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Diagnostically Correct Interventions of Aerobic Activity and Prayer in Addressing Mild Depression and/Or 'Dark Night'

Linda Strozdas
Loyola University Chicago

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LOYOLA UNIVERSITY CHICAGO

DIAGNOSTICALLY CORRECT INTERVENTIONS OF AEROBIC ACTIVITY AND
PRAYER IN ADDRESSING MILD DEPRESSION AND/OR 'DARK NIGHT'

A THESIS SUBMITTED TO
THE FACULTY OF THE DIVISION OF PASTORAL STUDIES
IN CANDIDACY FOR THE DEGREE OF
MASTER OF ARTS IN PASTORAL COUNSELING
DEPARTMENT OF PASTORAL STUDIES

BY

LINDA STROZDAS, SSC

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CHAPTER I

INTRODUCTION

Upon reflection, I realize that my life experience began to "write" this thesis ten years ago even before the M.A. program in Pastoral Counseling existed at Loyola University. During an annual check-up back then, my physician said, "Let's talk surgery, and I mean NOW." I answered in shock: "I can't do that! I'm too busy!"

I was as out of touch with me---my body, my emotions and my spirit---as I was busy. Ignored, silenced and cemented down, my buried "self" was unwilling to tolerate numbness any longer and sounded the alarm through my body. I treated the physical symptoms with surgery and appropriate medication for a year and a half while resuming my intense pace. At an eighteen-month post-surgical check, however, the alarm went off again requiring a second surgery. "Look, if you want to live to be 40, my doctor warned, "you'd better slow down."

His words in mind, I made some helpful choices. I changed my residence, taught part time and engaged my spiritual director in guiding me through the Exercises of St. Ignatius over a nine-month period. This prolonged "30-day retreat" described in the nineteenth annotation to the Exercises, required a commitment of an extra hour of daily prayer. The director and I met weekly for one hour. We spent that time discussing what happened in that extra hour devoted to the Ignatian approach to God --- an approach that engages one's person through the intellect, affect, senses, will and imagination.

Several changes occurred within the context of the prolonged Ignatian retreat. First, the way I related to God in prayer began to change. The Exercises awakened and developed the affective and imaginative dimensions of myself in prayer as well as sharpened my awareness of and use of my senses so that I could "experience" God in all things, places and activities. In so doing, I gradually began to see and acknowledge how intellectualized my relationship with God had become. Such a one-sided "left brain" approach to life sapped reality of surprise, creativity and spontaneity.

Secondly, at the end of the retreat I understood how many "miles I had to go..." to insert my newly discovered way of relating with God into my relationships with others. The retreat had uncovered a missing piece that I had yet to address: my affective self.

Aware that I could go no further without additional professional intervention and support, I began therapy. At about the same time a nearby parish offered aerobics classes that I could afford. As I began "working through" mild depression in therapy, I began physically "working out" as well and continued spiritual direction. My therapist supported my participation in all three.

In retrospect, I understand that mild depression had drawn its discordant tonalities on three structures basic to the ways human beings interact with reality: mind, body and spirit. My body "knew" I was depressed and expressed the disharmony of these three interrelated yet distinct systems long before I could appreciate the toll my deadened emotions exacted on me.

While my physician attended to my physical well-being, he also saw a relationship

between my illness and stress in my life. A surgeon, his solution was that I "cut out" the stress from my life. His suggestion and my response to it was reactive and curative and in line with my prevailing assumptive world view that dissociated my "self" from emotions and their impact on physiology. I pared down my teaching to part time. Though my physical condition stabilized, the mild depression remained.

I bring this life experience to my ministry of pastoral counseling believing that nothing happened by accident, coincidence or luck. Rather, God allowed the experience of mild depression and the opportunity for interventions that addressed its impact on three corresponding and simultaneously operational levels of my being. Though I didn't see any relationship between these three activities at the time, I am convinced that aerobic exercise and the Spiritual Exercises certainly augmented talk therapy. Just how and why aerobic activity and prayer worked and may work in combination with talk therapy for addressing certain types of depression underscores my purpose in writing this thesis.

Necessarily foundational to this study then, is first an articulation of an holistic view of the human person. Chapter II will first set our study in that context. In it I select three factors among many that constitute human personhood: body, mind and spirit and examine them as they interact with each other. Against this background, Chapter III examines the manifestation of depression as a condition that signals the disrupted harmony of these three distinct yet interrelated dimensions of personhood. Because pastoral counselors and spiritual directors can sometimes mistake depression for spiritual desolation or dark night and vice versa, Chapter IV will address the distinctions

between the two and demonstrate how these distinct realities may have a common starting point; how they may precipitate each other and how they may even be experienced concomitantly.

Skilled helpers often attend to depressed clients out of the prevailing modus operandi of their training that often views depression as affecting but a single aspect of human experience, the psychological. We frequently limit our attention to the client's body-dimension only when physiological disturbances occur. Chapter V will explore aerobic activity as an adjunct intervention available to pastoral counselors that directly engages the body, mind and spirit in ways that talk therapy alone does not.

Furthermore, as pastoral counselors may also understand the client in a theological context, they have a unique opportunity to utilize the patient's God relationship in the therapeutic process. Chapter VI will explore some of the dimensions of prayer as relationship and certain techniques of prayer as an adjunct intervention available to pastoral counselors that directly engages the body, mind and spirit in ways that talk therapies alone do not. This chapter will search to understand the merits and limitations of some types of prayer and the usefulness of prayer as an adjunct intervention when clients present with depression.

Finally, a reflective conclusion will note the contributions of this study to the field of pastoral counseling as well as circumscribe some future directions for further studies.

CHAPTER II

PERSONHOOD: THE EMBODIMENT OF PLURIPOTENT CONSCIOUSNESS

As persons we share a common experience: the continuing discovery and creation of reality. Our personhood is "oriented structurally and dynamically to objects, events, others, self and God" (Kraft, p. 44) in a way that differs from all other creation. Free will expands our adaptability, rendering us capable of choices. Though choice enables us to be less structurally limited than other material life forms, our freedom is "existentially limited by our embodiment as well as by many other individual, historical and social factors" (Kraft, p. 44). In this foundational chapter and throughout this thesis I will limit the discussion to three individual factors of personhood: body, mind and spirit. While doing so, I presuppose a unity of personhood that perceives each of these dimensions as differing awarenesses of human consciousness that interact simultaneously. Finally, I propose that the unifying factor of body-mind-spirit consciousness is due to their common orientation toward relationship.

Whether examining the functions of body-mind-spirit consciousness individually or contextually, we soon find that our research and conjectures are far from exhaustive. Our efforts consistently confront us with mystery. Thus, we begin our study with the same wonder and awe of the Psalmist: "Who are we, O Lord, that you should care for us...you have made us little less than the angels, and crowned us with glory and

honor..." (Ps. 8) The glory and honor with which we are crowned is not limited to the sum of our parts, magnificent though they are. The magnificence of our personhood refers to the orientation of our entire being toward life-giving relationship with others, our environment and God as the underlying unity of life. We shall see how the fact that we are made for relationship forms the underpinnings of our body-mind-spirit consciousness. Such an orientation releases the creative and transforming energies of our pluripotent consciousness into all of reality rather than simply circumscribe our separate selves, as a Western perspective might do.

Body-Mind-Spirit Consciousness: Search for Life-giving Relationships

Body-Consciousness. Our body situates us in time and space and thereby serves as that first manifestation of our personhood which anchors us in the world. Who we are, how we feel, what we think, is articulated through our body. It is true that the body gives boundary to our sense of self and that our body consciousness reacts to all that is not-self in non-reflective ways to insure its survival. However, it is equally true that the body has consciousness and memory and may know and express the unharmonious functioning of our body-mind-spirit long before the mind-spirit can conceptualize it, express it or tolerate it. My experience of somatic illness expressed in the last chapter exemplifies this.

In addition to our personal survival needs, our body's senses and anatomical systems also orient our personhood beyond our individual selves toward physical union with another and thus enables the perpetuation of the human race. Yet our reproductive system and entire physiology are informed and supported by an identical dynamism

toward relationship with others that similarly characterizes our mind-spirit consciousness. The experience of recognizing and articulating pleasure, pain, empathy and self-surrender in love for another would be beyond our reach without the unified collaboration of our pluripotent consciousness. Our reproductive capacities would be merely functional. Conversely, when our mind-spirit consciousness informs our embodied consciousness, a communion of persons as well as a union of bodies takes place. In such a commingling we are changed and never the same.

Hence, the distinct and intimately connected contributions of body-mind-spirit consciousness enable us to identify and experience not only physical growth and development in human life, but also self-understanding and self-expansion in service of situating our human presence in a world with others. In the same way, the internal "program" or blueprint for relationship imprinted in each cell of the body nurtures the decision-making of our mind and the meaning-making dynamism of our spirit in our personhood's quest for relatedness. The next two sections will attempt to describe this intricate "networking" in our personhood's quest for internal harmony and outward relatedness with all that is "not self."

Mind-Consciousness. The mind's helpful analytical and symbolic functions make it possible for us to manage the reality of time and space that structures our lives. Our task-oriented behaviors, coping mechanisms, creativity, rational thinking and decision-making help us manage the body's basic needs and cope with intra and extrapsychic reality. But all of this would be simply mechanistic without simultaneous input from our body-spirit consciousness. It is the sensate-feeling capacity of the body that often

provides the emotional basis for our thoughts. We can identify those rare occasions when we experience times of creative thinking and recognize that it seems to occur when the body is most rested and feeling most alive; and, when the spirit engages our entire personhood in fun, merriment, or playfulness reviving a sense of humor. We utilize helpful input from body-spirit consciousness when we experience a "gut" reaction to persons or circumstances and when from that reaction we choose to "live-into" a decision.

When harmoniously connecting with our body-spirit consciousness in its experience of reality, the mind serves to communicate the body's and spirit's experience of self so that our separate 'selves' can be nourished and expanded by other aware 'selves.' The harmonious concert of body-mind-spirit consciousness informs the mind and makes desirable and possible not only self-awareness, but also meaningful negotiation and relationship with others and the environment in a caring way. Yet, moments of interpersonal union as well as mastery and control of our environment are fleeting and we experience these in a limited way. For example, at any given moment there are not enough words to explain the wonder of sexual union, or the depths of love. We cannot exhaustively explain ourselves to ourselves.

This is also true when we face the ultimate questions of life (Kraft, p.44). Such questions of meaning and purpose impel us to ask: Is this all there is? We search for "something more." We experience ourselves as a mystery to ourselves just as much as we experience others, our life and God as a mystery to us. The quest within body-mind consciousness to be in relationship with mystery is what we name spirit.

Spirit-consciousness. The spirit is that capacity within that compels us to ask meaning questions because such ultimate questions relate us to mystery. Our relationship to mystery informs our sensate-reproductive/negotiation-creative capacities and in so doing, mediates an alternative mode of "being in the world." Spirit-consciousness enables us to affirm rather than discount that which cannot be felt, understood, or planned. We come to yet another awareness of our personhood: that we truly are limited; that we don't have answers or explanations for everything and that this is acceptable. In the shift from control to acceptance of who we truly are, the dynamic we name spirit-consciousness paradoxically makes it possible to experience life meaningfully within and/or beyond our biological survival, our personal achievements or our problems.

But the very spirit-consciousness that admits and affirms Mystery in our lives would remain hidden to ourselves and to others without its intimate connection to body-mind consciousness. It is our body-mind consciousness that gives specificity and valuable input to spirit. Our body-spirit consciousness models the process of "letting go" that is the unique hallmark of spirit-consciousness. Let us see how.

First, our embodiment and our definitions of self provide focus for our spirit's energies. Thus, love of "self" as well as "others" becomes possible. Jesus acknowledges and affirms our physical/psychic structures in his summary of the Law. Fidelity to the Law is not an intangible exercise or vaporous goal of cosmic proportion; rather, the specificity of Jesus' words: "Love God with your whole heart and mind and soul and your neighbor as yourself" enables us to reach union with all of the

material/immaterial cosmos in and through the very structures of body-mind consciousness we share with all humankind.

We learn the process of "letting go" through our pre-natal and early life experience of utter symbiotic dependency. As we grow, our very alertness to the "something more" than my "self" in life arises from the early life experience of self-differentiation. As our infant/toddler selves continue to experience our insufficiency, we discover our interdependency and relatedness to others and our surroundings. These developmental psychological milestones are both the structure and paradigmatic process in and through which our spirit-consciousness finds expression, enabling us to form life-giving relationships with others as well a harmony within (Benner, pp. 126-133). The integration of body-mind-spirit consciousness occurs within the context of significant interpersonal relationships wherein through mutual self-surrender we discover the way to God and conversely, we uncover in these relationships how God relates to us. Jesus' articulation of the Law in Luke 10, 25-27 does not circumvent or deny body-mind consciousness; rather, their operational harmony with spirit enhances, integrates and enlarges the "size" of our personhood (Loomer, p.28).

Secondly, the body also provides a necessary "paradigm" or felt sense for what "letting go" requires. If we are to say "yes" to another in love---to affirm ourselves and them; and, to release our ego control, such a decision demands trusting another as well as a donation of ourselves that can be likened to the involuntary and unreflective aspect of the body. Love requires a decision to "let go" of the fears that our body will take over, expose our weakness, or reveal our true feelings.

Thirdly, the authentic self-surrender to another in love requires of us a free, intentionally and consciously chosen act. Our mind-consciousness informs such an act and involves both our acceptance of responsibility for the act of surrendering and all of its consequences (Care of Mind/Care of Spirit, p.83). Nelson observes that when we trust the orientation of our body and mind for relationship, then these may mediate our liberation (Embodiment, p. 97).

Thus, the intimate connection of body-mind-spirit consciousness and their harmonious function internally integrates us and in so doing, liberates us to experience something more than our individuality and our finality: love. That dynamic within that enables our union with self and others in meaningful relationship, love actualizes our profound dignity and value.

