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Lisa Smith Fibromyalgia: A Legacy of Chronic Pain

ABSTRACT

This theoretical study explored the syndrome known as fibromyalgia (FMS), a chronic pain condition which is rife with controversy about its very origins and nature. This study examined FMS from a biopsychosocial perspective, taking up the question of the relationship between the body and mind and their respective roles in pain. FMS is elucidated using an eclectic approach, including concepts from drive theory, object relations, contemporary case studies, and trauma theory (including the role of the brain in pain with no known etiology). A biopsychosocial assessment of a hypothetical client is offered in an attempt to ground the various ideas about the body, mind, and pain. This report concludes with recommendations for social workers.

FIBROMYALGIA: A LEGACY OF CHRONIC PAIN

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

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ACKNOWLEDGEMENTS

I would be remiss to look at this thesis as a product absent of the myriad hands and hearts that made it possible for me to come to Smith, and this includes the many people (many more than once) who wrote admission and scholarship letters (and offered me lower rent, and sent me books, and reassured me, and...). Thank you could hardly cover Susan, Stephen, Thayer, Bethany, Bear, Danica, Kathryn, Diana, Sister Jean, Shugen, & Ryushin. I'm committed embodying your living examples of generosity. I'm further grateful for the generous academic support I have received while studying at Smith.

Finally, to Adam and all the delicious surprises and unforeseen measures of sustenance that continue to unfold in our partnership-who could have known?

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CHAPTER I

INTRODUCTION

Fibromyalgia (FMS) is a chronic pain condition and a disease of unknown etiology that exists in the midst of controversy about what it is and whether it actually exists (Barker, 2005; Goldenberg, 1999; Hazemeijer & Rasker, 2003; King, 2005). As we will learn in Chapter III, FMS is overwhelmingly considered a "women's disease" (Barker, 2005). However, Researchers debate whether the pain is simply physical, mental, both, or neither. FMS is considered a diagnosis of exclusion, meaning that physicians have ruled out other diagnoses such as lupus or multiple sclerosis before they settle on FMS (Barker, 2005; King, 2005; Goldenberg, 1999).

FMS has been linked to psychological suffering, including depression (Alfici, Sigal, & Landau, 1989; Hudson, Goldenberg, Pope, Keck, & Schlesinger, 1992; Thieme, Turk, & Flor, 2004), and both anxiety and depression (Haug, Mykletun, & Dahl, 2004; Henningsen, Zimmerman, & Sattel, 2003). The broader category of chronic pain has also been linked to depression and anxiety in women (Keogh, McCracken, & Eccleston, 2006). Depression has been found to be the affective link between a sexual abuse history and the chronic pain of FMS (De Civita, Bernatsky, & Dobkin, 2004). One of the interesting questions that arises when we look at the presence of anxiety and depression

is, Do anxiety and depression cause FMS or are they the consequence of FMS? Depression and anxiety can be biological, intrapsychic, or interpersonal, all factors which lead us to ask questions about each of these arenas in the life of a person suffering from the pain of FMS.

Interestingly, FMS has also been linked to childhood trauma such as sexual abuse (Boisset-Pioro, Esdaile, & Fitzcharles, 1995; Taylor, Trotter, & Cuska, 1995; Walker et al., 1997) as well as abuse in chronic pain patients in general (Green, Flowe-Valencia., Rosenblum, & Tait, 2001), which directs our attention towards the interpersonal realm; yet, we cannot address the interpersonal without also asking how the interpersonal relationships affect a person's biological and intrapsychic experience. Thus, both the biological and the intrapsychic realms of chronic pain will be explored more thoroughly in Chapters IV and V. Previous studies have been concerned with the contribution of disruptive and non-sexual traumatic early family relationships in the emergence of FMS (McBeth, Macfarlane, Benjamin, Morris, & Silman, 1999; Van Houdenove et al., 2001). For example, in comparing three groups of patients with rheumatic disease including rheumatoid arthritis (RA), Fibromyalgia (FMS), and soft tissue rheumatic disease (STRD), Castro et al. (2005) found that FMS participants experienced a higher occurrence of long standing abuse, most often from family members. Abuse studies prompt the question, When we do not believe, or devalue the experience of, people who are in pain are we recreating an earlier traumatic experience?

This theoretical study proposed to examine the chronic pain condition FMS from a biopsychosocial perspective. This will be done by examining the biological, (See, for example, Henningsen, et al. 2003; Raphael, 2006; Van Houdenhove & Egle, 2004)

psychological, (See, for example, Hudson et al.,1992; Zautra, Johnson, and Davis, 2005) and social (See, for example, Goldberg, Pachas, and Keith, 1999; Hallberg and Carlsson, 1998; Imbrierowicz and Egle, 2003) literature connected to FMS, as well as by reaching more broadly into the general psychodynamic and trauma and stress literature (See, for example, Bromberg, 1998; Damasio, 1994; Herman, 1992; Scaer, 2001, & Schore, 1997, 2003) to challenge and broaden our current thinking about some of the dynamics of FMS. How we come to answer questions, such as how can we think about something we cannot explain, depends upon who is asking the question.

Given the links of the chronic pain of FMS to anxiety and depression, it seems logical that a multidimensional examination of this physical suffering is useful. However, researchers (Barker, 2005) have focused their efforts either on the medical domain, symptomology or etiology, or on psychological vulnerabilities (Haug et al., 2004; Henningsen et al., 2003) in the women who are diagnosed with the syndrome. Studies that address FMS from multiple domains paint a more three-dimensional biopsychosocial picture of the individual who suffers from this condition. In addition to examining the physiological and psychological nature of the suffering, therefore, a biopsychosocial review of the syndrome includes sociocultural considerations of those who are affected by the chronic pain of FMS. When a social work practitioner is more aware of potential familial and cultural stressors present in chronic pain, she is more thoroughly able to consider the impact of the environment on a person who suffers with FMS.

While many studies and articles consider the role of trauma, early family disruption, affect regulation, and somatization play in the lives of clients with personality disorders, few make specific connections between early childhood adversity, affect, and

the chronic pain of FMS. Further, while the somatic consequences of depression have long been acknowledged, these links between early experiences and subsequent psychological and physical experiences have not been as clearly stated in terms of their relationship to FMS and chronic pain. Given the controversy that surrounds FMS, women who are experiencing real pain can be marginalized if the disease is not considered "real."

A doctor's or a clinician's disavowal of pain—pain not considered "real—can replicate the disbelief that amplifies trauma in sexual abuse. In dismissing the pain of a woman as "in your head," society at large, and clinicians in particular, do a great disservice to those who suffer with FMS. While social workers concern ourselves with the development of suffering, we also undermine the potential healing nature of work with a client when we subscribe to the medical model's unidirectional notions of etiology. In this study, each of the factors we will consider in the pain of FMS can be considered interdependent and multidirectional. Even when we lack the words, the premise that the body speaks is at the heart of this hypothesis.

Women with traumatic histories may have developed the tendency to shield themselves from threatening affect through the body, *somatization*, avoiding the symbolic and verbal expression of pain (Blaustein, 2001). For instance, a disruption or deficiency in an early affective attachment relationship may actually inhibit a woman's ability to verbalize her own or another's emotional state (Fonagy, 2001). These threats and disruptions may be biological, internal, familial, or cultural. Yet, there has been a paucity of research which attempts to explore the interlinking biopsychosocial elements of FMS.

I believe our capacity to draw from multiple fields is a strength of the field of social work.

This study contributes to the field of social work by offering a lens to help clinicians understand the seemingly inexplicable, and often frustrating, process of chronic pain with no known origin. The distress of FMS will be elucidated through the biopsychosocial assessment of a hypothetical client. This client has not been diagnosed with FMS because she distrusts the traditional medical system because she does not utilize it. Instead, she chooses to work with alternative health practitioners by making use of techniques such as acupuncture. Her case offers us a living demonstration of how chronic pain, whether it is called FMS or not, can be assessed from a biopsychosocial perspective. Further, we will see that no aspect of her pain can be separated from psychological and social conditions. Finally, this study is attempting to advance our clinical understanding of the mysterious activity of the chronic pain of FMS.

Ultimately, this study is an attempt to make visible a clinical picture and clinical considerations of a potentially invisible and easily dismissed population: those women who suffer from the pain of FMS. When we meet a client who presents with chronic pain she should be assessed for a history of early loss, abuse, or trauma (Rubin, 2005). When we treat a client in our role as social workers, whether a client is referred to us from a physician, or whether chronic pain is one of many presented complaints, we are mostly addressing social and psychological factors. Enriching our conceptualization of the biological presentation of pain can offer us a framework from which to deepen our assessment and consequent treatment.

As social workers, depending on our training and temperament, we might be more or less inclined personally to pay attention to any of the particular factors which influence FMS. Thus, if she is most inclined to be psychologically minded one worker's bias might dispose her to lean more towards a narrow and internal psychodynamic focus, while another worker's bias might predispose her to view emotional problems as the result of interlocking systems (Berzoff, Flanagan, & Hertz, 2002). It would be impossible to take into account any of the myriad and necessarily unique biases of each person who reads this theoretical study.

Thus, this theoretical inquiry attempts to understand the chronic pain of FMS from a broad basis by utilizing an eclectic approach in an attempt to pull the best applicable theories from both psychodynamic thought and contemporary thought on stress and trauma. The purpose of this approach is to develop a richer and more in-depth approach to the assessment of chronic pain. Chapter II will focus on the methodology for formulating a biopsychosocial assessment of a client who presents with the chronic pin of FMS. Chapter III will examine FMS from a biopsychosocial perspective. Chapter IV will offer an eclectic reading of psychodynamic thought and its relationship to FMS. Chapter V will look at some of the social and biological substrates of trauma and stress which interact with the chronic pain of FMS. Chapter VI will apply these theories to a hypothetical patient who presents with multiple symptoms, including pain, as well as offer some tangible suggestions about how the clinical field of social work might better intersect with the chronic pain of FMS.

What will become apparent to the reader is that this theoretical study is filled with dichotomies such as mind and body, self and other, biological and psychological, and

internal and external. Yet, the realm of pain is paradoxically none of these singularly and all of these simultaneously. To explore the question of pain is almost like being asked to take a stance on one side of a duality. Do we choose mind or body? This dualistic approach is unreasonable because we are not working with clients in our mind, or on paper; we are working with living people who sit before us. The living experience cannot be so easily categorized. This study is an attempt to ask questions about pain from a third space, an attempt to ask, How would it be if my assessment were true for this person in this moment? Thus, there are no distinct conclusions drawn about the chronic pain of FMS, merely an attempt to explore the pain of one particular client.

This study is an invitation and an attempt to open up questions about that which we cannot explain. Social workers who work with trauma patients may encounter FMS, social workers who work in the medical field may encounter FMS, and social workers in clinical practice may encounter FMS. This inquiry will enrich our understanding of the work we do with clients in pain by taking the presentation of one symptom and exploring pain from the cellular level all the way to the social.

CHAPTER II

METHODOLOGY

Introduction

The biopsychosocial model is attributed to Engel (1977). The model is not as much a general theory, as a framework, a way of understanding the co-arising and interdependent factors of distress. "The basic distinguishing feature of the biopsychosocial model—that psychological and social factors can both influence and be influenced by pathopsychological processes—has been acknowledged in the formal psychiatric diagnostic systems for many years" (Smith & Nicassio, 1995, p. 6). The biopsychosocial model provides a model to organize and conceptualize information about a person who presents with the pain of FMS, a process which then becomes useful when a social work clinician begins to think about possible interventions.

Interpersonal, intrapsychic, and psychosocial factors in a client's life are all interacting with a particular baseline of physiology and neurobiology, thus a client should be assed both in terms of history and potential for future functioning (Derogatis, Fleming, Sudler, & DellaPietra, 1995). This thesis will attempt to use both the intrapsychic and interpersonal factors present in psychodynamic thought (See, for example, Alexander, 1950/1987; Driver, 2005; McDougall, 1989; & Sandler, 1987), as well as the

neurobiological and cultural factors present in stress and trauma theory (See, for example, Damasio, 1994; Herman, 1992; & Kandel, 1988) in order to help my colleagues in the field of social work formulate a richer, more subtle and more dynamic biopsychosocial assessment of a client who presents with the symptom of chronic pain, such as in the case of FMS. The guiding question of this methodology is quite broad, How can we conceptualize and assess a condition in which there is controversy about whether or not it even exists, while acknowledging that to deny its existence is to deny the existence of the person experiencing the pain?

Theoretical Framework

Smith and Nicassio (1995) suggest that when we treat a condition instead of a person experiencing a condition we could end up providing a caricature of care: "In emphasizing biological abnormality, the biomedical model espouses a reductionistic philosophy that frequently ignores or minimizes important psychological or social differences between patients who share the same medical diagnosis" (p.4). A person can be considered to be organized along a continuum of interlocking systems, moving inward through the nervous system, the organs system, the tissues and cells and simultaneously moving outward towards two person relationships, the family, the community, and the culture (Smith & Nicassio, 1995).

Yet, the broadest category of culture is not separate from the minute category of neurobiology (Kandel, 1998). Young and Zane (1995) write:

Culture is hypothesized to influence four major processes with respect to illness: (a) attentional processes in response to physical or emotional change, (b) interpretation of the change, (c) acting on symptoms, and (d) relabeling and reevalluation. (p. 166) The trauma and stress chapter will show that cultural attitudes affect neurobiology, thus affecting what we pay attention to, how we interpret what we see, what actions we take as a consequence of our interpretation, and ultimately how we evaluate a condition such as FMS. Further, the intrapsychic and interpersonal processes of attention, interpretation, action, and evaluation have been deeply considered in the field of psychodynamic thought. When we assess a client we are noting how a client attends to reality, which is really noting what the client perceives and what decisions she makes based on her perception.

My intention is to analyze a case in which a patient presents with chronic pain as one of her main complaints. Because of her distrust of the traditional medical model, and her lack of insurance, the patient has been treating herself holistically, working with a holistic pain management clinic. Thus, because she is not working with a rheumatologist (which we will learn in the following chapter controls the diagnosis of FMS) she has not actually been diagnosed with fibromyalgia. Nonetheless, her symptoms fit the model and provide an interesting way of examining and assessing her chronic pain from a multidimensional perspective.

In their 1995 book *Managing Chronic Illness* Smith and Nicassio (1995) provide an outline for assessing chronic conditions from a biopsychosocial perspective:

- I. The illness
 - A. Pathophysiology
 - **B.** Risk Factors
 - C. Prognosis
 - D. Diagnostic procedures

- E. Treatment procedures
- II. The patient
 - A. DSM Axis I conditions
 - B. Disease history
 - C. Personality traits and coping styles and mechanisms
 - D. Conceptualization of disease and treatment
 - E. Educational and vocational status
 - F. Impact of illness on subjective distress, social functioning, activity level, self-care, and overall quality of life
- III. Social, family, and cultural contexts
 - A. Quality of marital and family relationships
 - B. Use and efficacy of social support
 - C. Patient-physician relationship
 - D. Patient's cultural background
- IV. The health care system
 - A. Medical organization, setting, and culture
 - B. Insurance coverage for diagnostic treatment procedures
 - C. Geographical, social, and psychological barriers for accessing health services
 - D. Existence of disability benefits for medical conditions
- (p. 14)

The baseline of assessment should focus on well-being, coping effectiveness, and

psychological distress (Derogatis et al., 1995). Obviously, in a single assessment

interview I have not have been able to gather all of this information. Assessment is an

ongoing process. I do believe that I have presented enough working information, typical

to an initial intake session, to utilize both psychodynamic and trauma and stress models in order to begin to more clearly conceptualize a direction for further assessment and treatment for this particular hypothetical patient. Thus, with a model of a biopsychosocial assessment, we can begin to think about how to treat a person who experiences chronic pain (in this case akin to FMS) instead of simply, and generically, the condition of FMS. *Potential Biases*

The seeking, reading, and interpretation of the literature are all potentially biased by my own holistic experiences in the mind/body field. This history is so entrenched in my cells that it is almost virtually impossible for me to even consider that the mind and body can be spoken of as separate entities, if even for the sake of didactics. My biased perspective is woven throughout every single chapter. Further, this thesis is encumbered by my limited clinical contact with clients with FMS and a seeming multitude of women in my personal life who have been diagnosed with FMS. Thus, the work is likely to be biased by my own unconscious assumptions and curiosities coupled with a lack of professional experience.

Strengths and Limitations of the Plan

Further, any assessment is limited by not just the biases of the assessor, but also the environment in which it takes place. "The circumstances of the clinical evaluation can be artificial for the patient, as they are established primarily for the convenience of the health care provider" (Smith & Nicassio, 1995). Thus, the period of assessment is a time to develop a hypothesis about a person suffering from the chronic pain of FMS. Yet, this hypothesis could, and moreover should, be altered through observation of a client on multiple interpersonal and contextual levels, from what happens between the client and

practitioner in the room to meeting the client in her home environment. The treatment is going to depend on when and where a person experiences more or less pain. The discussion chapter will include a time-limited assessment of a single hypothetical client Thus, every factor outlined by Smith and Nicassio (1995) will not necessarily be covered. However, I will attempt to enrich each of the assessment factors they propose with psychodynamic and trauma theory as applied to the individual case.

Summary

Psychosocial factors can be causally implicated in chronic distress (such as in the pain of FMS) both directly, such as when an increase in anxiety leads to an increase in tension, and indirectly, such as when a person receives reinforcement or attention from others because of her pain (Smith & Nicassio, 1995). Thus, there is no simple mode for treating and assessing clients who present with a symptom of chronic pain, particularly when the pain occurs amidst many other symptoms as well. The biopsychosocial model is like getting a map of a hiking trail. The map can offer us a general sense of direction, but cannot anticipate the effects of rain, mud slides, fallen tress, or flooded rivers. Smith and Nicassio (1995) conclude:

The biopsychosocial model does not offer a specific blueprint for working with chronically ill patients because its application will justifiably vary from patient to patient, depending on the health outcomes of concern and factors identified as contributing to a particular case. Instead, adopting this framework allows the clinician to contextualize the patient's health problems by the full gamut of factors within different systems that may require specific evaluation and management...The major strengths of this model lie in its adaptability and accommodation to the needs of the individual patient, its flexibility of application, and the creative approaches to health care that follow from its implementation. (p. 26)

Instead, it may be much more useful to work with chronic conditions from a multidisciplinary, or treatment team, perspective (Belar & Geisser, 1995). This potential for breadth and a variety of perspectives is why bringing in theories present in psychodynamic thought (See, for example, Greenberg & Mitchell, 1983) and the trauma model (See, for example, Herman, 1992) bring vitality to the internal and external context of the symptom of chronic pain. Thus, we will begin our journey by exploring the phenomenon of fibromyalgia in more depth in the following chapter.

CHAPTER III

THE PHENOMENON: FIBROMYALGIA

FMS is not technically considered a somatoform disorder, particularly since it is a biomedical diagnosis; however the links between psychological suffering and the chronic physical distress of an unknown origin pertaining to FMS should give a clinician pause. By investigating the concept of chronic pain, as dependent upon a particular domain's bias, it becomes clear that some domains such as medicine or psychology accept and focus upon one part of the FMS syndrome while rejecting other aspects (Hazemeijer & Rasker, 2003). Psychological labels and biomedical categorizations are useful; yet it is the persons and the clinicians treating the persons who imbue the concept of pain with particular value and meaning. Thus, unexplained physical pain does not have to be dismissed as merely psychological by the medical world. Conversely, the physical manifestations of psychological suffering do not have to be minimized as merely defensive functioning by the psychological world.

This chapter will examine some current conceptualizations of the chronic pain condition known as FMS. Beginning with the broader category of chronic pain, this chapter will then investigate the basis of the condition FMS. The exploration will be done through a biopsychosocial lens. The biological section will explicate the nature of the

diagnosis, the biomedical label known as functional somatic syndromes, the stress model, and the multidimensional pain inventory with its repressive defenses. The psychological section will include studies that relate to anxiety, depression, and affect, as well as some of the psychological factors present in client attribution of syndromes. The social section will explore historical factors in the diagnosis, gender, psychosocial vulnerability and maintaining forces, family history, social supports, and physical and emotional trauma of FMS.

