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Lindsay L. Davison
Embodying the Therapeutic Alliance: An Exploration of the Working Alliance in the Personal Trainer – Client Relationship

ABSTRACT

This quasi-experimental study examines, from the standpoint of the personal trainer, the extent to which the *working alliance* and its component parts of *goal*, *task* and *bond* as defined within Bordin's (1975, 1979) theoretical framework, are experienced in the working relationship between personal trainer and client. Additionally, the study explores whether a personal trainer's or a client's ethnicity or gender, a trainer's age or training history, the frequency of the personal training sessions, or the length of the training relationship impact the working alliance total or its subscale scores.

An anonymous online survey was distributed by email to several hundred personal trainers. The survey included demographic information about the personal trainer, questions about the personal training client and length and frequency of the training relationship, and the Working Alliance Inventory - Short Revised Therapist-rated version (WAI-SRT-G). After data collection was complete, the sample consisted of 94 nationally-certified personal trainers, aged 21 years or older, who trained at least 50% of their clients in a gym setting.

The major findings of the study were 1.) The mean total alliance and subscale scores reflected the presence of a strong working alliance. 2.) The bond subscales scores had the highest mean. 3.) When total alliance and subscale scores were compared by gender or ethnicity of personal trainer or client, no significant differences were found. 4.)

Significant differences in total alliance and in certain subscales were found across the number of weekly training sessions and the personal trainers' years of experience.

EMBODYING THE THERAPEUTIC ALLIANCE: AN EXPLORATION OF THE
WORKING ALLIANCE IN THE PERSONAL TRAINER – CLIENT RELATIONSHIP

A project based on an independent investigation,
submitted in partial fulfillment of the requirements
for the degree of Master in Social Work.

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2008

ACKNOWLEDGEMENTS

I would like to thank my thesis advisor, Nina Brand, LICSW, for her even-keeled, ever-responsive muddling through of this first time process for us both; the social workers and personal trainers whose excitement about this research fueled my own enthusiasm; Liane Hartman, who saved me from the abyss of formatting faux pas; and Sarah, who graciously and patiently listened to my ongoing external processing about this project.

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CHAPTER I

INTRODUCTION

The working alliance can be defined and elaborated in terms which make it universally applicable, and be shown to be valuable for integrating knowledge—particularly for pointing to new research directions. . . a working alliance between a person seeking change and a change agent can occur in many places beside the locale of psychotherapy. (Edward Bordin, 1979, p. 252)

Therapeutic alliance—the idea that the working relationship between client and therapist is collaborative and considers both the client’s and the therapist’s capacities to negotiate a contract appropriate to the therapeutic work (Horvath & Symmonds, 1991)—is a concept that has been extensively developed and empirically studied within the field of mental health counseling (Horvath & Greenberg, 1994). A driving force behind current alliance research may be the amount of literature that reflects a positive relationship between therapeutic alliances and psychotherapy outcome (Horvath & Symmonds, 1991; Luborsky, 1994).

In 1975, Edward Bordin offered a conceptual framework for the therapeutic alliance that reshaped alliance research within the field of mental health counseling, and opened the door to new research directions outside the field. He defined what he called the “working alliance” as the active relational element in *all* change inducing relationships, and argued that a working alliance between a person seeking change and a change agent could occur in many places outside of a psychotherapy context (Bordin, 1979).

As a social work graduate student who was concurrently working as a certified personal trainer, I perceived certain similarities between the relationships that I developed with my social work clients and with my personal training clients. While the scope of practice and appropriate professional boundaries are different between the two fields, at the core of each is a working relationship between a client who presents wanting to make change, and a practitioner who has a knowledge base and skill set that would support the client in making that change. In my experience, these working relationships, while highly professional, also felt very personal. I found myself wondering if and how this personal connection I was feeling in my working relationships with both personal training and social work clients was actually a reflection of the working alliance.

Through my work in both fields, I also became aware that the structure and function of the work between a personal trainer and a client mirror certain aspects of outpatient mental health counseling. The personal trainer and client typically meet for about an hour, for some agreed upon number of sessions per week or month. These sessions are paid for at a set fee stipulated by the personal trainer and agreed to by the client. When the trainer and client first meet, the trainer conducts an assessment of the client that considers his or her exercise history and health, physical strengths and weaknesses, work/life variables that might either support or detract from the client's ability to exercise, and how the client motivates him or herself. The personal trainer also asks the client why he or she is seeking personal training, and what his or her goals are. Based on this assessment, the personal trainer draws upon different theoretical or experiential models to create a program for the client that helps the client to move towards these goals. During each session, the personal trainer focuses his or her energies

and attention on the client in a purposeful manner. The client's goals are re-assessed. A working relationship develops as the personal trainer and client train together. Finally, similar to planned terminations in therapy, a personal trainer and a client may determine how many sessions they have left, and work towards preparing the client to continue to exercise independently.

In addition to some of the similarities I was noting between personal training and psychotherapy that were piquing my curiosity in the applicability of the working alliance to the field of personal training, my personal training clients often provided me with feedback about how "good" they were feeling. This was not surprising given the role that exercise plays in managing symptoms of low-moderate levels of depression and anxiety (Brosse, Sheets, Lett, & Blumenthal, 2002; Harris, Cronkite, & Moos, 2006; Lancer, Motta, & Lancer, 2007; Paluska & Schwenk, 2000; Singh & Singh, 2000), as well as the psychological benefits of increased self-esteem and confidence that often result from exercise and physical activity (Arent, Landers, & Etnier, 2000; Hallal, Victora, Azevedo, & Wells, 2006; Schmalz, Deane, Birch, & Davison, 2007). While there is no literature that specifically explores the relationship between an individual's use of a personal trainer and increased psychological well-being, available literature suggests that the use of personal trainers does promote exercise adherence (Jeffery, Thorson, Wing, & Burton, 1998; McClaran, 2003), and estimates that many individuals who seek personal training do so to promote self-esteem and to improve psychological health (Gavin, 1996).

This study will quantitatively examine, from the standpoint of the personal trainer, the extent to which the working alliance and its component parts of *goal*, *task* and *bond* as defined within Bordin's (1975, 1979) theoretical framework, are experienced in

the working relationship between a personal trainer and a client. The data will also be used to explore whether particular variables in this sample, including a personal trainer's or a client's race or gender, a personal trainer's age or training history, the frequency of the personal training sessions, or the length of the training relationship impact the working alliance total or its subscale scores.

Even though Bordin defines and elaborates his concept of the working alliance in universal terms, and advocates for its application outside of psychotherapy, there is currently no literature that actually examines its application in other professional arenas. The relationship between exercise and psychological health, the role of the personal trainer in promoting safe and effective exercise participation, and the change-inducing nature of the personal trainer - client relationship make this particular working relationship a relevant and important place to begin this examination.

It is the intent of this study to show the applicability of Bordin's psychological construct of the working alliance to the field of personal training, thereby expanding the knowledge base on the therapeutic alliance and adding to the scant literature on the personal training relationship. Additionally, this study hopes to highlight relationships between the body and the mind that can serve to foster interdisciplinary trust and collaboration between mental health and fitness professionals.

CHAPTER II

LITERATURE REVIEW

In the 1970s, Edward Bordin (1975, 1979) proposed a framework for thinking about the therapeutic alliance that cut across theoretical orientation and treatment modality. He defined and elaborated his construct of the working alliance in terms which he believed would be universally applicable outside the field of psychotherapy to any working alliance created between a person seeking change and a change agent. This research is an attempt to apply Bordin's concept of the working alliance to the field of personal training in which the primary working dyad is comprised of a person seeking change - the personal training client, and a change agent - the personal trainer.

The primary research question that emerged from an extensive review of literature on the therapeutic alliance and exercise science is: To what extent are the working alliance and its component parts, as defined by Bordin and captured in an existing instrument, present in the working relationship between a personal trainer and a client, from the standpoint of the personal trainer? Additionally, are there particular variables, including a personal trainer's or a client's race or gender, a personal trainer's age or type of professional training, or the frequency or duration of the personal training sessions that impact the working alliance total or its subscale scores?

This investigation into the applicability of the working alliance outside the field of mental health counseling is framed within a body of literature that pulls from four different research areas: 1.) the therapeutic alliance, 2.) the psychology and physiology of

stress and adaptation, 3.) the relationship between exercise/physical activity and psychological and physiological health in adolescents, adults and older adults, and 4.) personal training. Given the extensive literature in most of these areas, I have tried to limit my focus to that information which is most current, credible, and relevant to this particular investigation.

Therapeutic Alliance

History of the Therapeutic Alliance

The concept of the therapeutic alliance, a collaborative bond between the client and the therapist which facilitates therapeutic work, has been studied and advanced in the field of psychotherapy since Freud first introduced the idea in 1912 (Horvath, 1994). The earliest versions of a model of the therapeutic alliance, which focused on positive transference, were expanded and revised within a psychodynamic framework. For several decades, the change process through which a client might improve was much debated, but little researched, within psychodynamic theory. Because it was assumed that treatment efficacy would confirm the theoretical assumptions and the hypothesized mechanisms of change underlying that particular treatment, the research conducted during these years focused on the efficacy of specific treatment interventions (Horvath, 1994). By the 1970s however, this assumption was being challenged as research on the alliance increasingly found that therapies based on diverse theoretical premises and which utilized a variety of interventions produced comparable client improvements. Although some of the research syntheses were criticized on methodological and conceptual grounds, the general conclusions were most often accepted, and led researchers to interpret these findings as an indication that there are certain components

of all therapies that are likely responsible for portions of the therapeutic gain (Horvath, 1994).

Bordin's Conceptualization of a Pantheoretical Alliance

One of the first researchers to offer a framework that attempted to explain how diverse treatment strategies produced similar client improvements was Edward Bordin, who, in 1975, reconceptualized the alliance construct in broad, pantheoretical terms. Breaking away from the idea of an alliance that existed in partnership with the client's unconscious projections onto the therapist, Bordin (1975, 1979) proposed a working alliance based upon the client's and therapist's collaboration against the common foe of the client's pain and self-defeating behavior. He identified three components of the alliance: an agreement on the *goals* of therapy, the degree of concordance regarding *tasks*, and the development of personal *bonds*. Within this framework, the existence of the working alliance itself, regardless of the theoretical orientation of the therapist, was an integral aspect of the change process.

Relationship between Therapeutic Alliance and Therapy Outcome

Within the next decade after Bordin's seminal proposal, several centers of alliance research emerged, including at the University of Pennsylvania (Luborsky, 1976), Vanderbilt University (Gomes-Schwartz, 1978; Hartley & Strupp, 1983), the Langley Porter Institute in California (Marmar, Horowitz, Weiss, & Marziali), and the University of British Columbia (Horvath, 1981). Each developed a distinct operational measure of the alliance. Although each measure is based on somewhat differing definitions of the alliance, its role in therapy, and the most appropriate source of data (client, therapist, or impartial observer), accumulating evidence suggests the intercorrelation of these

measures, including at the subscale, or constituent, level (Horvath & Symmonds, 1991). These methods for quantifying the alliance and its component parts have afforded investigators the opportunity to empirically explore the connection between the strength of the alliance and therapy outcome. Across studies that consider such variables as the type of treatment, length of treatment, early versus late alliance, and the relation between alliance and early benefits of therapy (i.e., is good alliance simply an aspect of early therapeutic progress?), the literature strongly suggests a link between alliance and therapy outcome (Horvath & Luborsky, 1993; Horvath & Symmonds, 1991; Martin, Graskie, & Davis, 2000).

The Alliance Today

It is generally understood that the alliance is a common relationship variable across all therapy modalities and frameworks, including models of multi-cultural or cross cultural counseling (see Horvath & Luborsky, 1993, for a comprehensive review of the literature; Horvath & Greenberg, 1994; Fuertes, Bartolomeo, & Nichols, 2001; Shonfeld-Ringel, 2001). While variations exist among alliance definitions used within different empirical measures, there appears to be general consensus on certain central ideas: the working alliance both 1.) captures the collaborative element of the client-therapist relationship and 2.) considers both the therapist's and the client's capacities to negotiate a contract appropriate to the breadth and depth of the therapy (Horvath & Symmonds, 1991). The alliance likely continues to be a focus of psychotherapy research because of the consistent links found between alliance measures and therapy outcome (Martin et al., 2000). While the concept of the alliance emerged out of the field of psychotherapy to address the working relationship between therapist and patient, its potential applicability

to other fields and other working relationships which involve a change-seeking agent and a change-offering agent (Bordin, 1979) may also prove timely and useful.

The Psychology and Physiology of Stress and Adaptation

In 1976, endocrinologist Hans Selye revolutionized how changes that occurred in or to the human body and its systems were understood and conceptualized. He defined stress as the nonspecific response of the body to any demand placed upon it, and suggested that there are “diseases of adaptation” (as cited in Hanna, 1988, p. 45). He proffered the general adaptation principle, a proposed mechanism by which the human body adaptively responds to the stresses placed on it in a three step process: the alarm reaction, the stage of resistance, and the stage of exhaustion (Hanna, 1988; Daniels, 2004; Selye, 1976).

Selye’s theory highlights the interconnectedness of the mind and the body. Stresses can be both psychological and physiological in nature, and can cause both psychological and physiological adaptations. This connection is illustrated in recent literature on post traumatic stress disorder (PTSD). Recent advents in the fields of neurochemistry and neurobiology have led to research findings that suggest that certain psychological stresses, such as exposure to the kinds of trauma that might elicit PTSD symptoms, can lead to physiological alterations in brain function, structure and chemistry (van der Kolk, 2001). Concurrently, these psychological stresses seem to result in psychological problems in areas that include: (a) regulation of affect and impulses, (b) memory and attention, (c) self-perception, (d) interpersonal relations, and (e) somatization (van der Kolk, Pelcovitz, Roth, Spinazzola, & Sunday, 2005).