The profound dignity and value of the body-mind-spirit connection of our consciousness finds expression in Christianity in the doctrine of the Incarnation wherein Jesus, the Compassion and Word of God became flesh. In that mystery the historical Jesus offered and continues to offer a tangible relationship with Love, not simply with the idea of Love. In the Incarnation the perceived limits of historicity become acceptable, descriptive aspects of who we are, not all of who we are.

When persons foster the emphasis of one aspect of this tri-partite consciousness over another (e.g., exploitation of others to satisfy one's own goals or needs), the profound dignity of human personhood becomes obscured. Life runs the risk of becoming meaningless and without commitment because we become alienated from ourselves as well as isolated and disconnected from others, our environment and

God (Kraft, p. 47).

In this foundational chapter, we have identified the unity of body-mind-spirit consciousness as that orientation within for relationship. We saw how this tri-partite dynamism of our consciousness becomes actualized insofar as these aspects of who we are operate in harmony with one another and enable us to become who we most truly are---persons made for relationship.

For Christians the author(s) of Genesis 1 and 2 summarized this profound truth in claiming that all humankind bears the divine imprint of the Trinitarian God of Relationship: Creator-Redeemer-Sanctifier within. The Trinitarian unity-in-diversity both models mutuality-distinctness and at the same time lovingly creates and nourishes the same hunger within us for relationship. We turn in the next chapter to an examination of the way depression may disrupt the unity of our pluripotent consciousness and consequently disrupt the relatedness one may have with self, others, one's environment and God.

CHAPTER III

DEPRESSION: THE DISRUPTION OF PLURIPOTENT CONSCIOUSNESS AND THE QUEST FOR RELATIONSHIP

"Shall I compare thee to a summer's day?" When searching for an apt metaphor for depression, one may think the opening query of one of Shakespeare's love sonnets completely off the mark. However, if one lives in Chicago, a summer's day can be painfully oppressive.

I am referring to those occasions when intense heat combined with high humidity, shrouds both wildlife and humans in its graduated build-up of discomfort before the relief of a cold front. Some may react with increased lethargy as do wildlife that becomes withdrawn and eerily more silent before the impending storm breaks. Discomfort for humans occurs when they experience their innate cooling system as highly ineffectual as already saturated air refuses to absorb perspiration. Life slows even for the athletically active who are cautioned to curtail outdoor activity to the coolest hours of the early day. Work weeks seem longer as commuters "melt" on public transportation or "simmer" in bumper-to-bumper traffic. Some may react with agitation that sparks violent behavior as surges of violent crimes match the rising heat wave. We look to the skies and listen for weather reports for any indication of relief.

Depression oppresses those afflicted in much the same way. Whatever has generated its presence, our body-mind-spirit consciousness innately seeks relief. Some

may respond with increased agitation, unable to fall asleep. When they finally do, that sleep is interrupted or aborted by early morning waking. Others experience an ever escalating depth of lethargy evidenced by slower thought processes, an inability to make decisions about routine matters, and a need for sleep far beyond their genuine needs. However one's body-mind consciousness may respond, one's spirit consciousness is also affected. All life may suddenly seem purposeless and sapped of meaning. Nothing satisfies. As estrangement from oneself increases, relationships with others are concomitantly negatively affected. One's ability to trust, accept and "let go" control; to be playful, creative, or to enjoy self with others diminishes. Life becomes dull, without direction or meaning; perhaps just as oppressive and constraining as a muggy pre-thunderstorm Chicago summer day or night.

Though weather can be predicted, prepared for and experienced, we know all too well that it cannot be controlled. Nevertheless, meteorologists helpfully predict disruptive weather through careful analyses of separate yet interdependent atmospheric conditions: wind velocity, air temperature and humidity, to name a few. Similarly, in this chapter I will present some of the ways depression inhibits the inner harmony of mind-body-spirit consciousness and thus erodes the very capacity for life-giving relatedness and relationship with our environment, others and with God.

The many ways of classifying depression reveal its complex and inextricable involvement of body, mind and spirit. Once viewed in the Middle Ages as a spiritual malady of otherworldly origins, depression is presently regarded from various scientific perspectives (Gallagher, p.68). Yet our interest in scientific classification and the

tendency to oversimplify in order to achieve clarity and a practicality of interventions tends to lead to dualistic thinking. We thus find in the DSM-III-R reference to depression as disease and psychological disorder without any direct account of the "disease" that marks spiritual depression. Explicitly unacknowledged in this diagnostic manual, our spirit-consciousness can be dismissed or split off; that is, considered as an entity unto itself. This perspective of our personhood contributes to the marginal and suspicious position of both body and/or spirit interventions as unnecessary adjunct therapies to traditional talk/behavioral therapies---a position this thesis challenges.

However, because it is imperative that we have an understanding of depression, we will find these well-developed distinctions very helpful in examining the neurophysiological aspects of depression to better understand its body-mind link and to forge a starting point for our discussion of depression of spirit-consciousness which will be addressed in the final portion of this chapter. Then, utilizing the symptoms for depression listed in the DSM-III-R, we will uncover its effects on our spirit-consciousness---effects which I believe to be already listed, but not examined or appreciated in light of our orientation for life-giving relationships.

Depression as Disruption of Mind-Body Consciousness

Periods of depression are quite normal. However, when the experience of depression exceeds "the normal boundaries of frequency, duration and intensity," (Johnsgard, p. 67) individuals suffer from clinical depression. John Preston helpfully distinguishes clinical depression from normal sadness, grief, or disappointments. In his book You Can Beat Depression, Preston notes that clinical depression lasts longer and

interferes with normal day-to-day functioning. Unlike grief, a painful emotion that eventually leads to healing, clinical depression, if left untreated, has a graduated capacity to constrict one's social interactions, feelings, behavior, thinking, and biological functioning in a negative way (Preston, p. 7). In order to prescribe effective interventions, an understanding of the various types of depression is crucial.

The DSM-III-R extensively catalogues the various types of depression and their symptoms and thus verifies its complexity (pp. 213-233). Using a medical model, Robert Waldinger classifies the types of depression as either major depressive episode (sudden) or dysthymic (chronic); as either endogenous (biological origin) or reactive (having an environmental source) under which he includes psychological depression; as either presenting agitated motor disturbances, or retarded, slowed motor responses (Waldinger, pp.112-114). Distilling these two major resources further, John Preston offers a simple and helpful tripartite structure: psychological depression; biological depression and a third, which is a combination of both (Preston, pp.11-13).

Psychological Depression. Those that encompass emotional reactions to losses and disappointments are considered psychological depressions. Attachment, cognitive and object relations theorists as well as self psychologists locate the source of psychological depression in early life experience. We will discuss this type of depression at length in Chapter IV when we look at depression as an expectable consequence of developmental growth through life.

Purely psychological depressions do not necessarily impair biological functioning, such as changes in patterns of sleeping, eating or the appearance of anhedonia.

Ordinarily psychotherapy, counseling, behavior and cognitive therapies apart from medications are employed to treat psychological depression. However, if one's reaction to trauma or prolonged stress produces psychological depression over a long period of time, somatic illness may also appear. The important link between stress, depression and disease, will be examined later in this chapter. The purpose of such an examination will be helpful to demonstrate later, in Chapter V, how aerobic activity may be helpful for stress management; as a preventive measure for somatic illness; and may be used as an adjunct intervention for some types of psychological depression.

Biological Depression. In biological or endogenous depression, definite chemical malfunctions in the nervous and hormonal systems occur. Precipitating factors rest in physiological changes within the individual rather than any external stressor. Side effects from certain medications, chemical substance abuse, hormonal imbalance, some physical illnesses, or genetic predispositions are believed responsible for biological depression (Preston, pp. 12-15). Because biological depressions signal an imbalance in body chemistry, various anti-depressants may be helpful interventions. Frequently, however, when presenting symptoms may signal a mixture of both types of depression, then a combination of talk therapy, cognitive/behavior therapy and medication may be prescribed. Aerobic activity may also effectively augment these interventions as well. In order to understand how, it is imperative to examine some of the neurophysiological components of depression.

Neurophysiological Factors of Depression

The hypothalamus and limbic system located in the brain's center, are the

structures of the body that regulate the human person's emotional system. Keith Johnsgard notes that specific areas of the brain as well as specific neural pathways form networks that are connected with the mental processes of pleasure, pain, anxiety, depression and organized cognition. Each network uses specific neurotransmitters that relay signals across synapses (gaps) between neurons within the network. Like keys, the neurotransmitters fit into specific receptor sites. When enough neurotransmitters bind onto the site, the presynaptic message is communicated to the postsynaptic neuron and continues to travel through the specific neural pathway. According to Johnsgard, the postsynaptic neurons either receive an adequate number of neurotransmitters to "fire," or not. Dopamine, norepinephrine, serotonin and beta endorphin, are but four neurotransmitters that influence emotions, thought processes and behavior disorders (Johnsgard, pp. 71-72).

While an excess of dopamine synaptic activity can produce schizophrenia and an insufficiency of this chemical may produce Parkinson's disease, dopamine plays a critical role in the pleasure centers of the brain. For this reason it is associated with depression. Above average levels of dopamine have also been related to extraversion. The serotonergic system plays a role in wakefulness and sleep; contributes to our sex drive; and, is sensitive to diet. The presenting symptoms of biological and mixed depression often affect sleep, eating and the experience of sexual desire/pleasure in negative ways. L-tryptophan, an amino acid used to manufacture serotonin, may be increased if diets are high in complex carbohydrates and low in protein. Such a diet helpfully elevates levels of serotonin and insulin, while it decreases the desire for desserts and other sweets

associated with binge eating. Extreme serotonin deficiencies characterize those who are depressed, potentially suicidal, alcoholics, and those who engage in high-risk activities and impulsive, violent behavior. Higher levels of serotonin on the other hand, have been found present in those who are in leadership positions.

Deficiencies of norepinephrine activity result in depression, especially in those who experience psychomotor retardation and suicidal ideation. While it was noted that extreme deficiencies of serotonin produced aggressive and impulsive behavior, abnormally low levels of norepinephrine may account for violence turned inward.

The "chemical key" that modulates pain is beta endorphin. Its levels increase significantly during pregnancy and drop immediately after delivery which may account for postpartum depression experienced by some women. In addition to regulating pain, this neurotransmitter is also linked to sexual drive and behavior. Autistic children, anorexics and bulimics are thought to have abnormal endorphin levels (Johnsgard, pp. 72-81). While it is true that various genetic or neurochemical imbalances may predispose one to depression, prolonged stress and maladaptive behaviors can also influence the body's neurochemical systems.

Stress Factors in Depression and Disease

The presence of stress-related somatic complaints, illnesses and/or diseases during the intake interview may signal or confirm the diagnosis of depression. In order to appreciate this and the significant contribution aerobic activity can offer in managing stress that may precipitate some types of depression, makes its inclusion in this chapter imperative. Johnsgard notes that prolonged stress may result in physiological

consequences eg., hypertension, ulcers, a depressed immune system or the depletion of neurotransmitters that may induce depression (Johnsgard, p.81).

Sherman Dickman concurs. He defines stress as "a process or series of ongoing reactions whose original function is to aid the body in adapting to stressors, rather than a static condition or situation" (Dickman, p. 69). Further, he notes that our metabolic mechanisms are better programmed to deal with short-term rather than long-term stressors. When avoided or mismanaged, external stimuli may become stronger and thus become long-term stressor responses. These can be connected with irreversible physiological changes and disease. Immediate response to stressors effects neurohormonal changes that can be detected by an increase in blood sugar concentration, increased heart rate and blood pressure, and decreased blood flow to the skin. These may be helpful when they secrete stress hormones to save a person's life in an emergency, but constant secretions of stress hormones may result in disease, disability or even death. (Dickman, pp. 68-69). Figure 4.1 traces the routes of psychological stimulus-stressor responses that originate in the cerebral cortex, move to the thalamus and hypothalamic areas, and eventually to all the organs, muscles and cells of the body (See Appendix A). Both physiological and psychological stress produce hormones that use the same pathways (Dickman, p. 68). Thus, figure 4.1 traces the pathways between the nerve hormonal systems and the psycho-physiological systems within the brain; and, figure 4.2 provides a helpful linear map that traces the role of psychological response to external stimuli. When stress is mismanaged or unmanaged and becomes chronic, both behavioral abnormalities and tissue damage results.

Also included in Dickman's fourth chapter are tables 4.1, 4.2 and 4.3. The first two demonstrate the effects of stress on the body's cardiovascular, digestive and muscular systems as well as behavioral and cognitive abnormalities. Table 4.3 further identifies specific stress-related diseases and conditions of the body. Since any of these physiological, behavioral or cognitive complaints may accompany a client's description of their symptoms, depression may exist beneath these physiological constructs erected to cope ineffectively with stressors gone awry. (Appendix A contains Dickman's helpful tables.)

Thus far we have identified three types of depression and attributed certain psychological, biological and neurophysiological causality to each. In doing so, we have traced the body-mind link as we examined how depression and/or stress may effect an individual neurophysiologically to the point of releasing stress hormones which, when secreted over a long period of time may cause tissue damage. Throughout this technical discussion we have inferred that both biological and psychological depression also affect negatively our interpersonal interactions. Since the orientation within us toward life-giving relationships can be perceived as the thread that intimately connects our body-mind-spirit consciousness, we will now consider the impact of depression on this unifying factor of our personhood. In so doing, we will facilitate our discussion of the effects of depression on spirit-consciousness, since it truly cannot be isolated from the evident disruption uncovered in our discussion of body-mind consciousness.

Depression as Disruption of Spirit-Consciousness

Spiritual Depression. We can best understand spiritual depression in the light of

our previous discussion of biological and psychological depression. To do so, we return to the specific list of the assessment manual, DSM-III-R. If we understand how the symptoms listed there contaminate our orientation for relationships as well as our physical and mental functioning, then we can begin to see how depression can impact our spirit consciousness.