Certain questions are germane to thinking about pain, such as: What is pain? Can it truly be measured? Even if it is measured, could one person truly experience the pain of another? What biopsychosocial propensities make pain dehabilitating? What psychological propensities inhibit pain and allow a person to function? How is pain passed on and defined by a society? Why do some people feel emotional pain and some people feel physical pain? Those who study FMS are attempting to answer some of these questions. What they are finding is that the answer is not simple.

Although the body and mind can be viewed as distinct entities (and many articles that address the nature of the body and mind start with the Descartes' position of Cartesian dualism) everyday experience demonstrates that our bodies affect our thoughts and our thoughts affect our bodies. For instance, most people have had an experience of a churning stomach and sweating hands before a public speech, the flush of attraction, or even felt that the world looks a little more dismal after an unpleasant bout with the flu (Blaustein, 2001). Any conceptualization is bound to be limited by the theory that explains it. Thus, it cannot be reiterated enough—people are not theories. One intention of this chapter and this thesis is to underscore that when we talk about FMS, we are not

just talking about chronic pain as a concept, but rather the chronic pain of FMS as

experienced in a *person's* body.

The Nature of Chronic Pain and Pain Perception

What is fascinating about the broader category of chronic pain in general, and the pain of FMS in particular, is that the nature of pain is completely subjective. The pain of FMS actually is the pain heightened *pain perception* (Goldenberg, 1999). Blumer and Heilbronn (1982) outline the personality characteristics of persons suffering from chronic pain of an unknown origin:

- Most sufferers complained of a *continuous* pain, meaning the pain was present at going to sleep at night and on waking up in the morning.
- In the face of multiple negative examinations, pain prone persons displayed a *hypocondriachal preoccupation* with painful body parts.
- Every person in the group had undergone at least one surgical procedure because of pain and most of the persons insisted that the problem required a *surgical solution*.
- Pain prone persons denied difficulties in interpersonal relationships, described their family relationships in idealized terms, and viewed themselves as independent types.
- Pain prone persons described a history of relentless work performance beginning in adolescence, combined with relentless activity prior to the onset of pain.
- Persons displayed *anergia* (loss of initiative and zeal, combined with helplessness and fatigue) and *anhedonia* after the onset of pain.

Psychodynamically, Blumer and Heilbronn (1982) frame these characteristics in terms of ego ideal and core needs. The ego ideal (rigidly maintained) characteristics include: to be independent, to be active, and to care for others. The core needs include: to depend, to be passive, and to be cared for. Core needs are hidden by relentless activity, but dilemma of

the need itself turns into pain. According to the authors, depression results from the frustration of the core needs and the failure of the ideal.

After acknowledging that this brief conceptualization paints a broad picture and ignores the particular and unique experience of an individual, the gaps between one's perception of self and another's perception of that same self are interesting. For instance, there is a difference between a patient's perception of independence versus the acknowledged medical perception of persons as demanding and needy (Solomon & Liang, 1999). This concept of gaps will be more thoroughly explored in later chapters when basic psychological defenses, such as splitting, on an intrapsychic, interpersonal, and systemic level are examined.

The Syndrome

Fibromyalgia Syndrome (FMS) is not technically a disease; rather FMS is considered a "syndrome" of unknown etiology (Goldenberg, 1999). Medical doctors usually turn to the diagnosis after a host of other diseases are considered, tested, and excluded. Persons suffer pervasive chronic muscular and joint pain and from myriad symptoms including irregular sleep patterns, fatigue, headaches, irritable bowl syndrome, irritable bladder syndrome, along with cognitive and mood disorders (Barker, 2005; Goldenberg, 1996; King, 2005). Interestingly, advanced scanning technologies, such as magnetic resonance imaging (MRI), do not reveal any muscle or joint deterioration (Barker, 2005).

This lack of physical evidence and unknown organic etiology, combined with chronic pain and association with compounding mental disorders makes FMS controversial (Barker, 2005; King, 2005). An editorial in the official journal of Rheumatology entitled *Fibromyalgia: Scourge of Humankind or Bane of a Rheumatologist's Existence* (Solomon & Liang, 1999) uses the terms "gloomy prognosis" and "significant resource consumption" to describe the syndrome, and concludes by exclaiming, "Next patient please!" (p.1554). Although each field has a theory, no one has been able to definitively establish if the relationship between anxiety and depression and unknown physical distress is a result of an anxious and depressive reaction to physical pain, a physical reaction to a primarily psychological problem, or physical and psychological distress that is related but not necessarily from the same source (Henningsen, Zimmermann, & Sattel, 2003). Some researchers (Kosturek, Gregory, Sousou, & Trief, 1998) suggest that "patients with chronic pain patients may have different psychological characteristics than patients with hypochondriasis or somatization disorder, a plausible conclusion that dovetails with DSM IV's differentiation of pain disorder from other somatoform disorders" (p. 403).

The diagnosis of FMS has become a catch-all diagnosis for persons who are experiencing pain that doctors are unable to identify. In explicating the amorphous boundaries of FMS, and addressing the controversy about the reality of the syndrome, Barker (2005) writes,

Consequently...those who suffer from FMS find themselves in an epistemological purgatory in which they must reconcile the deeply felt contradiction between their subjective certainty of their symptoms and the inability of medical science to demonstrate their objective existence. (p.7)

The most prevalent chronic conditions that affect the United States are arthritis and musculoskeletal diseases, which obviously impacts both health care costs and utilization (Lawrence et al., 1998). In the past few decades, approximately 2% (Lawrence et al., 1998) of people in the United States are estimated to have been diagnosed with FMS, an over whelming number of them women (Wolfe, Ross, Anderson, & Russell, 1995).

Barker (2005) offers an excellent sociological critique of FMS that includes race, class, and gender. The limits of a master's thesis preclude exploring this worthy issue in its entirety; and the topic of race and chronic pain is a subject unto itself. Understanding that limit, this thesis will attempt to summarize some of Barker's discussion. Very few clinical studies on FMS mention race at all. FMS is extremely rare in African Americans, perhaps 3%. Many of the studies the studies that have correlated class to the emergence of FMS have been done outside of the United States. The data suggests that there is a negative relationship between FMS and education and income occupation, and implying that FMS is related to lower class privilege. Given what we know about the prevailing sociocultural race and class factors in the United States, it seems odd that so few Black and Hispanic women are diagnosed with FMS, particularly because these women who have been tested do not actually meet the diagnostic standards of the biomedical model (Barker, 2005).

Barker (2005) explores some factors that might account for the discrepancy, including the Black culture's normalization of suffering through the generation of a community vocabulary and source of meaning around suffering. She suggests that in Black culture pathology is not necessarily located within the individual. The Black culture is acutely aware of the social and economic causes of suffering; and thus, has a language to locate suffering outside of personal pathology. Barker (2005) goes on to discuss White America's cultural assumption that "freedom" includes a life free from pain and suffering (See, for example, Morris, 1991 cited in Barker, 2005). Although the

majority of women diagnosed with FMS are disadvantaged socially and economically and have fewer resources to address their pain, white women's position in the dominant culture blinds them to the social forces that lead to the pain. Thus, pain is internalized.

Given the existence of the compounding mental health issues FMS, which is medically considered a functional somatic syndrome, could be considered an affective spectrum disorder or a somatoform by some mental heath clinicians. Therefore, instead of breaking the mind and body into dichotomous arenas, it seems logical to consider the syndrome from a biopsychosocial perspective. By framing FMS biopsychosocially, the pain can be viewed more holistically, versus one dimensionally. The variables of this syndrome, which arise comorbidly with a mental health diagnosis, reflect the mutual dependence or dynamic relationship between them. The biomedical model has focused on one dimension of the pain. Yet, it can be argued that psychology is also biased towards the seemingly opposite dimension.

Somatic psychology, a relatively new field, attempts to address the dynamic, interdependent nature of the body and mind.

This is not the psychoanalytic notion that some of the experiences pressed out of consciousness impress themselves on the unconscious flesh in the process called somatization. It is the phenomenological notion that flesh is conscious, or rather that the dichotomy between conscious and unconscious distorts the modes of sentience available to all the body...What we think of as mental phenomena: thoughts, memories, emotions, turn out to corporeal phenomena; what we think of as bodily phenomena: postures, gestures, body habits, turns out to be emotions, memories, and thoughts. (Young, 2002, 27-28)

Somatic psychology can be considered a bit more radical than traditional psychological and biomedical research. Yet, even in fields which had separated the domains into either mind or body, new ideas about the dynamic process of body and mind are coming forward. What is most relevant for social workers, in regards to the biopsychosocial model, is the potential for the clinicians to eschew linear causality model for the multidimensional and multi-directional possibilities of etiology and treatment that are inherent in a biopsychosocial conception of FMS.

A Biopsychosocial Exploration of the Syndrome

Thinking about the body and mind with more complexity makes room for acknowledgement of the individual experiencing the distress (Gatchel, 2004; Heningsen et al., 2003). Some medical researchers are beginning to do this, though each appears to have a slightly different definition of *biopsychosocial* (Gatchel, 2004). For the purposes of this study, I will explicate some of the parameters of the diagnosis using both a psychological and psychodynamic clinical lens and utilize an understanding of biopsychosocial characteristics that include "predisposing, precipitating, and perpetuating" dimensions (Van Houdenhove et al., 2001, p. 21)

Biological

Rheumatology and the Diagnosis

The diagnosis and medical treatment of FMS falls under the domain of rheumatology. In 1990 the American College of Rheumatology (ACR) Multicenter Fibromyalgia Criteria Committee came together, created, and adopted the criteria that is now used to diagnosis FMS. Diagnosis was determined by two criteria: *widespread pain*, pain in all four quadrants of the body, and eleven or more *tender points*, out of eighteen possible points (Wolfe et al., 1990).

Functional Somatic Syndromes and Relevant Studies

FMS is categorized under the medical term *functional somatic syndrome* (FSS). A functional somatic syndrome is a group of syndromes "characterized more by symptoms, suffering, and disability than by disease-specific, demonstrable abnormalities of structure or function" (Barsky & Borus, 1999, p. 910). There is a statistically significant relationship between anxiety, depression, and functional somatic symptoms (Haug, Mykletun, and Dahl, 2004; Henningsen et al., 2003). In a meta-analytic review of four functional somatic syndromes, irritable bowl syndrome (IBS), nonulcer dyspepsia (NUD), fibromyalgia (FMS), and chronic fatigue syndrome (CFS), Henningsen et al. (2003) found a significant correlation between FSS and depression and anxiety in all four syndromes.

This correlation means that the syndromes are related to, but not dependent upon, anxiety and depression. Further, the relationship was present whether depression was measured by somatic symptoms or not. However, the authors concluded that global conclusions cannot be determined from the results, as depression and anxiety can also arise without the amplification of physical symptoms. In one possible explanation, Henningsen et al. (2003) state that the psychological factors that arise in FSS constitute one dimension of pain and that it is possible that biological or neurological components might play a role in the onset of chronic pain of unknown medical origin.

In a study conducted in Norway of over 50,000 people in the general population Huag et al. (2003) came to several interesting conclusions, women reported more somatic symptoms than men (the mean number was 3.8/2.9 for women/men) and that there is a statistically significant relationship between FSS and anxiety and depression. Granted,

the study is limited in generalizability in that the results can only be generalized to Norway. Further, the persons were not asked about the severity of their symptoms. Nonetheless, the study does point to the fact that psychological variables should not be ignored in our attempts to understand the process of pain and somatization in FMS.

Because there is not an established relationship between the biomedical model and the psychosocial models, persons are pressed to label their distress along one dimension. Given the privilege of the medical model in Western culture, there is also a possibility for pejorative judgment if researchers conclude that the psychological distress precedes the biological distress. The binary relationship between those who study the body and those who study the mind has the potential to place those who suffer with FMS in a bind. A biological explanation for the pain validates and legitimizes the pain, while a psychological explanation for the pain has the potential to stigmatize. Pain of an unknown origin is a stress unto itself. Further, stigmatization could be considered a form of social stress.

Stress

The biological and psychological impact of stress and trauma will be more fully explored in the following chapters. Briefly, in exploring the conceptualization of FMS as a stress disorder, Van Houdenhove and Egle (2004) write,

Stress may be defined as a threat to the organism's homeostasis (Chrousos and Gold, 1992), reflecting the need to maintain stability through change (allostasis) (McEwen, 1988). This threat-be it a physical assault (biological stress) or emotional burden (psychosocial stress)-activates genetically determined neuronal, hormonal and behavioural [sic] programs (the stress response system), aimed at preserving or restoring equilibrium. (p.268)

A stress model would suggest that individuals have a genetic predisposition to be susceptible to be hyperresonsive to stress, the predisposition which then interacts with environmental and developmental factors, looping towards some of the other factors that are associated with FMS such as negative affectivity, immature defense mechanisms, and inadequate stress coping (Van Houdenhove & Egle, 2004). In comparison to another musculoskeletal chronic pain population, osteoarthritis (OA), Davis, Zautra, & Reich (2001) found that women diagnosed with FMS may be predominantly vulnerable to the effects of social stress, in combination with smaller social networks that the OA population, less effective pain-coping strategies, and less positive affective resources, may increase stress reactivity and stress related pain over time for those diagnosed with FMS.

The stress model and the trauma model are often compared in studies (Ciccione, Elliott, Chandler, Nayak, & Raphael, 2005; Raphael, 2006). The stress model is not necessarily in contradiction to the trauma model (which will be explored in the social section); the model shifts the focus of the etiology. There are also financial and social implications as to the etiology of what we call FMS. For instance, in some parts of the United States chronic pain is only compensated as a disability if it was precipitated by an injury (White, Carette, Harth, and Teasell, 2000). Van Houdenhove and Egle (2004) write,

...as the patient's histories show (Van Houdenhove, 2002; Van Houdehove, 2003) FMS symptoms often start in the aftermath of a protracted period of overburdening, and are triggered by painful injury, infection, or a traumatic experience....This would suggest that the illness onset might be facilitated by a shift from within the stress system from chronic hyperfunction to hypofunction, implying an inability to adequately respond to new stressors and, eventually, giving rise to long-term disturbances in stress-regulating, pain-processing, and

immune mechanisms (Bauer et al., 2000; Clauw and Chrousos, 1997; Ehlert, Gaab, & Heinrichs, 2001; Ehlert, & Hellhammer, 2000;Gold and Chrousos, 2002; Gunner and Vazquez, 2001; Heim &Yehuda, 2002; Helhammer and Wade, 1993; Winfield, 1999). (p. 271)

Using the predisposing, precipitating and perpetuating factors of the biopsychosocial model, Van Houdenhove and Egle's (2004) model predicts that there would actually be different subgroups, who respond differently both psychologically and pathologically, within the larger FMS population. In Van Houdenhove and Egle's (2004) model predisposing factors would consist of genetic and environmental interactions, early adversities, and personality. Precipitating factors would include psychosocial stress, including a lack of support, critical life events, and posttraumatic experiences.

Perpetuating factors would include comorbid depression, comorbid anxiety, and illness behavior.

Raphael (2006) focused on predisposing factors. Raphael (2006) criticizes the self report nature of the abuse studies as well as the notion that trauma underlies the etiology of FMS, instead proposing that individuals have a "dysregulated physiological stress response system that may predate the onset of symptoms" and she names this biological vulnerability a *stress vulnerability* (¶ 1). Raphael (2006) looks at biological propensity in opposition to sociological factors and concludes that neurohormonal stress responders such as the hypothalamic-pituitary-adrenal (HPA) axis dysfunction, which will be explored in more depth throughout the chapter on trauma, function independently from childhood experiences.

Raphael's (2006) proposal that stress propensity predates trauma is quite obviously important for the medical community who is searching etiology. However, it is

not as important for a clinician to prove linear causality as to be aware of all potential sociological, biological, and psychological factors that could influence a client's presentation with FMS. Raphael (2006) aptly concludes in her article,

The search for a cause of a complex syndrome, whose very case definition rests on a single validation study (Wolfe et al., 1990) designed to operationalize diagnostic views of expert clinicians is unlikely to be resolved with a single answer... Stress vulnerability alone may ultimately explain the onset of FMS for only a subset of sufferers, but this conceptualization may be valuable if it advances treatment of this poorly understood disorder for even a few individuals. (¶22)

What Raphael espouses is a notion that is already familiar to mental health clinicians, and is particularly rich in the psychodynamic tradition. The presentation of similar symptoms does not necessarily mean that the source of the problem or the style of treatment will be the same for two different clients. A skilled clinician working with someone who suffers with the pain of FMS needs to learn to hold both the particular nature of the person and the pain conterminously with the universal nature of the pain theory.

The Multidimensional Pain Inventory and Repressive Defenses

The Multidimensional Pain Inventory (MPI) is a frequently used pain inventory (Turk & Okifuji, 2002) which divides persons into three subgroups which distinguish psychosocial actors and physical pathology. The *dysfunctional* group is characterized by high emotional distress, severe pain, compromised life activities, and a reduced sense of control. The *interpersonally distressed* group also experiences high pain and affective distress, but perceives a low level of support from others. The *adaptive copers* group is comprised of persons who experience low levels of pain and distress, and can function within limitations (Turk & Rudy, 1988). The three subgroups are considered descriptors

of how people respond to pain. We do not know why people respond in one of the three patterns. The patterns can only describe how those who suffer with pain respond. The subgroups might predict which kind of patient would respond better to which kind of treatment.

After categorizing persons diagnosed with FMS into three groups based on the MPI, Thieme, Turk, & Flor (2004) studied the relationship between Axis I and Axis II comorbidity in persons with FMS. They found that 32.3% qualified for an anxiety disorder and 34.8% qualified for a mood disorder. The numbers were higher than the general population but about equal with other chronic pain conditions. The authors conclude,

The different prevalence of mental disorders in the psychosocial subgroups supports the hypothesis that mental disorders are not directly associated with FMS *per se*, but that previous experience, coping, social supports in general, and spouse behaviors in particular could mediate the association between FMS symptoms and emotional distress and thereby contribute to comorbidity in FMS. (p.843)

Interestingly, Thieme et al. (2004) point to the relationship between mental and physical distress, not specific etiology.

Working with the release of repressed negative emotions has been found to be useful in pain relief. By adding a fourth dimension to the MPI that accounts for *repression*, Burns et al. (2001) were able to further delineate potential treatment groups. It should be stated that this use of repression is different than the traditional psychodynamic understanding. Repression here is defined as "the stylistic tendency of low scorers (repressors) to avoid or ignore threatening information" (Linden et al., 1986, p. 309). Researchers working with chronic pain found that the group which had been previously categorized as "dysfunctional" on the MPI was actually two groups. Adding a measure of defensiveness distinguished the group of repressors who were characterized by high pain, low activity, and low distress. This defensive group acknowledged physical symptoms, yet experienced low levels of emotional distress (Burns et al., 2001). Repression may inhibit the success of treatment programs (Burns, 2000).

It is possible that this defensive category might apply to those with FMS. Yet, we must be careful about making generalizations about the group as a whole. Because so many varieties of people with unknown pain end up with the diagnosis, FMS cannot be considered a block category (Thieme et al., 2004). In a select review of the literature, Turk and Okifuji (2002) consider some of the biopsychosocial factors which contribute to chronic pain and conclude that one of the most important factors in assessing and treating chronic pain is an understanding that chronic pain persons do not compose a homogenous group. The authors assert that interventions need to be developed that address an individual patient's psychological needs and modes of adaptation. For instance, in FMS, some persons may struggle with interpersonal distress, while others may cope and push on, necessitating a different style of treatment. Further research which explored a correlation between the anxiety categories present in early family dysfunction, viewed through such lenses as attachment styles and the anxiety categories present in the MPI would be interesting.

Finally, Turk and Okifuji (2002) suggest that further pain and brain research needs to be done to understand the dynamic relationship between chronic pain and neurological, hormonal, endocrine, and psychological factors. Perhaps most interestingly, the authors (Turk and Okifuji, 2002) suggest that the field embrace a dual

diagnostic system, both a medical and psychological diagnosis, for certain chronic pain persons.