Thomas Hanna's (1988) research on somatics also reflects the interplay of psychological and physiological stresses and adaptations, particularly through highlighting the circularity of the relationships between them. Hanna conducted most of his research on the neuromuscular system, which is comprised of the nervous system and the muscular system, and documented some of the specific neuromuscular events that occur when the human body is stressed. He identified two basic neuromuscular stress responses, the withdrawal response and the action response. The withdrawal response is a neuromuscular reaction to stressful events that has been studied extensively in the animal world by neurobiologists. This primitive survival reflex, found throughout the animal kingdom, is sometimes referred to as the "startle response" or the "escape response" because it aids the animal in avoiding a threat. In opposition to the withdrawal response, the action response is a reflex characterized in humans by movements such as opening the eyes, jaw and face; pulling back the neck and pulling down the shoulders; extending the elbows and opening the hands; and relaxing the diaphragm and breathing out. Pulling in opposite directions, these two neuromuscular responses involve the entire muscular system as well as the central nervous system.

Since almost every muscle of the body has an opposite muscles that acts as a counterbalance, to contract (or shorten) one muscle is to lengthen its opposing muscle. The muscles called into action by one of the stress reactions therefore, inevitably involves its opposite. If certain muscles habitually are contracted in the withdrawal response, for instance, their opposing muscles are lengthened. Muscle pairs that are out of sync with one another lead to muscular imbalances, such as a protracted head, tightened and rounded shoulders, lower back pain, and shallow breathing (American College of Sports

Medicine [ACSM], 2005; Hanna, 1998; Daniels, 2004). Some modern day examples of chronic stress that would cause our bodies to be habituated in this way include sitting for long periods of time behind a desk or craning one's neck forward to look at a computer screen.

Breathing Dysfunction that Results from and Leads to Stress

Shallow breathing can be a physiological adaptation that results from the physiological stress of neuromuscular dysfunction. Shallow breathing however, which is also associated with high anxiety, can also serve as the stressor which causes physiological and psychological adaptations. A person feeling anxious is more likely to have a breathing pattern characterized by shallow breaths which can lead to the following adaptations: 1.) use of secondary respiratory muscles over the primary muscle – the diaphragm; the overuse and excessive tension of the secondary respiratory muscles leads to headaches, lightheadedness and dizziness, 2.) more rapid breathing which in turn precipitates altered carbon dioxide/oxygen blood content that stimulates feelings of anxiety (and further quickens breath), 3.) inadequate oxygen uptake and retention of metabolic waste within muscles that create stiff and tired muscles, 4.) decreased joint motion of the spine and rib cage due to improper breathing which leads to stiff, restricted joints (Daniels, 2004). Collectively, these situations, precipitated by breathing dysfunction, decrease our functional capacity in a way that results in a combination of physiological and psychological adaptations: headaches, feelings of anxiety, fatigue, and poor sleep patterns. Thus, the cycle of breathing dysfunction, resulting from both physiological and psychological stresses and leading to both physiological and psychological adaptations, continues.

Physical Activity, Exercise and Health

Definitions of Physical Activity and Exercise

Physical activity and exercise can be helpful in preventing and counteracting some of the dysfunction that occurs when our muscles are imbalanced, our joints are stiff, and our breathing has become dysfunctional. Physical activity can be defined as any bodily movement produced by muscles that result in caloric expenditure (ACSM, 2005). Many activities of daily life fall under this umbrella: lifting bags of groceries, pushing children in a stroller, walking to the bus stop, and gardening. Exercise, however, is more specific, and can be defined as body movement done to improve one or more components of fitness which include cardiovascular endurance, muscular strength and endurance, flexibility, and body composition (ACSM, 2005).

Exercise as Adaptation

Selye's (1976) general adaptation principle, framed within exercise physiology, is fundamental to understanding why exercise can produce changes in the body. As ACSM (2005) explains in its personal training literature: "if a body system is stressed by a training stimulus on a regular basis, the capacity of this body system usually expands" (p. 38). Adaptation depends on two other principles, threshold and overload. In order to obtain a change, or adaptation, the body system needs to be challenged beyond its training threshold, or minimal level. If the stress on the body system is not significant enough to challenge this minimal level, no change will occur. When the training stimulus (stress) exceeds this threshold, it is referred to as an overload, and the process of physiological change usually occurs (ACSM, 2005). In many cases, these physiological changes are adaptive and add to a person's overall sense of physical or psychological

health. For instance, an inactive person joins a local walking group, and by building up his endurance and flexibility with the oversight of the group leader, begins to jog, and is able to complete a 5K run. In other cases, however, due to lack of safe training guidelines, or compulsive exercise behaviors, the stresses that an individual puts on his body can lead to injury, burn out, or fatigue.

Physiological and Psychological Benefits of Exercise

Selye's (1976) general adaptation principle, framed within exercise physiology, is fundamental to understanding why exercise can produce changes in the body. As ACSM (2005) explains in its personal training literature: "if a body system is stressed by a training stimulus on a regular basis, the capacity of this body system usually expands" (p. 38). Adaptation depends on two other principles, threshold and overload. In order to obtain a change, or adaptation, the body system needs to be challenged beyond its training threshold, or minimal level. If the stress on the body system is not significant enough to challenge this minimal level, no change will occur. When the training stimulus (stress) exceeds this threshold, it is referred to as an overload, and the process of physiological change usually occurs (ACSM, 2005). In many cases, these physiological changes are adaptive and add to a person's overall sense of physical or psychological health. For instance, an inactive person joins a local walking group, and by building up his endurance and flexibility with the oversight of the group leader, begins to jog, and is able to complete a 5K run. In other cases, however, due to lack of safe training guidelines, or compulsive exercise behaviors, the stresses that an individual puts on his body can lead to injury, burn out, or fatigue.

Physical Health Benefits

Physical health benefits of exercise are measurable physiological adaptations that are associated with regular cardiovascular exercise, as well as with resistance (or weight) training, and core strength and flexibility. Cardiovascular adaptations that take place may include: a lowered resting heart rate; an increase in the amount of blood that the heart is able to pump per beat both during exercise and at rest; a decrease in resting diastolic and systolic blood pressure; and the production of less lactic acid at maximal workloads during exercise (ACSM, 2005). These cardiovascular adaptations are linked to decreases in coronary artery disease, high blood pressure, non-insulin dependent diabetes, cancer, osteoporosis, and obesity (Daniels, 2004).

Physiological adaptations that are associated with resistance training, depending on its type, intensity, duration, and frequency, can include hypertrophy, or muscle growth caused by the growth of individual muscle fibers; hyperplasia, or an increase in the actual number of muscle fibers; the transformation of muscle fibers along a continuum, i.e., a long distance runner who has more “slow twitch” muscle fibers can create more “fast twitch” muscle fibers through resistance training that focuses on strength and power; neural adaptations like increased neural drive to muscles, synchronization of motor units, and activation of the contractile apparatus which is responsible for initiating a muscle contraction; and increased bone density (ACSM, 2005; Daniels, 2004). Exercise that is focused on flexibility, balance, and core strength can be particularly instrumental in addressing some of the neuromuscular dysfunction that Hanna (1998) characterized, by retraining the neuromuscular system, and helping muscle pairs that are out of sync to become balanced (ACSM, 2005; Daniels, 2004).

Psychological Health Benefits

The physiological adaptations that the body makes in response to exercise are relatively straightforward to empirically measure in comparison to psychological adaptations. However, despite the well-documented methodological limitations that underlie many of the mental health-related studies, and a still-evolving understanding of change mechanisms, much literature has still been published on the relationship between exercise and mental illnesses such as depression, anxiety and post traumatic stress disorder (PTSD), as well as on exercise and more general constructs of psychological well-being. This literature strongly indicates a negative correlation between exercise and anxiety, stress and depression across age groups, and positive correlations between exercise and self-esteem, self-efficacy, and psychological well-being (Anshel, 2006; Biddle; 2000; Fox, 2000; Mutrie, 2000; Scully et al., 1998; Taylor, 2000). Additionally, as Hanna (1998) proposed, if neuromuscular dysfunction can lead to the psychological experience of stress (anxiety, headaches, fatigue), than physical activity that corrects those imbalances and leads to greater neuromuscular function may also decrease stress-related symptoms, thereby improving mental health.

Definitions and Rates of Mental Health Disorders: Depression, Anxiety, and PTSD

According to the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), clinical depression, or major depressive disorder, is characterized by an array of symptoms that include depressed mood, loss of interest or pleasure, feelings of sadness, irritability, changes in sleep and appetite, feelings of worthlessness, diminished concentration, and psychomotor retardation (American Psychological Association [APA], 1994). The symptoms must cause clinically significant distress or

impairment in social, occupational, or academic areas of functioning, and must not be the result of a substance, medical condition, or better accounted for by bereavement.

Adolescent and adult females are twice as likely as adolescent or adult males to have major depressive disorder. The lifetime risk for major depressive disorder in community samples has varied from 5% to 12% for men and 10% to 25% for women.

Clinical depression is often co-morbid with other psychiatric disorders, including anxiety disorders and post traumatic stress disorder (PTSD), in both adults and adolescents (APA, 1994). Post traumatic stress disorder is the development of characteristic symptoms following exposure to an extreme traumatic stressor including but not limited to military combat, violent personal assault, sexual abuse/assault, being kidnapped or taken hostage, torture, incarceration as a prisoner of war, natural or manmade disasters, severe automobile accidents, or being diagnosed with a life-threatening illness. Community-based studies cited in the DSM-IV reveal a lifetime prevalence for PTSD of approximately 8% of the United States adult population.

In adolescents, depression is most commonly co-morbid with anxiety disorders, with over 60% of adolescents who are clinically depressed having a history of anxiety or a concurrent anxiety disorder (Evans, D., Beardslee, W., Biederman, J., Brent, D., Charney, D., Coyle, J., et al., 2005). Although anxiety is a normal and adaptive part of human development and adult experience, and exists on a spectrum, anxiety is considered to be pathological when it either prevents or limits developmentally appropriate adaptive behavior in adolescents, or when it creates distress, dysfunction, or inflexibility that impairs an individual, regardless of age, in his or her social, academic, or occupational functioning (Foa, E., Costello, E., Franklin, M., Kagan, J., Kendall, P., Klein, R., et al.,

2005; APA, 1994). Examples of anxiety disorders include panic disorder, obsessive-compulsive disorder, social anxiety disorder, and generalized anxiety disorder.

Prevalence rates range depending on the type of anxiety disorder, and whether samples come from community or clinical settings (APA, 1994).

General Constructs of Psychological Well-Being

While the impact of physical activity and exercise on mental illness has been most extensively studied with clinically depressed and anxious populations, there is increasing research that explores the relationship between exercise and more general notions of mental health such as mood and self-esteem (Arent et al., 2000; Hallal et al., 2006; Schmalz et al., 2007; Scully et al., 1998). Since constructs like *mental health* or *psychosocial well-being* tend to be umbrella terms and can include any range of components (e.g., *mood*, *psychological benefit*, or *well-being*), when reviewing the literature it is helpful to consider how individual studies define both their terms (Arent et al., 2000) and their measures (Scully et al., 1998).

Relationships between Exercise and Mental Health in Adults

Depending on the level of physical activity and how exercise is defined by type, intensity and duration, results range across the studies of the effects of exercise on various psychiatric illnesses and symptoms. However, despite underlying methodological differences, the literature strongly supports the role of exercise in preventing and treating mild-to-moderate mental illnesses, particularly clinical depression and anxiety, among adults (Arent et al., 2001; Brown, Ford, Burton, Marshall, & Dobson, 2005; Brosse et al., 2002; Craft & Landers, 1998; Goodwin, 2003; Harris et al., 2006; Lancer et al., 2007; Mutrie, 2000; Paluska & Schwenk, 2000; Scully et al., 1998; Singh & Singh, 2000;

Taylor, 2000). In critical reviews of the literature, both aerobic (cardiovascular) and non-aerobic (resistance training) exercise have been shown to have anti-depressant effects that are comparable to most standard psychotherapeutic or pharmacological treatments (Arent et al., 2001; Brosse et al., 2002; Mutrie, 2000; Scully et al., 1998). Two meta-analyses concluded that depression was reduced after aerobic exercise for men and women of all adult age groups, across survey and experimental studies, and that the effects were greatest among clinical samples (Scully et al., 1998).

The literature on exercise and anxiety suggest a low-to-moderate anxiety-reducing effect of physical activity for both trait anxiety (chronic) and state anxiety (temporary/situational). The results for trait anxiety have been consistent across clinical and non-clinical sub-groups including active and inactive, anxious and non-anxious, medically healthy and unhealthy individuals, and in both adult males and females (Taylor, 2000). Participation in exercise that lasts at least ten weeks appears to have the greatest trait anxiety-reducing effects, which, interestingly, are not dependent on changes in physical fitness. The literature further suggests that acute (single) exercise sessions seem to have the greatest anxiety-reducing effects on state anxiety when the exercise is aerobic (Taylor, 2000).

Results from studies that seek to determine if and how exercise can impact mood indicate that various forms of exercise, including both aerobic and non-aerobic, can be associated with an elevation of mood state, particularly for clinical samples. The diversity of results however, suggests that there is more than one underlying mechanism for change (Scully et al., 1998). The literature has also established a positive link between exercise and self-esteem which seems to be strongest among those whose self-esteem is

initially low. It is important to note how each study defines its terms since some studies examine the relatively stable construct of *global self-esteem*, while others focus on domain specific esteem like *physical self-esteem* (Fox, 2000; Scully et al., 1998).