The somatic symptoms listed for depression in the DSM-III-R quite obviously relate to body-consciousness. Yet it is equally important to recognize that anhedonia, lowered libido, blunted affect, chronic tiredness, insomnia, hypersomnia, poor appetite, weight loss have a domino effect upon the way our body-mind-spirit consciousness relates to others and our world. When depression distorts and dulls those basic self-soothing body functions of eating, sleeping and sensate pleasure that lead to appropriate self-sustenance, self-regard, and libido, one's energies become preoccupied and consumed with self-maintenance. For example, let us look at the impact of physical exhaustion.

Physical exhaustion may fuel impaired and indecisive thinking about self and all that is not-self. When this is the case, an increasing sense of "being out of control" may overshadow our work and relationships. This in turn whittles away at our spirit-consciousness. We may be inclined to interpret life as increasingly meaningless because we tell ourselves that our presence (or absence) makes no difference. A growing sense of helplessness as well as hopelessness may translate behaviorally into increased dependency, passivity or a need for more and more sleep. Or, we may respond to our shrinking sense of self-value with longer hours at work or study hoping that increased productivity will restore what little sense of self we may have left. We cannot simply

"be" with ourselves, with others, with nature or with God because "being" contradicts our need to produce. Thus praise, joy, playfulness, a sense of humor, or dreams for ourselves and for others become foreign to us.

Without pleasure and without hope, all of life "tastes" flat. Our expectations diminish as do our social commitments because others "get the message" in our increasing unavailability; our taut and/or slumped body language; the negative attitudes peppering our conversations. Without psychological, intellectual, spiritual nourishment from others and without offering those self-same resources to others, the self grows more lonely, eventually starved and lifeless.

As we have seen, our personhood is the product of a complex process of self-definition associated with our sense of body, of will, and of spirit oriented for relationship with others. When all three components work together, we are becoming more "at home" with our identity and our shared destiny with the earth; with one another, with our universe and God, however we name the Holy Other.

Engendering the desire to be in relationship with another and to break out of our self-encapsulation, the self-surrendering function of spirit-consciousness enables our fuller becoming: to be in service of some power or cause bigger than ourselves. This aspect of spirit Benner names natural. Natural spirit differs from religious spirit in that it possesses no particular focus for its yearnings of self-transcendence nor surrender beyond human relationships. Religious spirit resides in those whose longing includes a relationship with a power or being who serves as a focus of self-transcendence and as meaning of life. Finally, Christian spirit refers to those who further specify their deep

spiritual longings within the context of a Christian faith, worship and community (Benner, p. 104).

Depression: The Black Hole

We began this chapter with reference to depression as an oppressive condition, similar to the effects of the build-up, discomfort and wrath of a thunderstorm on a muggy summer day or night. Slowly we began to see, however, that as depression disrupts the harmonious "atmospheric condition" of our pluripotent consciousness of body-mind-spirit, it simultaneously erodes the very unity of our personhood: the orientation within ourselves for relationships that are life-giving. We can conclude, then, that the process and outcome of untreated depression can be likened to the theory known in astrophysics as a black hole.

The most bizarre end point of stellar evolution, a black hole refers to the indefinite collapse of the very structure of some stars. The theory suggests that the former star catastrophically implodes without limit, diving below the "event horizon" in less than a second. The "event horizon" is the critical size below which objects are predicted to disappear and defines a region within which no event can ever be seen, heard, or known by anyone outside. The star literally disappears and leaves a blackened region of space from which radiation cannot escape. In the process the continuously imploding mass warps space and time in its vicinity. Close to the hole, the gravitational force field becomes large and the curvature of spacetime extreme. Warping every moment in time as well as every object and energy that comes within its horizon, the former star compresses known reality within, wrapping it completely around on itself.

It thereby isolates itself from the rest of the universe (Chaisson, pp. 112-125).

The experience we name depression simulates black hole theory insofar as in the disruption of our pluripotent consciousness, depression diminishes the very energy flow and orientation of our personhood for relationships in such a way that little by little the direction of our life-giving thrust changes. As the disruption of body-mind-spirit consciousness introduces more and more chaos within, our outward orientation for life-giving relationships ebbs, may stop and at some critical point, reach an "event horizon"--- a point at which we close out any self-disclosure, allowing no one to see, hear or understand what's going on inside. Left untreated, depression implodes our energies rather than expands them. Our horizons for relatedness collapse inward and increasingly diminish us to the loneliest number: one. Rather than a life-giving unity with others, God and the cosmos, we experience an isolated singularity devoid of meaning. We witness the extreme outcome of such emotional, psychological and spiritual foreclosure when an individual's behavior becomes catatonic or ends life in the act of suicide.

A second notable point about black holes deserves mention in our efforts to expand our understanding of depression. In the process of "gobbling matter," black holes release vast amounts of energy and therefore, astrophysicists further conjecture that perhaps the center of every galaxy is inhabited by a supermassive black hole...even our own Milky Way Galaxy (Chaisson, p.123). Since the 1970's experts have posited that, if black holes do exist, their function may paradoxically give rise to such objects as quasars, those "compact bodies that can emit as much energy as dozens of galaxies"

(Lane, p. 32). Black holes may explain the violent events that power the universe, generating the conditions to support life. Recent photos from the Hubble Telescope, however, support the opposite: bursts of star formation rather than stellar disintegration power the violent events in our universe that generate the energy and conditions that support life (Lane, p.23).

Accordingly, some psychological theories describe the etiology of depression as a consequence of normal human development. We will explore this aspect of depression more fully as we undertake the work of our next chapter: the distinction between depression and what spiritual writers refer to as "dark night."

CHAPTER IV

THE EDGE OF MORNING IN THE HELPING PROCESS: 'DARK NIGHT' AND DEPRESSION

When intense feelings of sadness, anxiety, abandonment or hopelessness perdure over an extended period of time, one may approach the skilled helper: spiritual director or pastoral counselor for relief. How do we best interpret the client's suffering? Is it depression or what spiritual writers refer to as 'the dark night'? Several authors helpfully identify the distinctions between the two experiences. (See Benner, Conn, May, Meadow, Shannon and Welch). An awareness of these distinctions can minimize the temptation of the pastoral counselor/therapist to spiritualize counseling/therapy or the spiritual director to psychologize spiritual direction (May, Care of Mind/Care of Spirit, p.12). While this chapter will summarize the helpful distinctions between depression and 'dark night,' we will also examine those factors that contribute to the similarity of symptomatology that may account for our confusion of the two. We will attempt to understand how these distinct realities may have a common starting point; how they may very likely precipitate each other; and, how they may even be experienced concomitantly.

When viewed as an indication of developmental movement or as indicative of a previous developmental arrest reenacted in the dynamics of the client's present life circumstances, the recognition of depression alongside 'dark night' and vice versa, may

be not so much a cause for alarm as a sign of an opportunity for the client's growth in relatedness. We can become aware of the client's positive movement toward relatedness in a number of ways. For example, the dynamics of the therapeutic relationship may shift or the client may report a number of positive changes in his/her relationships with others. Sometimes, though, a client may report distressful changes in the description of their God-relatedness. While other growth may seem to be happening for the client, their God-relationship seems to be "falling apart at the seams." Such an admission may be a further indication of positive outcome in the pastoral counseling process, perhaps even the long-awaited breakthrough or "dawn" in a therapeutic relationship. Let us see how.

Depression as Maladaptive Relatedness

While many general theories have been developed to explain how early family life, social systems, stress and sporadic crises may produce depression, this chapter will confine itself to two: attachment theory and cognitive theory. While observing infant monkeys or young children when they were separated from their primary caregivers, John Bowlby, an English psychiatrist, identified certain biologically determined stages of response to the loss of personal bonds. Angry protest marked the first stage when an infant is abruptly removed from its mother. Despair and finally apathetic detachment follow when the separation continues. Bowlby concluded that those adults who achieved an untroubled separation from primary caregivers are better able to cope with later transitional situations in life that implied a disintegration of one's self in relation to others and the world. Those who lose a parent, are neglected or abused by parents, become too

insecure to explore their world for themselves. Later, they become more susceptible to depression when subsequent transitions trigger the memory of the unresolved original separation experience (Grinspoon, pp.2-3).

Cognitive theorists similarly locate the source of depression in the early family configuration when, as a child, the depressed adult had interpreted premature isolation from the primary caregiver (loss of a parent, busy parents, or worry over a sick parent) as "there's something wrong with me" and even, "I deserve this isolation." The identity constructs of such individuals may vacillate between two sides of the same coin: self-reliance that allows for adaptation; and, learned helplessness. The latter is the side of depression that shows up when later transitions due to separation, an injury, loss or any variety of trauma trigger a physiological, psychological, spiritual response compatible with the original faulty thinking (Guidano and Liotti, pp.190-191). One's personal identity flip-flops, then, from exaggerated self-reliance to a lack of inner-directedness. The mind-body-spirit consciousness assimilates the present experience through unhelpful patterns of thinking: arbitrary inference; selective abstraction; over generalization; lack of distancing; polarized thinking; self-criticism; and a restricted sense of time that envisions the future as negatively as the present or worse. These irrational beliefs about oneself and the world may fuel the depressed person's need to exert much effort to become good and to oppose further change in the hopes that he/she can prevent the "uncontrollable through obsessive efforts that seek peace and calm" (Guidano and Liotti, pp. 201-202). We know that total avoidance of change and its accompanying experience of loss and "the way things were" is both impossible and undesirable. We know too that

appropriate treatment can enable the client to explore and understand one's past experiences and subsequent conclusions for the purpose of recreating one's "self" anew. Such "work through" issues relevant for the client will certainly involve a dismantling of familiar ways of knowing and experiencing life and at the same time provide a safe environment in which new attitudes and behaviors toward self, others and God may be "tried on" for a more developmentally appropriate fit. Thus, we may understand some psychological depressions as that maladaptive response one makes to normal developmental tasks in which we are continually challenged to renegotiate our sense of relatedness to ourselves, others, and our world.

Just as one outgrows previous cognitive and subsequent affective responses regarding relationships to all that is not-self, so too, a change in one's God-relatedness may also occur. Spiritual writers refer to a particularly radical change in God-relatedness, with its subsequent affective shifts within one's orientation and experience of God, as the 'dark night.' While its symptoms may signal relational development or an impasse in that development, 'dark night' differs significantly from depression in that it is an essential consequence of one's growth in relationship to God.

'Dark Night': A Consequence of Growth

Rather than an isolated experience or merely disruptive stage of development, Gerald May views the 'dark night' as the essence of one's dynamic spiritual journey. Throughout this journey there are certain times one recognizes the loss of prior knowing and convictions about God or times when one is with God more acutely yet without directional bearings. He further likens this period to being adrift at sea. Feeling utterly

abandoned, the individual experiences self as dependent upon this God who presents an increasing expanse to deepen one's awareness of God's power, love, goodness and majesty. This horizon-shift does not arise from psychological causes. One may react to this loss of attachment to tangible "knowing" or to this "unknowing process" with symptoms similar to depression, but it is quite different (May, p. 88).

Leech concurs. He notes that the depressed person exhibits a defense against life and thus one is unable to respond to some situation in a healthy way. Depression becomes recognizable in disconnection and alienation as the depressed person grows increasingly out of touch with self, others and their world. Unable to feel, the depressed person often avoids relationships. Such avoidance increasingly restricts one's sphere of influence and at the same time increases one's powerlessness and helplessness.

The 'dark night,' on the other hand, is a consequence of growth, marking the continuous movement to God in God as one learns to live in new territory. Often, though quite capable of "feeling God," one suddenly feels God's absence instead. One does not necessarily "choose" this unknowing, but feels rather, it is as it should be. The individual is not necessarily alienated from self or others. (Leech, pp. 90-112.)

Merton identifies 'dark night' as the realization that one is becoming whole, "falling into the hands of the living God." (Shannon, p. 139) Unlike depression which inhibits interest in others and divorces one from created dependency on God or anyone, the 'dark night,' Merton insists, is the lure of God, a "powerful, mysterious and yet simple attraction that holds the soul prisoner in this darkness and obscurity." (Shannon, p. 27) He likens 'dark night' to one's leaving the beaten track and traveling by paths

that can't be charted or measured." (Shannon, p. 29) Hence, for Merton, the 'dark night' is not to be "worked through" as are issues in therapy, but rather, simply accepted as the end result of all religious practices: meditation, prayer and liturgy, all of which may produce images of God that lead us into eventual dissatisfaction. Once there, we need only to relax and awaken to a fuller possession of God, for "our minds are most truly liberated from the weak created lights that are darkness in comparison to Him and we are filled with His infinite Light which is pure darkness to us." (Shannon, p. 49) No longer are we thinking about the relationship, but we are in the relationship itself with Meaning Itself.

In contrast, depression is that effort that fails to acknowledge meaning within ourselves and somehow to ignore any meaning outside or beyond us. This creates an embeddedness that locks us into a refusal to "let go" our former understanding of ourselves and our relationships. Often an impatience and disgust with the loss of our former "self" accompanies depression. 'Dark night' differs. The same feelings of dissatisfaction, disappointment and loss that accompany the change in one's God-relationship is there; however, one can identify and express the anger. This expression of anger is an energetic way of refusing to go back to the former balance in the relationship; it marks the increasing individuation of the client/directee in his/her God-relationship --- a movement that allows greater intimacy (Conn, pp.160-162).