Psychological

Mood

Symptoms such as sleep disturbance, fatigue, and body aches and pain are familiar symptoms present in depression. FMS has been correlated to major depressive disorder (MDD) (Hudson, Goldenberg, Pope, Keck, & Schlesinger, 1992) and a lifetime history of depression. Hudson et al.(2004) proposed that FMS is a kind of inherited psychopathology and could be one of other medical diagnoses included in a cluster diagnosis they call affective spectrum disorder (ASD). Raphael, Janal, Nayak, Schwartz, & Gallagher (2004) tested whether FMS was an affective spectrum disorder or the result of familial aggregation. The authors connected their results to the earlier discussion regarding stress vulnerability. Raphael et al. (2004) concludes,

In sum, the current study finds that increased rates of depression among women with FMS are best attributes to a familially mediated risk for depression among those with FMS. FMS and depression may be considered a part of the same spectrum, in that familial risk for depression may be manifest as FMS. Our data are consistent with a stress vulnerability model, a model finding increasing support in research on depression. Future research on the pathogenesis of FMS would be advanced by considering the interaction of environmental stress and genetics. (458)

Finally, DeCivita, Bernatsky, and Dobkin (2004) found that depressive symptoms mediate the effects of sexual abuse or pain.

Alternatively, Ahles, Yunus, and Masi (1987) did not find that the pain of FMS was a variation of a depressive disorder when they compared persons diagnosed with FMS with a known organic pathology, rheumatoid arthritis (RA) and a healthy control

group. Interestingly, however, in comparing persons diagnosed with FMS with persons diagnosed with RA, Walker et al. (1997) found that psychiatric disorders are associated with FMS, and that even if mood disorders are not considered the cause of FMS, anxiety and depression help to maintain the course of FMS. Others (White et al., 2000) have stated that psychological disturbance might have more to do with who seeks treatment than who actually develops FMS. Thinking about the effects of mood on FMS allows us to begin to conceptualize a state of pain where mood plays a role in pain, and whereby pain can be considered a form of intrapsychic and interpersonal communication. *Somatization: The Relationship to Anxiety and Depression*

Somatization is characterized by "a tendency to experience and communicate somatic distress and somatic symptoms unaccounted for by relevant pathological findings, and to attribute them to physical illness and to seek medical help for them" (Lipowski, 1990, p.13). It is a well known fact that depression and somatic symptoms are associated. In addition to personality variables and genetic factors, Lipowski (1990) proposes that somatization may be a learned family characteristic. He suggests that somatization might have been used as a way of communicating distress or to cope with stressful interpersonal relationships. Fibromyalgia is associated with depression but is not considered a form of somatization. Lipowski (1990) notes that our present definition of somatization is too narrow.

Perhaps this definition of somatization is rigid because the medical model is not clear about how to integrate psychological factors into a diagnosis without looking at those mental factors pejoratively. Further, there are no uniform criteria for depressive disorders that first manifest as somatic complaints (Lipowski, 1990). The affective
spectrum disorder diagnosis appears to be attempting to fill in this gap. Engel (2006) notes that "if the answers were simple we would have them by now" (p.187), writing that if he asked a psychiatrist about symptoms of unknown origin he is surely pointed to somatoforms; if he asks a toxicologist, he gets a description of how low level toxins can create idiopathic "sensitivities"; and a rheumatologist will have none of it. Further, somatization or physical symptoms of an unknown origin would be completely differently from a psychodynamic perspective. How FMS is understood, in part, depends on who is looking.

Positive Affect Studies

Instead of focusing on depression and anxiety, which are considered negative affects, researchers (Zautra, Johnson, & Davis, 2005) questioned if positive emotions play a role in regulating the negative states that accompany pain. Zautra, Johnson et al. (2005) found that positive affect is a characteristic of resilience in the face of chronic pain; or, oppositely stated, that low positive affect make a client vulnerable to pain and may point to difficulty in affect regulation. The Dynamic Model of Affect (DMA) (Davis, Zautra, and Smith, 2004) attempts to explain the interface between affect regulation, stress, and chronic pain. The model suggests that, depending on the perceived stress of a situation, a client's ability to distinguish between positive and negative affect in a situation varies. "Pain, then, seems to foster the collapse of affective space akin to that elicited by stress" (Davis et al., 2004, p. 1139).

For a client with FMS, this collapse of affective space would mean that she has more difficulty differentiating positive affect from stress when she is in pain. It is the lack of the regulating effect of the positive, not the weight of the negative that is attributed to

the enduring experience of pain. The inability to sustain positive affect in the face of stress becomes cyclical when a client anticipates future stresses and thus perpetuates a client's inability to respond with resilience in the face of stress (Zautra, Fasman et al., 2005).

Attribution

Persons diagnosed with FMS tend to attribute their pain to somatic rather than psychological causes. Challenging the psychodynamic repression theory, in which symptoms are viewed as expressions of repressed emotions, a study conducted in the Netherlands (Brosschot and Aarsse, 2001) tested the Restricted Emotional Processing (REP) theory which suggests that symptoms are misinterpreted in a way that is seen as less threatening than a negative affect. The authors found that while there is restricted emotional processing (REP) on state and trait levels, those who suffer with FMS have a more global way of coping and taking emotional responsibility beyond what might be expected in our baseline understanding of repression. Brosschot and Aarsse (2001) concluded that high alexithymia scores, combined with REP and somatic over-attribution, suggest *over-socialization*, defined as an "extreme beliefs ability and obligation to conform to social norms..." (p. 143). This "obligation to conform to social norms" is reminiscent of Blumer and Heilbronn's (1982) pain prone patient.

Repressors are typically defined by high defensiveness and low anxiety. The over-attribution level of *felt responsibility* of stress in persons in this group falls into the rare category of high defensiveness and high anxiety. This finding suggests that persons diagnosed with FMS "would have an unrealistically strong belief in their ability to

control their egoistic desires in order to meet social standards and at the same time experience distress in an intense or amplified way" (Brosschot and Aarsse, 2001, p. 143).

Social

Historical Factors

FMS as the condition is presently understood and labeled is rooted in a term coined by Sir William Gowers, *fibrositis*, which he used to describe inflammation of the fibrous tissue. In reality, fibrous tissue cannot become inflamed; however the term was maintained and used to describe shell-shocked soldiers in WWII who had inexplicable muscle and joint pain. Until the 1970's fibrositis was considered identical to *psychogenic rheumatism*. The fact that this is a women's disease is all but ignored in the medical literature (Barker, 2005).Barker (20005) further notes that an added dilemma for women is that—because of the women's movement, and an elevated consciousness around not labeling women's problems as hysteria, and in an attempt to distance itself from psychogenic rheumatism, and be non-biased in language—women's unexplained somatic distress is becoming "hyperbiological" and actually "accelerat[ing] the tendency towards the medicalization" of women's pain (Barker, 2005, p. 63).

Gender and Sex

Strikingly, in the 21st century, FMS affects women in disproportionately larger numbers than men. Some sources note a ratio of 6:1 (King, 2005), while others place the ratio as high as 9:1 (Hawley and Wolf, 2000). Barker (2005) deconstructs the diagnosis making of this divisive medical phantom,

The most straightforward explanation for the sudden and dramatic rise of FMS would be that the tools of medicine have only recently discovered or revealed what

has historically eluded the medical gaze or what has been crudely captured in accounts of 'vapors,' 'nerves,' 'hysteria,' or 'neurasthenia.' (p. 4)

Why might women report more somatic symptoms? Women are acculturated to be more emotionally expressive, yet might fear the stigma of a mental health diagnosis. Or, perhaps she has a family history that supports somatic expression, or she utilizes other defenses that prohibit her from being consciously aware that she is depressed. Barker (2005) concludes,

FMS is a condition whose organic basis is questioned by many biomedical clinicians, but to which a biomedical diagnosis is nevertheless routinely applied, thereby stranding millions of women diagnosed with the disorder to cope with their somatic distress without the cultural support and legitimization that a diagnosis ordinarily brings. (p. 63)

Having a name for unknown distress can provide tremendous relief to women, particularly when they are met with confusion and ambivalence from primary physicians (Åsbring & Närvänen, 2003). While clinicians who work in mental health settings cannot address the biomedical etiology of the distress, it would behoove them to understand the culture in which it is contained.

Psychosocial Vulnerability and Maintaining Forces

A qualitative study conducted in Sweden (Hallberg & Carlsson, 1998) is useful in bringing to light some of the experiences of the many to the singular voices of women who live with FMS. The authors conducted a qualitative study of twenty two women age 22-60 years-old diagnosed with FMS in order to describe the participants' belief systems around pain and the women's social and familial experiences in regards to the pain. Hallberg and Carlsson (1998) coded their data according to psychosocial vulnerability and maintaining forces. Psychosocial vulnerability revealed four themes: 1) traumatic life history, which included early loss, responsibilities early in life, helplessness and powerlessness; 2) pessimistic life view, which included meaninglessness; 3) overcompensatory perseverance, which included ambition, sociability, hyperactivity, and insufficiency; and 4) unsatisfying work situation, which included low-valued jobs, "controlled" work tasks and personal dissatisfaction.

The maintaining forces included three themes: 1) professional care, which included lack of a perspective of wholeness; 2) pain benefits, which included increased attention, and 3) family support, which included role changes in the family. Unfortunately, generalizations cannot be made from Hallberg and Carlsson's (1998) study as the sample was not selected randomly. Nonetheless, the findings seem to reinforce the previous discussion of the interdependence of internal and external factors in pain and validate a biopsychosocial framing of the distress of FMS.

Family History

Studying the role of adverse child hood factors in FMS can help break the larger group into subgroups (Imbrierowicz & Egle, 2003). Imbrierowicz and Egle (2003) found that early childhood adversities are related to the etiology of FMS. There is a significant relationship between childhood traumatic events and chronic pain. Being female and having an alcoholic parent or grandparent have been found to be the two most powerful predictors of FMS (Goldberg, Pachas, and Keith, 1999). The authors conclude,

Child sexual abuse is correlated with family history of alcoholism, drug dependency, deprivation, and other family pathology. The interaction among all of these traumas contributes to a sense of uncertainty, unpredictability, and vulnerability in the child. The child with trauma history does not develop adequate coping mechanisms to confront new accidents or illnesses in life. Any new trauma such as physical injury adds to the person's sense of victomhood. The survivor of child trauma feels severely depressed, which may account in part for the chronic depression observed in patients with chronic pain. The tumultuous early family environments of patients with chronic pain may explain their insecurity, vulnerability and negative attitude towards overcoming pain. (28)Calling chronic pain "the next frontier in child maltreatment research," Kendall-Tackett (2001) observes that pain is a symptom that links the body and mind through time.

Although this will not be an exploration of attachment theory (See, for example, Bowlby, 1988), looking at attachment theory is a useful construct to explore some of the intrapsychic and interpersonal factors present in chronic pain through time. "Attachment behaviour [sic] is any form of behaviour [sic] that results in a person attaining or maintaining proximity to some other clearly identified individual who is conceived as better able to cope with the world" (Bowlby, 1988, p. 26-27). Insecure attachment may be one stress that leads to a weakened stress system (Van Houdenhove & Egle, 2004). Using Bowlby's attachment theory as a foundation for understanding the myriad variables present in pain, Mikail, Henderson, & Tasca (1994) proposed that chronic pain "results from the dynamic interaction between biological alteration, intrapsychic factors, and external or systemic factors that are interpersonally based…intertwined in a pattern of cyclical causality...determined by the unique combination of a given biological change occurring within the context of a particular psychic structure and the associated social context " (p. 7).

The authors (Mikail et al., 1994) suggested that a psychosocial assessment of persons with chronic pain should be extended to include attachment style and predicted that insecurely attached individuals would make up the majority of chronic pain persons. The results of Hallberg and Carlsson's 1998 study of psychosocial vulnerability and maintaining forces (explored previously) supported Mikail's et al. (1994) hypothesis

which was based on clinical literature, not empirical data. Further research of the relationship between attachment and chronic pain is necessary and would benefit the field.

Attachment styles can be used to understand and articulate the processing of internal and intrapsychic emotional content. The construction of repressive defensiveness can be one way of understanding how people defend themselves from negative affect (Mikulincer and Orbach, 1995). Weinberger (1979 cited in Mikulincer and Orbach, 1995) proposed that repression is used to diminish subjective chronic pain distress and that repression is accompanied by heightened physiological arousal and active behavior. Mikulincer and Orbach (1995) used Weinberger's (1979) concept of repressors to examine the relationship between attachment styles and chronic pain in their study by distinguishing a group who tend to exhibit high levels of defensiveness with low levels of pain.

Using this definition, Mikulincer and Orbach (1995) created a construct called *repressive defensiveness* by using two self-report scales: The Taylor Manifest Anxiety Scale and the Marlowe-Crowne Social Desirability Scale. They also assessed for attachment style with two scales based on Hazan and Shaver's (1987) close relationship measures. Repressive defensiveness was composed of two parts: *defensiveness*, defined as "a tendency to avoid awareness of negative affects and impulses" and the level of manifest anxiety (p. 918). Finally, Mikulincer and Orbach (1995) created a two part memory and rating task, in which participants were first asked to recall stories that related to particular emotions, such as anger, surprise, or happiness and then later asked to rate their experience of telling each story.

Mikulincer and Orbach (1995) concluded that differences in attachment styles revealed different internal and interpersonal reactions to emotional memories. In the 1995 study (Mikulincer & Orbach) *securely attached* participants could tolerate distressing emotions without becoming overwhelmed by them and could experience intimacy without enmeshment. *Avoidant* participants experienced high levels of anxiety and tended to blockade themselves against perceived internal and external danger. *Ambivalent* participants struggled with separating themselves from either internal pain or external conflicted relationships.

Mikulincer and Orbach (1995) suggest that different groups may utilize different emotional states for different individual purposes. For instance, the avoidant group may utilize anger to shore up a sense of invulnerability and self-reliance. The authors write:

Although our findings delineate the existing differences among attachment groups in regards to the processing of recalling emotional memories, they do not provide information about the source of these memories. There are at least three possible explanations for the current findings. One, the groups may differ in the frequency of real sadness and anxiety episodes. Two the groups may differ in the ways they encode and label their emotional experiences. Three, they may differ in the retrieval of these experiences. (p.924)

One further question of somatization raised by this study, is: Do people who experience anxiety and depression somatize differently depending upon their attachment styles? Again, the limits of a Master's thesis prohibit exploring this question thoroughly; however recognizing how the effects of the realms of the interpersonal and social play out in the family is important in understanding chronic pain.

Those who live with FMS have been shown to have significantly higher

occurrences of childhood physical and emotional abuse, as well as childhood neglect. A

2001 (Van Houdenhove et al.) study in Belgium found that in the sample group

consisting of people diagnosed with FMS, 48.4% had experienced emotional neglect, 37.9 % had experienced emotional abuse, and 23.2% had experienced physical abuse. A large subgroup had experienced lifelong victimization as a "global experience," defined by the variables of being "helpless and powerless in confrontation with a long lasting situation of neglect, violence, chaos, unpredictability, and inadequate family limits" (p.26).

In addition, there is an association between a higher tender point count, the current defining diagnostic characteristic in FMS, and adverse events in childhood such as abuse, death of a parent, or perceived lack of care (Mc Beth, Macfarlane, Benjamin, Morris, & Silman, 1999). In a study (Goldberg et al., 1999) that examined traumatic events in childhood and chronic pain in adulthood in persons diagnosed with facial pain, myofascial pain, and fibromyalgia the authors found that 76% of participants diagnosed with FMS had experienced childhood illness, 65% had experienced a major upheaval, 53% had experienced a death in the family, 47% had experienced sexual trauma, 41% had experienced violence, and 41% had an alcoholic parent or grandparent. Don Goldenberg (1999), one of the rheumatologists who helped create the diagnosis FMS, speaks to the effect of trauma in a patient's life:

Not every patient with fibromyalgia has PTSD, just like every fibromyalgia patient has a history or clinical depression or anxiety. Traumatic experiences and recurrent stress are highly comorbid with physical and psychologic illness. In total, stress and psychologic factors tip the balance of many common clinical symptoms, such as pain and fatigue, into the realm of illness and pathology. (p. 2)

The ability to tolerate complexity and interdependence in the etiology and evolution of distress is an important concept for a clinician to learn to accept, not just intellectually,

but in the field of engagement with a client. Abuse does not happen in a vacuum. Most likely it is a part of a system with other dysfunctional factors.

Sexual Abuse

Questions about a history of abuse should be a part of routine inquiry when a client presents with a chronic pain condition (Green, Flowe-Valencia, Rosenblum, and Tait, 1999). Childhood trauma has been associated with deregulation in the adult nueroendocrine system (Weissbecker, Floyd, Dedert, Salmon, and Sephton, 2006), a system which will be further explored in the trauma chapter. Researchers (Ciccione et al., 2004) recently tested the trauma hypothesis, which basically proposes that there is a precipitating traumatizing event which triggers the onset of FMS. The trauma could be emotional or physical. The results did not support the hypothesis that FMS symptoms are amplified by a history of abuse but did find that posttraumatic stress disorders (PTSD) were more prevalent in women with FMS.

Ciccione et al. (2004) specifically looked at women who were diagnosed both with FMS and with major depressive disorder (MDD) and compared them to women who were not diagnosed with FMS. One of the predictions of the hypothesis was that women with FMS would show more posttraumatic stress symptoms of avoidance, arousal, and intrusion. The researchers (Ciccione et al., 2004) controlled for depression, age, and education and found that the occurrence of a PTSD diagnosis was more statistically likely in the FMS group. Further, two trauma symptoms, intrusive thoughts and arousal, were more prevalent in the FMS population, whereas another symptom, avoidance, was not.

Ciccione et al. (2005) found that either group with a history of abuse was likely to experience depression and that there was not a significant difference in history of abuse.

Additionally, the researchers found that in the women who reported rape, 65% of those in the FMS group feared they "might be killed or seriously injured" compared to 14% in the control group. The authors concluded, "The prevalence of PTSD in the FMS sample suggests that chronic stress in the form of PTSD symptoms may be responsible for increased FMS in women with a history of rape" (p. 384).

In a study that compared 400 women diagnosed with FMS to 42 women without connective tissue disease or other medical conditions (Taylor, Trotter, & Csuka, 1995) FMS participants reported a 65% sexual abuse history in FMS participants. However, these results were not considered statistically significant because 52% of the control group reported an abuse history. This study is utilized to disprove the trauma theory in connection to FMS. Yet, over half the women in both groups reported abuse! Although not the function of this study, the fact that over 50% of participants in both groups reported a history of sexual abuse leads to questions about collective trauma and social stressors that must necessarily be asked about chronic pain and FMS.

Boisset-Pioro, Esdaile, & Fitzcharles (1995) compared an FMS group with a group diagnosed with other rheumatic disorders and found that 53% of FMS participants reported at least one instance of physical or sexual abuse. Raphael (2006) critiques the Boisset-Pioro et al. (1995) study for using self-report questionnaires. Interestingly, in the Boisset-Pioro et al. (1995) study, 58% of the FMS participants had not told anyone else about the abuse. While self-report questionnaires are criticized for their potential lack of validity; perhaps the anonymity also allowed the women to speak more freely.

In a study in Guatemala City (Castro et al., 2005) which compared persons with other rheumatic diseases to persons with FMS, the persons with FMS reported a

significantly higher occurrence of abuse that was long standing and most frequently from family members. In the Castro et al. study (2005) physical abuse was the highest at 60.9%, followed by 24.3% verbal, and 14.8% sexual. The variety in numbers raises the question: Does style of abuse vary across culture, or does likelihood of reporting a particular type of abuse vary across cultures? In a study conducted through the University of Michigan Medical Center (Green, Flowe-Valencia, Rosenblum, & Tait, 2001) researchers found that long-term abuse predicts the onset of chronic pain. The overall response rate for abuse was 48% of participants. Of those participants, 40% reported childhood abuse, 28% cited adult abuse, and 33% cited repeated abuse. Like the questions asked about affect, do depression and anxiety lead to pain or does pain lead to depression and anxiety, the questions about trauma are also being debated in the biomedical field.