Relationships between Exercise and Mental Health in Adolescents

While studies of adolescents have been limited, exercise appears to be psychologically beneficial to this age group as well. A 2006 review of the literature (Hallal et al.) suggests that adolescent physical activity favorably impacts mental health, may reduce current symptoms of depression and anxiety or their onset, and can positively affect self-esteem. The results of a longitudinal assessment of the links between physical activity and self-esteem in early adolescent non-Hispanic girls indicate that participating in physical activity can lead to positive self-esteem among adolescent girls, particularly for younger girls and those at risk for being overweight (Schmalz et al., 2007).

Exercise and physical activity are often portrayed as having positive physical and psychological consequences, and often do. However, it is particularly important in the adolescent and late adolescent populations, who are most at risk (although adult men and women are also vulnerable), to recognize that excessive exercise, such as the compulsive exercise behaviors that accompany some eating disorders, can have harmful consequences. Subsequently, much of the literature on adolescents and physical activity proposes that additional research be conducted to further define and distinguish healthy exercise adherence/commitment from exercise addiction (Szabo, 2000), and advocates that upper limits of physical activity be established (Hallal et al., 2006).

Relationships between Exercise and Mental Health in Older Adults

Older adults are a group for whom depressive symptoms are common and often co-morbid with other medical and psychological issues. Physical, mental, and social age-related changes in the older adult, including physical deterioration, loss of friends and family, and chronic medical conditions provide significant emotional challenges. Muscle weakness that accompanies aging can compromise everyday activities, increase the risk of injury from falls, and lead to dependence on others (Arent et al., 2000).

The findings of four randomized controlled trials of exercise as a primary treatment for clinical depression in adults over age 60, suggest that in its efficacy in treating depressive symptoms, low-to-moderate intensity exercise, either aerobic or resistance training, is comparable to a placebo-control condition (Singh & Singh, 2000). A larger meta-analysis included studies that investigated the effects of physical activity or exercise on some construct of mood in older adults (Arent et al., 2000). As defined by the authors, *mood* was an umbrella term that included such constructs as depression, anxiety, anger, vigor, fatigue, confusion, pleasantness, and euphoria. In the analysis, activity and exercise were classified as cardiovascular exercise, resistance training, or a combination of those, and was based on activities described by the American College of Sports Medicine (1995) in its exercise prescription guidelines. Exercise was associated with significant pre-to-post-treatment improvements in mood when compared to a no-treatment control, motivational control, or yoga-flexibility treatment modalities. Variables that seemed to most impact mood improvement were fitness improvements, low initial fitness levels, and exercise frequency, while variables such as intensity of exercise and duration of training were not considered significant (Arent et al., 2000). The

authors also argue that the literature convincingly shows that greater aerobic power, muscle strength, and flexibility allow older adults to perform at levels equivalent to people 10-20 years younger, and that this, in itself, equates to a dramatically improved quality of life.

What Causes the Relationships between Exercise and Psychological Benefit?

While the literature clearly points to a relationship between exercise and psychological benefits, determining causality has proved difficult. Across the studies, researchers find themselves left with similar questions: How, exactly, is exercise related to psychological well-being? Does one follow or precede the other? Do they exist independently? How do the physiological changes that can occur from exercise impact mood? To what extent do the social benefits of exercise promote psychological well-being? How do psychological and physiological processes and functions interact to determine outcome? (Biddle, 2000; Fox, 2000; Harris et al., 2006; Mutrie, 2000; Scully et al., 1998; Taylor, 2000) Some of the literature offers new explanations or further considers already proposed mechanisms of change (Brosse et al., 2002; Craft, 2005; Hallal et al., 2006), while other studies refute current causal inferences altogether (Arent et al., 2001). The underlying conclusion reflected across most of the literature is best stated in one critical review: “Given the complexities of the relations between exercise and psychological well-being, it is unlikely that any single theory, model or hypothesis will suffice. Instead, multiple perspectives must be employed.” (Scully et al., 1998, p. 117)

Methodological Limitations

Throughout the literature on exercise and mental health, similar methodological limitations are often cited. These limitations can be summarized as follows: 1.) the complexity of the relationship between exercise dose (defined as the type, intensity, duration, and frequency of exercise) and the range of possible psychosocial or psychological benefits makes the collection of hard data difficult (Goodwin, 2003; Harris et al., 2006; Scully et al., 1998); 2.) the paucity of epidemiological, longitudinal, and clinical trial studies (Arent et al., 2001; Brosse et al., 2002; Brown, Ford, Burton, Marshall, & Dobson, 2005); 3.) the critical reviews and meta-analyses, while identifying positive correlations between exercise and measures of psychological well-being and negative correlations between exercise and anxiety, stress, and depression, fail to suggest guidelines on how exercise could be used to alleviate particular symptoms, and what types of exercise would be most useful in which situations (Brown et al., 2005; Scully et al., 1998); 4.) the methodological inconsistencies, including non-standardized measurement techniques, make generalizations difficult despite the wealth of data (Hallal et al., 2006; Scully et al., 1998); 5.) the lack of ethnic diversity and age range within the available research, much of which has been conducted with younger and middle-aged Caucasian adults. Future research needs to target underserved and understudied populations both nationally and internationally (Hallal et al., 2006; Brosse et al., 2002).

Personal Training

History of the Field of Personal Training

In the 1950s and 1960s, gym members in the United States consisted primarily of men who were training - often weight lifting - towards specific goals such as increased

size (bodybuilders), strength (power lifters), explosive strength (Olympic lifters), or sport-specific strength (DANIELS, 2004). By the early 1970s, however, attitudes about exercise, fitness and appearance were changing, and going to the gym had become more socially acceptable in many U.S. communities. In contrast to playing sports, which required some degree of skill, fitness training was an active outlet for anyone, regardless of ability. Exercising in gyms had the added benefit of being available regardless of weather or time of day (NASM, 2004). While becoming a gym member cost money, creating some degree of exclusiveness, there were also affordable gyms and fitness centers such as the YMCA, whose missions were to serve local communities and families.

The mainstreaming of fitness created a rise in gym membership that included a large number of individuals who were relatively uneducated about exercise and the gym environment. In the absence of fitness professionals, guidance on how to use weights or equipment, or on how to develop an exercise program, was often solicited from the perceived gym “expert.” These experts from the 1970s tended to be the men in the gym who had been training the longest, or who “looked” the most fit or strong. Although evidence is mostly anecdotal, the fitness professional is thought to have emerged out of commercial transactions in which new gym members offered the gym experts money in exchange for their perceived training knowledge and guidance (Daniels, 2004).

Although these experts were likely able to provide good information on certain aspects of exercise training, like loads (amount of weight), sets and numbers of repetitions, it was not usual practice for them to assess a client for past medical conditions, risk factors, muscle imbalances, injuries, or goals (NASM, 2004). This would

have resulted in training programs that more closely mimicked those of the instructor than were scientifically grounded in human movement science and designed to meet the individual needs, goals, and abilities of the client.

Evolution of Personal Training

As a whole, the environment in which many United States citizens currently spend their time lends itself to physical inactivity (Daniels, 2004). Advances in technology, longer work hours, and extended commutes have left many American adults sitting more and moving less, both at work, and in general. Physical education and after-school sports programs are being cut from school and county budgets leaving many children without safe or affordable means to be physically active. Rates of obesity are on the rise. And people are living longer, leading to chronic diseases and disabilities like arthritis.

Current research on such topics as lower back pain, musculoskeletal injuries to the back and spine, arthritis, and chronic diseases suggest a relationship between inactivity, muscular dysfunction, and injury (Daniels, 2004). An individual's muscle imbalances, decreased flexibility, and/or lack of core and joint stability that often result from inactivity (and lead to lower back pain, musculoskeletal injuries, and arthritis) are often referred to, in the exercise literature, as being *de-conditioned*. Research indicates that a more de-conditioned a person is the more likely she is to become injured if she begins to exercise (Daniels, 2004).

In a country where many people, from small children through older adults, are living increasingly sedentary lives, the need for physical activity is real. A de-conditioned individual however, whether that person is a nine year-old boy who spends most of his time after school playing video games or a retired 68 year-old woman with arthritis who

is no longer able to drive, risks injuring herself if she begins to exercise without proper guidance. The role of a professional whose job it is to assess an individual's current physiological functioning and to develop and implement a safe, individualized exercise program with them is clear.

Over the past thirty years, research in exercise science, the development of a fitness industry, the creation of professional associations and non-profit organizations that are committed to education and evidence-based practice like the National Strength and Conditioning Association (NSCA), the American Council on Exercise (ACE), and the American College of Sports Medicine (ACSM), and the continuing effort to create national industry standards for certification and ethics, has given rise to a burgeoning and increasingly respected field of fitness professionals. Personal trainers are part of this field, which includes but is not limited to strength training and conditioning professionals, group exercise instructors, athletic trainers, and clinical exercise physiologists.

While there is currently no national certification or uniform scope of practice for personal trainers, several of the larger and most reputable organizations that offer certifications for fitness professionals have developed their own. For instance, ACSM, which has certified more than 25,000 trainers (2005), defines its Certified Personal Trainer (CPT), and his or her scope of practice, as the following:

The ACSM Certified Personal Trainer is a fitness professional involved in developing and implementing an individualized approach to exercise leadership in healthy populations and/or those individuals with medical clearance to exercise. Using a variety of teaching techniques, the ACSM Certified Personal Trainer is proficient in leading and demonstrating safe and effective methods of exercise by applying the fundamental principles of exercise science. The ACSM Certified Personal Trainer is proficient in writing appropriate exercise recommendations,

leading and demonstrating safe and effective methods of exercise, and motivating individuals to begin and to continue with their healthy behaviors. (ACSM, 2006)

The National Academy of Sports Medicine (NASM), which developed its original

Certified Personal Trainer certification in 1987, defines its NASM-CPTs as:

Health and fitness professionals who perform individualized assessments, and design safe, effective and individualized exercise and conditioning programs which are scientifically valid and based on clinical evidence to clients who do not have medical or special needs. They provide the guidance to help clients achieve their personal health, fitness and performance goals via the implementation of exercise programs, nutritional recommendations and suggestions in lifestyle modifications. Certified Personal Trainers do not diagnose and/or treat areas of pain or disease and will refer clients to other health care professionals/practitioners when appropriate. They abide by NASM's code of conduct at all times. (NASM, 2007)

In a move towards creating more uniform practice standards, ACSM and NASM are part of a group of eight organizations, which also includes NSCA and ACE, whose CPT certification is accredited by the independent National Commission for Certifying Agencies (NCCA), a branch of the National Organization for Competency Assurance (NOCA), (see Chapter III for additional information).

Personal trainers work in a number of settings, including at a health club, or at a client's home or office. Health clubs are likely the largest single employer of personal trainers, offering personal training services as a part of membership. Since 1998, health club membership in the United States has grown over 23%, to 7 million members (National Board of Fitness Examiners [NBFEE], Annual Report, 2006). Among health club members, Americans over the age of 55 are the fastest-growing age group (Daniels, 2004). Personal training services continue to increase as well. The American Sports Data, Inc., a company that specializes in sports and fitness research, estimates that over four

million Americans paid for personal training services in 1998, a number that has continued to climb over the past decade (NBFE, 2006).

Research on Personal Training

While there is extensive research that comes out of the field of exercise physiology, very little research exists that is specific to personal training. A review of the literature reveals limited findings on why clients hire personal trainers (Gavin, 1996), and suggests a relationship between personal trainers and increased physical activity amongst training clients (Jeffery et al., 1998; Maguire, 2001; McClaran, 2003). Beyond these studies however, relatively little empirical research exists on the specific role(s) and function(s) of the personal trainer, or on the efficacy of personal trainers in helping clients to prevent injury or to achieve goals (either from the standpoint of the client or the personal trainer). Apart from anecdotal evidence captured in trade journals or popular culture articles, there is also only minimal research that examines ethical dilemmas or addresses professional boundaries (Gavin, 1996), and scarce literature on the interpersonal aspects of the working relationship between personal trainer and client (Maguire, 2001). Many of the studies that do exist have not been replicated, and there are currently no studies on the validation/reliability of the survey instruments that have been utilized to collect quantitative data. The overall lack of empirical and qualitative research on personal training likely reflects the relative youth of the profession and its stage of development as a field. Due to the lack of literature, defining the role(s) of the personal trainer as well as the working relationship created between the personal trainer and the client remains partial conjecture.

Why Do People Hire Personal Trainers?

The results of a 1996 national study of 228 personal trainers that was conducted through the trade magazine of a large professional association of fitness professionals include some general findings on reasons for hiring personal trainers (Gavin, 1996). In estimating different reasons for why clients might have hired them, personal trainers reported body shaping, weight management, muscular strengthening, exercise adherence, and improving physical health with the most frequency. Personal trainers also estimated that more than 50 percent of their clients hired them to improve self-esteem, and more than 33 percent to improve psychological health.

Personal Training and Increased Physical Activity

One of the roles that personal trainers seem to play is increasing the likelihood that their client will actually exercise (Maguire, 2001). With rates of exercise adherence notoriously low (Scully et al., 1998), this possibility is important. While there are few studies in the literature that address whether or not working with a personal trainer increases an individual's exercise adherence, those that do have found a positive relationship (Jeffery et al., 1998; McClaran, 2003). One randomized, controlled study, which evaluated two strategies – the use of personal trainers and financial incentives – for improving exercise adherence and long-term weight loss, found that attendance at the exercise sessions of the treatment group that included the use of personal trainers was double in comparison to the treatment group of standard behavior therapy (Jeffery et al., 1998). The results of another study, which evaluated the effectiveness of personal training on changing attitudes towards physical activity (thereby increasing levels of activity), suggest that one-on-one personal training increases the amount of physical

activity by changing attitudes towards it. This study however, was limited by the lack of a control group (McClaran, 2003). In addition to the role that personal trainers may have in increasing exercise adherence of their clients, other research suggests that the use of personal trainers may help clients better meet their goals than those who do not use trainers. For instance, heavy-resistance weight training in moderately trained men supervised by a personal trainer has been shown to elicit greater adaptations in strength performance compared to unsupervised training (Mazzetti et al., 2000).