Thus, 'dark night' is always a process of movement into deeper, more authentic relationship with God. Reminiscent of the psalmist in Ps. 139 who notes of Yahweh that "darkness is not dark for you and night shines as the light of day," Merton views one's

spiritual journey as the "ray of darkness which is really a ray of light but so brilliant a light that it blinds us to leave room for the activity of God." (Shannon, p. 33)

The authors thus far consulted regarding the experience of 'dark night' carefully delineate the differences between depression and 'dark night.' It is apparent in their descriptions of these two human experiences, that both 'dark night' and depression may resemble one another as they are experienced; however, it is clear that their difference rests in the outcome attached to both. Psychological depression due to developmental arrest, implodes energy as our analogy with the black hole theory suggested in the last chapter. 'Dark night' expands our capacity for relationship. Thus, 'darkness' as referred to by spiritual writers, has both positive and negative meaning. Meadow summarizes this when she notes that "spiritual 'darkness' contains terrible aloneness, devastating self-knowledge, and the awareness of evil and personal impotence. Simultaneously spiritual 'darkness' also holds the light of truth, intimacy with God, and perfect peace in the midst of terrible suffering" (Meadow, p.125).

Like one who suffers depression, one who experiences spiritual 'darkness' will also experience terrible suffering in loss of the religious framework of meaning itself; may be unable to believe in the reality of their own experience; may be unable to hope or to love (Meadow, p. 125). What accounts for the similarities of symptoms? Looking to the origin of 'dark night' may provide some insights into this question and also may offer the skilled helper a greater understanding of these two in their distinctness.

'Dark Night' and Its Epigenetic Origins

The experience of God just as in knowing self, others and the world, is intimately

related to how we categorize experiences as we internalize them. Rizutto notes that our God representations are formed not only in the early interaction of the infant with its primary caregivers, but simultaneously according to social, political, historical and religious contexts. The relationship with one's parents influences one's affective, preverbal component of God while the latter influences and shapes one's thoughts about God within the context of cultural forces. (Rizutto, p. 209). Like all other constructs and affective representations, our ideas and our representations of God with their more affective aspects face lifelong reorganization as we come into contact with different experiences of others in the present. As we "imagine new possibilities for the future, we inevitably rework our historical memories and representations." (Randour, p. 103). Randour further notes that in this process, disharmony inevitably arises between one's concept of God and one's more affective representations of God and of personal identity. Thus, relatedness or lack of relatedness to God impacts on identity questions.

Although some disharmony will be tolerated for awhile between a concept of God, and one's representation of God and self, eventually we demand congruence. We may achieve this by discarding our original ideas about God in favor of a new concept of God, and a new sense of self...[or] some...may sacrifice self-development in favor of maintaining their current concept of God (Randour, p. 104).

'Dark Night' and Depression: Discordant Sounds in Human Experience

Who would get up at 3 A.M. on a Saturday to drive out to a nature center to watch for owls? Recently the Audobon Society ran an ad in the Chicago Tribune offering an 'Owl Watch' at 4:30 A.M. The limit of twenty-five persons responded and followed the guide through various Forest Preserve sites. Though the participants neither heard nor saw a "hootin' thing" that particularly cold and damp morning, one participant

later expressed these observations: "The individual sounds of other birds in the pre-dawn morning, though discordant, nevertheless formed a part of the experience of listening/waiting. Geese, crow, a duck, cardinal, robin...all local birds with distinct territorial calls formed a backdrop for the experiences that are natural and not uncommon in this particular Illinois setting before dawn in early March."

Though birds of a "different" feather, the discordant sounds of depression and 'dark night' may be a simultaneous occurrence in an individual's life-long quest for identity and for destiny, a quest begun long ago within the original experience of human bonding. How so? Whether one revises, maintains, or discards one's notion of God and its related affective impact, or God-representation, Randour concludes that how one imagines, thinks and feels about God, closely connects to the level of resolution one has achieved with one's internalized primary caregivers. This, in turn, impacts one's relationship to self and to others in the world. (Randour, p. 104)

Peter Marris in "Attachment and Society," concurs. "The loss of any unique relationship evokes the vulnerability of all of them...the fragility and our uncertain ability to protect what we love" (Marris, p. 197). He further notes that even if we choose a symbolic relationship (eg., brides of Christ, children of God), humans structure the meaning of life in search of exclusive ties of relationship that seek the same nurturance and support present or missing in that original bond (Marris, p. 199).

Some Implications for Pastoral Counseling and Spiritual Direction

Insofar as they both surface issues of identity and destiny for an individual, both 'dark night' and depression share the same habitat: human experience of self, others and

God. From the literature reviewed in this chapter, they also both share the same starting point: the nature of the bond developed early on with primary caregivers. Since both human experiences tend to thrust an individual into uncharted territory, each causes stress or concern. Here the similarities end.

Depression is an ever-limiting reality that, when untreated, progressively constrains relationships and undermines trust. 'Dark Night,' on the other hand, signals an ever expanding relationship that generates ever deeper and wider levels of trust in self, God, and others when its "unseeing" and "unfeeling" nature are recognized as the process of growth toward God, into God, initiated by God.

In a therapeutic context, the pastoral counselor can suspect that as developmental and relational issues gradually emerge and change over time in the therapeutic alliance, the client's God-relationship may be in equal need of examination. Mary Jo Meadow's article helpfully illustrates this when she elicits the presence of both depression and spiritual 'darkness' in the writings of Dag Hammarskjold and Simone Weil.

How essential then are recommendations for competent spiritual direction! Undertaken simultaneously outside the therapeutic context, spiritual direction would appropriately assist the client in enhancing his/her God-relationship. In spiritual direction appropriate interventions that encourage the client to "stay with" the 'dark night' experience in service of growing development in the person's God-relationship would be more advantageous than "working through" the constraints that early concepts and representations placed on personality development. The added course of spiritual direction could further insert the client within broader circles of faith community and

traditions, thereby expanding his or her relationships outside the therapeutic context --- an important component for depressed persons whose sphere of healthy relationships often is diminished.

Conversely, the informed spiritual director, aware of the personal identity/developmental issues at stake in one who presents God-relatedness concerns, can focus a sensitive ear for signs of depression as well as of 'dark night' and offer the directee an understanding challenge to examine the possible helpfulness of counseling/therapy. Undertaken in tandem, spiritual direction and counseling or therapy would undoubtedly expand the directee's gradual awareness of self and enable their work through identity issues that may presently inhibit one's relationship with God, with others and with one's self-understanding.

Therefore, it is quite possible that in the course of therapy, counseling, or spiritual direction, the skilled helper can identify either depression or 'dark night.' Indeed, as one starts from the point of either depression or 'dark night', one may find that a depression may precipitate 'dark night' or vice versa. Finally, growth in a helping relationship may be dependent on the individual's enlisting in its complementary process: either spiritual direction or therapy/counseling. Then a concerted effort may bring into the client's awareness the discordant soundings of depression and 'dark night' in human experience. Their similar origin and how these both impact the client's identity and destiny will become gradually evident. In therapy/counseling, such an awareness can enhance interventions through accurately naming the client's suffering/concern and providing accurate therapeutic goals. Accordingly, in the course of spiritual direction,

such awareness can help the individual see his or her concerns within the context of all human experience. This can defuse the director's fears of losing one's faith; or of feeling that they are the only person ever to experience the 'dark night.' Working together in this way, both therapist/counselor and spiritual director can provide healing within a holistic approach that values the complexity of the human condition.

While God-relationship issues certainly have a place for examination in pastoral counseling, spiritual direction does not. Conversely, while developmental issues certainly impact one's God-relationship and spiritual growth, they require more focused attention outside the arena of spiritual direction. All the more necessary for professionals to have knowledge of these disciplines and how intimately they are connected.

In much the same way, aerobic activity can be therapeutic; yet, if the pastoral counselor or spiritual director were to employ this intervention at some point in the session itself, the original client-initiated contract would be compromised. Whenever we blur the purposes and goals of one discipline with another within a session we risk creating diffusion rather than the true integration we seek to facilitate. When disciplines with separate goals become merged, they disappear much as the buildings along the Chicago Lake front on a foggy day. Integration, on the other hand, harmonizes distinct yet complementary disciplines as a musical chord sounded on a piano. The beauty of the new sound occurs because each distinct key contributes to the whole and remains to be heard. Therefore, accurate knowledge and personal experience of any intervention: therapy, spiritual direction or aerobic activity enhance the pastoral counselor's or spiritual director's personal/professional growth and concomitant effectiveness in the

healing process (Kennedy-Charles, p. 403-409). We move now to our last chapters that examine aerobic activity and prayer as adjunct interventions for certain types of depression; for the reduction of state anxiety; and for effective stress management.

INTRODUCTION TO CHAPTERS V AND VI

AEROBIC ACTIVITY AND PRAYER: CATALYSTS FOR HARMONY IN BODY-MIND-SPIRIT CONSCIOUSNESS

Recently I returned home restless and mentally spent after eight hours in a new department at work. Though I knew my colleagues well from a previous project, saying good-bye to friends in my former department was far from easy. After a light supper and reading the paper, I found that the restlessness had not subsided, so I decided to attend a nearby aerobics class. Returning home about 8:30 P.M. I felt refreshed, alert, and relaxed. I subsequently engaged in two hours of quality study and a time of prayer before retiring. I was amazed and grateful to God for the "transformed" me that had emerged in response to an emotionally challenging day. Since I usually exercise in the morning, and then become absorbed in the day's activities, I had been previously unaware of or insensitive to the alert and refreshed body-mind-spirit state that follows exercise. Graduate school, participating in a pastoral counseling internship as well as working three part-time jobs to make ends meet certainly provided generous amounts of stress. Along with a healthful diet and enough rest, aerobic activity and prayer proved to be catalysts for managing a stressful time in my life. Why and how much do aerobic activity and/or prayer help manage stress, state anxiety or certain types of depression?

Embodied mind-spirits that we are, stress impacts us physiologically, psychologically and spiritually. Earlier, in chapter III we examined the ways stress may

accompany depression and may affect an individual neurophysiologically to the point of releasing stress hormones; physiologically to the point of tissue damage; and spiritually to the point of disrupting our orientation to relationship with self, others, the environment and God. Chapter V will examine how and why aerobic activity may help manage stress, state anxiety or certain types of depression as well as offer some possible exercise prescriptions and important variables of aerobic exercise in treating certain types of depression. Chapter VI will explore two dimensions of prayer and the possible contributions prayer may have in stress management as well as its helpfulness as a therapeutic intervention for mild depression.

CHAPTER V

AEROBIC ACTIVITY: POSITIVE ADJUNCT INTERVENTION FOR SKILLED HELPERS IN ADDRESSING MILD DEPRESSION AND/OR DARK NIGHT

Until the late 1960's, most skilled helpers often overlooked aerobic exercise as an effective adjunct for some mood disorders (See Raglin & Morgan's article as well as Taylor et al.). Even now, neither the DSM-III-R nor Waldinger's comprehensive Psychiatry for Medical Students mention exercise under treatment modalities for mood disorders. It is the purpose of this chapter to review some of the literature that examines the relationship between aerobic activity and well-being that many health care and mental health care professionals are beginning to acknowledge and affirm.

Aerobic Activity: Effective Antidote for Stress and Mild Depression

Herbert Benson, M.D., identifies two inborn body mechanisms that act in counterdistinction to each other: the fight-or-flight response and the relaxation response. A protective mechanism that allows adaptation to danger, the fight-or-flight response to stress elicits those characteristics we named in Chapter III. There we saw the negative impact stress had on the harmonious connection of our body-mind-spirit and its underlying orientation for relationship. Increased heart rate, blood pressure, chronic pain, anxiety, disquiet, a decrease in the body's immunological capacity accompany our inability to flee or fight some daily concerns, world crises, or changes in social

standards. An alternative and equally possible response to stress is the relaxation response.

Not to be confused with simple rest, the relaxation response is characterized by lowered blood pressure, breathing rate, slower brain waves, and feelings of peace and tranquility. The relaxation response can be elicited by repetition of a word, phrase, prayer or muscular action while passively disregarding everyday concerns if they intrude. Benson notes that various cultures and religious traditions have developed techniques to evoke this response in order to attain union with God. The West confined this kind of prayer to mysticism. He suggests that the rosary may have been the first routine religious practice introduced and retained in the West. In the East, the much earlier "Prayer of the Heart" or "Jesus Prayer" elicited the relaxation response for that tradition. Similar secular techniques for inducing this response are autogenic training and progressive muscular relaxation.

The relaxation response works after someone has practiced the technique 10-20 minutes two times per day for about a month when the body responds with decreased norepinephrine levels, one of the main neurotransmitters involved in the fight-or-flight response. Further, the right and left hemispheres of the brain interact more, permitting increased cognitive receptivity and creativity. Physiologically, a significant decrease in systolic pressure by 10mm and diastolic pressure by 5-10mm occurs; and, frequency and intensity of pain, anxiety, hostility, anger, short-temperedness, insomnia, diarrhea and constipation, measurably diminish. Habits become easier to change because feelings can emerge without anxiety (Benson, pp. 4-6).

Raglin and Morgan agree with Benson and add that a warm shower, a period of quiet rest, as well as exercise that is aerobic, are associated with similar quantitative reductions in state anxiety. They attribute the similar reduction in state anxiety to the fact that prayer, aerobic exercise, shower or quiet rest may provide distraction from stressors. Even so, qualitative differences occur between these four stress management techniques. For example, vigorous physical exercise initiates neurophysiological changes that do not occur in prayer, a rest period or from a warm shower apart from or following aerobic exercise. The anti-anxiety effects of exercise persist for 2-3 hours, a greater period of time, as well as the elevation in body core temperature, a factor many account as having immunological benefits for a person. Let us see how and why this occurs.

Aerobic Activity and the Aerobic Energy System

Aerobic simply means with oxygen, or in the presence of oxygen. Any activity that increases the content of oxygen in the blood, and requires only a few molecules of ATP (adenosine triphosphate), a chemical necessary for the conversion of the nutrients we eat into usable energy, can be considered aerobic. Aerobic conditioning is achieved through continuously maintained activities that use large muscle groups, are rhythmic, and require an expenditure of energy and increased oxygen supply. Activities such as walking-hiking, rollerblading, running-jogging, cross-country skiing, tennis, bicycling, rope-skipping and various endurance game activities are those recreational, leisure and sports activities that require a continuous, high level of energy expenditure. (Cooper, pp. 3, 8, 31-35). These and any other aerobic exercise of certain frequency, duration

and intensity, performed within or below an individual's THRZ (Target Heart Rate Zone), defines the aerobic exercise that may be a helpful adjunct therapy for certain types of depression. An understanding of the aerobic energy system will reveal the energy pathways of aerobic exercise and its physiological benefits.