Summary

There do not appear to be any easy answers when it comes to the etiology of the chronic pain condition FMS. The preceding chapter has examined the predisposing factors of the stresses present biologically and in early relationships, the precipitating factors including an ongoing lack of family support, family disruptions, and trauma, and the perpetuating factors of mood. When a client presents with a diagnosis rife with controversy and complexity, how can a practitioner organize her formulation into a river of thought from the many streams of factors that feed into the moment of presentation?

It is almost as if by handing her clinician the diagnosis the client is asking the clinician to polarize. Do you believe in FMS or not believe in FMS? Do you see my affect or my body? Are you going to look inside or outside? As clinicians we are

encouraged to meet our clients from a complex both/and position as opposed to a dualistic either/or position. This position can only be directly experienced and expressed; yet we still need a way to organize our thoughts. From its inception (and particularly Freud's work with hysterical clients) psychodynamic thought has concerned itself with the nature of the relationship between the body and mind. The following chapter will utilize psychodynamic thought to further explore the chronic pain of FMS.

CHAPTER IV

AN ECLECTIC PSYCHODYMANIC READING OF THE RELATIONSHIP BETWEEN BODY, MIND, AND PAIN

Hysteria is a 4,000-year-old diagnosis that has been applied to no mean parade of witches, saints, and, of course, Anna O.¹

A hysteric is like a glass of water without the glass.²

Introduction

It has been suggested that psychoanalysis came into being because Freud was attempting to clarify the nature of pain (Engel, 1959). Yet, psychoanalytic thought has not addressed the nature of pain as thoroughly as other psychological fields, such as cognitive-behavioral (Gendrault, 2001). Even within psychoanalytic thought there is no singular theory about the nature of pain. Thus, a reading of the relationship between mind, body, and pain must be approached with a spirit of inquiry and breadth which tolerates the necessary fluidity within these dynamics. Gendrault (2001) writes,

¹ Kinetz (2006)

² cited in Bromberg (1998)

It is obvious that pain fulfills paradoxical roles when taken from various perspectives. In any event, pain still escapes us. Somatic pain, neurotic bodily pain, mental pain, unconscious pain, all can generate or else be generated by mental representations, ideation, and affects, viciously and confusingly interacting and exploding in various conditions such as hysteria, obsessive-compulsive states, depression and so on. Pain always seems to threaten any theoretical endeavor tacitly coercing the pain student to take a position on one side of a persistent mind-body dualism. (p. 61)

The power of a psychodynamic exploration of pain is that it endeavors to understand the very personal and subjective nature of pain, thus asking: Who is the individual suffering?

In formulating any conceptions about pain it is imperative to understand how pain functions. In turn, in trying to understand how pain functions, the nature of the self must be investigated—for, who is the self that is suffering and where exactly in the self does pain function? Thus, a brief exploration of the development of self from a drive theory perspective and an object relational perspective will be offered; after which, we then turn to the development of self as it is understood from a body/mind frame as portrayed by Tyson and Tyson's (1990) explanation of Freud's understanding of the body ego and Winnicott's (1949/1975) ideas about the psyche-soma.

Once the ground of *who* is experiencing the pain is laid, the nature of pain itself can be more fully encountered. The following section will explore pain as mental, physical, and emotional phenomenon. The psychosomatic experience of pain is embodied in the subsequent section, which outlines the history of hysteria. In thinking about the nature of mind and body as located in our sense of self, there are two ways of thinking about the way in which pain splits the relationship between body and mind: 1) dissociation (the mind stream) and 2) somatization (the body stream). Thus, these two sections will follow the history of hysteria.

It is not entirely clear why the symptom of pain manifests in one stream or another, but the subsequent sections on the psychodynamic explorations of anxiety and depression will begin to outline the role that affect plays in pain. Finally, contemporary analysts and analytic thought, including case examples, will be utilized to demonstrate the various voices present in psychosomatic distress and chronic pain. Thus, this exploration of chronic pain will be pursued the way a light enters a diamond—depending on how you hold the pain the patterns of pain manifest differently. The limits of a master's thesis prohibit this chapter from being an exhaustive study, yet there is enough material to create a place for a beginning clinician to enter the vast field of mind and body relations and to begin to think about the dynamic relationships present in the chronic pain of FMS.

Finally, with much reflection I have made some deliberate word choices that may seem insensitive to the contemporary reader. I have chosen to retain the word "mother", as opposed to consistently substituting a less gendered word such as "caretaker." It is not my intention to blame the mother, but to invite the reader to somatically associate and experience the very basic and physical way that an infant depends upon the mother. As is universally known by any breastfeeding mother, when a mother is breastfeeding and the infant cries in hunger, the mother's breast actually leaks. Because it is particular to the psychoanalytic tradition, I have also chosen to retain the word "patient" when speaking about the therapeutic relationship in a psychoanalytic context. Lastly, despite controversy (Berzoff, Flanagan, & Hertz, 2002), I have utilized the words psychoanalytic and psychodynamic interchangeably, within the broader spirit of the biopsychosocial perspective that psychodynamic thought offers.

Development from a Drive and Conflict Perspective

Drives are seen to be the source of human motivation (Brenner, 1982). According to Brenner, a modern conflict theorist, Freud believed that drives contained two "somatopsychic" elements, a source which is somatic and an effect which is psychic. Two separate drives, libido and aggression, move the self into activity. The aim of the libido is pleasure; whereas, the aim of the aggressive drive is the death or destruction of either the self or the other (or both depending on the developmental level). Drives are located in the space between body and mind (Brenner, 1982). However, Brenner (1982) critiques any suggestion that there is a space between mind and body calling the idea redundant and a relic of Freud's time. As will become relevant when we talk about some of the possible interpretation of psychosomatic symptoms, the drives are inherently related to life and death, and thus the development of the self.

In terms of conflict and symptom formation, libido gives rise to the symptom whereas aggression gives rise to the accompanying punitive and destructive impulses towards the self. Conflict can manifest in two ways, between the drive derivatives and between the ego and the drives. Brenner (1982) suggests,

Drive derivatives conflict only when one is used to ward off another. If for example, murderous wishes give rise to anxiety, to guilt, or to depressive affect, loving wishes may be used to defensively ward them off. In every reaction formation there is a conflict...Drive in conflict with drive, except in the purpose of defense, does not exist. (34)

One drive derivative may generate depression and anxiety, and another drive derivative may be used to relieve the affect caused by the first. However, Brenner (1982) clarifies the suggestion that the ego can be separated from the drives and critiques,

What psychoanalytic theory subsumes under the heading of ego functions is separable from drives and drive derivatives only in situations of conflict. Ego functions are the executants of the drives and their derivatives (Brenner 1973b, p.41). They are inseparable and indistinguishable from them except when a drive derivative arouses unpleasure and, for that reason, defense. (p. 34-35)

What Brenner (1982) is basically saying is that it is not the drive itself which disorganizes a person, but rather the subsequent anxiety and depressive reaction, that then give rise to a particular defense. In other words, every conflict has its roots in the motivation of the drive, the consequent anxious or depressive affect, and the type of defense a person utilizes. Finally, this thesis will assume that the basic motivation in drive theory is that the motivational movement in human development is towards pleasure, not necessarily towards the relationship as it is in object relational thought. *Oedipal Conflict in Drive Theory*

Between the ages of three and five children begin to develop genitals and start to become aware of sex roles and partnerships (Berzoff, 2002). According to drive theory, libidinal energies are directed towards the opposite sex parent and aggressive energies are directed towards the same sex parent. At this point relationships now become more complex because they involve three people. The child becomes confused because she also loves the parent towards who she simultaneously feels competitive and aggressive. Berzoff (2002) suggests that Freud believed that children gave up their desire for the opposite sex parent out of a fear of retaliation from the same sex parent. Very simply, out of this fear of physical harm (*castration anxiety*) the child develops conscience, a sense of guilt, and the *superego* emerges.

The oedipus complex is a central feature of hysteria from the drive perspective (Feinchel, 1945), which will become historically relevant as we begin to explore the

nature of psychosomatic illness. The oedipal stage is thought to be resolved when the child identifies and internalizes characteristics of the same sex parent (Berzoff, 2002). This oedipal concept also becomes important developmentally. For instance, defenses such as splitting are seen to be pre-oedipal and the ability to tolerate ambivalence is seen to be post oedipal. Drive theorists suggest that the desire for physical pleasure motivates us to seek relationship. Object relationists suggest that seeking another in itself gives us physical pleasure; and that, in fact, when a person turns to pleasure as an end in itself then something has gone awry in the relationship (Jones, 1999). In turn, we will briefly examine object relational thought.

Development from an Object Relational Perspective

Goldstein's (2001) *Object Relations Theory and Self Psychology* provides a simple primer for outlining some of the general concepts present in the diverse field of object relational psychoanalytic thought. This book will be used to define some basic terms present in object relations thought, which is actually filled with many diverse theorists. The concept of *object refers* to any person in the external environment with whom an individual (infant, child, adult) relates; and *part object* refers to ideas of development from theorists such as Klein (1926/1984), who believed that an infant first experiences the caretaking object as two separate people. For instance, the mother who frustrates needs and desires is "all bad" and the mother who gratifies needs and desires is "all good."

It is considered a developmental achievement to see that good and bad are contained in one person. Splitting the good and bad terminates with the successful transitional through the *oedipal stage* (see Kernberg, 1976, for instance). Thus, object

relations are not necessarily in antithesis to Freud; however, the focus on development and motivation changes. Depending on their attachment to drive theory, theorists debate how much of an influence real people have on an infant's development (Goldstein, 2001).

Generally, *real objects* are seen as objective objects in the external world and *fantasy objects* are defined as an infant's subjective experience of others. As these objects are taken into the self, *introjects*, infants begin to form a sense of themselves, *self representations*, and a sense of others, *object representations*. Goldstein (2001) emphasizes that an infant's interpretation of a situation does not always match objective reality. She offers an example where a frustrating mother could seem more frightening to a child than objective reality might suggest.

Frightening introjects are taken in with highly charged primitive impulses and affects (Goldstein, 2001). For instance, if an infant is screaming and hungry and the mother appears with an angry face, then that face becomes associated with the infant's hunger. Conversely, the appearance of a smiling and calming face at a moment of distress is taken in as soothing introject. Over time, introjects are grouped into "good me" and "bad me" experiences. This process is associated with the development of the superego. While the ego is responsible for the process of internalization, broadly speaking, in object relations thought, the development of the superego arises out of the internalization of introjections (See Jacobson, 1954, for instance). The superego regulates mood and self esteem. A dominant superego is correlated with poor affect regulation.

In early development, the parents are experienced as omnipotent and idealized, the child becomes one with this idea image and her self and other objects become merged, the *ego ideal*. Self esteem develops as a result of a person living up to her ego

ideal. Optimally, the ego ideal should become more realistic and complex as a person develops and by the age of six or seven the superego should be less rigid and more integrated with the ego. When this integration and development of flexibility does not happen, the superego becomes harsh and idealized internal images become punitive. "The superego then may become excessively strict, if not persecutory, or exerts itself in extreme and contradictory ways—for example, when someone acts in a hurtful and destructive manner but then feels excessively guilty and inflicts self-punishment" (Goldstein 2001, p. 59).

In contrast to the previous ideas about superego development (which came from Jacobsen), Klein thought that a harsh superego came from the introjection of powerful, angry, and destructive images of parents which the child would like to subsequently punish. The child then becomes afraid of her own retaliatory fantasies and punishes herself for her aggressive thoughts and actions. In contrast to Klein, Fairbairn thought that "individuals remain at the mercy of internal bad objects that persecute them and run their lives" (Goldstein, 2001, p. 60). Within a Fairbairnian perspective the child is allowed to maintain an illusion of control when the external world is seen as all good and it is she herself which is all bad. We can see how this illusion might actually boost self-

The Body Ego

The sense of self is a subjective experience which relies upon the synthesis and integration of ego functions. At the foundation of bodily experiences are biological needs and state regulation; these are biological activities which happen in conjunction with their correlate sensations. According to Tyson and Tyson (1990), Freud believed that the

earliest ego functions, and earliest sense of self, are what he called a *body ego*, an ego which arises from basic sensations and activities. The authors note, "Perhaps a better translation would be 'body-self,' for Freud was clearly referring to a part of the self aspect of *das Ich*, not the ego as a psychic structure" (p. 121). The basic activities of infants are eating, sucking, and sleeping. With these activities, there are tangible sensations linked to hunger and satiation, arousal and attentiveness, sleeping and wakefulness.

According to Tyson and Tyson (1990) Freud understood that that body boundaries (the body ego) arose through a synthesis of these activities and sensations and that the emerging differences of body experiences formed one of the core aspects of self experience throughout life. Basing their work on that of Freud's body ego, the authors (Tyson & Tyson, 1990) suggest that "experiences of illness, medical and surgical intervention, body growth and change—all arouse a range of conscious and unconscious fantasies and anxieties about body issues that may play a central role in pathology" (Tyson & Tyson, 1990, p. 121). From a critical perspective, this concept of fantasy seems to be negated by the fact that basic bodily experiences are dependent upon the caretaker. Bodily boundaries and their mental representations seem to be dependent upon interaction with another. This interdependency is what Winnicott (1949/1975) speaks about.

The Psyche-Soma

D.W. Winnicott was a pediatrician before he became an analyst, and he continued to work with mothers and babies throughout his analytic career. Interestingly, he also worked with psychotics. He worked with many children who never seemed to have obtained a stable and differentiated a stable oedipal stage (Winnicott was influenced by

Melanie Klein). Greenberg and Mitchell (1983) propose that Winnicott (1949/1975) challenges Freud's notion that the patient begins as a person.

Winnicott (1949/1975) suggests that either because they are strikingly psychotic, or because of other developmental and internalization issues, people could seem as if they are interacting with others without actually investing the kind of spontaneity and vulnerability necessary for authentic interaction. Jones (1999) comments,

Winnicott is treating the relationship between the body and mind as a subject for psychoanalysis. Rather than seeing the mind-body problem as a metaphysical or neuropsychological issue, he treats it psychoanalytically and calls on us to reflect on what early experiences predispose us to experiencing our bodies in one way or another. (p. 391-392)

Winnicott (1949/1975) writes about the emergence of the person, of which the relationship between mind and psyche is crucial. "To study the concept of mind one must always be studying an individual, a total individual, and including the development of that individual from the very beginning of psychosomatic existence" (p. 243). He says that *mind* is a particular way that the psyche soma functions.

Winnicott (1949/1975) suggests that while we accept the division of mind and body in lay people's conversations, we should not accept that division when we are thinking scientifically, or rather analytically, about an individual. Further, Winnicott (1949/1975) defines *psyche* as "the imaginative elaboration of somatic parts, feelings, and functions, that is, of physical aliveness" (p. 244); however, he clearly states that the psyche is not localized anywhere. He (Winnicott, 1949/1975) speaks of the "false entity" (generally referred to as the "false self") or alternately, and interestingly, "false localization" (p. 244).

Winnicott (1949/1975) writes, "The use of the words physical and mental in describing disease leads us into trouble immediately, the psychosomatic disorders, halfway between the mental and the physical, are in a rather precarious position" (p.244). He says that the body and the mind are mutually arising and interdependent, and that only at a later stage of development does an individual feel that she has an inside and an outside. The distinction of feeling forms the core of the imaginative self. To speak of development gone awry, we have to understand Winnicott's (1949/1975) conception of healthy development and his theory of mind.

In the very first few weeks of life, healthy development requires what Winnicott (1949) calls *continuity of being*. What he means is that in order for the psyche-soma to develop, an infant requires a *perfect* environment of physical care that responds and adapts to the infant; otherwise failure to adapt becomes an impingement upon the infant, to which she must react. The need for a perfect environment rapidly fades and subsequently requires *good enough mothering*. Winnicott (1949/1975) describes the limited way that a dependent infant can interact with her environment:

The mental activity of the infant turns a good-enough environment into a perfect environment, that is to say turns relative failure of adaptation into adaptive success. What releases the mother from her need to be near-perfect is the infant's understanding. (p.245)

Yet, all along, by keeping the content and the context of the material which the infant encounters simple and palatable, it is still the mother's job to buffer and protect the baby from material the infant cannot understand.

Winnicott (1949/1975) allows for chance, there are unpredictable threats to the continuity of being within his theory. Nonetheless, at the root of the development of

every human being or at the core of the self, however, is the need for a perfect environment. Thus, certain failures, such as erratic mothering, can cause the infant to take over the mother's role through an overactive mind. When this happens, a split develops between the psyche and the soma. Winnicott (1949/1975) says that "*mental functioning then becomes a thing in itself,* practically replacing the good mother and making her unnecessary" (p. 246). His ideas seem to be connected to the ideas of boundary and overactivity found in FMS patients (Brosschot and Aarse, 2001; Hallberg and Carlson, 1998; Van Houdenhove and Egle, 2004).

When the mental functioning becomes overactive, the infant begins to expect impingement and then becomes excessively reactive. In examining his clinical work, Winnicott (1949/1975) writes,

Clinically one may see such a person develop into one who is a *marvelously good mother to others* for a limited period; in fact a person who has developed along these lines may have almost magical *healing properties* because of an extreme capacity to make active adaptation to primitive needs. The falsity of these patterns for expression of the personality, however, becomes evident in practice. Breakdown threatens or occurs, because what the individual is all the time needing is to *find someone else* who will reveal this 'good environment' concept, so that the individual may return to the dependent psyche-soma which forms the only place to live from. In this case 'without mind' becomes a desired state. (p.247)

Environmental failures burden the psyche-soma as they continue to disorganize an individual. They are like a "foreign body" that is "beyond understanding or prediction" (Winnicott, 1949/1975, p. 248). We will see these themes of dependency, overactivity, impingement, absence, and breakdown arise when we look at the various clinical examples at the end of the chapter.

Basically Winnicott (1949/1975) sees psychosomatic illness as an attempt to bring the psyche back to its original intimate association with the soma. He believes that true health is the true self, which is based on an intimate and interdependent continuity of the psyche-soma. Because we cannot then locate the mind, there is no separate thing that we can call the mind. However, an individual does require intact brain functioning, as well as mental functioning, as a foundation for the psyche-soma. The capacity of the psychesoma is universal, but the development of the mental function is distinct, depending upon the quality of the environment.

In discussing Winnicott's contributions to contemporary theory, Greenberg and Mitchell (1983) emphasize that, in Winnicott's theory, an infant actually experiences herself as omnipotent and the source of all creations. In essence, an infant repeatedly "hallucinates" various basic needs and the mother repeatedly presents them. Could hyperarousal in the adult can be thought of as a dynamic explanation for infantile excitement? What happens when we get excited but nothing appears? A mother can fail in two ways: (1) by failing to present creations and needs when she is excited, and (2) by interfering with the infants' formlessness and unintegration when she is in a state of quiescence (Greenberg & Mitchell, 1983). In either case the infant is forced to respond by giving up what she desires and changing herself to meet what is offered. Perhaps this creation of the false self would explain the hyperactivity found in FMS patients (Brosschot & Aarse, 2001; Hallberg & Carlson, 1998; Van Houdenhove & Egle, 2004).

The self loses spontaneity and the mind and body become fragmented. Out of the need to survive, the infant must become highly attuned to the needs of the other. In Winnicott (1949), the drive for relationship becomes primary, not secondary as in

traditional Freudian theory. "In Winnicott's theory, the earliest object relations consist of interactions between developmental needs within the child and maternal positions offered by the mother...He does not challenge the drive concept directly, but he crowds it out, relegating it to a peripheral and secondary status" (Greenberg & Mitchell, 1983). For Winnicott (1949/1975) pain comes from failure in the environment, but for Freud (Tyson & Tyson, 1990) pain comes from unconscious fantasies about the body. Thus, it is helpful to look more closely at the nature of pain itself.