Relational Elements of Personal Training

While the therapeutic relationship and the personal training relationship might not initially beg comparison, there is a considerable amount of overlap between some of the relational elements described in the personal training coursework of such organizations as ACSM (2005) and NASM (Daniels, 2004), and the goal, task and bond components of the working alliance as they were defined by Bordin (1975, 1979).

Alongside the exercise science and conceptual frameworks for assessment and program designs on which individuals are tested within these certification programs, personal trainers are expected to be familiar with certain relational concepts that underlie many kinds of psychotherapy, including how to develop rapport and to convey empathy. ACSM's (2005) *Resource Guide for the Personal Trainer*, for instance, defines empathy as the ability to understand people from their own frame of reference rather than one's own, and encourages its certified personal trainers to "make an effort to understand what the person feels and convey to the client that desire to comprehend" (p. 67). The text discusses the use of active listening as a way to express empathy, as well as how to reframe and reflect what a client says in order to facilitate the development of rapport and

self-disclosure. ACSM also distinguishes between verbal and nonverbal communication, highlighting the ways in which personal trainers might consciously (or not) communicate to their clients without words, and why this is relevant in building a strong working relationship.

NASM (Daniels, 2004) requires its trainers to understand its R.E.A.D. system, an acronym that stands for rapport, empathy, assessment, and development. NASM argues that in the beginning phases of the relationship between a fitness professional and a client, interpersonal dynamics are more important than scientific expertise. These interpersonal dynamics are thought to establish trust, which in turn facilitates communication and leads to a more accurate assessment of the goals and needs of the client. Like the ACSM literature, NASM coursework includes research on the role of verbal and nonverbal communication in building rapport. It also defines empathy and relates this to understanding what motivates a client and how and why he or she has arrived at their stated goals. NASM argues that rapport and empathy are necessary in order to uncover and understand a client's goals and needs, and discusses the utility of directive and non-directive questions as well as paraphrasing (or reflecting) in order to conduct an effective assessment. The final step in the R.E.A.D. process, developing solutions, is the equivalent of designing an intervention or treatment plan to help the client to address her presenting issue and achieve her goal.

ACSM's and NASM's description of the rapport and empathy necessary to create a trusting working relationship between a personal trainer and a client can be likened to Bordin's concept of the interpersonal bond between therapist and client. The importance that the training coursework places on the personal trainer and the client working towards

a stated and mutually agreed upon goal, likewise mirrors the agreement between therapist and client on the goals of the therapy that defines Bordin's goal component of the working alliance. Finally, the training coursework's emphasis on the personal trainer's ability to design an individualized exercise plan to support the client around his or her presenting issue in a way that allows them to reach his or her goal (Daniels, 2004), can be understood in terms of the third component of Bordin's working alliance, task, which is defined as the patient's agreement with the therapist that the tasks of therapy will address the patient's presenting problems.

In the training literature and coursework, a personal trainer's skill in developing a strong working relationship with a client is often related to customer service and sales, i.e., a trainer's ability to sell his or her services and to create a sustainable client base or business (Maguire, 2001; Daniels, 2004). It is interesting to examine this equating of a personal trainer's skill in developing a working relationship with the success of his or her personal training business in light of Bordin's (1979) proposal that the working alliance is key to any change process which involves a relationship between a person who seeks change and the one who offers to be a change agent. Bordin's framework might be applied in the following manner. In the case of the personal trainer and his or her client, the interpersonal dynamics between the person seeking change (the personal training client) and the change agent (the personal trainer) are integral to the change process. These interpersonal dynamics, to the extent they lead to the development of a strong working alliance between personal trainer and client, may, in turn, be related to personal training outcome, similar to the field of psychotherapy, where working alliance is related to therapy outcome (Martin et al., 2000). A personal training client who has benefited

from a positive outcome is, arguably, more likely to purchase additional training sessions or to refer friends and colleagues to that trainer. It is therefore, perhaps, unsurprising, that the training literature often equates a trainer's interpersonal skills with sales.

Summary

There has been substantial research on the therapeutic alliance, as well as on the positive psychological and physiological benefits of exercise and physical activity. There is currently little literature however, that attempts to characterize or to empirically capture the working relationship between a personal trainer and a client, and none on the extent to which a working alliance may be formed through the personal training relationship. The following chapters seek to find a bridge between the fields of mental health counseling and personal training, whose primary working relationship between personal trainer and client also seeks to promote health and change, by exploring the applicability of the psychological construct of the working alliance to this working relationship. Specifically, the next chapters will examine the extent to which total working alliance and its component parts of goal, task and bond, as they have been defined by Bordin and captured in the Working Alliance Inventory, are present in the personal trainer- client relationship from the standpoint of the trainer.

CHAPTER 3

METHODOLOGY

The purpose of this study is to assess the applicability of Bordin's concept of the working alliance (1975, 1979) to the field of personal training. The primary research question is: To what extent is the working alliance, and its constituent parts of goal, task and bond as they are defined within Bordin's pantheoretical framework, present in the working relationship between a personal trainer and a client from the standpoint of the personal trainer? Additional research questions seek to determine which components of the working alliance are strongest in the relationship between personal trainer and client, and to what extent total alliance, as well as subscales, differ across variables such as the gender and race of the personal trainer and the client, the years of experience and kind of certification of the personal trainer, or the frequency and duration of the training relationship.

Sample

Participants

Although some studies based upon the Working Alliance Inventory, an instrument developed to measure the working alliance as it was defined by Bordin (1979), surveyed both therapist and client on their respective perceptions of the working relationship (Horvath & Greenberg, 1989), I decided it would be challenging to obtain data from dyads of personal trainers and clients, and instead needed to limit my sample to one or the other. I anticipated that it would be difficult to access personal training clients except

through word of mouth. This seemed like a potential pitfall because my intent was to distribute my survey electronically and this would create an additional step. In contrast, I was aware that I could obtain the names and email addresses of personal trainers through public list-serves and databases of fitness professionals, which meant that I could distribute my survey electronically from the outset – a good reason to focus my research on personal trainers.

I wanted to create study guidelines that mirrored those of the studies conducted to develop the measurement tool on which my survey was based, the Working Alliance Inventory, Short-Revised version (WAI-SR, Hatcher & Gillaspay, 2006). When reviewing the samples used in those studies however, I found that there was a wide range of the therapists' professional experience and training, treatment modality used, length of treatment time, and frequency of sessions. Relevant inclusion criteria consisted of therapy being conducted on an outpatient basis, and therapists being either licensed professionals or supervised pre-doctoral students. I attempted to create inclusion criteria for the research participants that would, at the very least, try to mirror these two aspects.

In order to determine what personal training environment might be most comparable to an outpatient setting, I considered that personal trainers can train clients in several different venues including a gym or health club setting, a client's home, and a client's workplace. I speculated that a working relationship that develops between a personal trainer and his or her client might be impacted by the environment in which they are working. Specifically, I made an assumption that from the trainer's point of view, training a person in the context of her home, her personal space, might create a more casual atmosphere, and likely a different working relationship, than training her in the

more formal setting of a gym. Based on this premise, I decided that a gym or health club setting would be most equivalent to an outpatient therapy setting where the therapy is being conducted in an office. However, since many trainers who train in a gym or health club setting also train some people in their homes, I was concerned that including trainers who work exclusively in a gym setting might diminish my subject pool. For this reason, I chose to include personal trainers who train at least 50% of their clients in a gym setting, and to direct my research questions to the last client that the personal trainer trained *in a gym setting*.

Unlike the mental health fields, which have specific educational, clinical and state licensure requirements (Association of Social Work Boards, 2006; American Counseling Association, 2008; Association of State and Provincial Psychology Licensing Boards, 2006), a personal trainer is not mandated to pass a national or state board requirement in order to practice (NBFE, Annual Report, 2006). While there is some movement in the field towards developing state and/or national licensure, there is little uniformity across education, experience, and certification amongst personal trainers.

For the purposes of trying to create personal training certification criteria that would be comparable, even relatively, to the educational requirements of the therapists involved in Hatcher's and Gillaspay's samples (2006), I identified a group of organizations whose personal trainer certifications are accredited by the National Commission for Certifying Agencies (NCCA). According to the website of the National Organization for Competency Assurance (NOCA) (2007), NCCA's parent organization:

The National Commission for Certifying Agencies (NCCA) was created in 1987 by NOCA to help ensure the health, welfare, and safety of the public through the accreditation of a variety of certification programs/organizations that assess

professional competence. Certification programs that receive NCCA Accreditation demonstrate compliance with the NCCA's Standards for the Accreditation of Certification Programs, which were the first standards for professional certification programs developed by the industry.

NCCA uses a peer review process to: establish accreditation standards; evaluate compliance with the standards; recognize organizations/programs which demonstrate compliance; and serve as a resource on quality certification. Certification organizations that submit their programs for accreditation are evaluated based on the process and products, not the content, and are therefore applicable to all professions and industries. (Retrieved October, 2007)

The eight NCCA-accredited certification organizations who offer certifications or programs in personal training include the three most widely regarded organizations in the fitness industry: ACSM, the American Council on Exercise (ACE), and the National Strength and Conditioning Association (NSCA) (New York Times, 2000).

In order to participate in the survey, trainers were required to hold a national certification. A survey question related to certification asks trainers to check "all that apply" from a list of nine choices that include the eight NCCA-accredited personal training certificates, as well as an "Other" category which asks trainers to name the certifying organization.

In summary, in order to participate in the survey, personal trainers had to meet the following criteria: 1.) be at least 21 years old, 2.) be able to read English, 3.) hold a national certification in personal training, 4.) train at least 50% of their clients in a gym setting, 5.) sign a consent form that had been approved by Human Subject Review Committee. Ninety-four participants were recruited.

Recruitment

Once approval for the study was obtained from the Smith College Human Subject Review Committee (Appendix A), I distributed an email to my immediate personal and professional networks that outlined my research and included a direct link to the survey. The content of the email differed slightly depending on whether or not the intended recipient was a personal trainer or someone who might know or work with one, but included the same information about the study (Appendix F). I posted information about my research, with a direct link to the survey, on a few fitness professional list-serves and message boards, as well as on a monthly newsletter to Smith College School of Social Work alums. I contacted the fitness managers of gyms local to the area in which I was living, as well as those in the region where I last practiced as a trainer, and emailed them my survey information to distribute to their personal training staff (Appendix G).

Additionally, a few of the NCCA-accredited organizations, including ACSM and the National Federation of Fitness Professionals (NFFP), had online databases that allowed me to search, by state, for the publicly available email addresses of individuals who held a personal training certificate from that organization. I selected email addresses at random of personal trainers located in states throughout the country including: AK, AL, CA, CT, CO, FL, GA, IL, IN, LA, MA, ME, NY, SC, TN, TX. Overall, I distributed more than 400 emails with information about the survey.

Ethics and Safeguards

Permission to conduct the study was obtained through the Smith College School for Social Work Human Subjects Review Committee (Appendix A). Data was collected online through SurveyMonkey.com, a leading web-based survey tool that employs

multiple layers of security to ensure that data is protected by firewall and intrusion prevention technology, and is kept confidential. In order to access the survey, participants were required to read and electronically sign a consent form (Appendix E) that gave a detailed description of the project. Participation in the study was voluntary and anonymous, and participants were able to skip any question. Participants were able to withdraw from the study at any time up until the point that they clicked on “Submit Survey.” Once participants submitted the survey electronically, they were no longer able to withdraw because there was no way to identify their questionnaire. Data was stored on an external hard drive in order to safeguard information. Data was collected and reported in the aggregate, and participants were not asked to make individual statements that could be quoted. Consistent with Federal regulations, all data will be kept in a secure location for three years at which point it will be destroyed or continued to be maintained securely. When the data is no longer needed, it will be destroyed. Participants were informed that in addition to me, Smith faculty and advisors to this study would also have access to the data.

Benefits and Risks of Participation

In terms of the potential risks and benefits of participating in the study, participants were given a detailed description of the project in the informed consent (Appendix E). Participants were told that it was possible that the survey may prompt them to consider certain aspects of their professionalism or to wonder about the effectiveness of their working relationship with their clients, in which case they may experience distress. The following two resources were provided to the participants in the consent form: 1.) the National Strength and Conditioning Association (NSCA)

Certification Commission's Code of Ethics for Certified Individuals: http://www.nscacc.org/downloads/Code_of_Ethics_for_Certified_Individuals.pdf, and 2.) the National Social Worker Finder web site which directed the participant to licensed social workers in their region: <http://www.helpstartshere.org/common/Search/Default.asp>.

While participants received no financial compensation for participating in the study, there were some potential gains available to them. Personal trainers who completed the survey might gain some insight into different aspects of their working relationships with their clients that they may find useful. The data collected through the study may be used to develop coursework for personal training certification programs or professional development seminars for personal trainers on how to develop effective working relationships with their clients. Personal trainers who are able to develop effective working relationships with their clients are more likely to retain current clients and to obtain new ones.