Aerobic exercise depends on adequate oxygen and energy production. Three systems meet these needs. The respiratory and cardiovascular systems receive and transport oxygen from the environment to the brain and to the working muscles. The cells of the working muscles require energy as well as oxygen to produce movement. Thus, a third system, the aerobic energy system, breaks down the carbohydrates, fats and proteins we eat in the presence of oxygen, to provide energy. Consequently, our bodies need a conditioned cardiovascular system capable of supplying sufficient amounts of oxygen to the working muscles as well as appropriate nutrients to produce reactions that manufacture ATP, or stored energy capable for use. These aerobic reactions occur in the mitochondria of the muscle cell and cause the contractile elements in the muscle fibers to activate, to slide past each other and contract. Thus, movement occurs.

Activities that are high intensity but short in duration, like sprinting, a tennis serve, a volleyball spike or quickly climbing a flight of stairs, are anaerobic. That is, they supply the muscles with a limited and rapid burst of energy that does not require oxygen. Further, they utilize only carbohydrates as fuel. This results in only a partial breakdown of glucose and produces lactic acid instead of ATP. However, after the first four minutes of prolonged aerobic exercise, 99% of energy required for muscle contraction is generated by aerobic reactions. This means that the cardiovascular system

kicks in, increasing its maximal oxygen uptake 50%. At the same time, the body utilizes stored fat as well as carbohydrates and protein in the complete breakdown of glucose inside the muscle cell itself. That breakdown uses another 50% in maximal oxygen uptake and forms, replenishes or expends stores of ATP, our energy source.

Actualization of the aerobic energy system requires aerobic conditioning; that is, regular aerobic exercise three to five times per week for a duration of fifteen to sixty minutes of low to moderate activity at 50% - 85% of one's maximal oxygen uptake. Such exercise produces the following physiological benefits: an improvement in the cardiovascular system; an increase in the number and size of mitochondria present within the muscle cell; and, the trained muscle's capacity to mobilize and metabolize fat stores even while at rest or during submaximal aerobic activity (Cooper, pp. 7-50). Another benefit, increased bone density, is especially important for women who after 35, are prone to a significant loss in bone density and increased risk of osteoporosis (Dishman, p.20). Increased muscle strength and flexibility reduces lower back pain and enhances body shaping through toning (Dishman, p. 21). Further, an elevated core body temperature occurs in response to vigorous exercise, producing pyrogens as when our body is invaded by viruses or bacteria. Thus, the immune system is enhanced, perhaps explaining why regular exercisers report fewer colds and flu (Spencer, p. 292; see also Simon, p.2738). In addition to the physiological benefits of aerobic exercise, health and sports professionals report that those engaged in regular aerobic exercise of varying intensity report a significant decrease in "anxiety and depression, improved sleep and appetite, better concentration, even better academic performance" (Monahan, p. 192).

Aerobic Exercise and Affect

Comparable to psychotherapy, Dishman notes that regular exercise can abate symptoms in cases of moderate depression. Moreover, other cognitive, behavioral and perceptual reframing associated with exercise has been a successful therapeutic adjunct in a variety of psychiatric disorders. Further, the use of aerobic exercise in treating certain aspects of coronary-prone behavior and psychoendocrine responsivity to mental stress, may provide a helpful therapeutic adjunct. "Though the effective psychological dosage or modality has not been quantified, exercise offers a low-cost alternative or adjunct with healthy side effects" (Dishman, Vol. 69; pp. 125-135). What accounts for these positive changes in affect?

John Raglin and his associate, William P. Morgan, concur with Spencer that the vigorous exercise production of pyrogens has positive physiological effects on the immune system. They additionally note that the elevated core temperature may account for the reductions in state anxiety because of the biochemical changes exercise produces in the brain. Both psychic and somatic tension states are reduced following exercise. The Thermogenic Hypothesis, or to what extent temperature effects cause in part or fully reduced anxiety and a sense of well-being, needs further examination (Raglin and Morgan, pp. 181-182).

Researchers posit three additional hypotheses to explain the neurochemical changes that take place during aerobic exercise. Decreased depression following exercise has also been attributed to diversion. The Distraction Theory hypothesizes that quiet rest in an area free from distraction for a period of time from 20 - 45 minutes significantly

marks reductions in state anxiety and blood pressure. Dishman notes that the same reductions are evident after aerobic exercise rather than exercise on a treadmill. The psychological "time-out" from stress and attention to other surroundings, was helpful. These reductions in stress persist longer for those who exercise than for those who simply rested (Dishman, pp. 114-115).

The Monoamine Hypothesis theorizes that after exercise improved affect occurs because exercise alters one or all of the brain's major monoamines: dopamine, serotonin and norepinephrine. Just how this occurs needs yet to be demonstrated (Dishman, pp.101-110).

The Endorphin Hypothesis associates improved mood state following aerobic exercise with the release of endorphins and a recruitment of opiates that induce euphoria. Several authors, however, find more research necessary and are unwilling to attribute elevated endorphin levels following exercise to improved mood (Dishman, pp.113-114). At present these theories merely acknowledge a positive correlation between exercise and well-being since few studies meet acceptable standards of measurement (Taylor et al., p. 199). That the association is a positive one, however, continues to motivate researchers' attempts to pinpoint WHY and HOW.

In addition to improved affect, Taylor et al. list several additional psychological benefits of aerobic exercise in both clinical and non-clinical populations. Aerobic exercise increases academic performance and work efficiency; assertiveness, confidence, emotional stability, independence, intellectual functioning and one's internal locus of control; memory, perception, positive body image, self-control, sexual satisfaction and

well-being. (Taylor et al. p. 196). Johnsgard concurs:

Strenuous exercise is not something an expert does to you, for you or with you. It is your very own virtually cost-free, self-administered, guaranteed intervention. Each day you can lace on your two sneakers, the one named "control" and the other named "hope." Helplessness and hopelessness breed depression (Johnsgard, p. 144-145).

Aerobic Exercise as Therapeutic Modality

At Trinity House, a spiritual and psychological part-time, non-residential treatment facility for men and women in ministry, other certified aerobic instructors and myself conduct aerobic exercise classes which are integrated into the overall program. Clients at Trinity House are required to engage in an hour long aerobics class each treatment day. For some, this means three times per week; for others, five. A structured class is the preferred exercise modality because it can be monitored safely by certified instructors and by participating staff within a safe, confidential environment that running-jogging through a Chicago neighborhood may not provide. The classes vary enough to meet each client's personal exercise needs: low impact, high impact, use of weights, chair aerobics, step aerobics, use of elastic bands, standing and supine leg and abdominal exercises ...all with differing music programs. On occasion, at the end of the hour's cool down and stretching period, guided imagery along with music enlists the client's imagination while encouraging the client to enjoy the state of well-being that follows vigorous exercise.

Staff members recognize that as a treatment modality, aerobic exercise is additionally a helpful paradigm for therapy. By the level of personal and group interaction within the aerobics class, instructors and staff can perceive when clients may

be struggling with different stages of therapy. If the level of interest, exertion and participation progressively wanes, that client most likely will quit their therapeutic endeavor before long. Gains in cardiovascular fitness as in therapy, require personal effort as well as a supportive, professional staff. There is a high correlation between those who personally invest in the "work out" and those who eventually succeed in similarly "working through" other issues.

Additionally, the staff reports that a marked difference and interest in body-awareness occurs as the client becomes more aware of their inner world in the other therapeutic modalities. Clients are encouraged to purchase comfortable exercise clothing that feels good and enhances body contours; to purchase appropriately supportive aerobic shoes. For some clients whose identifying religious dress, role or lifestyle was/is inhibiting, this alone is a helpful "permission" to examine physical or conceptual constructs that may presently or residually exist in present/past self-perceptions regarding sexuality and body image.

Along with other diagnostic testing, a physical exam clearance is required for participation in the aerobics class. This is the beginning step of a therapeutic process that encourages clients' personal responsibility for their physical well-being during the exercise period and beyond the therapeutic environs. Each is taught to compute RHR (resting heart rate) which when retaken at six-week intervals, is a concrete measure of cardiovascular fitness. Keeping a record of one's personal improvement: lower RHR and increased cardiovascular fitness is a personal goal that minimizes comparison or competition in the aerobics class section. The THRZ (target heart rate zone) is also

determined individually and the heart rate monitored four times throughout each class so each client can gauge his/her own level of appropriate exertion. (See Appendix B for information in computing these two figures.) Concomitantly, clients are frequently asked throughout the class how they feel. Being out of breath or unable to talk while exercising at any point, indicates one is working too hard and perhaps even anaerobically. Further, clients are repeatedly exposed to the names of muscles that are being worked or stretched, and are invited at the beginning of class to identify which particular muscle or muscle groups of their bodies they would like to exercise. (See Appendix C) Safe positions, form and instruction about how to determine unhelpful muscle fatigue which can lead to injury, are also indicated. Repeated encouragement and emphasis is given to appreciate one's individual flexibility and range of motion. Fewer exercises performed with attention to correct form are more helpful than attempts to meet unrealistic expectations that compromise one's personal safety. Clients are encouraged also to go with the flow of the music, and not to be overly concerned with performance or "being perfect." As sweating gets rid of body toxins and indicates a rise in core body temperature, clients are encouraged to "listen and give attention" to this invaluable stabilizing mechanism and to respond immediately by drinking water at any point during as well as after class.

As weeks progress, familiarity and ease gradually increase while one simultaneously learns to work effectively and successfully in the other treatment modalities. The originally hesitant or perhaps withdrawn client achieves a sense of "coming home" to one's body in yet another way: sexual self-awareness as well as

attunement to the sexuality of other male and female clients. Less apprehensive, more playful, more communicative and increased willingness to have fun for the sake of having fun with others, describes the transforming dynamic between client and the rest of the class.

Care of the body mirrors care of the entire self. The goal of any authentic therapy is to generalize the new insights, cognition, and behaviors experienced in the therapeutic alliance outside the therapeutic situation. When short holiday break periods or clients' brief "vacations" from the program approach, information about as well as goals for continued aerobic exercise while away is discussed and encouraged. This serves to assist the client in assuming responsibility for this important modality outside Trinity House on weekends, during retreat, on vacation, over the holidays, and serves to invite the client to explore and enjoy a variety of aerobic exercise, so that when termination approaches, exercise goals and the practical means to achieve them will be in place. Further, a commitment to personal aerobic exercise following termination can serve to support the client's other efforts to insert their renewed sense of self into post-therapeutic life-experience by being a visible and tangible symbol tandem to the "exercise" of other life-giving cognition, behaviors and choices. Even though "how much" exercise and what kinds are most beneficial vary from person to person and are difficult to measure, current informative guidelines developed by the American College of Sports medicine provide clients with helpful parameters.

Varieties of Aerobic Exercise and Depression

Must exercise be aerobic to benefit the depressed person? Robert S. Brown,

M.D., Ph.D, insists that the exercise be aerobic to work up a sweat; at that point, the body temperature increases to 104 degrees, circulation is enhanced and a tremendous amount of oxygen reaches the brain (Monahan, p.196). Terry F. Nelson, PhD, notes that improved affect occurs only with substantial changes in the physical measures of cardiac efficiency eg., lower blood pressure, RHR, body weight...,those things that give clients motivation and prevent relapse (Monahan, p. 196). Others, like Elizabeth Doyne, Ph.D., note that improved affect can follow even anaerobic exercise, such as bench pressing, when engaged in for at least thirty minutes (Numata, p. 18). While bench-pressing, when engaged in for at least thirty minutes may be just as effective as aerobics in alleviating depression, the parameters of this type of exercise are beyond the scope of this paper. Before examining general guidelines for some specific aerobic activities, some practical points may be helpfully addressed first.

When engaged in aerobic exercise, the body requires periods of rest as well. If one engages in aerobic exercise seven days per week, he/she may experience general fatigue that can result in damage to muscle tissue as well as increase the risk of stress fractures to bone. Muscle and bone tissue need time to rest. A training effect, that is, lowered RHR and muscle tone can be achieved within 6 weeks of working within one's THRZ just three times per week for 45 - 60 min. A person can also effectively and safely work out aerobically five days per week, provided a day in between is engaged in some other exercise. Thus, it is helpful to offer clients a smorgasbord of possibilities, wherein they can vary the exercise as well as the number of days per week, and insert days of less strenuous "active rest" or strolling in between.

Mention of the reasonably safe amount of exercise is made at this point because some persons can abuse exercise and develop or feed into addictive behaviors. Taylor et al. identify the following symptoms of harmful psychological addiction to exercise: compulsiveness; decreased involvement in job, marriage, other commitments; escape or avoidance of problems; exacerbation of anorexia nervosa; exercise deprivation effects; fatigue; over-competitiveness; overexertion; poor eating habits; preoccupation with fitness, diet and body image; excessive self-centeredness (Taylor et al., p. 199).

Helpful and essential to all forms of aerobic exercise is a gradual introduction to it. Persons who have not been exercising need to check with a physician for medical clearance. Further, it is helpful to begin with short periods that are gradually increased. (See Appendix D.) Clients need to be informed also that it is more helpful to "work out" on an empty stomach than immediately after eating. A period of two to two and a half hours after a meal is a recommended space of time before commencing in exercise that is aerobic.