Pain as Communication: A Physical, Mental, and Emotional Phenomenon

To talk about the chronic pain of FMS, it is important to talk about the nature of pain itself. Pain, by its definition is considered subjective and is associated with early childhood experiences of unpleasant sensations while chronic pain is pain that continues long after the injury has healed and pain is expected to have abated (Gendrault, 2001). Gendrault (2001) says that the experience of pain engenders "meaningless" (p.33) suffering, as the inexplicable nature of the pain seems to serve no identifiable purpose for the person experiencing the pain. Consequently, if pain is subjective, which we saw in the previous chapter whereby the pain of FMS is actually the pain of heightened pain perception (Goldenberg, 1999) then the meaning of the pain must by its definition become unique to each individual. Therefore, pain is simultaneously physical, mental, and emotional.

According to Gendrault (2001) Freud characterizes pain as something between the external and internal; pain appears to the person as an internal sensation, even when the source is external. Pain becomes the means of preventing the experience of the re-experience of trauma. Gendrault (2001) expands this idea:

Thus it is possible to note that a state of high arousal (preparedness for anxiety and hypocathexis) is the last protection against fright and trauma.... the peripheral world remains a determinant of internal dynamics, but pain becomes defined as a boundary state between the internal and the external. (p. 41)

Pain is a kind of arousal that keeps a person from experiencing trauma. Just as Winnicott (1949/1975) suggests that there is no place to locate the mind, it becomes challenging to locate the pain. Pain is something that is directly and personally experienced.

Gendrault (2001) traces Feud's writings about pain from 1895 through 1929. We will use his timeline to briefly examine Freud's understanding of pain. Freud starts with a neurological understanding of pain in the 19th century, and by the 1920's Freud was also discussing the psychological aspects of pain. The sheer nature of pain forces one to accept the role that the body plays in internal perception, which Freud acknowledges when he says that the ego is first a bodily ego (Gendrault, 2001). Therefore, an important question is: If the body ego is the foundational ego, are the body and ego differentiating or integrating in development? It seems to be that depending on their orientation, different theorists hold different perspectives on this question. Further, the answer depends upon the way that the symptom is serving the particular person in a particular situation. Perhaps, even, the same painful sensation could serve the same person differently in different situations.

According to Gendrault (2001) Freud links physical pain to the process of mourning and the loss of mental objects (Gendrault, 2001). Unfortunately, pain did not sustain Freud's interest. In his historical review Gendrault (2001) notes,

Pain and pleasure became the sensory means to acknowledge an 'outside world' bringing forth the previously mentioned boundary state created by pain. Freud does not hesitate to relegate physical pain to a secondary role when discussing the topic of unhappiness, as the suffering brought about by one's relationships to others takes a primary stance. (p. 42-43)

This idea of relating pain to mourning and loss raises some interesting questions. Does pain actually create a boundary? Which direction is the boundary facing? Does pain keep the disappointing object out? Or is pain keeping the self held in? According to Gendrault's (2001) reading of Freud, pain is a reaction to the actual loss, whereas anxiety is a reaction to the threat of the loss.

After tracing Freud's writings on pain, Gendrault (2001) turns his attention to other lesser known psychoanalytic writings on pain. Pain has been characterized as a biological warning signal which protects the body from threatening stimuli, a withdrawal of energy from body parts whose erotic and aggressive impulses which threaten the person's life; further pain has been interpreted as either being filled with sadistic features (anger, rage, and feelings of revenge) or masochistic features (submissiveness, guilt, and revenge), and finally pain has been identified as an expression of an internal or external inhibition in communicating a need.

Engel (1959) sees pain as a symptom, an affect which reduces guilt and aides a person in organizing object relationships. Engel (1959) links pain to personality, saying that there are a body of people who are prone to pain as a symptom, and that the pain coming from psychogenic origins (and not physical lesions). Gendrault (2001) criticizes Engel (1959) for differentiating physical pain as a symptom from psychological pain as a symptom, without explaining the causal relationship of physical pain as a symptom choice:

In particular, he does not explain the relationship (and differences) between the choice of bodily pain and mental pain as symptoms. Indeed, guilt, masochistic

character structure, aggressive drives turned against the self, object loss (actual or fantasized), and conflicts over sexual drives are features that can be found with patients who are not pain prone. (p. 50)

Yet, Engel (1959) does seem to say that a patient chooses the location of the pain

depending upon the trigger for the pain.

Holding Engel's (1959) description of a "pain prone" patient in the appropriate

21st century critical context, his observations prove useful and intriguing when thinking

about FMS. We can both look at the emotional causes of illnesses as well as the

physiological aspects of emotional states. We can also look at the way that symptoms in

the body and mind arise together, without subscribing cause.

Engel (1959) describes pain prone patients as having:

- Either a precipitating history of, or a situation filled with, conscious and unconscious guilt, where pain becomes a means of atonement or self-punishment.
- A history of relationships involving physical and emotional abuse.
- A belief that a price must be paid for happiness, thus pain.
- A history of suffering and defeat, self-sabotage, and an expectation of failure (masochistic character structure). A self-deprecating attitude and a propensity to solicit pain, as seen in a large number of painful injuries, operations, and illnesses. Treatment that is not painful may be rejected.
- A tendency towards a dramatic and relishing account of a painful story.
- Development of pain as an adaptation for loss, or the development of pain as a companion at a time when a relationship is threatened of loss.
- The development of pain when circumstances fail to satisfy.
- A propensity for a sadomasochistic type of sexual development, with some episodes of pain occurring during times of conflicts over sexual impulses (oedipal).
- The site of pain is based on an unconscious identification with a love object; the pain being either a real pain suffered by the patient when in some conflict with the object, or a pain the patient wished for an object in the patient's fantasy.

• Psychiatric diagnoses including: conversion hysteria, depression, hypochondriasis, and paranoid schizophrenia, or a mixture of these, or none of these.

Referring the picture of chronic pain patients proposed in the previous chapter by

Blumer and Heilbronn (1982) and expertly tying it in to Engel's (1959) theory, Gendrault

(2001) writes:

Blumer and Heilbronn suggest that, from early life, core needs, such as needs to depend and needs to be passive and cared for, are concealed and denied....According to the authors loss and disappointment, often associated with injury, lead to increased guilt and depression, whereas the latter is determined by the frustration of core needs and the failure of the ideal self...they assert that the implications of the bodily problems (read symptoms in psychoanalytic terms) allows for maintaining an ideal view of the self under the pressures presented by infantile core needs. We can speculate that the authors are suggesting that the bodily problem acts in lieu of regression (displacement) to a preoedipal or archaic state maintaining ego integrity (defense mechanisms) under the pressure of a very rigid superego....Thus, they introduce pain not so much as a primary or secondary characteristic but as synchronous to depression....Pain is viewed not so much as causing depression, but instead as preventing further depression. Pain, according to Blumer and Heilbronn, following Engel's thesis, is a protective process in the sense that it is utilized to attenuate the guilt and shame of depression. (p.52-53)

Although regressive, pain is seen as a symptom choice which holds the self together and,

ironically, prevents further pain.

Psychosomatic Illness

Pain is the major component of the psychosomatic symptom nature of

fibromyalgia. Looking at pain and psychosomatics, then, this interface begins with

Freud's (1895) study of hysteria. In tracing the history of psychosomatic illness

throughout the late nineteenth and twentieth century, Shorter (1992) suggests that

patients have actually shifted their hysterical symptoms (originally located in the sensory

system) to come into accord with shifting medical paradigms (which now locates itself in

the central nervous system). Shorter (1994) asks and answers,

How does a given symptom become a disease of fashion? An epidemic of illness attribution, or epidemic hysteria, seems to involve two phases: (1) appropriating a genuine organic disease—whose cause is difficult to detect and substantiate—as a template; (2) broadcasting this template to individuals with often quite different symptoms, who then embrace this template as the explanation of their problems. (305)

He places chronic fatigue syndrome, chronic mononucleosis, myalgic encephalomyelitis, and fibromyalgia in this aforementioned category.

Shorter (1994) investigates how social circumstances have interfaced with biological or constitution to create psychosomatic illness. In asking himself why women seem to have dominated the historical psychosomatic landscape, Shorter (1994) notes, "There is a common theme of psychological misery and sociological unhappiness experiences of psychosomatic illness that is transhistorical and transcultural" (p. 87), observing that while psychosomatic symptoms are universal, women are more likely than men to somatize in every culture. Shorter (1994) is unwilling to accept that "patterns of oppression" (p. 88) cause enough stress to explain the gap between genders. Thus he finally summarizes,

In accounting for the female surplus of psychosomatic illness, one basic circumstance about the difference between men and women is striking. Both historically and today, women have always borne the greater burden of unhappiness. (p. 88)

His implication is that psychosomatic symptoms are a way of coping with a socially prescribed propensity in which women leave themselves more emotionally vulnerable in social interactions.

I do not believe Shorter (1994) has made himself clear here. What exactly is the greater burden of unhappiness? Are women predisposed to tolerate affect differently? Are women more genetically predisposed to handle stress somatically? Are women more

likely to encounter trauma or to be victimized? Or, are women just more likely to be diagnosed with hysteria and, in turn, fibromyalgia? With these critical questions in mind we can begin to explore the history of hysteria.

Early Origins: Hysteria

The word "hysteria" was around before Freud. It comes from the Greek *hystera* and means "wandering womb" (Kozlowska, 2005). Even today a 2006 New York Times article asks: *Is Hysteria Real? Brain Images Say Yes* (Kinetz, 2006). Historically, the root of female illness has been viewed as a starved or misplaced womb. Hippocrates actually recommended marriage as a treatment for female maladies. We can understand Freud's approach to hysteria better if we place his theory in the context of preceding centuries.

Using a review compiled by Kozlowska (2005) I will briefly outline the history of unaccountable medical symptoms as they were understood within the mind-body context. Kozlowska (2005) begins with a criticism of the legacy of the 17th century philosopher Rene Descartes. "The Cartesian paradigm has generally forced a cleaving of humanity into psyche and soma...resulting in biological explanations or psychological theories disembodied from body function" (p. 1). After Descartes, in the 1700's "master organ theories," which suggested that organ dysfunction caused nervous system dysfunction, emerged. Following in the footsteps of the organ theories "nervous irritation," a diagnosis located in the central nervous system, arose. Located in the nerves of the spine, nervous irritation, a diagnosis which was seemed reserved for women, created a category for a condition in which there could be functional deficits or weakness in a woman with no underlying organic pathology. In the 1800's the spinal irritation theory evolved into the reflex theory. Simply, the idea was that one organ could unwillingly affect another organ through a spinal reflex arc. Kozlowska (2005) offers an amazing image, noting that if a limb were paralyzed doctors might actually operate on a woman's womb! During this period Charcot, who was a neurologist in Paris, reconceptualized the diagnosis of hysteria as a "functional" nervous disorder, using the word functional because he believed that distress was caused by lesions that could not be located. So, by the nineteenth century, hysteria was a diagnosis that included dissociative disorders, somatoform disorders, hypochondriasis, anxiety, and depression. By the end of the nineteenth century, there were two basic ideas about hysteria, as embodied by Freud and Janet.

Janet believed that there was a part of a person's mental system which split off under stress and trauma, *dissociation* (Kozlowska, 2005). This aspect, which would normally be a part of the mental functioning, such as a person's consciousness, actions, identity, memory, and sense of physical self, was thought to be attuned to both external and internal conditions. The split was preceded by an idea and accompanied by an emotion under conditions such as terror, stress, illness, and fatigue. It is only recently that Janet's theories have come back into popularity.

Ultimately, in the 20th century the dominant ideas about hysteria were embodied by Freud's shifting conceptualizations. However, in the late nineteenth century, Freud was still aligned with Janet. Thus, when Freud split from Janet, he gave up a trauma theory in favor of a conversion theory. *Conversion* is the process in which unacceptable mental contents are transformed into somatic symptoms. In his original thinking in (with Bruer) in *Studies on Hysteria* Freud (1895/1974) writes that experiences inherently arise

with affect. This affect is either consciously discharged or naturally discharged through its association with other conscious states.

In hysteria, the memory attached to the experience is cut off. Thus, the somatic symptoms of hysteria become symbols of repressed memory. At this early stage of their thinking, in asking why the memory is cut off, the authors (Breuer & Freud, 1895/1974) say that the memory took place while the subject was in a dissociated hypnoid state, a state in which the ego regarded the experience as incompatible. Why is somebody functioning in a dissociated hypnoid state? At this point Breuer and Freud (1895/1974) regard trauma as responsible for the hypnoid states; the authors state that "hysterics suffer from reminiscences" (p.58). Later, unfortunately, Freud shifts his perspective to focus on the fantasy aspect of hysteria.

Is the hypnoid state a response to trauma? Is splitting a defense in itself or is it the product of the breakdown of defenses? Giovacchini (1993) suggests that splitting can be both a sign of a breakdown and an attempt to restore equilibrium. "A disintegrative process leads to dissociative responses, which in turn lead to some degree of stabilization and prevent further disintegration" (p. 82). Sometimes somatic symptoms can prevent disintegration and sometimes somatic symptoms can be an attempt at cohesion.

At the base of the hysterical condition, then, are symptoms that arose under paralyzing affects or "psychical states" such as fright. Hypnoid states "...provide the soil in which the affect plants the pathogenic memory with its subsequent somatic phenomena" (Breuer & Freud, 1895/1974, p.63). Hysterical symptoms are seen as the intrusion of hypnoid states in waking life. Breuer and Freud delineate two kinds of hysteria, *dispositional* hysteria and *acquired* hysteria.

Dispositional hysteria is when the mind is already predisposed to hypnoid states, the ground that Bruer and Freud (1895/1974) speak of. Acquired hysteria is a deliberate amnesia, the splitting off of trauma in otherwise healthy people. In contemporary thought, it would seem that dispositional hysteria is more related to trauma and the type of dissociation and somatic presentation which Bromberg (1998) speaks of in the following section. Whereas, acquired hysteria seems to have taken precedence as Freud's conflict theory took over the twentieth century.

The motor phenomena, or the physical presentation of hysterical attacks, were understood to be a physical reaction which correlated with the associated affect. The authors (Breuer & Freud, 1895/1974) are clear; they are speaking about the mechanisms of hysterical phenomena, not the internal causes. Breuer and Freud (1895/1974) see psychoanalysis as the "speech of strangulated affect" (p.68). Bruer, in a later chapter describes hysterics as "beautiful as double flowers" (p.321) and writes,

Their liveliness and restlessness, their cravings for sensations and mental activity, their intolerance of monotony and boredom may be formulated thus: they are among those people whose nervous system while it is at rest liberates excess of excitation which requires it to be made use of. (p.321)

This excitation forces hysterics to be too concentrated on their bodily functions. In speaking of pain Breuer concludes, "…every pain, however caused, reaches maximum intensity, every ailment is 'fearful' and 'unbearable.' Further, whereas in normal people a quantity of excitation, after cathecting a sensory path, always leaves it again, this is not so in these cases" (p. 321). He seems to see pain as an energy that has not been cathected in hysterics, leaving them permanently excited.
Neurasthenia

The two main non-psychotic psychiatric diagnosis of the nineteenth century were hysteria and another somatic condition Freud diagnosed based on his own symptoms, *neurasthenia*. Neurasthenia is manifested by somatic symptoms and a depressive mood and is marked by its lack of analyzable symbolic content. Women were primarily diagnosed as hysterics and men were primarily diagnosed as neurasthenics (Hartocollis, 2002). Taylor (1992) traces Freud's psychosomatic notions of disease, noting that Freud categorized neurotic disorders into two types: *actual neurosis* and *psychoneurosis*. According to Taylor's (1992) understanding, actual neurosis is not caused by tensions in the psyche, but physical tensions due to a lack of sexual satisfaction. Neurasthenia, anxiety neurosis, and later, hypochondriasis are included in this group.

Because these neuroses were not seen as containing symbolic psychological content, they were not viewed as being amenable to analysis. According to Taylor (1992) Freud sees the origin of the psychoneuroses, such as hysteria, in psychic conflict thus amenable to analysis. However, he notes that in the development of psychoanalytic thought, Freud's concept of the actual neurosis was virtually lost as analysts excitedly concluded that every physical presentation had its roots in intrapsychic conflict.

In this observation, Taylor (1992) points to the psychosomaticists (See, for example, Alexander, 1950/1987) of the 1940's and 1950's who developed the concept of the seven "classic" psychosomatic diseases: bronchial asthma, essential hypertension, peptic ulcer, ulcerative colitis, thyrotoxis, rheumatoid arthritis, and neurodermatitis. While biological roles were acknowledged, the relationship between the mind and the body was very linear—the "so called mysterious leap from mind to body" (Taylor, 1992,

p. 253). In this line the pre-oedipal intrapsychic conflict and their correlated emotions were seen to be at the root of the physical distress. However, Taylor (1992) notes that during the 1950's while the notion of conflict as the origin of physical distress was supported empirically it was, however, also limited by later research which showed that many of the groups studied were heterogeneous in origin.

While conflict is one possible explanation of a cause of psychosomatic distress, it seems that limiting distress to conflict is too simple. Taylor (1992) further suggests that perhaps it is not the conflict over emotion itself, but impaired ego function in regulating and modulating affect that produces the physical distress.

According to Hartcollis (2002), the bulk of Freud's writings on actual neurosis concerned neurasthenia, the symptoms of which he believed could not be analyzed because he believed they came from toxic damage from too much masturbation or too much nocturnal emission. Unlike hysteria, Freud did not consider the symptoms either symbolic or sexual comprises between contrasting impulses. Hartcollis (2002) suggests it was Freud's suffering at the hand of these symptoms that seemed to lead to his experimentation with cocaine as a stimulant in nervous disorders.

Presently, the concept of actual neurosis has re-emerged under the label chronic fatigue syndrome (or myalgic encephalomyelitis in Great Britain) where the symptoms are identical and are unreservedly associated with depression. As Shorter (1992) notes, CFS and FMS belong in a similar category of psychosomatic distress. Hartocollis (2002) traces the concept of actual neurosis through psychoanalytic thought, noting that Wilhelm Reich saw actual neurosis as "damned up libido" (p. 1363) which could only find relief in real sexual gratification; Ernest Jones accepted Freud's theory of masturbation,

qualifying that he believed that masturbation led to neurasthenia when accompanied by intense moral conflict; and Ferenczi also attributed actual neurosis with sexuality, but instead of associating it with toxins, associated the physical pains to feelings of guilt because society condemned practices like masturbation.

While he says that Freud did not literally discuss the psychosomatic illness such as FMS we identify today, Hartocollis (2002) tracks the concept of actual neurosis to Franz Alexander (1950/1987) and the Chicago school of psychosomatics, who saw relationships between unconscious conflicts at various levels of psychosexual development specific personality characteristics in the "classic" seven psychosomatic diseases. Hartocollis (2002) also speaks about a group of French analysts who composed a school of thought known as the Paris School of psychosomatics. This group sees the somatic symptoms of neurasthenia as ego defenses that substitute for neurotic mechanisms that have failed—a kind of thinking that did not have conscious or unconscious symbolic content, which they call *operational thinking*. Strong affects are seen as direct expressions of unmediated content as a defense against trauma. Instead of pointing to toxins, they point to regression and fixation (Hartocollis, 2002).

Fundamentally, Freud (1895/1975) and Alexander (1950/1987) believe that body pains are meaningful personal symbols which have their source first in the mind and secondly in the body. A body symptom that does not occur first in the mind does not then have meaning. Janet and the subsequent trauma lineage (See, for example, Bromberg, 1998) feel that the mind is bypassed in somatic symptoms, thus bodily pain is not necessarily symbolic in the way that Freed understand symbolism (Hartcollis, 2002).

Both of these lineages of thought are relevant, which is why it is important to speak both

of dissociation and somatization.