Data Collection

The research was quasi-experimental with a fixed method design. Specifically, the data collection instrument was an anonymous, online questionnaire distributed through SurveyMonkey.com that consisted of twenty-two close-ended questions, divided into three sections. In the first section, demographic information about the personal trainer was collected (Appendix B). The second section consisted of questions about the personal training client and the duration and frequency of the working relationship (Appendix C). The final section of the survey incorporated a therapist-rated version of an existing instrument, the Working Alliance Inventory - Short Revised version for Clients (Hatcher & Gillaspy, 2006), that was currently being tested in Germany (WAI-SRT-G)

(Munder, 2007) (Appendix D). This portion of the survey was modified so that the language was consistent with the personal trainer – client working relationship (i.e., substituting “personal trainer” for “therapist” and “training sessions” for “therapy sessions”).

Instruments

There are at least 11 instruments which empirically measure the therapeutic alliance, most of which are available in several self-report versions (client, therapist, observer) (Horvath & Luborsky, 1993). The instruments assess global levels of alliance, as well as a variety of alliance components, which can include personal attachments, willingness to invest in the therapy process, regard, empathy, unconditionality, task, bond, and goal (Horvath & Luborsky, 1993; Horvath & Symonds, 1991). While definitions of the working alliance vary across the measures, the literature suggests that several of these measures and their components, or subscales, demonstrate good convergent validity, as well as strong intercorrelations (Hatcher & Gillaspay, 2006. Hansell, 1990; Saburin, Hansell, Gutfreund, Gaston, & Marmar, 1990; Tichenor & Hill, 1989 as cited in Horvath & Symonds, 1991; Luborsky, Barber, Siqueland, Johnson, Najavits, et al, 1996).

As I reviewed the existing alliance measures in order to determine which would be most suited for my study, I considered several factors: 1.) the measure’s relevance and applicability to the personal trainer-client working relationship, its length and complexity, its reliability and validity, and my ability to obtain permission to use the instrument for my research. As my review of the literature evolved, it became increasingly apparent that the Working Alliance Inventory (WAI), built as it was upon Bordin’s underlying theme

of an alliance that is pantheoretical and generalizable outside of psychotherapy, would be ideal. Furthermore, the subscales of the WAI – goal, task, and bond – and the questions that pertained to them, seemed like they could be understood by someone outside the field of mental health counseling, such as a personal trainer. Certain questions in other alliance instruments, whose component parts might include something like transference, could potentially be confusing for somebody without a psychology background. That the WAI and its subsequent versions were available to the public with permission of their respective authors, confirmed my intention to use that particular alliance measure as the basis for my study.

One of the earliest measures of the alliance, the WAI was a 36-item self-report instrument designed to assess the strength and dimensions of the alliance as conceptualized by Bordin (Horvath & Greenberg, 1986). The core of Bordin's theory is the notion that the alliance is a negotiated, collaborative feature of the treatment relationship that is comprised of three parts (goals, tasks, and bonds). These terms can be defined as follows: Goals (outcomes) are the target of the intervention. Bonds refer to the personal attachments between the client and the therapist that include issues such as mutual trust, acceptance, and confidence. Tasks are the behaviors and cognitions that form the substance of the counseling process. In a strong working relationship, both persons must perceive these tasks as relevant and helpful, as well as accept the responsibility to perform these tasks (Bordin, 1975, 1979). The development of the original WAI entailed a several-step process that included item generation, rating by experts, rating by professionals, and pilot testing for scale interdependence, reliability,

and validity. It resulted in a 36-item questionnaire with 12 items each for goal, task and bond that were rated on a 7-point Likert scale (Horvath & Greenberg, 1989).

The WAI was soon consolidated however, into a 12-item short version (WAI-S) by Tracey and Kokotovic (1989), and tested for invariance across the therapist and client samples. Both the WAI and the WAI-S came into wide use as alliance measures, but were the focus of relatively little systematic empirical testing after Tracey and Kokotovic's report until Hatcher & Gillaspay (2006) determined to examine the factorial validities of the WAI-36 and the WAI-S in two good-sized independent samples, and to identify and cross-validate a revised short-form WAI (WAI-SR), using one sample as a criterion and the second for confirmation. The resulting WAI-SR, a 12-item self-report measure, based on a 5-point rather than a 7-point Likert scale, reflects Bordin's theory, has stable factor structure across two different samples, and shows greater differentiation between Goal and Task scales than the WAI or WAI-S (Hatcher & Gillaspay, 2006).

I sought permission to use the WAI-SR from Dr. Hatcher, who told me, through a series of email correspondences, that a German colleague of his had recently tested a version of the WAI-SR for therapists in a good-sized sample using a German version of the questionnaire, but had not yet published his findings. Hatcher wrote me that: "Things look promising, and I've attached the English equivalent to this e-mail. It is essentially a rewording of our WAI-SR for clients" (personal communication, September 30, 2007). This version (the WAI-SRT-G: T = therapist, G = German), is the one that I modified to give to personal trainers, and which constitutes the third section of my questionnaire. I was able to obtain the name of Hatcher's German colleagues, Fabian Wilmers and

Thomas Munder, and to gain consent from them directly (T. Munder, personal communication, April 25, 2008).

Data Analysis

Descriptive statistics including frequency distributions were used to describe demographic characteristics of the sample, as well as the personal trainer's professional experience, and frequency and duration of the training relationship. Crosstabulations were run to show the gender of the trainer by the gender of the client. The Cronbach's alpha procedure was used to assess the reliability of the working alliance scale items (goal, task, bond). *T* tests, which assess group differences amongst only two groups, helped to determine if there was a significant difference in total working alliance and subscales across variables such as gender of client (male versus female), gender of trainer (male versus female), ethnicity of client (White, non-Latino versus All Other) and ethnicity of trainer (White, non-Latino versus All Other). One-way analyses of variance (ANOVAs), which test for significant difference between three or more groups (like several age groups for instance), were run to ascertain if there was a difference in the scales by variables such as age groups, years as a trainer groups, and number of sessions per week groups. When an ANOVA revealed a significant difference, post hoc tests like the Bonferroni test were used to determine between which pair of groups this difference existed.

Study Limitations

There were several limitations to the study. While the study measures alliance in the working relationship, it is from the standpoint of the trainer, the change offering agent, rather than the client, the change seeking agent. The personal trainer's impression

of his or her own efficacy or responsiveness as a professional, for example, might be greater than the client's perception of how friendly or helpful or knowledgeable the trainer was, leading to higher alliance scores on the part of the trainer. However, since data is obtained from only one half of the working dyad, the study is not able to compare differences in how the personal trainer and the client each experience their working relationship.

Bordin's pantheoretical theory (1975, 1979) was an attempt to explain therapy outcome results that seemed independent of the treatment modality, i.e., if outcome results were similar across different modalities then might there be some dimension of all the modalities that was, at least in part, responsible for the outcome. While this study is situated within Bordin's theoretical framework of the working alliance however, it is limited in that it does not collect outcome information, and subsequently, is not able to explore whether there might be a correlation between personal training outcome and strength of alliance, at least from the standpoint of the trainer.

There are several additional limitations to this study. First, the survey respondent, the personal trainer, was asked to identify the ethnicity and gender of his or client. The trainer's perception of the client's ethnicity or gender could be different than how the client identifies him or herself. Second, one of the inclusion criteria stipulated that the survey participant must hold a national certification in personal training. Since there is a lack of uniformity amongst certifications (does the certification require clinical practice, what knowledge is being tested, who oversees the teaching?), having a certification is no guarantee that research participants will have a comparable baseline of knowledge or experience, making it difficult to try to link certification or other related credentials to the

degree of working alliance. Third, there are fewer personal trainers of color than I anticipated and very few clients of color. These small sub-sample sizes make it difficult to compare alliance scores if these groups are broken down further, i.e., by gender. For instance, there is insufficient sample size to look for differences in alliance between dyads of male trainers of color working with white non-Latino clients, and male, white, non-Latino trainers working with female clients of color. Fourth, data on whether or not the personal trainer works full time or part time, if he or she holds another job, and if so, what type of job was not collected, which leaves additional gaps in understanding where the personal training fits into a trainer's overall professional picture. These limitations, both in terms of the study's structure and content, should be considered when reading the following chapters on Findings and Discussion.

CHAPTER 4

FINDINGS

Based on Bordin's argument (1979) that the working alliance will be present in working relationships where a change seeking and change offering agent are present, the research sought to determine to what extent the working alliance, and its constituent parts of goal, task and bond as they are defined within Bordin's pantheoretical framework, are present in the working relationship between a personal trainer and a client from the standpoint of the personal trainer. Additional research questions addressed the extent to which total alliance as well as subscale scores differ across variables such as the gender and race of the personal trainer and the client, the years of experience and kind of certification of the personal trainer, or the frequency and duration of the training relationship.

The participants in this sample are nationally certified personal trainers aged 21 years or older who train at least 50% of their clients in a gym setting. The data provided by the trainers on their clients was based on the client that the trainer last trained in a gym setting. Ninety-four personal trainers consented to participate in the survey, but consistent missing data across the survey questions suggest that between 4 and 6 respondents did not fill out most or all of the survey. For this reason, the percentages that will be reported here are the valid percents. The valid percent is based only on the valid cases in the sample, i.e., only those respondents who did not have missing data for that question are included in the computation of the valid percent. Demographic data on respondents'

gender, ethnicity, age, and years of experience as a trainer are outlined in Table 1.

Demographic data on the gender and ethnicity of the client, as reported by his or her personal trainer, is reflected in Table 2.

Table 1

Selected Demographics of Respondents

<i>Gender</i>	<i>Frequency</i>	<i>Valid Percent</i>
Female	47	52.8
Male	42	47.2
Transgender	--	--
Total	89	100.0

<i>Ethnicity</i>	<i>Frequency</i>	<i>Valid Percent</i>
Black, Latino	2	6.7
White, Latino	8	26.2
Black, non-Latino	4	13.5
White, non-Latino	70	21.6
Asian	1	23.8
Native American	1	2.8
Multi-ethnic	1	1.1
Other	3	4.3
Total	90	100.0

<i>Age</i>	<i>Frequency</i>	<i>Valid Percent</i>
21-25	15	17.0
26-30	15	17.0
31-35	24	27.3
36-40	10	11.4
41-45	8	9.1
46-50	8	9.1
51+	8	9.1
Total	88	100.0

<i>Years of Experience</i>	<i>Frequency</i>	<i>Valid Percent</i>
Less than 1	9	10.1
1-2	17	19.1
3-5	28	31.5
6-10	19	21.3
More Than 10	16	18.0
Total	89	100.0

Table 2

Gender and Ethnicity of the Personal Training Client

<i>Gender</i>	<i>Frequency</i>	<i>Valid Percent</i>
Female	61	69.3
Male	27	30.7
Transgender	--	--
Total	88	100.0

<i>Ethnicity</i>	<i>Frequency</i>	<i>Valid Percent</i>
Black, Latino	--	--
White, Latino	4	4.6
Black, non-Latino	3	3.4
White, non-Latino	78	89.7
Asian	2	2.3
Native American	--	--
Unsure	--	--
Total	87	100.0

*Demographics of the Personal Trainer and the Client**Personal Trainer and Client Gender*

Of the 89 personal trainers who reported their gender, 47 identified as female and 42 identified as male. No respondents selected transgender. In contrast to the relative balance between female trainers and male trainers however (52.8% versus 47.2%), there were more than twice as many female clients, 69.3%, as male clients, 30.7%. No personal trainers identified their client as transgender. Crosstabulations were run in order to show the gender of the trainer by the gender of the client and the following pairings were found: Male Trainer/Male Client 19.3%, Male Trainer/Female Client 28.4%, Female Trainer/Female Client 40.9%, Female Trainer/Male Client 11.4%.

Age of Personal Trainer

A substantial majority of personal trainers (72.7%) reported being aged 40 or younger. When age was broken down into smaller groups, 17.0% were ages 21-25,

17.0% were ages 26-30, 27.3% were ages 31-35, 11.4% were ages 36-40, and 9.1% were ages 41-45, 46-50, and 51+, respectively.

Ethnicity of Personal Trainer

Race and ethnicity were described in accordance with the major racial and ethnic populations currently residing in the United States. Respondents were asked to check all race and ethnic categories that applied to them. The majority of participants, 81.2%, identified as White, Non-Latino. The next largest grouping, White Latino, was 9.4%. Black Latino and Black, Non-Latino represented 2.4% and 3.5% of the valid total respectively. Asian and Native American were each 1.2%, as was Native American AND Black Non-Latino, a category created to capture a multi-ethnic respondent. Additionally, three respondents checked the category “Other” and described their respective ethnicities as “Mexican American,” “Puerto Rican,” and “Simetic.” For the purposes of statistical analysis, these latter three respondents were not included since they did not identify themselves as part of the major ethnic groupings.

Ethnicity of Personal Training Client

In the survey, personal trainers were asked about the ethnicity of the client they last trained in a gym setting. No data was collected on whether or not the personal trainer was reporting their client’s ethnicity based upon the trainer’s perception or upon the client’s written or verbal description of his or her ethnicity. The vast majority of trainers, 89.7%, reported that their clients were White, Non-Latino. Of the remaining 10% of clients, 4.6% were White Latino, 3.4% were Black, Non-Latino, and 2.3% were Asian.