Each exercise period needs to begin with a gradual warm-up and stretching. The warm-up period increases body temperature as well as blood flow to the working muscles. This prevents muscle injury and thus enhances long-term commitment to exercise. At the end of the warm-up period, the pulse can be located within the THRZ, signifying a readiness to begin exercising aerobically. An appropriate amount of time similarly needs to be blocked into the end of the aerobic exercise period to allow for a gradual decrease or "cool down" in exercise before one begins floor work and/or stretching. Throughout the aerobic exercise period, the pulse rate signifies that exertion

is sustained safely within 70% - 80% of one's maximal oxygen volume. If one stops abruptly while working in the THRZ, the blood pools in the extremities where it has been meeting the demand of the working muscles. It hasn't enough time to get back to the heart. A cardiac arrest may result. For the very same reason, very hot showers or saunas immediately following vigorous exercise may be fatal. Following the cool-down, stretching allows the working muscles to release the accumulation of lactic acid that has occurred. Without stretching, this build-up results in soreness the next day or two after exercise. If heart rates do not return to normal within one half hour after exercise, or if one feels spent or wiped out rather than relaxed and refreshed, the exercise was too intense and may precipitate unnecessary injury.

If one engages in an aerobics class, or chooses aerobic walking, jogging or running, appropriate shoes are imperative to prevent stress fractures. If the mode of activity is undertaken at a health club, and is an organized class, encourage the client to be a wise consumer who checks the following: Is the facility licensed? Do instructors have an updated CPR and certification through IDEA or AFAA? What are the number of students per class? Are classes overcrowded? On what type of floor are classes conducted? Cement, terrazzo, wood, carpet, or linoleum tile covering cement will cause greater distress to the feet and joints. The ideal floor surface can be of vinyl or wood with an air cushion beneath it. Wall mirrors that assist class members to monitor safe form are advantageous as well. If clients choose to walk, jog, or run aerobically, surfaces that are firm yet "give" are beneficial and safe. Running on sand can be as hazardous as running on concrete or asphalt surfaces.

The following guidelines represent a normal range of aerobic activity. Clients need to choose those which they like and to vary them to taste.

Aerobics class:

Frequency: 3 - 5 times per week.
 Duration: 45 min. - 60 min.
 Intensity: 60% - 85% of maximum oxygen volume (See Appendix B to compute THRZ)
 Essential Format:
 Warm-up --- 5 to 7 min.
 Stretching- 2 to 3 min.
 Aerobic section--- 20 to 30 min.
 Cool Down - 5 min.
 Floor Work- 10 min.
 Stretching- 5 min.

Rollerblading and/or Biking:

Frequency: 3 - 5 times per week.
 Duration: 45 - 60 min.
 Intensity: 60% - 85% of maximum oxygen volume (THRZ)
 Essential: Attention to lower body muscle stretches in warm-up and cool down: quadriceps, gluteals, calves, achilles tendon, hamstring, hip adductor/abductor.
 Alternate days: exercise upperbody, stomach muscles; stomach curls, push-ups; pectorals, deltoids, biceps, trapezius with weights. Game activities, eg. volleyball, badminton, golf, bowling, swimming, rowing.

Walking:

Frequency: for women minimally to moderately fit: 3 days per week.
 Duration: cover 2 miles in less than 30 minutes
 Intensity: at least 20 minutes in the THRZ

Frequency: for women are moderately to well fit: 5-6 days per week.
 Duration: cover 2 miles in less that 30 to 40 minutes
 Intensity: at least 20 minutes in the THRZ

Frequency: for men minimally to moderately fit: 3 days per week.
 Duration: cover 2 miles in less than 27 minutes.
 Intensity: at least 20 minutes in the THRZ

Frequency: for men who are moderate to well-fit: 5-6 days per wk.
 Duration: 2 miles in less than 30-40 minutes
 Intensity: at least 20 minutes in the THRZ

Running:

Frequency: for women who seek high fitness: 4 days per week
 Duration: cover 2 miles in 20 - 24 minutes
 Intensity: at least 20 minutes in the THRZ

Frequency: for men who seek high fitness: 4-5 days per week
 Duration: 2 miles in less than 20 minutes
 Intensity: Additional distance necessary so that 20 min.is in THRZ

Some Conclusions

While physical activity in general and aerobic exercise specifically appear to alleviate symptoms of mild to moderate depression and contribute to improved mood state, Taylor et al. note that few studies meet acceptable standards of methodology to explain a causal relationship for exercise and well-being (Taylor et al. pp. 199-200). Even so, the vast amount of literature over the last twenty years continues to emphasize the positive potentials that exercise has in the treatment of depression. This chapter has explored some of these and has offered a sampling of practical interventions for the pastoral counsellor in an effort to augment other therapeutic modalities; and, to contribute to a holistic vision of the clients we see. One further application may be suggested here as well: the more fit relationship the helper has with his/her own body, the more convincing, empathetic, supportive and informed will this adjunct treatment modality be.

In this chapter we have also noted that the relaxation response and aerobic activity among other behaviors, reduce stress for varying lengths of time yet in qualitatively

different ways. Perhaps activity that is aerobic might beneficially precede an individual's designated time for prayer. We turn now to examining how prayer as a therapeutic intervention includes but is not limited to the relaxation response in addressing mild depression.

CHAPTER VI

PRAYER: ADJUNCT INTERVENTION FOR ADDRESSING MILD DEPRESSION

Steven N. Blair notes that for 99.5% of 500,000 years of human life on this planet, humankind lived in nomadic/semi-nomadic groups, sustaining themselves by hunting and gathering food. He offers four rather arbitrary time periods as a way to appreciate some historical and evolutionary perspectives on lifestyle and health: "the pre-agricultural period, from the beginning of human life up to about 10,000 years ago; the agricultural period, from 10,000 years ago until about 1800; the industrial period, from 1800-1945; and the nuclear/technological period, from 1945 to the present (Blair, p. 75). Blair's categories apply to the experience of first world countries wherein amply varied food supplies, labor-saving devices, and a sedentary lifestyle leave us poorly prepared to deal with the stress that accompanied the profound and rapid changes characteristic of the blessing-curse of our nuclear-technological era.

In our last chapter we examined the ways aerobic activity may help alleviate mild depression and may help manage stress and state anxiety. We found that the anti-anxiety effects of an hour of rhythmic aerobic activity persist for 2-3 hours. We also saw that the 'Jesus Prayer,' one illustration of Bensons' Relaxation Response, may produce a similar anti-anxiety effect which lasts 20 minutes after the focused time of prayer ends. What we name 'prayer' may include but is not necessarily limited to this technique or

to others. That we may utilize appropriately the 'Jesus Prayer', meditation, guided imagery, the Spiritual Exercises or any other 'prayer technique' as a therapeutic intervention, it is important to understand them within a larger context: for the purpose of harmonizing our intra/extra physiological, psychic and spiritual orientation for relationship. Thus, the contributions prayer may have for positive therapeutic outcomes when used as an adjunct intervention for mild depression, depend largely upon how we understand prayer and its role in the therapeutic process.

Prayer as Relationship

Leech identifies basic human prayer as that activity we all do. He defines natural prayer as the articulation of our longings, desires, deepest wishes, joys and sorrows to other people or to some unknown force in the universe. (True Prayer, p.7). Even though not all prayer is directed to God at this basic level, it nevertheless opens us beyond ourselves and immerses us in the reality of another or an external power.

Christian prayer builds upon basic human prayer yet moves beyond with its specific focus in Christ and with its Trinitarian understanding of God. The Christian God is a community of Persons --- Creator, Redeemer, and Sanctifier --- who are an eternal loving movement of self-giving Persons relating toward each other in loving unity and distinctness (Gallagher et al. p. 8).

For Christians, the ecstatic intimacy and sharing of Personhood of the Triune God resonates in humanity wherein we are continually invited to share intimately in the gift of each Person within the Trinity. The tri-partite dynamic of self-others-God found in Jesus' distillation of the Law, "Love the Lord God with your whole heart and love your

neighbor as yourself," mirrors the imprint of the Trinity within each of us. In effect, Jesus revealed that the quest for union with God and the quest for union with humanity is a single quest. Therefore, the experience of self and God are intimately bound with the quality of our relatedness with self, with others and with our environment. Whenever we experience alienation in any one of these interconnected spheres, we experience a similar disharmony between ourselves and God. For the Christian, those three Persons whose mutuality captured visibly in Rublev's icon, "Trinity," both model and at the same time lovingly create and nourish the hunger within the human spirit for "kindred spirits." In this sense prayer can be understood as relationship. How does this impact the process of pastoral counseling?

Through a therapeutic relationship the pastoral counselor works to offer space for clients to experience the offer of God's personal concern and friendship for them and for our work together; of Gods' compassionate understanding and desire to heal and transform whatever is out of synch for them personally so that they might live more hopefully and happily even if external conditions cannot be changed. Further, we hope that the quality of the relationship communicates God's trust in this individual's goodness. Therefore, whatever challenges to growth and change may arise, we strive to offer the client that support and strength which renders change possible when insight comes.

Relational Model theorists and practitioners note that it is the relationship with another that heals (St. Clair, pp. 1-35). Pastoral counseling offers the pastoral counselor opportunity to consciously foster and nourish a context for the therapeutic relationship

that includes God's healing presence and activity. In so doing, the skilled helper inserts the therapeutic relationship into a larger context and thus opens self and client to more than techniques, or expertise though these are essential. Furthermore, like any other relationship the client may present for examination, the pastoral counselor encourages the client's introduction of material related to his/her God relationship. Thus, one indicator of health/pathology may be the client's perception/experience of God. Conversely, an indicator of authentic therapeutic change may be a change in the client's God image and experience of God.

While the therapeutic relationship supports, affirms, strengthens and enhances the life of the client, it is more than any single intervention or session. So too, when Christians speak of our relationship with God in Christian prayer, prayer becomes more than any single technique, or religious practice. Prayer as technique and prayer as relationship are interactive; however, they are two separate issues and need to be viewed as such.

Prayer as Technique

In this paper we have referred to several modes of prayer which can be defined as techniques or strategies which may facilitate the pray-er's relationship with God, with self, with others, with one's environment: the Spiritual Exercises of St. Ignatius, meditation, guided imagery and the Jesus Prayer. One may consult innumerable books and monographs that expertly describe many facets of these techniques and so we will not go into any one of them in great detail. Our primary concern at this point surrounds the pastoral counselor's use of these techniques as adjunct interventions for stress

management, state anxiety and mild depression; and out of that concern, to suggest some general guidelines.

The suitability of any therapeutic intervention, a prayer technique or otherwise, can be measured by how well it enhances and harmonizes the client's orientation for relationship within, with others, with God and with one's environment. The following questions are an attempt to suggest some criteria.

Does the pastoral counselor have the necessary skills to provide adequate client preparation for the prayer intervention of choice? Will this prayer strategy enhance the therapeutic relationship? Will this technique enhance the rhythm of encounter and response in the client's God-relationship? Because Christians believe that the living God is social, that is, a Trinity of Persons involved with humanity as well as with individual persons, will the intervention of choice enhance the client's other interpersonal relational spheres? Does the technique engender the client's orientation to reality and a corresponding awareness or wakefulness to the reality and presence of God in all of life? Does the technique facilitate non-censured self-disclosure with God that will enable the client to translate insights learned in the therapeutic process into "letting go" of what he/she sees as unhelpful and to risk "trying on" new modes of relating? How well does the technique foster the client's "being with God" or resting in God so that one can experience self-worth apart from immediate and tangibly measurable "success?" Does the technique facilitate the client's exploration of his/her God relationship in a way that affirms and supports a transformation that involves an integration of body-mind-spirit that is open to a service oriented, sensitive, intuitive wisdom that looks at each life experience

freshly and without preconception?

Therapeutic Dimensions of Prayer: Relationship and Technique

In 1977 the American Psychological Association called for research that would critically examine the clinical effectiveness of meditation. They defined meditation as "a family of techniques which have a conscious attempt to focus attention in a nonanalytical way nor to dwell on discursive ruminating thought" (Shapiro, p.6). Interestingly, the articles submitted and collected into a single volume, Meditation: Classical and Contemporary Perspectives primarily focus on non-Christian meditation even though the editors envisioned the work to be non-cultic in scope. They concluded that meditation as a prayer technique did not differ from other self-regulation strategies (eg., the Jesus Prayer, the Relaxation Response) for "general relaxation" either physiologically or clinically (Shapiro, p.41). They perceived its uniqueness, however, in the way an individual experiences meditation and interprets life because of meditating. Those who meditated while others employed self-regulating strategies expressed more positive estimates of their behavior (Shapiro, p.10).

Even so, certain client populations may experience adverse effects. Whether non-Christian or Christian, prolonged periods of meditation may increase anxiety, boredom, confusion, depression, restlessness and withdrawal. In transcendental meditation, feelings of dissociation and occasional dizziness were also reported. Clients for whom meditation may be contraindicated were those who perceived its practice as a powerful avoidance strategy or as a means of resistance to painful areas of their lives. Those who were shy and lacked social skills or appropriate assertiveness did not benefit

from meditation. Additionally, Shapiro noted that meditation may not be useful for the chronically or seriously depressed whose tendency toward inactivity and isolation impairs relatedness (Shapiro, pp. 8-9).

Those clients who possess an external locus of control or those who may be obsessive-compulsive and tend to dwell in a ruminative manner on trivia or nonessentials, benefit least from transcendental meditation (Ellis, p. 672).

Additionally, meditation techniques that emphasize spiritual, noncorporeal or sacred outlooks that deny our essentially human, fallible condition deplete the client's capacity to fully accept themselves as limited and "on the way." Such a stance denies the Incarnation in Christian tradition. Christian history reveals that the experience of God in our tradition is that of a God who is known in the midst of the turmoil of human struggle and not one who exists above and beyond it. If meditation forges an ever greater split between sacred and secular, between our limitedness and transcendence, then the client may suffer the needless and foolish sacrifice of many potentially fulfilling experiences that can bring about health. The Exercises of St. Ignatius of Loyola are but one concrete strategy among others within the Christian tradition that facilitates the prayer's consistent interiorization of the Incarnation in its goal: contemplation in action. Its ultimate aim as the aim of some other approaches, is to see things just as they are. We can see from this lengthy list of concerns regarding meditation, that matching interventions of prayer techniques to clients and their respective clinical issues is complex and requires knowledge of the technique and its possible ramifications.