Dissociation

When Freud abandoned real trauma and replaced it with a fantasy model he also abandoned a model of dissociation. Bromberg's (1998) work comes out of the interpersonal school and the work of Henry Stack Sullivan. Bromberg (1998) outlines the centrality of dissociation as a phenomenon in response to trauma:

It is not a new version of Freud's theory of repression in response to conflict, and despite historical misunderstanding, dissociation is not simply Sullivan's word for repression. In disavowing Freudian Conflict theory, Sullivan was not just rejecting a concept; he was saying that what structures the human mind is a process empirically different from the one Freud came to believe existed...it is the more primary nature of trauma to "elude" our knowledge because of what they [Laub and Auerhahn] call a deficit—a gap that has to do with formation of psychic structure into "me" and "not me"—a dissociative gap, by virtue of which the experience of the original trauma is relegated to a part of the self that is unlinked to that part of the self preserved as a relatively intact "me." p. 215

Could pain be considered a dissociative gap? This might be an explanation for why a person diagnosed with FMS might not really experience any psychological content in her pain (Burns, Kubilus, Bruehl, & Harden, 2001; Thieme, Turk, & Flor, 2004). Bromberg (1998) is certainly saying that the process of dissociation and the process of conflict are two different processes. He is talking about the structure of the mind, not the content. The object relations school "offers a way of correcting Freud's mistake without abandoning his vision" (Bromberg, 1998, p. 216).

The hypnoid state is a form of protection. It can serve to hold the body and mind together, or keep them from separating. Bromberg (1998) describes the function of dissociation:

Where drastically incompatible emotions or perceptions are required to be cognitively process within the same relationship and such processing is adaptationally beyond the capacity of the individual to contain this disjunction within a unitary self-experience, one of the competing algorithms is hypnoidally denied access to consciousness to preserve sanity and survival. When ordinary adaptationally adjustment to the task at hand is not possible, dissociation comes into play. (p.243)

Dissociation is not fragmentation and it is not inherently pathological (Bromberg, 1998). Maturation is when the self states attain a feeling of coherence that takes precedence over the feeling of discontinuity (Bromberg, 1998). From this perspective, the sense of the coherence is a result of caretaking, affect regulation, and appropriate environmental responsiveness.

It is not that the self starts off whole and then fragments. It is that a healthy self starts off as a multitude of self states and achieves maturation and coherence in healthy development. From a deficit perspective, the mind stream and the body stream are not in opposition. They arise concurrently, but perhaps without relationship in the case of trauma. That is why it is as important to look at the role of dissociation in the psychosomatic process as it is to look at somatization.

Somatization

The foundational criteria for somatoform disorders are there is no underlying medical condition which explains the somatic symptoms (DSM IV-TR, 2000). The historical diagnosis of hysteria was subdivided into somatization disorder and histrionic personality disorder. Interestingly, up until 1980 conversion hysteria, with its physical symptoms, and dissociative hysteria, with its associated amnesic mental symptoms were classified together by the American Psychiatric Association (Harvard, 2005). The International Classification of Diseases (ICD-10) still classifies conversion disorder as a dissociative disorder (Kozlowska, 2005).

Conversion is one disorder which falls under the somatoform disorders and to diagnosis the disorder the symptoms must be the result of a psychological conflict or distress (Harvard, 2005). It affects sensory and motor functions which are normally under voluntary control, which distinguishes it from hypochondria and somatization disorder. Pain complaints may be present in conversion disorder, but the diagnosis is not limited to pain (DSM IV-TR, 2000). If pain is the focus of the clinical disorder in excess of the psychological factors, then pain disorder is diagnosed (DSM IV-TR, 2000). Yet, pain is also associated with depression and anxiety. Further, if the criteria for somatization disorder are met, then somatization disorder, not pain disorder is diagnosed (DSM IV-TR). How would one decide if pain is in excess of the psychological factors?

For the purpose of simplicity, I will briefly outline some of the aspects of somatization disorder as it is used diagnostically, with the caveat that underlying psychodynamic factors and the broad use of somatization are different than the characterological patterns seen in the DSM-IV. With the same caveat, I will also utilize the term "conversion." "All the accepted views of conversion disorder imply that it is a psychological defense—a response to an external or internal threat" (Harvard, 2005, p. 3). Historically, conversion disorder was linked to dissociation (See, for example, Bruer and Freud's *Studies on Hysteria* as discussed in the previous section). Some important terms that come up around conversion disorders are: *la bell indifference*, a lack of concern about the implications of the symptom; *primary gain*, the avoidance of anxiety

associated with unconscious conflict; and *secondary gain*, when the response of others prolongs the symptom (Harvard, 2005).

According to the Diagnostic and Statistical Manual (DSM IV-TR, 2000), "the essential feature of somatization disorder is a pattern of recurring, multiple, clinically significant somatic complaints" (p.486). The complaints cannot be attributed to any general known medical condition or must be in excess of what would be generally expected from the condition. "Individuals with somatization disorder usually describe their complaints in colorful, exaggerated terms, but specific factual information is often missing...Somatization disorder occurs only rarely in men in the United States, but the higher reported frequency in Greek and Puerto Rican men suggests that cultural factors may influence the sex ration" (DSM IV-TR, 2000, p. 486-487). For a theoretically descriptive document, The DSM IV-TR has certainly inherited all the gender bias previously associated with hysteria.

There is no mention of trauma or stress in this diagnosis, although the familial patterns section reveals that the male relatives of this disorder are at increased risk for antisocial personality disorder and substance related disorder and that in the female first degree biological relatives somatization disorder is observed in ten to twenty percent of the population. Interestingly, the diagnosis is contingent upon who is diagnosising it. Physicians are more likely to diagnose the disorder than non-physicians (DSM IV-TR, 2000). The DSM is a description of symptoms (much as Bruer noted that his comments on hysteria were descriptions). Psychodynamic theory becomes richer when it can describe how symptoms function within a given context, such as in the case of the anxiety and depression associated with FSS, FMS, and chronic pain (Haug, Mykletun, &

Dahl., 2004; Henningsen, Zimmerman, & Sattel, 2003; Hudson, Goldenberg, Pope, Keck, & Schlesinger, 1992).

A Psychodynamic View of Anxiety

Brenner (1982) considers anxiety to be unpleasure accompanied by any idea that has to do with danger. Anxiety is not necessarily thought to be the result of any particular defense; thus the nature of the anxiety is contingent upon the internal make up of the patient. According to contemporary conflict theory (Brenner, 1982) anxiety and depression can be seen as similar affective responses, both containing unpleasure, plus either loss of the object, loss of the love of the object, castration, punishment, guilt, selfinjury, and penance. In his view, anxiety and depression are separated only by time. The ideas and fears of depression are located in the past, while the ideas and fears of anxiety are located in the future.

Anxiety is a component of every psychic conflict, so its presence is not thought to actually point to the specific nature of the conflict (Brenner, 1982). Feinchel (1945) suggests that in hysterical anxiety "what was intended to prevent a trauma has actually induced one...anxiety is simply felt in situations where an uninhibited person would experience either sexual excitement or rage" (p. 195). In *Studies on Hysteria* (Bruer & Freud, 1895/1974), intolerable affects are seen as the trigger for repression and for symptom formation.

According to the seminal text of Greenberg and Mitchell (1983) which attempts to give a broad overview of object relational theories, early on, Freud sees anxiety as actually being physically toxic, which stemmed from his views on actual neuroses. Later, the authors suggest, Freud sees anxiety as a danger signal to the ego (reminiscent of the

trauma experienced at birth) and as a signal for the ego to mobilize defensive activity. In psychoanalysis it is important to know the nature, or the time period of the idea, of the anxiety for a given patient.

If a mother rejects a child in her natural attempts to differentiate and natural wish for autonomy, a child may manifest an absence of signal anxiety, struggle with affect differentiation, utilize splitting as a major defense, be more active than verbal, not have an internalized sense of self, be unsuccessful in developing object constancy, and not know how to mediate and neutralize aggression (Goldstein, 2001). If a child experiences aggression, but is unable to differentiate between self and other (or unwilling to differentiate for survival's sake); then, just as (Brenner, 1982) suggests, the dynamic present in anxiety can also be manifest in depression.

A Psychodynamic View of Depression

Depression is known to run in families, although it is unclear if this tendency is due to biology or family environment. Historically, depression has been understood as negative affect, or anger, towards the self (McWilliams, 1994). The kind of psychodynamic character organization Mc Williams (1994) describes points to tendencies in how one understands the self. Thus, a depressive character organization in psychoanalysis might not be exactly the same thing as a DSM diagnosable depression.

Two notable defenses in the psychodynamic understanding of depression are *introjection* and *turning against the self*. In introjection a parent might do something negative, or child might also misinterpret a behavior as negative, leaving a child with a powerful feeling of loss, anger or hurt. The child then projects those feelings on to the parent. Because the negative feelings are too hard to feel and they impede the desire for

reconciliation and love, the child regulates all of the negative affect by unconsciously experiencing it as a bad part of the self (McWilliams, 1994).

Looking at the myriad ways aggression can be turned against the self Edgcumbe and Sandler (1974/1987), more contemporary analysts, discuss two varieties: (1) directing the aggression against the self (particularly the body) where the self represents the substitute for the object, and (2) directing aggression against the self as a punishment for any act or thought that has aroused guilty feelings. In the first, it is thought that the person does to herself what she would like to do to another person. The content remains the same. Perhaps if a person would like to strangle someone else, she would seize and contract the muscles in her own neck. This happens out of guilt, shame, embarrassment, fear, or a wish to protect the object out of love or necessity.

In the second case, the person also punishes herself, which could happen through the "involuntary" infliction of pain (i.e. accidents), and is related to a guilty wish. In this case, the punishment is not for an aggressive wish, but for a forbidden wish. Further, the authors (Edgcumbe & Sandler, 1974/1987) suggest that other varieties of aggression turned against the self could arise from other developmental situations, such as the faulty development of self-object differentiation, a reproach to a neglectful object, compliance with a hostile object, or as a component of masochistic sexual suffering. How the person turns against herself then seems to depend on how the environment is responding to her.

"The combination of emotional or actual abandonment with parental criticism is particularly likely to create depressive dynamics" (McWilliams, 1994, p.235). This can happen when parents deny or discourage feelings or when the family environment creates a dynamic where the child becomes parentified. The child can come to believe that her

own feelings will destroy the parent because the parents have given the tacit message that they cannot tolerate the feeling themselves. Sometimes families give children the message that to take care of one' self is selfish (McWilliams, 1994). Mc Williams (1994) notes that because of women's identification with primary female caretakers feminist theorists have speculated that women are more likely to utilize depressive solutions for emotional problems. Whereas, men gain a sense of autonomy through separation; thus, men are less likely to utilize separation as a defense. What is fascinating is that because guilt is such a characterological certainty in depressively organized people, that many people use altruism and activity to build self-esteem and avoid depression (McWilliams, 1994).

Thus, as in the nature of psychosomatic illness, depression has its own narrative. Instead of focusing on causal links, we can ask how it would be if this somatic solution were true, for this person, in this moment. Then the association might actually be linked to a person's actual experience of herself. Bromberg (1998) clarifies this position:

A case can be made, for example, that the reason a state such as depression is difficult to alleviate even with medication is that it is simply not just an "affective disorder" but an internally coherent aspect of the self. For many people, it is a self-state with its own narrative, its own memory configuration, its own perceptual reality, and its own style of relatedness to others. It is not simply something one feels—it is who one *is*, at least at certain times...The resistance to losing one's depressive reality is greatest when personality is organized more by dissociative mental structures than by conflict, because the importance of the feeling of selfhood attached to a given state is greatest when there is least simultaneous access to alternative self-states with other potential perceptual realities and self-narratives. (p. 245)

Thus, the depression and pain associated with FMS might be explained by conflict in one situation and more adequately explained by deficit in another. This perspective requires us to see the nature of the self as something that is dynamic and fluid.

The following section will explore the experiences of different analysts who work with different patients with bodily symptoms. We will see that depending on the patient, the psychosomatic symptoms have very different meanings. In fact, depending on the context, the same symptoms for a singular patient can have very different meanings.

Ways of Understanding the Nature of the Symptoms

Conflict

Alexander (1950/1987) puts muscular skeletal symptoms in the same category as hysterical conversion. Holding in mind that he is writing in the context of a particular time and place, with particular circumstances and conditions, I will briefly present Alexander's (1950/1987) ideas about conflict in psychosomatic illness. We should understand that his interpretations could certainly utilize a through feminist critique but that some of his observations are interesting. In his examination of disturbances in joints and skeletal muscles, Alexander (1950/1987) concludes that the female patients he writes about are predominate in their control of emotional expression, suggesting that they are competitive and unable to submit to men. Today we might say that the context of power as embodied by gender has become more transparent and women are angry about it.

From this conflict perspective, the muscle spasms are caused by repressed hostile impulses, I suppose towards men, or at least towards those in power. Furthermore, Alexander (1950/1987) calls the symptom of muscular pain a "psychological straight jacket," elaborating his views:

These patients try to achieve equilibrium between aggressive impulses and control. They learn to discharge aggression through muscular activity in acceptable channels; hard work, sports, gardening, actively heading the house. They also learn to relieve the restrictive influence of the conscience by serving others. (206)

The illness in Alexander's (1950/1987) patients serves a secondary function, relieving the patient of the guilt of aggressive impulses and allowing her to feel entitled to the attention her illness then engenders. Subsequently, her chronic pain then becomes a reaction against real dependence and the wish for dependency.

Using Somatic Symptoms to Avoid Conflict

Despite the fact that most back pain does not originate from a structural problem, back pain seems to be a socially acceptable form of psychophysical distress and does seem to be held with quite the same cultural disdain as some of the other psychosomatic disorders (Coen & Sarno, 1989). In their research on the syndrome, Coen and Sarno (1989) conclude that the pain is the result of

...tension and chronic rigid character defenses that contribute to musculoskeletal pain syndromes, and the uses made of this pain for avoidance of internal conflict, dependency, containment and punishment of destructiveness, unacknowledged angry and sadistic attacks on (internal and external) caretakers, and enhancement in self esteem through suffering. (p.361)

The authors see the tension as a form of hypervigilance which guards against the danger of a particular affect; thus conflict is avoided because one becomes absorbed by the somatic sensations.

Developmental: Oedipal and Pre-Oedipal

In Jones' (1999) analysis, Freud looks at oedipal development as a natural part of biology, while object relationists suggest that the resulting sexuality between parent and child is a result of a failure in the relationship (Jones, 1999). Thus, when psyche and soma get caught up in conflict in drives, Jones (1999) suggests that sexuality between a parent and child happens as a result of emotional deprivation:

The oedipal and electra complexes are just two in an endless series of variations on the search for connection and caretaking. Their appearance is the result of that search becoming sexualized as the consequence of a certain type of seductive interpersonal encounter. (p. 369)

This perspective contrasts the drive theorists offer a different perspective on oedipal themes in somatic pain.

Feinchel, a classical theorist, (1945) writes that patients in analysis often exhibit muscular cramping when they can no longer avoid seeing that the analyst's interpretation is accurate. Feinchel (1945) views muscular cramping and spasms as a means of "keeping the repressed in repression" (p. 247). According to his view, if the impulses do not reach motility, they will not become conscious. The relaxation of the musculature might mean the return of overwhelming affect, particularly the return of *spite* and *rage*. According to Feinchel (1945), conflict expressed in muscular tension is not always hypertonic; hypotonic, lax or "flappy" (p. 247) muscles can also interfere with expression. Thus, he suggests that the conflict within the entire muscular system is better referred to as psychogenic "dystonia" (p.247). The author (Feinchel, 1945) writes,

A continuous misuse of the muscles for "neurotic" spasms has necessarily a tiring effect. Actually the fatigue characteristic for all actual-neurotic states is probably due to the "dystonic" innervation of muscles. This fatigue is most outspoken in cases of inhibited aggressiveness; often it can be directly called an equivalent of depression. (p. 249)

Interestingly he (Feinchel, 1945) also allows for the possibility of somatically predisposed personalities a "continuous unconscious tendency to suppress movements" (p. 249). However, the example he offers is a demonstration of oedipal conflict, not any early trauma or deficit.

Body Memories

In tracing the history of chronic pain from a psychoanalytic perspective, a modern-day analyst Perlman (1996) highlights the individual meaning of the nature of the pain to the patient, noting that that the earlier the trauma in a patient's life, the more likely that it will be dissociated and split off. Early relationships set a tone in the body in terms of stress and tension. Traumatic experiences which are encoded in the body, but dissociated, speak to the body through pain (Perlman, 1996). The localized memories can be specific or ongoing; Perlman (1990) calls the sensations which are felt but not remembered *body memories*. In clarifying his perspective and experience Perlman (1990) writes,

The process of memory storage in the body occurs because the images and the implications of trauma can be too overwhelming to allow them into consciousness (i.e., they are repressed). For many chronic-pain patients, there can be powerful traumatic unprocessed experiences encoded in very specific body areas, or very early procedural memories that are not linked to language or images; they are experienced as chronic pain. (262)

In his work, Perlman (1990) indicates that the most beneficial forms of treatment come out of the development of a positive transference; yet he still seems to understand the nature of the pain as one of conflict. The author (Perlman, 1990) concludes his article and case study by saying that when there is safety in the therapeutic alliance, past experiences, which are contained in the pain, can be addressed by working with present life issues and relationships.

Maintenance of Safety

Object relationships can be considered interpersonal, thus containing affect. The relationship between objects, what we desire from them, and how we act towards them is

complex (Sandler, 2003).When a parent cannot adequately identify with a child's affective experience, his or her failure generates heightened anxiety and a loss of safety for the child. Then a child is forced to adapt to the situation internally in order to control for the sense of loss (Sandler, 2003). Attachment theorist Peter Fonagy (2001) concurs:

Safety is the experience of the ego not threatened by drive states, moral pressures, the environment, or its own disintegration... Thus, Sandler's model of structural change is consistent with attachment theory. It is not drives and defenses that are transformed but rather affectively toned self-other configurations. (p. 80)

The habits of defensively creating safety become codified in personality. A person becomes habituated in how she relates to herself and the world.

"The need to feel safe and secure dominates everything" (Sandler, 2003, p. 17). Women who experienced early attachment disruption through trauma might still live with the inner sensibility that external interpersonal relationships would not remain safe if the vicissitudes of her inner world were revealed to another. Thus, to protect her relationships she might not even be able to acknowledge to herself what she is feeling. Her inability to verbalize due to insecure attachment styles may contribute to the emergence of FMS (Goldberg, Pachas, & Keith 1999; Imbrierowicz & Egle, 2003; Mikail & Henderson, 1994; Van Houdenhove, 2004).

Trauma and Dissociation in Pain

Working with contemporary deficit theory, Bromberg (1998) accepts Schwartz's (1994) definition of dissociation, which he thinks is the most acceptable to the majority of psychoanalytic schools of thought: dissociation "can most simply be understood as a self-hypnotic process that attempts to anaesthetize and isolate pain...The mind is essentially fleeing its own subjectivity to evacuate pain" (cited in Bromberg, 1998, p.

190). Bromberg (1998) sees the job of dissociation as a function of protecting the person from her sense that she cannot hold two contradictory feelings at the same time. Thus, dissociation protects a person from responding to an object with both fear and security at the same time.

The patient protects herself by retreating into a state that is physically present but not actually mutual; this protects a person from "hope" (p.194,) which has proven so dangerous in the past, and from a real, spontaneous, and unregulated experience. The continuity of this experience can make a person hypervigilant, craving safety but not being able to trust it. Where does the mind flee? Bromberg (1998) writes,

...consciousness will become inherently a cocoon unless it has access to a sufficient range of self-states to allow authentic interchange with the subjectivity of others. Without this flexibility, other people are simply actors in whichever mental representation of reality defines the self state that exists at the moment. (p. 193-194)

Why does a person abandon hope? Hope is seen as the enemy of vigilance so necessary to maintain the cocoon (Bromberg, 1998). Perhaps the muscular tension of FMS can be seen as the maintenance of the vigilance that prevents hope, or alleviates disappointment and despair (See, for example, Mikulincer & Orbach, 1995).

Self States

These various self-states Bromberg (1998) describes hold various self-states which are disconnected but complete unto themselves. Each self-state contains its own range of perception, memory, affect, and way of relating interpersonally (Bromberg, 1988). Different concrete self-states hold different ego resources. There is no concrete ego, *per se*; we are composed of a set of fluctuating and flexible, or not, set of functions, resources, and defenses, etc. Disorders then become defined by "dissociative solutions"

(Bromberg, 1998, p. 202) a person utilizes to achieve a balance between safety and needs. The solutions can be seen in the hysteric's "flooding of affect or in the loosening of the schizoid's hold on reality" (Bromberg, 1998, p. 202). Bromberg (1998) accepts that dissociative solutions can also be found in somatic processes. From this perspective, perhaps the chronic pain of FMS can be considered another way of navigating the balance between safety and needs. If a patient clings to her pain, she at least maintains her state of safety (See, for example, Ciccione, Elliot, Chandler, Nayak, & Raphael, 2005).