Personal Trainer Certifications

In order to participate in the study, personal trainers were required to have nationally recognized certifications. Because there is a lack of uniformity across certifying organizations and the content or practice knowledge tested through a given certification, it is somewhat difficult to specifically define what “nationally recognized” means. However, for the purposes of creating a sub-grouping, the study asked personal trainers to select “all that apply” from a list of eight certifications that are approved by the National Commission for Certifying Agencies (NCCA), as well as from an option of an “Other” certification. Of the eight NCCA-recognized personal training certifications, 41 trainers were certified by the American College of Sports Medicine (ACE), 11 trainers were certified by the American Council on Exercise, 19 hold National Academy of Sports Medicine (NASM) certifications, 12 were certified by the National Federation of Professional Trainers (NFPT), and 15 held National Strength and Conditioning Association (NSCA) certifications. Personal trainers collectively held an additional 25 related personal training and/or other fitness credentials that ranged from a master’s degree in sports performance to certifications with a focus on aerobics, group exercise, cycling, weightlifting, functional movement, triathlon, pilates, post rehab, and golf. Only 5 respondents reported holding only an “Other” certification.

Years as a Personal Trainer

Years of experience as a personal trainer ranged from less than one year (10.1%) to more than ten years (18%) with the majority following somewhere in between. Approximately one third of trainers, 31.5%, had been working in the field for 3-5 years, followed by 21.3% who had been working for 6-10 years, and 19.1% from 1-2 years.

Data on whether or not study participants worked as a trainer full time or in addition to another job was not collected.

Characteristics of the Personal Trainer – Client Working Relationship

Personal trainers were asked the following questions about the working relationship with the client they last trained in a gym setting: When did you last train this client? How many sessions per week do you train this client on average? For how long have you been training this client? This data is reported in Table 3.

Table 3

Characteristics of Personal Trainer – Client Working Relationship

<i>When Client was Last Trained</i>	<i>Frequency</i>	<i>Valid Percent</i>
Today	40	45.5
Yesterday	13	14.8
2-3 Days Ago	18	20.5
4-7 Days Ago	7	8.0
More than 1 Week Ago	10	11.4
Total	88	100.0

<i>Average Sessions per Week</i>	<i>Frequency</i>	<i>Valid Percent</i>
1 Session Every Other Week	6	6.9
1 Session per Week	15	17.2
2 Sessions per Week	42	48.3
3 Sessions per Week	20	23.0
More than 3 Sessions per Week	4	4.6
Total	87	100.0

<i>Length of Training Relationship*</i>	<i>Frequency</i>	<i>Valid Percent</i>
6 Months or Less	19	23.6
6 Months – 18 Months	14	17.5
18 Months – 3 Years	28	35.0
More than 3 Years	19	23.8
Total	80	100.0

Note. Length of training relationship was obtained in years and months. For the purposes of this table data was consolidated into 4 groups.

Almost half (45.5%) of respondents reported training the client the same day they took the survey. About 15% had trained their client the previous day, another 20.5% reported

last working with their client 2-3 days ago, and the remaining 19.4% had trained the client 4 or more days ago.

Personal trainers most frequently trained their client an average of twice per week (48.3%), while another 23.0% worked their clients out three times per week, and 17.2% trained their client once per week. A small minority reported training their clients either more than three times per week (4.3%) or once every other week (6.4%).

The mean length of time that a personal trainer reported working with her or his client prior to taking the survey was 28.0 months, or 2.3 years. Roughly a quarter of trainers (23.8% each) reported training the client about whom they were surveyed either 6 Months or Less, or More Than 3 Years. Fewest trainers (17.5%) had been working with their client for 6 Months to 18 Months, while the most trainers (35.0%) reported training their client between 18 Months to 3 Years.

Working Alliance Inventory – Short Revised Version for Therapists – German

Total working alliance scores and subscale scores were calculated by taking a mean of the relevant questions, each of which was a five point scale ranging from 1 to 5. Negatively worded questions were reverse scored so that a higher response always indicates greater frequency. Cronbach's alpha found that the WAI-SRT-G's 12 questions had strong internal reliability ($\alpha = .803$, $N = 96$, $n = 12$).

Descriptive statistics were run on the total alliance scale and subscales. Scores on the total working alliance scale ranged from a minimum of 2.83 to a maximum of 5, with a mean score of 4.31. The bond subscale, which ranged from a minimum of 2.75 to a maximum of 5, had the highest overall mean of the three subscales at 4.59. Goal, which ranged from 2.33 to 5, had the next highest mean at 4.22. The average mean for task, the

lowest of the three subscales, was 4.12, while the minimum and maximum scores were 2.75 and 5 respectively. Possible scores on all the scales could range between one and five, though actual mean scores were all 4.12 or higher, placing them in the high end of the possible range of scores. Statistics on total alliance and subscale scores are presented in Table 4.

Table 4

Statistics on Total Working Alliance and Subscales

		<i>Working Alliance Total</i>	<i>Goal</i>	<i>Task</i>	<i>Bond</i>
N	Valid	80	80	80	80
	Missing	16	16	16	16
Mean		4.310	4.222	4.119	4.588
Median		4.417	4.250	4.250	4.750
Mode		4.420	4.25	4.25	5.00
Std. Deviation		.4364	.5706	.5639	.4938
Minimum		2.83	2.33	2.75	2.75
Maximum		5.00	5.00	5.00	5.00

Total Alliance and Subscale Scores by Gender of the Trainer, Gender of the Client, or Combination of Trainer/Client Gender

T-tests were run to determine if there were differences in total alliance or alliance subscale scores by gender of the trainer, and again by gender of the client. No significant differences were found. To determine if there was a difference in the mean total alliance or subscale scores of male/male, male/female, female/female, and female/male pairs of personal trainers and clients, a one-way analysis of variance (ANOVA) was also run. No significant differences were found.

Total Alliance and Subscale Scores by Ethnicity of the Trainer and Ethnicity of the Client

T-tests were run to determine if there were differences in total alliance or subscale scores by ethnicity of the trainer, and again by ethnicity of the client. All the survey responses that reflected an ethnicity other than White, Non-Latino were included in one group so that the *t*-tests compared total alliance or alliance subscale scores between a White, Non-Latino group and an All Other Ethnicities group. A respondent who checked both White, Non-Latino and Native American was counted as Native American and included in the All Other Ethnicities group. While no significant differences were found in the *t*-tests, it is important to note that group sizes for both were noticeably uneven (White, Non-Latino Personal Trainers $N = 63$ versus All Other Ethnicities Personal Trainers $N = 13$; White, Non-Latino Clients $N = 71$ versus All Other Ethnicities Clients $N = 8$).

Total Alliance and Subscale Scores by Age of the Trainer

A one-way analysis of variance test (ANOVA) was utilized to determine if there was a difference in alliance scales by the different age groups. No significant difference was found.

Total Alliance and Subscale Scores by Years of Experience as a Trainer

Descriptive statistics on total alliance and subscale scores by age group are presented in Table 5.

Table 5

Mean Alliance Scores by Years of Experience as a Personal Trainer

	<i>Years of Experience</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Min.</i>	<i>Max.</i>
<i>Working Alliance Total</i>	Less than 1	9	4.361	.2887	3.92	4.92
	1-2	14	4.337	.3367	3.67	4.92
	3-5	24	4.337	.4351	3.00	5.00
	6-10	19	4.055	.5280	2.83	4.92
	More than 10	14	4.550	.3319	3.83	5.00
	Total	80	4.310	.4364	2.83	5.00
	<i>Goal</i>	Less than 1	9	4.361	.6009	3.25
1-2		14	4.214	.4790	3.00	5.00
3-5		24	4.243	.6029	2.33	5.00
6-10		19	3.895	.6028	2.50	5.00
More than 10		14	4.548	.3096	4.00	5.00
Total		80	4.222	.5706	2.33	5.00
<i>Task</i>		Less than 1	9	4.139	.4526	3.25
	1-2	14	4.089	.4962	3.00	5.00
	3-5	24	4.177	.4748	3.00	5.00
	6-10	19	3.855	.6938	2.75	5.00
	More than 10	14	4.393	.5522	3.00	5.00
	Total	80	4.119	.5639	2.75	5.00
	<i>Bond</i>	Less than 1	9	4.583	.3750	3.75
1-2		14	4.696	.3560	3.75	5.00
3-5		24	4.583	.4982	2.75	5.00
6-10		19	4.421	.6669	3.00	5.00
More than 10		14	4.714	.3780	4.00	5.00
Total		80	4.588	.4938	2.75	5.00

A one-way analysis of variance (ANOVA) was run to determine if there are significant differences in total alliance or subscale scores by years of experience as a trainer.

Respondents were divided into groups according to their years of experience: less than 1 year, 1-2 years, 3-5 years, 6-10 years, and more than 10 years. As Table 6 shows, significant differences in total alliance score were found between the groups ($F(4,75) =$

3.040, $p = .022$), and significant differences in goal subscale score were found between the groups ($F(4,75) = 3.155, p = .019$).

Table 6

Analysis of Variance by Years of Experience as a Personal Trainer

		<i>Sum of Squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.*</i>
<i>Working Alliance Total</i>	Between Groups	2.099	4	.525	3.040	.022
	Within Groups	12.944	75	.173		
	Total	15.042	79			
<i>Goal</i>	Between Groups	3.705	4	.926	3.155	.019
	Within Groups	22.016	75			
	Total	25.721	79			
<i>Task</i>	Between Groups	2.468	4	.617	2.043	.097
	Within Groups	22.653	75	.302		
	Total	25.122	79			
<i>Bond</i>	Between Groups	.918	4	.230	.938	.447
	Within Groups	18.344	75			
	Total	19.263	79			

*Sig. < .05 indicates differences between the groups

A Bonferroni post-hoc test showed the significant difference in total alliance occurred between the group with 6-10 years of experience ($M = 4.05$) and the group with more than 10 years of experience ($M = 4.55$). The significant difference in goal score across years of experience also fell between the group with 6-10 years of experience ($M = 3.89$) and more than 10 years ($M = 4.55$). In both cases, the more experienced trainers had a higher mean than those with less experience. There were no significant differences found in the task or bond subscale.

Total Alliance and Subscale Scores by Personal Training Certification

T-tests were run to determine if there were differences in the total working alliance or subscales by whether personal trainers entered *only* a certification that was *not*

one of the 8 NCCA-recognized certifications versus any of the other choices, and no differences were found. A one-way ANOVA run on the three possible categories of certification - those who entered *only* an NCCA recognized certification(s), those who entered *only* a non NCCA recognized certification(s), and those who entered some combination – also found no significant difference in alliance scale or subscale.

Total Alliance and Subscale Scores by When the Trainer Last Trained the Client

One-way ANOVAS were used to examine whether or not working alliance scales differed by the amount of time that had passed since the trainer last trained the client on which he or she was reporting. There were no significant differences in scores found between the four groups: today, yesterday, 2-3 days ago, 4 or more days ago.

Total Alliance and Subscale Scores by Length of the Training Relationship

A one-way ANOVA was utilized on each of the working alliance scales to determine if there were significant differences in alliance score by how long the personal trainer and client had been training together. The length of the training relationship was reported in years and months but divided into four groups: 6 months or less, over 6 months to 18 months, more than 18 months to 3 years, and more than 3 years. No significant differences were found in alliance scores between these groups.

Total Alliance and Subscale Scores by Average Number of Training Sessions per Week

Trainers were asked in the survey to select the average number of sessions they trained their client per week from 1 of 5 categories. These five groups were later consolidated into the following three groups: one session or less per week, two sessions per week, three or more sessions per week. Descriptive statistics on total alliance and subscale scores by number of sessions per week is presented in Table 7.

Table 7

Mean Alliance Scores by Number of Training Sessions per Week

	<i>Sessions Per Week</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Min.</i>	<i>Max.</i>
<i>Working Alliance Total</i>	1 Session or Less	20	4.104	.5122	2.83	4.92
	2 Sessions	38	4.443	.3172	3.67	5.00
	3 or More	21	4.300	.4631	3.33	4.92
	Total	79	4.319	.4213	2.83	5.00
<i>Goal</i>	1 Session or Less	20	4.004	.7683	2.33	5.00
	2 Sessions	38	4.342	.4208	3.50	5.00
	3 or More Sessions	21	4.258	.5237	3.00	5.00
	Total	79	4.234	.5635	2.33	5.00
<i>Task</i>	1 Session or Less	20	3.888	.6096	2.75	5.00
	2 Sessions	38	4.257	.4595	3.00	5.00
	3 or More	21	4.095	.6494	2.75	5.00
	Total	79	4.120	.5674	2.75	5.00
<i>Bond</i>	1 Session or Less	20	4.413	.5694	2.75	5.00
	2 Sessions	38	4.737	.3485	3.50	5.00
	3 or More	21	4.536	.5436	3.00	5.00
	Total	79	4.601	.4813	2.75	5.00

A one-way ANOVA was run for each scale to determine if there are significant differences in total alliance or subscale scores by average number of training sessions per week. As Table 8 reflects, significant differences in total alliance were found between the groups ($F(2,76) = 4.42, p = .02$), and significant differences in bond were found between the groups ($F(2,76) = 3.44, p = .04$).

Table 8

Analysis of Variance by Number of Training Sessions per Week

		<i>Sum of Squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.*</i>
<i>Working Alliance Total</i>	Between Groups	1.512	2	.756	4.420	.015
	Within Groups	12.996	76	.171		
	Total	14.508	78			
<i>Goal</i>	Between Groups	1.513	2	.756	2.472	.091
	Within Groups	23.252	76	.306		
	Total	24.765	78			
<i>Task</i>	Between Groups	1.803	2	.901	2.940	.059
	Within Groups	23.305	76	.307		
	Total	25.108	78			
<i>Bond</i>	Between Groups	1.501	2	.751	3.444	.037
	Within Groups	16.564	76	.218		
	Total	18.065	78			

*Sig. < .05 indicates differences between the groups

A Bonferroni post-hoc test showed the significant difference in total alliance occurred between the group who trained their client one session or less per week group and the group who trained their client two sessions per week. The average means for these two groups were 4.10 and 4.44 respectively. A Bonferroni post-hoc test showed the significant difference in bond score fell between the same two groups. In this case, the one session or less per week group had a mean bond score of 4.41, and the two sessions per week group had a mean bond score of 4.74. There were no significant differences found within the goal or task subscales.

