real-world outcome research offers the potential to strengthen counseling's professional identity, address accountability, empower clients, and improve counseling effectiveness.

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