Object Relationships

Greenberg and Mitchell (1983) note that Freud's *object* is the target of the libidinal and aggressive drive. The authors suggest that the most important tension in psychoanalytic thought has been the evolving tension between the drive as motivation and relationship as motivation. "Each theory selects from the complexity of life certain aspects or dimensions which are understood to lie at the center of human concerns, coloring much of the seemingly diffuse and variegated aspects of the patient's experience" (p. 15) Simply and broadly stated *object relations* is a term which corresponds to a person's relationship to his or her internal and external worlds (Greenberg & Mitchell, 1983).

Object relations would suggest that in normal development physical states are transformed into symbolic states, for example the verbalization of thoughts and feelings. Early care is physical; this care could be equated to Freud's body ego (Jones, 1999). A lack of care and parental attunement can actually be translated by an infant as physical pain, which is then translated as a physical and painful emotional state. Relying on

Winnicott (1951/1975), Jones (1999) suggests that there are two possible trajectories when an infant is not properly held in a secure, mirroring environment: "a defensive separation of self from body in which symbolic elaboration consumes somatic awareness or a swallowing of the symbolic by the somatic" (p. 393).

Taylor (1992) notes that the *transitional objects* (Winnicott, 1951) which a child uses to symbolically represent the mother (when her presence would have been historically have been used) to regulate anxiety first function as a sensation object. The object provides smells, contact, sensations which remind the developing child of physical contact with the mother which had a regulatory function. He recalls two cases he worked with where patients were able to use sensation to modulate affect. One case was a 21-year old woman who found that she could stop panic attacks by smelling the scent of her husband on the bed sheets after he left for work. Another was a 74-year-old woman who also found that she could modulate intense panic anxiety after her husband's sudden death by smelling a piece of her husband's clothing.

Interesting, there might be a very "hidden" (Taylor, 1992) somatic piece of relationship which we use to regulate our emotions. Taylor enhances this theory by exploring psychobiological disregulation, which we will explore in the next chapter. Fundamentally, Taylor (1992) connects the disregulation and deficit model with Freud's original model of actual neurosis because he suggests that there is no primary psychological meaning in many somatic symptoms. Instead of saying that the "mysterious lap from the mind to the body" (p.264) and conflict are the source of psychosomatic illness, he suggests that "...the concept of psychogenicity...is replaced by

the view of the psyche as one component within a hierarchical arrangement of reciprocally regulating subsystems" (Taylor, 1992, p. 264).

Taylor (1992) suggests that this disregulation model eradicates the line between medical disorders and psychiatric disorders, because all pathology becomes re-evaluated as a disorder of self and other regulation. Again, the biological component will be explored in the following chapter. Briefly, Taylor (1992) concludes that deficiencies not only affect self and other representations but also the nervous and endocrine systems that are involved in homeostatic biological regulation. Thus, "these individuals may compensate partly for their deficits in self-regulation by maintaining symbiotic selfobject relationships with other people; however they are at greater risk for developing illness following separation and object loss" (p. 265).

Finally, Taylor (1992) suggests that treatment should function like Winnicott's (1951/1975) "good-enough mother" and should focus on strengthening the patient's resistance to disease by focusing on self regulation and the resolution of the splitting of "good" and "bad" self and other objects. In this process, the ill patient's tolerance for previously disavowed affect will improve as developmental arrests are resolved. *Affect*

According to Sandler (1972,1987) Freud originally saw affects as a form of energy; psychosomatic symptoms, or conversion hysteria, were thought to be brought about a pent up amount of energy from real traumatic experiences that needed to be released in order restore equilibrium in an individual. In his understanding, the pent up energy was a store of energy that was not tolerable to an individual, thus came out indirectly. Therapy was necessary in order to bringing up the memory to consciousness

and the catharsis of the affect. There are feelings and there is discharge (Sandler, 1972/1987).

In Sandler's (1972/1987) review, Freudian thought then shifts its focus to the intrapsychic world. Affects are seen as secondary to charges of libidinal energy, in which anxiety then becomes the transformation of libidinal energy (Sandler, 1972/1987). Finally, according to Sandler (1972/1987) with the introduction of the structural theory, Freudian thought describes anxiety as an affective signal, a signal to the ego that it is in danger of being overwhelmed.

Thus, at this point, the experience of the affect is assigned to the domain of the ego, while the somatic aspects of emotions were seen as feeling states and seen as aspects of drive derivatives. Sandler (1972/1987) laments that while Freud acknowledged that the signal for danger could arise from something external to the person, that affects were still seen as drive manifestations and a form of psychic energy. Sandler (1972/1987) distinguishes between feelings and affect states:

While both the body changes occurring in emotion and the qualities of *feeling* have been subsumed under the heading of "affect," and while psychological processes may be associated with feelings, it is important to distinguish between the two. The neurohormonal and metabolically caused changes in the body, commonly referred to as emotions, can be regarded as biologically based adaptive responses to disturbances of psychological homeostasis and can be regarded as having functions in regard to the mobilization of responses, to preparation for "fight" or "flight," and so on. (p. 294)

As the child organizes her experiences internally through mental representations, the mental apparatus is making its judgments based on experiences. By its nature, the physical experience of the world can only be experienced subjectively. Significance and meaning always contain traces of feeling states. Adaptation depends upon the feeling of safety. Sandler (1972/1987) continues,

...we can speak of an economics of feeling states, and we can consider the mental apparatus to function to maintain a dynamic *feeling homeostasis*. Normally, this is "in step" with the maintenance of bodily homeostasis. By this is meant that the restoration of a feeling homeostasis (with its associated feelings of safety and well-being) is perfectly correlated with the restoration of homeostasis in the physical systems of the body. (p. 295)

Thus motivation comes from both changes from feeling states from both internal and external stimuli (Sandler, 1972/1987). Sandler argues that affects are primary, not the secondary result of drives.

Interestingly, he (Sandler, 1972/1987) suggests that the mental apparatus has the capacity to rapidly "scan" the experiential field of input, with its associated feeling states, and actually alter painful or threatening experiences that might overwhelm or threaten consciousness. Even the discrepancy between a wished for ideal state and the actual state of being can cause pain. The ideal is also "embedded in a matrix of feelings" (Sandler, 1972/1987, p. 297). Normally the mental apparatus and the physical apparatus operate in harmony; yet it is also possible for them to become disharmonious. The mental attempt to restore safety can interfere with the physical affective regulation process. Sandler

(1972/1987) concludes:

The body, may, as a consequence, remain in a state of chronic physiological imbalance because of the defensive activity of the mental apparatus. The person may consciously *feel* well, but may for example have elevated blood pressure or other changes that, over the course of time, may lead to irreversible organic changes in the body. To put it another way: Because of guilt or anxiety, the mental apparatus may find a solution that restores a feeling of homeostasis, but does so at the expense of physiological adaptation. The body is thrown out of balance, so to speak, because the normal behavioral processes that lead to the disappearance of temporary and normal affective states is not permitted to take place. This leads to abnormal chronic affective physiological states, which may in

turn lead to organic pathology. This is one possible pathway for the development of certain forms of psychosomatic disturbance. (p. 297)

It sounds as if what Sandler (1972/1987) is suggesting is that a state of chronic pain can actually sustain a state of homeostasis similar to the homeostatic stress notion discussed in the previous section by Van Houdenhove and Egle (2004). This perspective may help us understand why some women with FMS do not report any affective disturbance (Burns et al., 2001).

Attachment Related Strategies in Modulating Affect

Fonagy and Target (1997) propose an attachment model that is based on a caregiver's ability to physically mirror and reflect back what a child might be experiencing internally. In this model a child looks outward to find meaning in her psychological experience. She organizes an internal working model of her experience based on how the caregiver has reflected her experience. This mental function is called the *reflective function*. If the caregiver is sensitive, those affective experiences will eventually be labeled as emotion. This relationship teaches her to read the emotional states of others and would affect her experience of self-agency, impulse control, self-monitoring, and affect regulation. The neglect of a caregiver in attachment relationships affects the child somatically.

"It is to be expected then that individuals who have experienced severe neglect or coercive, rigid, frightening, and, even at times, abusive parenting will frequently experience their sense of self agency massively curtailed and limited to the more firmly established bodily (physical) domain" (Fonagy & Target, 1997, p. 692). For some children, knowing what another feels could be a matter for survival. In less physically

dire circumstances, when adequate internal models have not been formed, if a child tries to understand the thoughts and feelings of violent or neglectful caregivers in terms of her own experience, the child will often conclude there is something wrong with her. This distortion happens because she perceives negative emotions in the caregiver who cannot adequately reflect her experience back to her.

The function of adult attachment is to bolster emotional regulation (Allen, Stein, Fonagy, Fultz, & Target, 2005). Unfortunately, there has not been a lot of research done on adult attachment and psychopathology (Vanhoudenhove & Egle, 2004). When a person cannot control her environment, she regresses to more primitive defenses by using defenses which reduce anxiety and maintain an internal sense of safety and a contained sense of self (Sandler, 2003) which modifies and controls her experience. Attachment problems may create somatization tendencies (Van Houdenhove et. al, 2001). The ability to *mentalize*, to represent affect in the mind (Fonagy, 1997), may shelter a person from psychosomatic illness (Gottlieb, 2003).

The Role of Early Relationships in Pain

The importance of a psychoanalytic dynamic exploration of the nature of psychosomatic distress was gradually minimized in psychoanalytic thought due to advances in more traditional biomedical fields. By exploring advances in psychodynamic thought in affect regulation and affect development Taylor (1992) examines how psychosomatic distress can once again be seen as compatible with more contemporary notions of relational psychotherapy. He examines how contemporary relational theory (such as Mitchell, 1988) which correlates psychopathology to deficits in psychic

structures and functions is more relevant in thinking about psychosomatic distress than Freud's ideas of intrapsychic conflict.

Taylor (1992) traces the trajectory of psychoanalytic thinking about psychosomatic distress and he notes that ego deficits in forming affect representations lead to emotions that are poorly differentiated and unregulated. He then notes that the failure to process the emotion cognitively, and the subsequent failure to regulate and modulate distressing emotions, leads to the development of hypochondriasis and somatization disorders. Taylor (1992) suggests that faulty interactions reduce a person's ability to self regulate:

As Emde (1988b), Stern (1984) and other developmental psychologists have shown, the capacity to form affect representations and to self-regulate states of emotional arousal is acquired within the context early social relationships. When the primary caregiver is emotionally unavailable, or when the child is repeatedly subjected to inconsistent responses because of parental "misattunments," the child is more likely to manifest abnormalities in affect development (Edgcumb, 1984; Emde, 1984, 1988a, b; Furman, 1978; Osofsky and Eberhart-Wright, 1988; Sterm, 1984, 1985). (p. 257)

This faulty interchange results in a child internalizing a faulty internal representation of both self and other, which affects the child's ability to regulate emotional arousal and distress. It is this failure of emotional regulation, undifferentiated affect, and inability to cognitively process an emotional experience which might, perhaps, lead to the pain of FMS.

Pain as the Preservation of Connection to Early Relationships

Jones (1999) attempts to examine the mind-body dilemma from the psychoanalytic perspective, as well as look at embodiment from an object relations perspective. Foundationally, Jones (1999) notes that it is not the desire for pleasure that compels us to seek relationships, but the presence of relationships that allow us to experience pleasure. He (Jones, 1999) says that according to object relationalists, physical pleasure as an end unto itself arises when the environment fails. Early physical caretaking acquires meaning in the context of an interpersonal environment. These connections might not necessarily be positive. Jones (1999) cites an example of a young woman, Nancy, whose history predisposed her to distance herself from her physical existence.

Nancy's dynamic was reinforced by many factors: (1) a history of childhood abuse, (2) a tendency towards intellectualization, (3) a sense of disgust towards herself, (4) unfulfilling sexual encounters, and (5) a religion which looked upon the body with disgust (Jones, 1999). Jones (1999) writes, "The body as known comes to birth in an interpersonal milieu" (p. 398), thus physical experience cannot be separated from interpersonal experience. Perhaps the pain of FMS might be viewed as a connection to an early and unmodulated relationship.

Pain as a Failure of Individuation and the Maintenance of Symbiosis

The mother initially serves as the boundary which protects the baby against overwhelming stimuli that comes from without, at the same time the mother also protects the baby from being overwhelmingly stimulated from within (McDougall, 1989). The mother needs to read the baby's need for stimulation. When the mother does not protect the baby from overstimulation or the baby falls prey to traumatic understimulation, the body does not develop adequate boundaries and becomes confused by the line between her mother's body and her own. Just as FMS patients tend to attribute their pain to physical and environmental, rather than psychological causes (Brosschot and Aarsse,

2001), the analyst Joyce McDougall (1989) comments on patient attribution and solution finding:

Thus, we may understand the way in which certain somatizing patients who have been exposed to continuing trauma in infancy (in that external stimuli became so powerful that they broke through the protective shield), tend to attribute their pain to outside circumstances, since primitive emotional states have failed to achieve a mental elaboration of a symbolic or verbal kind. When separation and difference are feared as experiences that may destroy the sense of self, and the subject feels impelled to struggle against the primordial division that gives rise to an "individual..." (p.43)

Because of a failure in parenting, the child becomes unduly autonomous. The

illusion of being at one with the parent coupled with early autonomy leaves a child

feeling inadequate (McDougall, 1989). The maintenance of the illusion of fusion

generates a feeling of trust and safety. Because of confusion around separation, the child

becomes forced to hide a part of herself in the illusion of fusion. To take charge of one's

own autonomous body is to take charge of one's own autonomous thoughts. In fact,

McDougall (1989) suggests

In those who are no way psychotic but instead suffer from grave psychosomatic illnesses, it has been my experience that certain highly charged emotional thoughts, which the mother cannot bear, become totally forbidden or foreclosed thoughts for her child. (47)

A disavowal of the body by separation and a disavowal of thoughts by something like foreclosure becomes a way of protecting the mother. A child who cannot identify with a caretaking mother may gain the sense that she is not responsible for taking care of her own body. McDougall (1989) suggests that somatic complaints arise in place of the psychotic fear (or wish) that one's body was still under the control of someone else. Thus, these patients may simple fail to autonomously hear and respond to the mind's signals of psychic distress and fail to take care of their bodily manifestations of suffering. The body responds through stress (archaic hysteria) in the face of what is perceived to be presymbolic imminent danger, psychotic anxiety. Thinking about the tightening and immobilizing response of the musculoskeletal system in FMS (Barker, 2005; Goldberg, 1996; and King, 2005), I wonder if McDougall's (1989) observation that in some of her patients "[i]mmobility is felt to be the only protection against a return to an unbearable and inexpressible traumatic state" (p. 93) could be an explanation for the rigidity present in pain.

McDougall (1989) makes some fascinating connections between affect, activity, the body, and addiction. It is natural to try and discharge extreme emotional tension under stress (eating more, drinking, smoking, etc.). However, she (McDougall, 1989) notes that an affect cannot be simply seen as something purely mental or physical; "[e]motion is essentially psychosomatic" (p. 95). She suggests that when acting out or discharge through addictive behaviors becomes a regular defense against feeling, the body resomatizes the affect and the mind interprets the gesture of acting out as an action devoid of content.

Because affects consequently become so immediately discharged, it is possible that a person might not even be aware of the warning signals of anxiety, which McDougall calls "the mother of invention in the psychic theater" (p.96). This instantaneous discharge is why someone may never consciously know that she is feeling threatened psychologically, which is what many women diagnosed with FMS report (Brosschot and Aarse, 2001). Most interestingly, as with the hyperactivity found in FMS patients (Brosschot and Aarse, 2001), McDougall (1989) suggests that a person may become overly involved or addicted to the activity of work (or other activities) with the

unconscious attempt of shutting out any room for relaxation or daydreaming. "These people are continually involved in 'doing' rather than in 'being' or 'experiencing.' In a strange way, if one is continually gripping her muscles, or even constantly responding to pain, there is constant activity and little room for an inner life" (p. 97).

In short, McDougall (1989) concludes that in the psychosomatic process, dreams and fantasies are replaced by somatic sensations. While we might never know what actually transpired between a mother and an infant on the most intimate bodily level, McDougall (1989) suggests that in the transferential therapeutic relationship, the analyst is often able to feel the "affect laden" (p.105) double bind messages which a child received and maintained in order to ensure her survival. McDougall's (1985) insight corresponds to another offered by Griffith and Griffith (1994), a couple who works together with psychosomatic patients:

Detailed interviews of patients suffering from somatoform symptoms have shown that the bodily experience of such a dilemma is that of mobilizing the body for action (e.g., an aggressive emotional posture), while expressing a contradictory emotional posture (e.g., a warm welcoming, with smiles and attentive listening, belying privately held seething). In essence, the body receives two conflicting directives for organizing its physiological readiness to act. Thus, it is not the intensity of a powerful emotion, such as anger, fear, or shame that typically triggers a somatic symptom. From an ethological perspective, this is a "command to camouflage" the body's emotion, homologous perhaps to the 'freeze reaction" or immobility reflex that other animals show when threatened or in a trapped position. One cannot *not* perform socially—when the performance is forbidden, one offers a somatized expression by the body as a *performance of a dilemma*. (p. 61)

In a sense, when a patient does not have the words, the bodily experience becomes

language itself. Life becomes a performance in the theater of human relationships.

Trauma

In an attempt to explain a particular category of high functioning psychosomatic patients she has encountered, the analyst McFarland Solomon (2004) regenerates the notion of the "as-if" personality:

The 'as-if' personality concerns the action of defensive dissociation deriving from very early experiences of internalizing the absent object, creating the sense of an internal void at the core of the self. At the same time, the self is capable of acts of self creation through a succession of identifications and internalizations with other sources of environmental nourishment, which substitutes for, and are constructed around, the original sense of internal emptiness. Thus are restored, but only up to a point the resources of the originally diminished self. Until these resources have been used up, the self is often able to excel in activities to an exceptional degree. (p. 635)

McFarland Solomon (2004) identifies dissociation as a survival strategy; the self must dissociate from the toxic experience of the long for and idealized other (toxic parent) in order to maintain an intact sense of self. Thus, one actually internalizes a void where the experience of another ought to be. Drawing on the work of Britton, McFarland Solomon (2004) notes that in the void of the "as-if" syndrome, a person occupies a liminal space where she fears both projection and introjection. The person actually lives in a "substitute holding environment", akin to Winnicott's (1951) idea of a *transitional space* whereby opposing experiences are held without reconciliation. McFarland Solomon (2004) writes, "In my view this may be more the result of the patient's identification with the pathologizing dynamics of the internalized parent couple, locked in an unconscious cross identificatory defensive illusion, or shared negative unconscious phantasy [sic] (as considered, for example, by Fisher, 1999)" (p. 639).

McFarland Solomon (2004) contrasts her notion of the "as-if" personality with Winnicott's (1960) idea of the *false self*. The false self also arises to cover and protect

the true self in the face of a hostile environment. But, in Winnicott's view the true self still exists. Similar to McFarland Solomon's (2004) notions of the tools that the self uses to survive, the false self also depends on high levels of intellectualization, which can lead to mind body dissociation. Also in accord with Winnicott (1960), he "as-if" self also is characterized by mind-body dissociation and physical pathology. However, McFarland Solomon (2004) distinguishes her concept from Winnicott's (1960) false self by noting that the dissociation in the "as-if" personality is the result of real trauma, abuse, or neglect.

The self compensates for the toxicity in the environment by seeking other sources of identification and nourishment from the wider environment. "The precious internal constructs are then understood not so much as 'false' but rather as constructed—the self's attempts to create an internal and external environment that is more life supporting and narcissistically soothing than that which had been available to the self' (McFarland Solomon, 2004, p. 642). McFarland Solomon (2004) paints a composite picture of an 'as-if' patient she calls "Clara."