CHAPTER 5

DISCUSSION

Overview of Study

Based on observations that many elements of the outpatient working relationship between a therapist and a client are mirrored in the working relationship between a personal trainer and a client, this research was undertaken to explore the applicability of Bordin's construct of the working alliance to the field of personal training. Using a revised German version of the Working Alliance Inventory, the WAI-SRT-G (Munder, 2007), a well-utilized tool based on Bordin's conceptualization of the working alliance, this quasi-experimental research was designed to measure the extent to which the working alliance and its constituent parts of goal, task and bond are present in the working relationship between personal trainer and client, and to determine how demographic or other variables related to this working relationship impact total working alliance and subscale scores.

Overview of Literature

In an attempt to explain how diverse mental health counseling treatment strategies produced similar client improvements, Edward Bordin reconceptualized the therapeutic alliance construct in broad, pantheoretical terms (1975, 1979). He characterized a *working alliance* based upon the client's and therapist's collaboration against the common foe of the client's emotional pain and self-defeating behavior and identified three constituent dimensions: an agreement on the goals of therapy, the degree of

concordance regarding tasks to accomplish the goal, and the development of personal bonds.

Defining this working alliance as the active relational element in *all* change inducing relationships, Bordin suggested that a working alliance between a person seeking change and a change agent could occur in many places beside the locale of psychotherapy (1979). He argued that this conceptualization of the working alliance, defined and elaborated as it was in terms which were universally applicable, could be shown to be valuable for integrating knowledge and pointing to new research directions (1979). There is currently no literature that examines the application of the working alliance, as defined by Bordin and empirically captured in the Working Alliance Inventory and its revised versions (Hatcher & Gillaspay, 2006; Horvath, 1982; Munder, 2007), to other professional arenas.

Research on human physiology and psychology has long emphasized links between the body and the mind (ACSM, 2005, Hanna, 1988; Daniels, 2004; Selye, 1976). Stresses can be both psychological and physiological in nature, and can cause both psychological and physiological adaptations (Hanna, 1988; Selye, 1976). Current research in neurochemistry and neurobiology have led to findings which suggest that certain psychological stresses, such as exposure to the kinds of trauma that might cause PTSD symptoms, can lead to physiological alterations in brain function, structure and chemistry (van der Kolk, 2001), as well as result in a number of psychological problems (van der Kolk, Pelcovitz, Roth, Spinazzola, & Sunday, 2005).

Part of the growing body of evidence that highlights links between the body and the mind is comprised of the substantial literature on exercise, and its positive

physiological (ACSM, 2005; NASM, 2004) and psychological health benefits.

Specifically, exercise that falls within the exercise prescription guidelines (1995) set by an organization like ACSM, has been shown to positively impact mental health (Brown et al., 2005; Brosse et al., 2002; Craft & Landers, 1998; Goodwin, 2003; Harris et al., 2006; Lancer et al., 2007; Mutrie, 2000; Paluska & Schwenk, 2000; Singh & Singh, 2000; Taylor, 2000) and more general psychological well-being (Arent et al., 2000; Hallal et al., 2006; Schmalz et al., 2007; Scully et al., 1998) among adolescents, adults and older adults.

Whereas mental health professionals utilize various psychotherapeutic treatment modalities to support their clients' growth, exercise is the primary treatment modality used by personal trainers to help clients to achieve their goals. Specifically, the role of the personal trainer is to design safe, effective and individualized exercise programs as well as to promote safe and effective exercise participation (ACSM, 2005; NASM, 2007). Available literature suggests a relationship between the presence of personal trainers and increased physical activity amongst training clients (Jeffery et al., 1998; Maguire, 2001; McClaran, 2003).

Discussion of Findings

Degree of Alliance in the Personal Trainer – Client Working Relationship

Consistent with Bordin's (1979) hypothesis that a working alliance between a person seeking change and a change agent can occur outside the arena of mental health counseling, the major findings of this study reflect the presence of a working alliance from the standpoint of the personal trainer. While possible scores on all the scales could range between 1 and 5, mean scores for total alliance as well as the goal, task and bond

dimensions were all 4.12 or higher, placing them in the high end of the possible range of alliance scores.

Bond

Of the three subscales, bond had the highest average mean of 4.59, while goal and task followed at 4.22 and 4.12 respectively. Bonds refer to the personal attachments between the client and the therapist that include issues such as mutual trust, acceptance, and confidence (Bordin, 1975, 1979). The findings suggest that the personal trainers surveyed experience a high degree of mutual trust, acceptance and confidence in relation to the client they last trained in a gym setting.

That the bond score was highest of the three could be a reflection that regardless of the client's goals or the ways in which the working dyad is addressing them (tasks), the actual time spent in relation to one another during the training sessions creates a sense of bond. It could also indicate that personal trainers might have a better understanding of the experience of bond (as that definition is captured in the survey questions), than those of goal or task. As the personal training literature highlights (ACSM, 2005; Daniels, 2004), some of the most widely-recognized national certifications in personal training test individuals on concepts like rapport building, empathy, and communication, all of which could relate to bond. There were no statistically significant differences in bond scores between trainers who held NCCA-recognized certifications (which include the most widely-recognized national certification organizations) and those who held other types. This suggests that the particularly high mean of the bond subscale may reflect that professional development and certification tests for personal trainers in general require them to be familiar with some of the relational concepts that could help them to establish

positive and respectful relationships with their clients. It is also possible that individuals who enter the field of personal training may be self-selected through an interest in working with others, and may therefore have or be interested in developing relational skills that could contribute to building rapport and facilitating personal bond in their working relationships with their clients (Maguire, 2001).

Ethnicity of Personal Trainer and Client

Alliance scores were not significantly different across gender of the personal trainer or client, ethnicity of the personal trainer or ethnicity of the client, or age of the trainer. Descriptive statistics on the ethnicity of both personal trainers and clients reflect very small percentages of individuals in this study who identify or are identified as any ethnicity other than White, Non-Latino. There is currently limited publicly available information on national statistics regarding demographics of personal trainers who work in a gym setting, including ethnicity. Because of this, it is not possible to ascertain how the percentage of personal trainers who identified as ethnicities other than White, Non-Latino in this study compares to the percentage of personal trainers nationally who identify as other than White, Non-Latino. However, given consistent methodological limitations that cite the lack of ethnic diversity within the available research, much of which has been conducted with Caucasian adults (Hallal et al., 2006; Brosse et al., 2002), an underlying assumption is that this research was inadvertently biased towards White, Non-Latino trainers. Additionally, the snowball techniques that I used, as a White, Non-Latino woman whose personal and professional circles are majority White, Non-Latino, to help distribute information about my survey, may have reached a disproportionate number of White, Non-Latino trainers.

Only 10% of personal trainers reported having most recently trained a client of color. Although there were no publicly available national statistics on the ethnicities of individuals who have purchased personal training in a gym setting (personal training clients), it is relatively unsurprising that the percentage of personal training clients of color is small. This may be due to socioeconomic factors that disproportionately impact people of color and make the purchase of a gym membership or personal training sessions unaffordable or not an economic priority. The small reported number of clients of color may also reflect differences in cultural, community, or image-related values across different racial or ethnic communities, with White, Non-Latino individuals more likely to subscribe to a particular type of body image that might promote working with a personal trainer.

Gender of Client

The difference in percentage of female clients, 69.3%, to male personal training clients, 30.7%, may also likely, at least in part, be related to cultural messages in this country around gender and body image that are different for women than for men. The higher percentage of female clients might also be a reflection of differences in help-seeking behaviors between men and women which result in women feeling more comfortable or willing to ask for help than men when it comes to exercise.

Years of Experience as a Personal Trainer

While there was no significant difference in alliance scores found by age, there was a significant difference in the total alliance and goal scores by years of experience as a trainer, with more experienced trainers having higher mean scores than less experienced ones. Interestingly, the significant difference in total alliance and goal scores in both

cases fell between the group with 6-10 years of experience and the group with more than 10 years of experience.

Postulating about this finding reveals one of the study's limitations – that data on whether or not a personal trainer works in this field full or part time was not captured. It could be possible that the trainers who have more than 10 years of experience in the field are more likely to be full time fitness professionals, and in making personal training a fulltime career have become particularly good at developing the working relationships they need to sustain and grow their training practice. This postulation however, does not explain why the significant difference is found between the group with 6-10 years of experience (who arguably have a substantial amount of experience themselves) and more than 10 years of experience. Additional data might have been helpful in speculating on this difference, including: the number of hours per week a personal trainer works in the field, whether or not he or she has another job, whether this job has a strong relational element, or job satisfaction measures, any of which could uncover a link to the length of time a trainer has remained in the field.

The Two Sessions per Week Ideal

On average, personal trainers had been training the client on which they reported for 2.33 years. There were no significant differences in alliance scores by the length of the training relationship, which ranged from less than six months to more than three years. Total alliance and subscale scores were also not significantly different by when a personal trainer reported last training their client (i.e., today, yesterday, 2-3 days ago). However, total alliance scores, as well as the bond score, seemed to be impacted by the number of sessions per week that personal trainer and client worked together. The

significant difference in total alliance ($F(2,76) = 4.42, p = .02$) fell between the one session or less per week group, whose mean was 4.10, and the two sessions per week group, whose mean was 4.44. There was also a significant difference in the bond subscale ($F(2,76) = 3.45, p = .04$) according to number of sessions per week. A Bonferroni post-hoc test again showed the difference was between the one session or less per week group ($M = 4.41$) and the two sessions per week group ($M = 4.74$).

The one session or less per week group was comprised of working relationships based on training sessions that occurred once every other week or less, which could also be once every other week, or maybe once per month. Training at this frequency is likely to impact the working relationship that the two individuals are able to develop. With more time in between sessions, from 1 week to up to 2 or 3 weeks, a client may be less likely to achieve his or her goals. The actual tasks or training program may be less delineated or feel less purposeful to both trainer and client at that frequency. There would also be less time for a trainer and a client to develop rapport, empathy, respect, confidence and other qualities that may be a part of the bond dimension. This may help contribute to lower alliance scores amongst trainers who report meeting with their clients one session or less per week.

The mean total alliance and bond scores peak at two sessions per week, and decrease for those trainers who report working with their clients three or more sessions per week. There are a number of factors that may contribute to why two sessions per week seems to maximize the training relationship in a manner that translates into how the personal trainer reported alliance. A client who is willing to train two sessions per week shows a certain type of commitment of time and money than one who trains one or less

times per week. For some trainers, this may show a willingness and dedication on the client's part to invest her time or money into the change process. A personal trainer who has two sessions per week to work with a client is more able to create and implement a program over that period of time than with less frequent meetings. Even if the client does not exercise outside of those sessions, those two workouts may still help the client see or feel changes in herself. Additionally, spending two hours per week with a client may develop a continuity and rapport in the training relationship that facilitates bond and overall alliance. This frequency of meeting may also create accountability for the client in terms of knowing that in a matter of a few days she will be meeting with her trainer again, while at the same time providing additional space when she can exercise on her own, taking additional responsibility for her change process.

The dip in total alliance and bond scores at three or more sessions per week may be a reflection that someone who can afford to pay for this amount of weekly training is in a financial position where the cost feels less like an investment than for someone who may be stretching financially to pay for two sessions per week but subsequently wants to maximize those sessions. Meeting with a trainer three times or more per week also leaves less time for that client to work out autonomously, and may foster a dependency on the personal trainer that impacts the alliance. As Bordin notes (1975, 1979), in a strong working relationship both persons must perceive tasks as relevant and helpful, and accept the responsibility to perform these tasks. A client who works out three or more times weekly with a trainer may be relying on them in a way that does not allow the client to accept individual responsibility for performing tasks (i.e., exercising on her own outside of the workouts with the trainer). With this frequency of sessions, the personal trainer and

client may begin to take the training relationship for granted in ways that impact the client's commitment, work ethic, or interest in setting goals. A client who is interested in or who perceives herself as needing that number of weekly sessions may also potentially be looking for the exercise or the personal training relationship to fill a specific personal need that falls outside of the bounds of the working relationship.

Implications of this Study to Bordin's Theoretical Framework of the Working Alliance

This study took Bordin's (1975, 1979) mental health counseling construct of the working alliance, applied it to the field of personal training, and found that, from the perspective of the personal trainer, total working alliance, as well as its constituent dimensions of goal, task and bond, are all notably present. That personal trainers were able to understand the actual language of the study questions enough to complete the survey perhaps offers one example that Bordin (1979), as he hoped, defined the working alliance in terms that can be generalizable outside of psychotherapy, at least to this particular working relationship. Additionally, the definitive presence of the working alliance and its component parts in the personal trainer – client working relationship, one in which there is a change seeking agent (the client) and a change offering agent (the trainer), is consistent with his premise that the working alliance is an active relational element in *all* change inducing relationships.

Recommendations for Future Research in this Area

This study was an attempt to explore the applicability of the mental health counseling model of the therapeutic alliance as it was conceptualized by Bordin (1975, 1979) to other non counseling fields. Like much research however, the study serves to highlight additional areas of inquiry. Research that addresses certain of the study's

findings: 1.) why two training sessions per week maximized total alliance and bond scores, and 2.) why trainers who reported having been in the field for more than 10 years had significantly higher scores of total alliance and goal than those who had been in the field for 6-10 years, could help strengthen the results of this particular study.