Should the practitioner choose to use meditation or another prayer strategy,

Shapiro encourages continual monitoring and offers questions for helpful evaluation. Is there an optimal maximum amount of time per day for practice of the intervention? How does one maintain adherence? Is the individual meditating for too long a time and consequently impairing reality testing? Or, in an effort to "let go" of distracting thoughts, is the individual simply not analyzing cause and effect awareness that can lead to helpful insight-producing change? (Shapiro, p.9). If evaluation feedback reflects positive therapeutic success, then termination and follow-up follow. If not, perhaps modifying the technique or dropping it altogether may be necessary (Shapiro, p.44).

In summary, we have seen that as a technique that may alleviate state anxiety, meditation accomplishes "general relaxation," as do some other self-regulatory interventions. However, in certain cases of depression, meditative prayer would be unhelpful.

Though prayer as technique may serve the growth and development of prayer as relationship, the latter cannot be easily measured. When emphasizing the relationship dimension of prayer, we noted that pastoral counselors have the opportunity to utilize the client's introduction of his/her God relationship as fruitful material for therapeutic examination much as material the client supplies regarding his/her other relational spheres. In so doing, the skilled helper may find indication of the client's desired change or lack of change. Further, we noted how prayer as relationship may inform the therapeutic context. Those who choose pastoral counselors in place of other skilled helpers usually indicate that he/she does so because of the desire that his/her religion or faith dimension will be honored. In this context, it would seem that prayer as

relationship naturally occurs within the process and content of pastoral counseling, with client and pastoral counselor's faith/belief systems enhancing the therapeutic relationship.

Choosing whether to utilize either prayer as relationship or techniques of prayer, requires pastoral counselors to be as aware as possible of our own professional and personal preconceptions, values, and biases regarding health; normality; the client's possibility of changing and interventions to accomplish positive therapeutic outcomes.

CHAPTER VII

REFLECTIVE CONCLUSION: AEROBIC ACTIVITY, PRAYER AND PASTORAL COUNSELING

Within the limits of this thesis, we have examined the suitability of aerobic activity and prayer as adjunct interventions for mild depression. We have seen that both modalities contribute to the reduction of state anxiety and to helpful stress management in qualitatively different ways. Just how the combination of aerobic exercise preceding a focused time of prayer may enhance one's relatedness to God and thus impact all other relationships, has hardly been addressed by individuals. Further studies may reveal the impact of combining both aerobic exercise and prayer as means for stress management. Keenan's brief article provides some beginning reflections in this area by a priest/psychologist-aerobics instructor.

While physical activity in general and aerobic exercise specifically appear to alleviate symptoms of mild to moderate depression and contribute to improved mood state, Taylor et al. note that few studies met acceptable standards of methodology to explain a causal relationship for exercise and well-being (Taylor et al. pp. 199-200). Even so, the vast amount of literature over the last twenty years continues to emphasize the positive potentials that exercise has in the treatment of mild depression. This thesis has explored some of these and has offered a sampling of practical interventions for the skilled helper in an effort to augment other talk therapies/spiritual direction.

Furthermore, while the scientific community has begun to take mysticism and prayer seriously over the last two decades, the positive impact of prayer as relationship and diagnostically correct interventions of techniques of prayer have only begun to be explored with most attention given to non-Christian meditation. Future studies might explore the complex phenomenon of both non-Christian and Christian meditation beyond their physiological impact. Deikman notes that such "spiritual materialism" interferes with the real potential of meditation and is like "collecting oyster shells and discarding the pearls" (Deikman, pp. 679-80). He further notes that though this seems awkward to the scientific community, it is necessary for the spiritual growth espoused by mystics of every religious tradition: the development of an inherent intuitive capacity to perceive the reality that underlies the world of appearances (Deikman, p. 679).

Finally, we have attempted to examine the ways in which aerobic activity and prayer contribute significantly to enhancing harmony within our body-mind-spirit because each addresses our pluripotent consciousness in ways that talk therapies alone do not.

APPENDIX A

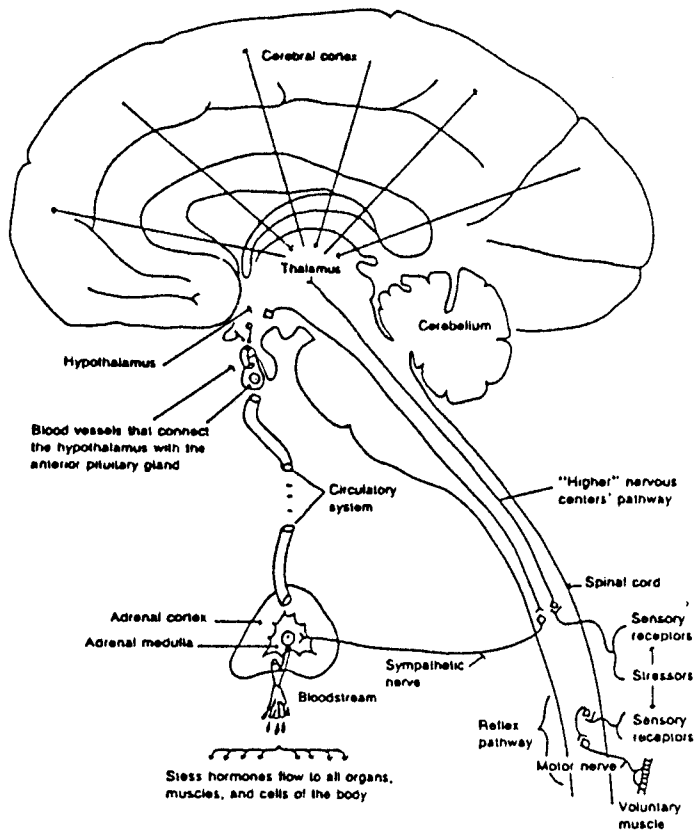
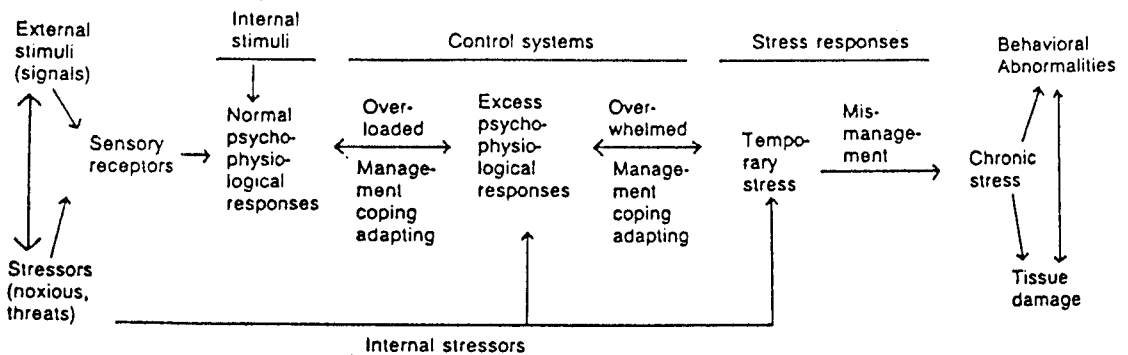


Figure 4.1 Pathways of stimulus-stressor responses.



*The pathways of signals between the nerve-hormonal systems and the psycho-physiological system are omitted. These pathways are outlined in Figure 4.1.

Figure 4.2 Stimulus and stressor responses.

NOTE. From Pathways to Wellness, (pp. 68 and 75) by S.R. Dickman, 1988, Champaign, IL: Leisure Press. Copyright 1988 by Sherman R. Dickman. Reprinted by permission.

Table 4.1 Examples of the Effects of Stress on the Cardiovascular, Digestive, and Muscular Systems

Cardiovascular	Elevated heart rate Increased blood pressure Increased heart rate variability Coronary heart disease
Digestive	Burning sensation in stomach, chest, and throat areas (due to increased stomach acidity) Nausea Loss of appetite Reduction in the flow of saliva Ulcers Disruption of rhythmic peristalsis (making swallowing difficult, causing diarrhea, etc.)
Muscular	Tense muscles Tension headaches Tightness of chest cavity Spasms of the esophagus/colon (Diarrhea/constipation) Backache Tension at back of neck Tension around the stomach

Note. From *A Behavioral Approach to the Management of Stress* (p. 9) by H.R. Beech, L.E. Burns, and B.F. Sheffield, 1982, New York: Wiley. Copyright 1982 by Wiley. Adapted by permission.

Table 4.2 Stress Responses: Behavioral and Cognitive Aspects

Behavioral	Decreased performance level Overcompetitiveness Attempt to control situations and people Egotism Impatience with others Generalized hostility Passivity/inertia
Cognitive	Distortions of thinking Lowered intellectual functioning Unproductive, ruminative, anxiety-generating patterns of thinking Indecisiveness

Note. From *A Behavioral Approach to the Management of Stress* (p. 11) by H. R. Beech, L.E. Burns, and B.F. Sheffield, 1982, New York: Wiley. Copyright 1982 by Wiley. Adapted by permission.

Note. From Pathways to Wellness (p. 80) by S.R. Dickman, 1988, Champaign, IL: Leisure Press. Copyright 1988 by Sherman R. Dickman. Reprinted by permission.

Table 4.3 Examples of Stress-Related Diseases and Conditions

Cardiovascular system	Coronary artery distress Hypertension Strokes Rhythm disturbances of the heart
Muscular system	Tension headaches Muscle contraction backache
Locomotor system	Rheumatoid arthritis Related inflammatory diseases of connective tissue
Respiratory and allergic disorders	Asthma Hay fever
Immunological disorders	Lowered resistance Autoimmune diseases
Gastrointestinal disturbances	Ulcer Irritable bowel syndrome Diarrhea Nausea and vomiting Ulcerative colitis
Genitourinary disturbances	Diuresis Impotence Frigidity
Dermatological diseases	Eczema Neurodermatitis Acne
Other problems	Fatigue and lethargy Type A behavior Overeating Depression Insomnia Diabetes

Note. From *A Behavioral Approach to the Management of Stress* (p. 13) by H.R. Beech, L.E. Burns, and B.F. Sheffield, 1982, New York: Wiley. Copyright 1982 by Wiley. Adapted by permission.

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APPENDIX B

APPENDIX B

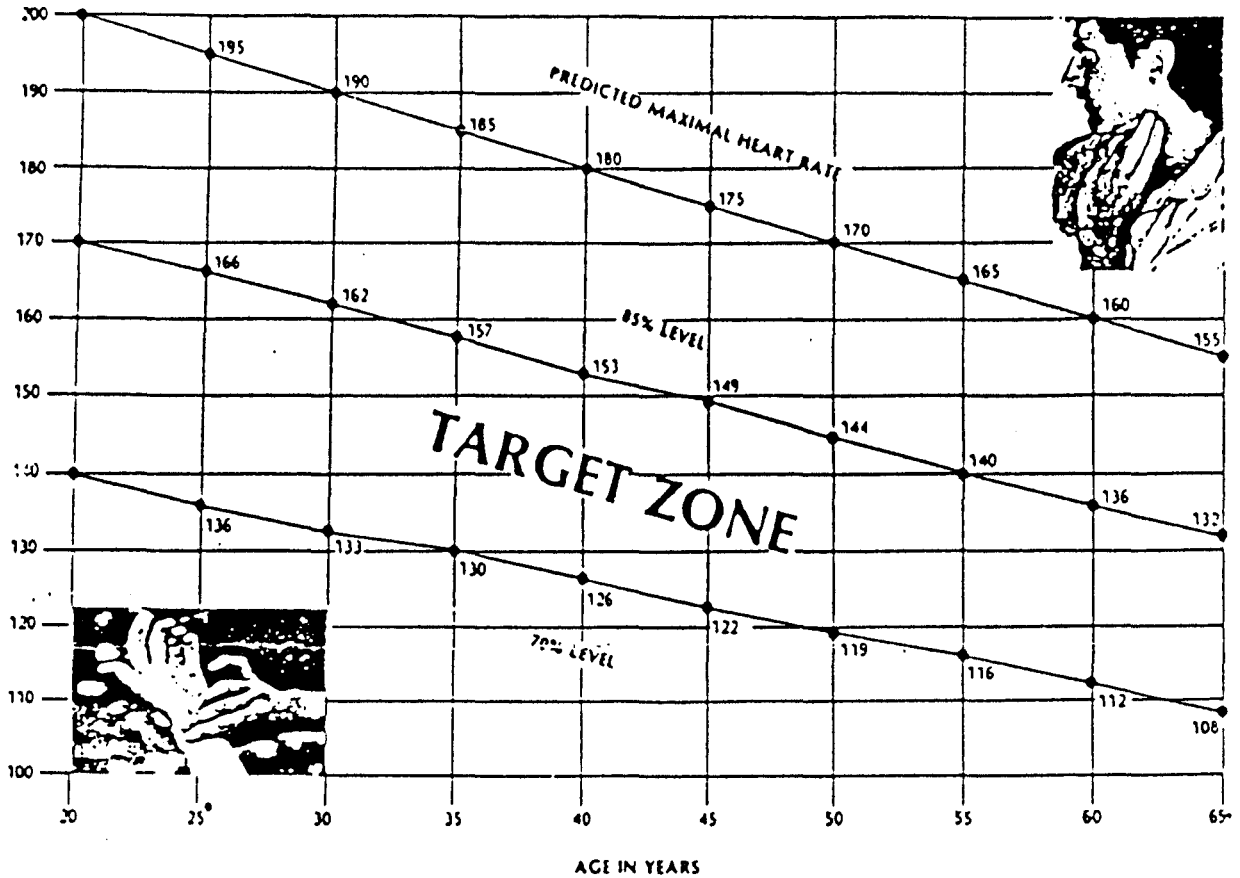
RHR --- RESTING HEART RATE

The RHR is that volume of blood the heart pumps when the individual is at rest. To determine this figure, invite the client to monitor their pulse for 10 seconds immediately upon awakening and while still in a horizontal position. Noting this 10 second pulse count three consecutive mornings and then averaging the three numbers, gives a fairly accurate RHR. As one exercises aerobically, that is, 3-5 days per week for at least 20 minutes in the THRZ, the RHR decreases and thus indicates improvement in cardiovascular fitness. Also, the pulse count taken at the end of the aerobics class will approach the RHR figure as cardiovascular fitness improves.