Additionally, based on the underlying assumption that a gym setting was more comparable to an outpatient therapy office setting, this study was limited to personal trainers who trained 50% or more of their clients in a gym setting. Future research might include all personal trainers, but could seek to capture more comprehensive data on how many hours per week trainers train and in what settings (homes, gym, place of business) in order to compare alliance scores across those variables. Other demographic variables that might prove useful are educational background, whether or not the trainer works full time in the field and, if not, what other kind of jobs he or she holds.

Collecting data on dyads of clients and personal trainers is necessary to compare how each experiences their same working relationship, to determine if differences in perception of the working alliance exist, and to be able to compare these differences across the personal training and social work fields. Given that the literature strongly suggests a link between alliance and therapy outcome (Horvath & Luborsky, 1993; Horvath & Symmonds, 1991; Martin, Grasse, & Davis, 2000), it would be helpful for future research to capture data on working alliance and personal training outcome in order to determine if similar positive correlations between alliance and outcome that exist in psychotherapy are reflected through the personal training working relationship. However, given differences in reasons why therapy clients and personal training clients might seek treatment, research on personal training outcomes will need to include or to

develop outcome measures specific to personal training clients' presenting problems and goals in addition to using the outcome measurements employed by traditional alliance researchers.

Research that attempts to clarify the role of the trainer and the boundaries of the personal trainer – client working relationship may support that field in developing circumscribed professional guidelines. This would be useful in comparing working alliance scores between professions like mental health counseling and personal training since alliance scores may differ across fields depending on the field's stated rules of professional engagement and ethics. Further areas of research also include why individuals seek personal training (goals and motivations), and whether or not this is linked to alliance or outcome.

Conclusion

The findings of this study offer an example that the mental health counseling concept of the working alliance, as defined and elaborated by Bordin (1975, 1979), can be applied in fields outside of psychotherapy. Expanding the overall knowledge base on the therapeutic alliance, this study underscores the relevance and utility of a social work concept for other professions, particularly those in which the primary working relationship is based upon a change seeking agent and a change inducing one. Highlighting the links between physiology and psychology and the role that a personal trainer can play in promoting both psychological and physical health, this study calls for additional collaboration between mental health and fitness professionals, both of whose work is vital in promoting psychological health and well-being.

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Appendix A

Human Subjects Review Committee Approval Letter

December 25, 2007

Lindsay Davison

Dear Lindsay,

Your revisions have been reviewed and all is in order, except for the name business. Under the Instructions for the survey, you say “insert the name of the client you most recently trained in a gym setting in place of the _____ in the text.” Please insert “first” before name and send a copy of that page to Laurie for your permanent file, just in case the Feds come poking around. We have no special requirements about how you note permissions from developers of questionnaires. We just wanted to know that you got them. We are glad to give final approval to your interesting study.

Please note the following requirements:

Consent Forms: All subjects should be given a copy of the consent form.

Maintaining Data: You must retain signed consent documents for at least three (3) years past completion of the research activity.

In addition, these requirements may also be applicable:

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

Renewal: You are required to apply for renewal of approval every year for as long as the study is active.

Completion: You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

Good luck with your project. Have a good break and a good Holiday.

Sincerely,

Ann Hartman, D.S.W.
Chair, Human Subjects Review Committee

CC: Nina Brand, Research Advisor

Appendix B

Demographic Questions for the Personal Trainer (Survey Questions #1-5)

1. Gender (please check one):

- Male
- Female
- Transgender

2. Age (please check one):

- 21-25
- 26-30
- 31-35
- 36-40
- 41-45
- 46-50
- 50+

3. Ethnicity (please check all that apply):

- Black, Latino
- White, Latino
- Black, non-Latino
- White, non-Latino
- Asian
- Native American
- Other (please specify): _____

4. Please select which of the following nationally accredited personal training program certificates you hold (check as many that apply):

- American College of Sports Medicine (ACSM)
- American Council on Exercise (ACE)
- The Cooper Institute
- National Academy of Sports Medicine (NASM)
- National Council on Strength and Fitness (NCSF)
- National Exercise Trainers Association (NETA)
- National Federation of Professional Trainers (NFPT)
- National Strength and Conditioning Association (NSCA)
- Other (please specify): _____

5. How many years have you been a personal trainer?

- Less than 1
- 1-2
- 3-5
- 6-10
- More than 10

Appendix C

Demographics on the Client and the Personal Trainer – Client Working Relationship (Survey Questions #6-10)

6.) What is the gender of your client (please check one)?

- Male
- Female
- Transgender

7.) What is the ethnicity of your client (please check one):

- Black, Latino
- White, Latino
- Black, non-Latino
- White, non-Latino
- Asian
- Native American
- Unsure

8.) When did you last train this client?

- Today
- Yesterday
- 2-3 Days Ago
- 4-7 Days Ago
- More Than 1 Week Ago

9.) On average, how many sessions per week do you train this client?

- 1 Session Every Other Week
- 1 Session per Week
- 2 Sessions per Week
- 3 Sessions per Week
- More Than 3 Sessions per Week

10.) For approximately how long have you been working with this client?

Number of: Years _____ Months _____

Appendix D

Working Alliance Inventory – Short Revised version for Therapists (German Edition)

*This version has been modified for personal trainers
(Survey Questions #11-22)

*This portion of the survey is based on the WAI-SR (Working Alliance Inventory, Short Revised version) and a new therapist-rated version currently being tested in Germany. Permission to use the WAI-SRT-G was obtained both from the original author of the WAI-SR, Robert Hatcher, and his German colleague, Thomas Munder. These items are copyrighted © by Adam Horvath.

INSTRUCTIONS: Below is a list of statements about the working relationship between personal trainer and client. Some items refer directly to your client with an underlined space. As you read the sentences, mentally substitute the name of the client **YOU MOST RECENTLY TRAINED IN A GYM SETTING** in place of _____ in the text. For each statement, please take your time to consider your own experience with that client and then check the box that comes closest to reflecting your opinion about it.

Important: The rating scale is not the same for all statements. PLEASE READ CAREFULLY.

11. As a result of these personal training sessions _____ is clearer as to how he/she might be able to change.

① ② ③ ④ ⑤
Seldom Sometimes Fairly Often Very Often Always

12. What _____ is doing in our sessions gives him/her new ways of addressing his/her original reasons for seeking a personal trainer.

⑤ ④ ③ ② ①
Always Very Often Fairly Often Sometimes Seldom

13. I like _____.

① ② ③ ④ ⑤
Seldom Sometimes Fairly Often Very Often Always

14. _____ and I collaborate on setting goals for his/her personal training.

① ② ③ ④ ⑤
Seldom Sometimes Fairly Often Very Often Always

15. _____ and I respect each other.

⑤ ④ ③ ② ①
Always Very Often Fairly Often Sometimes Seldom

16. _____ and I are working towards mutually agreed upon goals.
⑤ _____ ④ _____ ③ _____ ② _____ ① _____
Always Very Often Fairly Often Sometimes Seldom

17. I appreciate _____.
① _____ ② _____ ③ _____ ④ _____ ⑤ _____
Seldom Sometimes Fairly Often Very Often Always

18. _____ and I agree on what is important for him/her to work on.
⑤ _____ ④ _____ ③ _____ ② _____ ① _____
Always Very Often Fairly Often Sometimes Seldom

19. I care about _____ even when he/she does things that I do not approve of.
① _____ ② _____ ③ _____ ④ _____ ⑤ _____
Seldom Sometimes Fairly Often Very Often Always

20. I feel that the things we do in our personal training sessions will help _____ to accomplish the changes that he/she wants.
⑤ _____ ④ _____ ③ _____ ② _____ ① _____
Always Very Often Fairly Often Sometimes Seldom

21. _____ and I have established a good understanding of the kind of changes that would be good for him/her.
⑤ _____ ④ _____ ③ _____ ② _____ ① _____
Always Very Often Fairly Often Sometimes Seldom

22. I believe the way we are working with _____ 's reason for seeking a personal trainer is correct.
① _____ ② _____ ③ _____ ④ _____ ⑤ _____
Seldom Sometimes Fairly Often Very Often Always

Note: Items copyright © Adam Horvath. Goal Items: 14, 16, 18, 21; Task Items: 11, 12, 20, 22; Bond Items: 13, 15, 17, 19.

Appendix E

Informed Consent Form

Dear Personal Trainer,

I am Lindsay Davison, a graduate student pursuing my master's degree in social work (MSW) at the Smith College School for Social Work. I am also a certified personal trainer. For my Thesis I am collecting data for a research project. The purpose of this study is to examine the extent to which certain characteristics of the working relationship between a therapist and a client are experienced in the working relationship between a personal trainer and a client. This research will be used for my MSW Thesis and for future presentation and publication on this topic.

In order to participate in this study, you must be a certified personal trainer who trains 50 percent or more of your clients in a gym setting. Participation in this study will involve completing a questionnaire online at www.surveymonkey.com that will ask you to rate several statements related to the working relationship between you and the most recent client you have trained *in a gym setting*. The survey will also ask you to provide some demographic information such as gender, age, ethnicity, certifications and/or education related to personal training, and the length of time you have worked as a personal trainer. The survey will take approximately ten minutes to complete and will be available online from January 1, 2008 through February 16, 2008.

Your participation in this study will provide important information about the extent to which certain documented aspects of the working relationship between a therapist and a client are present in the working relationship between a personal trainer and a client. The applicability of certain social work models to the working relationship between a personal trainer and a client may enhance the success of fitness professionals in helping clients to meet their goals. The better able you are at meeting your client's goals the more likely he or she will be to keep training with you and to refer you to other prospective clients. The information gathered in this study may be used by professionals teaching in the sports sciences and fitness industries, as well as in Social Work schools and other mental health programs. There will be no financial or other compensation for your participation.

There are limited risks involved in participating in this study. However, it is possible that the survey may prompt you to evaluate certain aspects of your professionalism or to wonder about your effectiveness as a personal trainer, which may feel stressful. If you have questions about professionalism or ethics, a helpful resource may be the National Strength and Conditioning Association (NSCA) Certification Commission's Code of Ethics for Certified Individuals at:

http://www.nasca-cc.org/downloads/Code_of_Ethics_for_Certified_Individuals.pdf.

Additionally, if you would like to speak with a licensed social worker in your region,

please visit the National Social Worker Finder web site at:
<http://www.helpstartshere.org/common/Search/Default.asp>.

Participation in this study is voluntary and anonymous, and you can skip any question. You may withdraw from the study at any time up until the point you click on “submit survey.” Once you have submitted the survey you will not be able to withdraw because there will be no way to identify your questionnaire. Data will be stored on an external hard drive in order to safeguard information. The data will be collected and reported as a whole, and you will not be asked to make any individual statements that could be quoted. Consistent with Federal regulations, all data will be kept in a secure location for three years at which point it will be destroyed. Smith faculty and advisors to this study will have access to the data.

If you have any questions or concerns about your rights or about any aspect of this study, please email me at ldavison@smith.edu, or call the Chair of the Smith College School for Social Work Human Subjects Review Committee at (413) 585-7974.

By submitting this survey, you are indicating that you have read and understand the information above and that you have had an opportunity to ask questions about the study, your participation, and your rights. You are also confirming that you consent to participate in this study. Thank You.

Please print a copy of this Consent for your records.

- Yes, I consent to participate, take me to the survey.
- No, I do not consent, and wish to exit now.

Appendix F

Recruitment Material for Potential Participants

Dear Personal Trainer,

I am Lindsay Davison, a graduate student pursuing my master's degree in social work (MSW) at the Smith College School for Social Work. I am also a NASM-certified personal trainer who has competed athletically at both the NCAA Division I and National Team levels.

I am collecting data for a research project and could use your help. The purpose of the project is to examine the extent to which certain characteristics of the working relationship between a therapist and a client are experienced in the working relationship between a personal trainer and a client. This research will be used for my MSW Thesis and for future presentation and publication on this topic.

In order to participate in this study, you must be a certified personal trainer who trains 50 percent or more of your clients in a gym setting. Participation in this study will involve completing a questionnaire online at www.surveymonkey.com that will ask you to rate several statements related to the working relationship between you and the most recent client you have trained *in a gym setting*. The survey will take approximately ten minutes to complete.

Your participation in this study will provide important information that may be used to identify ways to enhance the success of fitness professionals in helping clients to meet their goals. The better able you are at meeting your client's goals the more likely he or she will be to keep training with you and to refer you to other prospective clients. The information gathered in this study may also be used by professionals teaching in the sports sciences and fitness industries, as well as in Social Work schools and other mental health programs.

To take the survey, please click here: (there was a link to the Informed Consent form on the survey site).

Thanks!

Lindsay Davison

Appendix G

Recruitment Material for Key Contacts in the Fitness Industry

Dear _____ :

I am Lindsay Davison, a graduate student pursuing my master's degree in social work (MSW) at the Smith College School for Social Work. I am also a NASM-certified personal trainer who has competed athletically at both the NCAA Division I and National Team levels.

I am collecting data for a research project. The purpose of the project is to examine the extent to which certain characteristics of the working relationship between a therapist and a client are experienced in the working relationship between a personal trainer and a client. This research will be used for my MSW Thesis and for future presentation and publication on this topic.

Participation in this study will provide important information that may be used to identify ways to enhance the success of fitness professionals in helping clients to meet their goals, thus promoting client retention and referrals. The information gathered in this study may be used by professionals teaching in the sports sciences and fitness industries, as well as in Social Work schools and other mental health programs. On a personal note, this research may also be used to help me develop a model for a clinical practice that combines personal training and talk therapy.

I am hoping that you might consider distributing information about this research study to your personal training staff and colleagues. I can email you an introductory letter to forward to your training staff. Your trainers can access the survey directly through an online link in the letter or by emailing me directly at ldavison@smith.edu.

Thanks for your help!

Lindsay Davison