THRZ --- TARGET HEART RATE ZONE

Subtracting one's age from 220 indicates the theoretically maximum at which anyone's heart can beat at that age. However, one must not exercise at this maximal heart rate because it may represent a rate at which unnecessary fatigue and injury may occur. Thus, someone 40 years of age would have a maximal heart rate of 180. Multiplying $180 \times .85$, however, will give the upper level of exertion one at age 40 may safely employ: 153 beats per minute or 25 beats in a 10 sec. pulse count. The lower end of the range for a 40-year-old person can be determined by multiplying $180 \times .6$. The IDEAL point for the 40-year-old individual would fall somewhere between 70% and 80%, or somewhere between 21 and 24 beats per 10 second pulse count. Helpful charts follow.

SAMPLE OF AN ESTIMATED MAXIMAL HEART RATE AND TARGET ZONE CHART



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Table A.6 Target Heart Rates

Age	80%	70%	60%	Age	80%	70%	60%
15	164/27	144/24	123/21	47	138/23	121/20	104/17
16	163/27	143/24	122/21	48	138/23	120/20	103/17
17	162/27	142/24	122/21	49	137/23	120/20	103/17
18	162/27	141/24	121/20	50	136/23	119/20	102/17
19	161/27	141/24	121/20	51	135/23	118/20	101/17
20	160/27	140/23	120/20	52	134/22	118/20	101/17
21	159/27	139/23	119/20	53	134/22	117/20	100/17
22	158/26	139/23	119/20	54	133/22	116/19	100/17
23	158/26	138/23	118/20	55	132/22	116/19	99/17
24	157/26	137/23	118/20	56	131/22	115/19	98/16
25	156/26	137/23	117/20	57	130/22	114/19	98/16
26	155/26	136/23	116/19	58	130/22	113/19	97/16
27	154/26	135/23	116/19	59	129/22	113/19	97/16
28	154/26	134/22	115/19	60	128/21	112/19	96/16
29	153/26	134/22	115/19	61	127/21	111/19	95/16
30	152/25	133/22	114/19	62	126/21	111/19	95/16
31	151/25	132/22	113/19	63	126/21	110/18	94/16
32	150/25	132/22	113/19	64	125/21	109/18	94/16
33	150/25	131/22	112/19	65	124/21	108/18	93/16
34	149/25	130/22	112/19	66	123/21	108/18	92/15
35	148/25	130/22	111/19	67	122/20	107/18	92/15
36	147/25	129/22	110/18	68	122/20	106/18	91/15
37	146/24	128/21	110/18	69	121/20	106/18	91/15
38	146/24	127/21	109/18	70	120/20	105/18	90/15
39	145/24	127/21	109/18	71	119/20	104/17	89/15
40	144/24	126/21	108/18	72	118/20	104/17	89/15
41	143/24	125/21	107/18	73	118/20	103/17	88/15
42	142/24	124/21	107/18	74	117/20	102/17	88/15
43	142/24	124/21	106/18	75	116/19	102/17	87/15
44	141/24	123/21	106/18	76	115/19	101/17	86/14
45	140/23	123/21	105/18	77	114/19	100/17	86/14
46	139/23	122/20	104/17	78	114/19	99/17	85/14

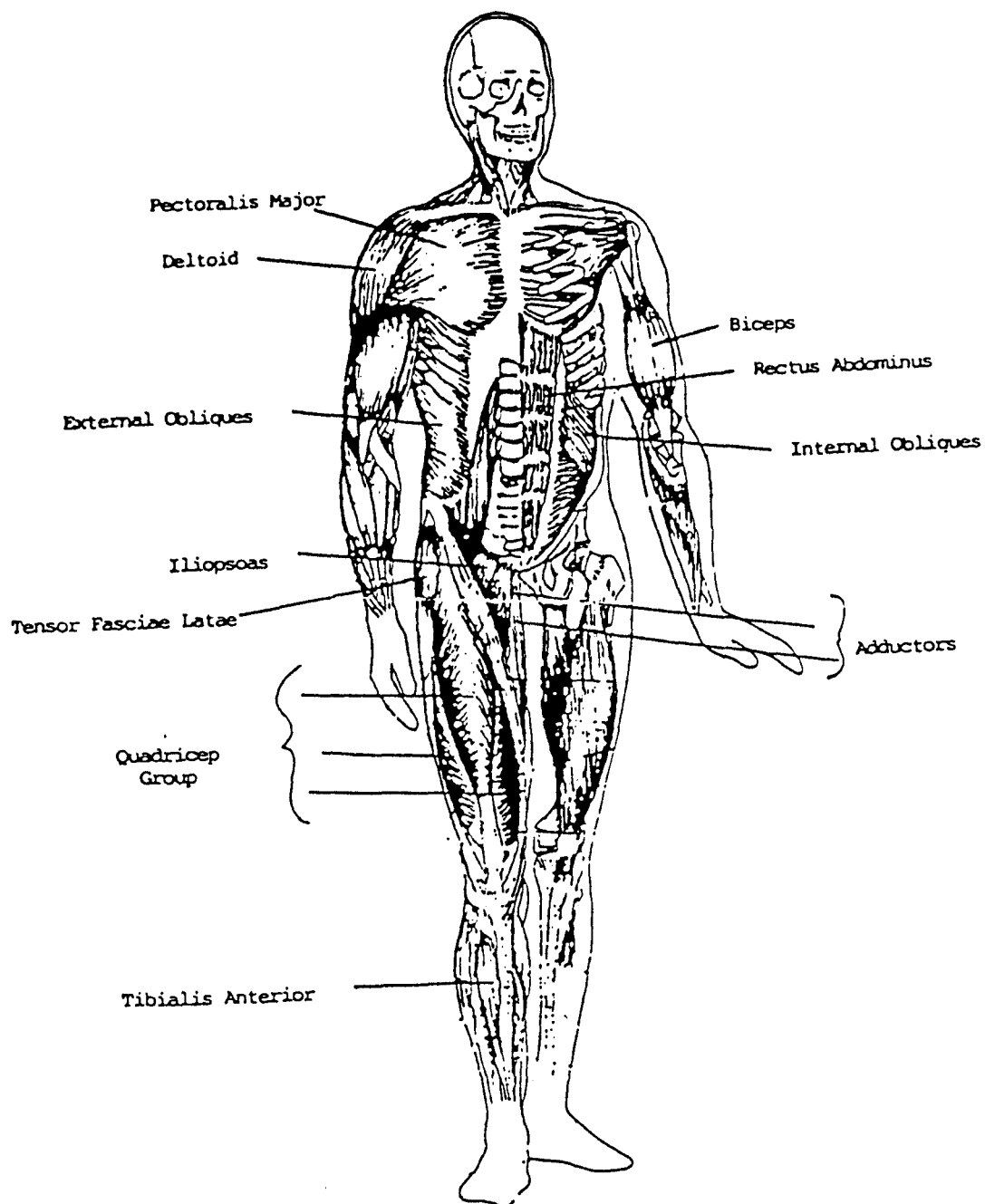
NOTE: All percentages include heart rate for 1 minute followed by number of beats to count for 10 seconds. Equation: $220 \text{ minus one's age times percent}$ was used to arrive at above heart rates.

Joanne L. Smith 1985

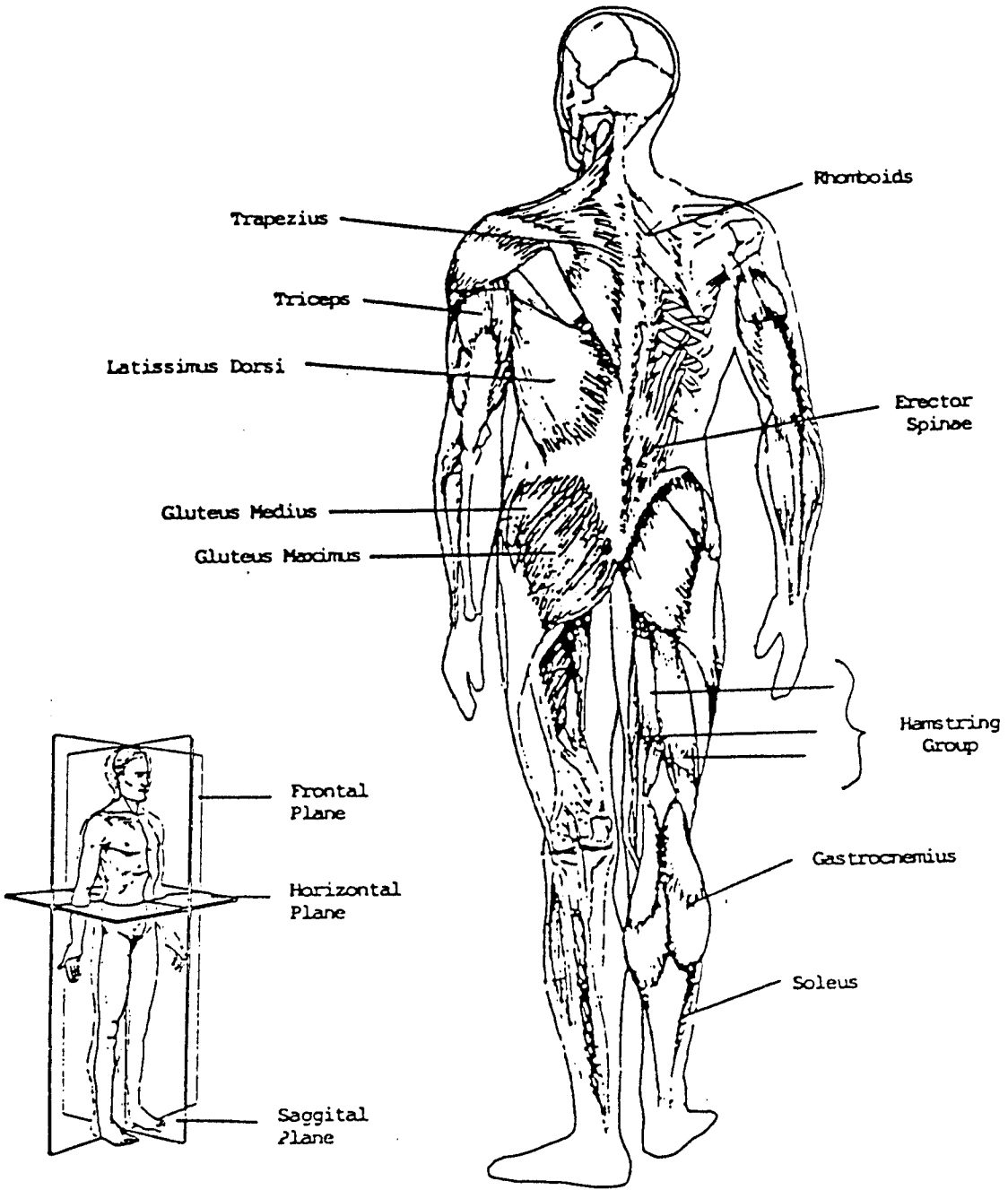
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APPENDIX C

MUSCLE CHART



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APPENDIX D

APPENDIX D

FREQUENCY AND DURATION PRESCRIPTIONSFOR VARIOUS FITNESS LEVELS

<u>Fitness Category</u>	<u>Frequency</u>	<u>Duration in THRZ</u>
Poor	Every other day	10 minutes
Fair	Every other day	10 - 15 minutes
Good	3 days per week	15 - 20 minutes
Excellent	5-6 days per wk.	20 - 30 minutes

(Cooper, p. 107)

Within a short time, the body adapts to the increased level of exertion. After the first six weeks, individuals may safely increase the time spent working in the THRZ by 1 or 2 minutes every three weeks to achieve or maintain cardiovascular fitness. Unfortunately, fitness cannot be stored. Within three weeks of interruption, the system returns to lower functional abilities before any training was initiated (Cooper, p. 111).

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VITA

The author, Linda Strozdas, ssc, was born in Sioux City, Iowa. In May 1977 she received the degree of Bachelor of Arts in English from Loyola University of Chicago. Shortly afterwards, she began studies for the Master of Arts in Theology which she received from Loyola University of Chicago in February, 1984.

Her experience with parents of students, with undergraduates, with colleagues and other adults in several educational, diocesan, congregational and parish settings led her to pursue graduate studies in Pastoral Counseling. In September, 1990, she was granted a Fellowship and an Assistantship at Loyola University of Chicago, enabling her to complete the Master of Arts in Pastoral Counseling in 1993.

Additionally, the author also holds membership and certification as an aerobics instructor in AAFA, the American Aerobics Fitness Association. Her knowledge of exercise physiology and theology has been the topic of a workshop on prayer, the Spiritual Exercises of Ignatius of Loyola and aerobic activity in Chardon, OH.

APPROVAL SHEET

The thesis submitted by Linda Strozdas, ssc, has been read and approved by the following committee:

Dr. Frances Belmonte, Director
Professor, Institute of Pastoral Studies
Loyola University Chicago

Dr. Alan Schnarr
Adjunct Professor, Institute of Pastoral Studies
Loyola University Chicago

Rev. Robert Sears, S.J., Ph.D.
Adjunct Professor, Institute of Pastoral Studies
Loyola University Chicago

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Masters of Arts in Pastoral Counseling.

9/3/92
Date

Frances R. Belmonte, Ph.D.
Director's Signature