Clara is portrayed as a successful, creative woman who feels as if she is living her life out of a void. Clara is the child of a violent father, a depressed and emotionally absent mother, and the survivor of trauma and abuse. About half-way through her treatment Clara falls ill with a dehabilitating chronic immune disease. Generally, she fits into what McFarland Solomon (2004) refers to as the cluster of the "as-if" personality elements: a sense of void at the center of the self, traumatic experiences involving early abuse and neglect, psychosomatic collapse, hypervigilance as a defense against the possibility of retraumatization (which also places high demands on the psychosomatic

whole); high levels of creative achievement; and excessive demands on the analyst's countertransference (p. 652).

McFarland Solomon (2004) explains that the psychosomatic nature of the illness are not the result of conflict, the body avoiding unconscious psychic content; rather, the illness is a result of the body, as a representation of its own trauma, attacking itself against unbearable toxicity and stress in an acknowledgement that habitual defenses are no longer viable. She (McFarland Solomon, 2004) seems to suggest that the trauma itself is so outside of a comprehensible or predictable human experience that only the body can speak the inexplicable language of inflicted trauma:

In almost every case I have had experience of the patient's body has had to share the burden of the traumatizing experience with the psyche. It is as if the psyche could not tolerate the full impact, or else could not make sense of the experience except by rendering it into organic form, or because the traumatizing history had such real toxic effects on the physical system underpinning the self's psychological experience. (p. 649)

Finally, McFarland Solomon (204) sees the "as-if" personality as one subgroup of the dissociative disorders, the way in which a person might respond to traumatic cognitive or affective experiences. Her understanding of the psychosomatic manifestations of the "as-if" personality is that the trauma that has been held for too long in the body has not been held in the mind. Again, hers is an example that highlights the importance of context. Not all women who are diagnosed with FMS have experienced trauma (See, for example, Goldberg, et. al, 1999), but there are subcategory of women who have. We must hold in mind that the diagnosis of FMS itself is not homogenous (Van Houdenhove & Egle, 2004).

Pain as a Fear of Death

Drawing on Fonagy's (1997, 2001) notion of the attachment function and mentalization, the contemporary analyst Driver (2005) examines how her patient "Jane" struggles to maintain an internal balance, shifting between both somatic and psychological overactivity and underactivity in an attempt to avoid annihilatory fears. Driver's (2005) patient is diagnosed with myalgic encephalomyelitis (ME), which is commonly known as chronic fatigue syndrome (CFS) in the United States. CFS is often compared to FMS in the literature (Shorter, 1992). Driver (2005) notes that because patients often seek external, rather than internal, resolution, patients who have chronic illness are a challenge to work with.

In an attempt to transcend the dualistic nature of working with body-mind issues, Driver (2005) works from an alternate space with Jane so that their relationship did not get caught in the dualism or symmetry of overactivity (fight) or underactivity (flight and collapse). Driver (2005) writes, "When there is an unconscious symmetry and fusion between physical disease and psychological 'dis-ease' a powerful 'field of disease' is created. Anxiety, stasis, and death anxieties frequently become merged by such a symmetrical linkage" (p. 157).

Initially, in her work with Jane, who first presented with depression and chronic headaches and was later diagnosed with ME, Driver (2005) describes a patient who came from a home where her mother was depressed, preoccupied, and disengaged. Thus, Jane's mother was unable to make room in her own mind for her daughter. Jane's mother literally allowed her daughter to fall off the changing table as a baby, and Driver (2005) attributes Jane's headaches to a recreation of the experience. Also, the headaches serve

as a kind of demand that the analyst keep the "baby" analytic patient in mind. Fearing the destructiveness of her own anger towards her mother, Jane was forced to keep her anger repressed and hidden, lest her anger destroy her caretaker.

Driver does an excellent job of tracking the theoretical and countertransferential concerns that arise in her work with Jane. One of the most fascinating theoretical concerns that Driver (2005) discusses is that fact that, because she does not actually have an internalized mother to process and reflect upon her experience, Jane is actually unable to process the fused toxic state of her body and mind. "It cannot be metabolized because there is no embodiment of a mother with which it can interact" (Driver, 2005, p. 162). Jane's body actually cannot relate to inner objects because her body is one of her inner objects.

Driver (2005) continues:

At an unconscious level therefore, physiological and psychological experiences that contain similar affects can easily conflate and psych and soma become unconsciously and symmetrically linked. This conflation of physical and psychological experience can generate a fusion and confusion in relation to the felt experience. The internal equation easily becomes rest=death, activity=life. It is much harder to stay with an asymmetrical equation rest=life. (p. 166)

When we rest we begin to engage an inner psychological domain, rather than using

activity to avoid any inner life. Reflecting on her own experience, Driver (2005) notes,

The pressure to be active, either by the patient or countertransferentially within the analyst, is immense. Activity defends against the fear of 'nothingness.' Activity and overactivity become the enatiodromia that defends against the 'deathlike' sense of underactivity but it also defends against a lack of an internal maternal reflection." (p.167) Activity is an interesting concept to bring into the conversation about FMS, because even when the pain diminishes a person's activity, there is still constant muscle activity in the pain.

Life Reassured in Pain

McDougall (1989) writes that in initial work with psychosomatic patients, she originally supported Freud's notion of *foreclosure*, which suggests that because of a severe split between psyche and soma, psychologically conflictual material was not merely repressed, as in neurosis, but actually wiped out from consciousness. In her early understanding she saw the body as responding to a psychological threat and expressing the symbolic meaning of the conflict. However, McDougall (1989) notes that over time she has became aware that many of her patients are aware of their affective experience and are able to think symbolically.

Reformulating her earlier opinion, McDougall (1989) suggests that somatic reactions could be considered a form of "archaic libidinal and narcissistic longings that are felt to be life threatening, much as a small infant might experience the threat of death" (p. 28). In fact a somatic reaction could reassure one that she is alive simply because physical illness or pain proves that one is alive. Then pain can serve to contrast a sense of inner death. Further, McDougall (1989) connects the desire for a continuous reassurance that one is alive to the consequences of a disturbed infancy and, interestingly, as a defense against depression.

McDougall (1989) actually links psychosomatic manifestations to psychosis, since both function to prevent the self from disintegrating in the face of a perceived

overwhelming danger. As was discussed more in object relations theory section, this role of protector is first literally provided by the caretaker or the mother. She writes:

Psychosomatic maladies come to acquire, secondarily, a beneficial significance. The physical suffering they cause is liable to be compensated by the unconscious conviction that the illness is serving a protective function, such as defining one's body limits. Fears of merging when in affective interaction with others (recalling unconsciously a disturbed mother-infant relationship) and the fear of being engulfed or abandoned by her are thereby alleviated. Communicating a state of despair through organic illness may also give access to caretaking people. Analysis also uncovers one further fantasy, namely that the physically attacked body is at the same time a way of attacking the body of the internalized mother, thus providing a further secondary gain from illness. (p. 29)

The conversion to pain then becomes an "archaic version of symbolism" (McDougall,

1989, p. 30), an "attempt to survive."

It is not so much that the body and mind are split, as the messages are silent, much as in infantile life. As I understand her theory, symbols cannot be ejected from consciousness because they are not yet symbols that can be thought. So, perhaps McDougall's (1989) view of FMS would be that the pain is caused by deficits in early relationships; yet she also seems to still hold a piece of conflict theory in her perspective. *Pain as Boundary*

Gendrault (2001) comments on Anzieu's (1995) (only available in the French language) chapter on pain in his book on the *skin ego*—which Anzieu defines as the space between the internal and the external. As such, pain becomes a challenge to the process of differentiation by disorganizing and threatening the structural distinction. Even the most inattentive other can be moved to respond to a child in pain. The mother's response allows the child another opportunity to reintroject the mother in her supportive role, and
thus allows the child to tolerate the pain. However, the danger is the way in which pain becomes the intervening medium in relationships. Gendrault (2001) writes,

If, according to Anzieu, a close relationship is not established early between mother and child when the pain arises, such pain will become the mediating agent of relations to objects. Consequently, this author describes a transition from a suffering body, a body in pain, to a body of suffering, a body of pain. The body of pain is the result of identificatory failures subsequent to a lack of skin in the mother-child relationship. The individual in pain organizes physically around such unanswered pain to become a body of pain, a body of pain that is not his. This will lead to boundary fluctuations. (p. 55)

Pain then becomes a way of keeping the other close. Gendrault (2001) criticizes Anzieu's

(1995) position noting that the process of differentiation is by its nature painful and that

Anzieu does not explain why a child would organize around pain rather than some other

unmet demand.

Continuing in his review of psychodynamic understanding of pain, and translating

the French for us once again, Gendrault (2001) discusses Nasio's (1996)

conceptualization that pain is an affect which can actually overrun the ego; it is not so

much the actual wound or painful experience that overruns the ego but the mental

representation of the wound of experience. In interpreting Nasio's (1996) article,

Gendrault (2001) writes,

Nasio continues to describe a dual parallel processing of pain. He describes an external perception, which holds the painful sensation, and an internal perception, which hold the psychic commotion. While the former or somatosensory perception can be expressed as 'I hurt' (the ego manages the pain), the latter, or somatodrive perception is expressed as 'I am in pain' (the pain overruns the ego). Nasio explains the somatodrive perception in tradition Freudian terms, that is, as a breach in the protective shield. He further explicates that the self-perception by the ego of the pain-induced internal commotion, that is, somatodrive perception, creates the affect of pain. Nasio adds that it is the pain of such commotion that remains unconscious. (p.59)

In this case, pain then becomes a breach in the boundary.

The analyst Kuchenhoff (1998) describes working with a psychosomatic patient and grounds his theory in the work of Bion, Green, Lacan, and Winnicott. He sees the central dilemma of psychosomatic distress as the choice between intrusion and abandonment. In order for there to be symbolization and representation, the other has to be at an optimal distance from the self, not impinging and not completely absent. If the object is felt to be lost, then it cannot be drawn up to the imagination; if it is felt to be impinging, then the psychic space is felt to be too "occupied, colonized, and damaged" (Kuchenhoff, 1998, p. 370). Kuchenhoff (1988), drawing from Green's concept of *somatic exclusion*, suggests that somatic illness arises from this dilemma. "The ego is sheltered from disintegration; the conflict is not worked through on a psychic level, but is exteriorated to the body that is left without a psychic cathexis—and the somatic illness begins" (Kuchenhoff, 1998, p. 371). Exclusion also suggests boundaries—there is something included, and there is something not included.

Somatic exclusion functions as a defense mechanism. It is still not entirely clear to me how Kuchenhoff (1988) views transition from psychic conflict to somatic illness. Kuchenhoff (1998) suggests that we can only speak in metaphors when we speak of exclusion from and access to the psychic sphere. Allowing for the mystery of the process, we can speak more readily about the function of the process. The process of exclusion is viewed as an attempt to restore space by both keeping an intrusive object at a distance and restoring an "enforced normality" (Kuchenhoff, 1998, p. 372), keeping interpersonal relationships smooth by minimizing cognitive and emotional differences.

The question remains, Does destroying the body establish distance between the self and the object, or are the somatic symptoms the result of very regressive conversion

mechanisms (Kuchenhoff, 1998)? It is not clear. Psychodynamic thought can work with the dynamic nature of the dilemma, but Kuchenhoff (1998) suggests it is much more difficult to make a characterological classification about the nature of the psychosomatic personality.

Kuchenhoff (1989) also refers to Anzieu's (1995) concept of the skin-ego, noting that the concept allows us to talk about differentiation from a body oriented language rather than a mind oriented language. "The psychic projection of the skin organ is called skin-ego; according to Anzieu, it has to shelter the intrapsychic space and to serve as a stimulus barrier" (p. 373). According to Kuchenhoff (1989) Anzieu (1995) suggests that the stimulation of the skin creates an artificial boundary, which both stimulates the body boundary from within and creates a body barrier from without. Perhaps, in the chronic pain of FMS, the muscular pain serves a similar function. The pain would both provide a companion, of sorts, preventing the person from feeling alone, all the while inhibiting any impinging access from the outside.

The False Self in Self-States

Bromberg (1998) argues that there is no such thing as an integrated or "real" self. Instead, the dissociated self state serves to stabilize the various discrete selves—states that fell as if they are in contradiction to one another. "Self-expression and human relatedness will inevitably collide; and emotional health is not integration. It is what I have called the ability to stand in the spaces between realities without losing any of them—the capacity to feel like one self while being many" (Bromberg, 1998, p. 195). The author (Bromberg, 1998) writes that a sense of falseness arises because the self state, in protecting itself, doesn't allow feedback or discussion from other self-states.

He (Bromberg, 1998) talks about a highly adaptive "dissociated caricature of adulthood" (p. 198) in which an analyst may find more adaptive than regressed self states; he warns that this successful dissociation is still a discrete self-state nonetheless. Bromberg (1998) continues,

To the degree that these other voices cannot participate in life, they remain alive as a private torment...Life is not authentically "lived." The present is at best a waiting period—a "masked" search for self-validation as a temporary escape from self prosecution and the moment when he will be ignored, disbelieved, challenged, criticized, disdained, or denounced by the world. He is waiting, in other words, for the always anticipated eventuality when another person he has been foolish enough to trust forms an alliance with one or another of his dissociated self-states and becomes an embodiment of his internal voices. (P. 198-199)

Bromberg's (1998) observation is reminiscent of the disbelieving and disdaining medical doctors described in the previous chapter (Åsbring & Närvänen, 2003; Solomon & Liang, 1999). His observation also draws parallels in my mind to both the historical experience of hysterics and the present day experience of FMS, in that both are patients in pain who are unable to convince doctors of their own subjective distress.

The Somatic False Self

Linking his work to Winnicott's (1960) idea of the false self, the contemporary analyst Goldberg (2004) proposes a fascinating model of pseudo somatic vitality which he calls the *somatic false self*. In his vision, the body activates itself in such a way as to create an impermeable boundary; whereby, this somatic state regulates itself to both conform to external expectations and simultaneously protect itself from the potential chaos of internal desires. The body becomes a refuge and a place of physical containment. Goldberg (2004) suggests that because of the threat of annihilation that comes

from the holding environment that the child lives

...under a threatening cloud of encroaching deadness and meaningless. This means that, in order to avoid devitalization and even catastrophic depersonalization, these patients must exploit their own body-aliveness by means of eliciting tension or pain, or excitement in the sensorium and the musculature. Such artificial activation of body vitality is, however, inimical to any real sense of appetite or need, and is therefore always accompanied by an underlying sense of futility and exhaustion. (p. 824)

Like the mind that can strive to control through omnipotence, the body can also strive to protect against unpredictability through omnipotence and control.

The body and mind are actually never allowed to experience an authentic or spontaneous desire because the constant stimulation of the body makes it impossible for the body and mind to rest. The resulting urgency that results from the lack of authenticity creates a feeling of helplessness (Goldberg, 2004). The stasis of the body functions like a holding environment that protects against dissolution. Goldberg (2004) notes that this type of presentation is not the dystonic somatic presentation of hysteria.

The body is not attempting to express a conflict. In fact, the repetitive sensory stimulation is attempting to keep the body functioning so that it does not draw attention to itself. The false body creates an ever present mother and an illusion of safety (Goldberg, 2004). Writing about the countertransference present with this category of patients, Goldberg (2004) observes,

In the clinical encounter, this often means a patient who is perpetually and interpersonally engaged, in some cases hyper-vigilant, in other cases hyper-related, but always simultaneously withdrawn beyond reach in terms of deeply personal emotion and vitality. Frequently this produces the ironic—or comical—situation of the patient being superficially alert and engaged, while the analyst, being shut out from emotional contact, is distracted and gets lost in a trance of one kind or another. (p. 833)

Goldberg (2004) notes that because of their unknown etiology chronic illness are particularly suited to fill the requirements of the somatic false self.

The body is chronically uncomfortable; but, because of the lack of legitimacy, the mind cannot gain symbolic control over the distress. The pain becomes a kind of "enveloping psychophysical presence" (Goldberg, 2004, p. 837). He is suggesting the presence of pain becomes oddly comforting. Like Winnicott's false self, Goldberg's (2004) somatic false self arises out of a failure of internalization. A condition of chronic depletion plus compulsorily auto-stimulation arises to over-engage the body. Interestingly, a physical illness can bring forth either despair or comfort. One can despair because the pain is so uncomfortable and simultaneously feel comfort because the pain is so familiar and present.

A Multidimensional Perspective

Shapiro (2003) provides an excellent case analysis of a young woman diagnosed with FMS that offers the reader an opportunity to examine the multiple ways that pain can communicate, including somatization on oedipal and pre-oedipal levels, conflict, secondary gain, anaclitic depression, internalized self-other interactions with a depressed mother, and transgenerational trauma. The author brilliantly speaks to attribution and the potential for internal and systemic splitting, observing that the referral system itself is actually split when a doctor refers a patient to a psychologist. However, Shapiro (2003) notes that clinicians have to start by accepting the split in attribution in order to work effectively with patients. Confrontation could set off other defenses, such as seeking further medical treatment. "Having the symptom in the body 'saves face' when shame

and cultural stigma are powerful. The shame must be addressed before the body and mind can be bridged" (Shapiro, 2003, p. 549).

Briefly, Shapiro's thirteen-year-old patient (Kai) is the child of Asian immigrants. Kai is referred by the family doctor because she is incapacitated by FMS, unable to walk, move, or take care of basic body functions such as going to the bathroom or her menstruation. Shapiro (2003) works to create a holding environment for Kai. Many facets of Kai's biopsychosocial history are elucidated in the examination of the various ways of understanding her case psychodynamically. Briefly, a new immigrant, Kai's mother was isolated and depressed for the first eighteen months of her life. Kai has an older brother who also retreated to depression upon arrival to the new country while her father was absent working.

About a year and a half into the treatment Kai walks out the door with a stomach ache after the therapist tells her that their time has ended. Describing a session that had focused on Kai's struggle with geometry (and Shapiro's countertransferential attempts to avoid the subject) Shapiro (2003) writes,

Walking toward the door she slouched more, her face crumbled, she looked down and grabbed her stomach. 'My stomach hurts', she whispered-wailed as she walked out the door. In this short vignette, we see enactment (enabled by my blind spots) and themes of separation, dependent longings, aggression and sexuality. Her rage at separation was followed by defensive somatization. With the psychosomatic learning problem, I hypothesized, based on data from other sessions, repressed awareness of Kai's female body—the problems with geometrical location and shapes (Lerner, 1976). The defensive somatization—her stomach ache—could be conceived as: 1) a symbolic conversion of unacceptable longings and rage to an organ associated with nurture and receptivity; 2) the somatic expression of a psychophysiological affective response, with attention defensively and regressively focused on the somatic aspects; and 3) a masochistic and passive-aggressive expression of transferential rage, automatically expressed in a way likely to arouse my guilt (which it did). (p.554) Up through this period, Shapiro (2003) continues to work with Kai's shame and guilt. She beautifully demonstrates how she uses her own somatic countertransference to gauge Kai's development while accepting that growth is not necessarily linear.

For instance, about a year into the treatment, in a developmental leap forward, Kai attends a dance at school. This positive gesture is followed by increased physical symptoms for a week. Kai addresses the split between her cultures, noting that in Asia people never needed teddy bears because there were always other people around for comfort. Yet, Kai also longs for privacy and her own teddy bear. Observing that the food in Asia makes her sick, Kai says, "There my body is not at home. In this country my mind is not at home" (p. 556). Reflecting, Shapiro (2003) writes:

I viewed the cultural aspects of Kai's material as multi-faceted, representing, among other issues, idealization and loss of an incompletely experienced and longed for nirvana, as well as conflicts in her adolescent reworking of self, ego deal, separation and individuation, and Oedipal themes (Akhtar, 1999). Prominent in these conflicts were variations in modes and degrees of separation and individuation. Was she to be merged or was she to be autonomous? She wanted both at the same time, and the only way to obtain both was to regress to a fantasied omnipotent state. In this regressed state she avoided facing the reality that she could not be all things in all ways. (p.557)

Shapiro (2003) goes on to describe how Oedipal-level conflicts embedded in culture kept

Kai from being too attractive or succeeding in school. For instance, an achievement could

mean a loss to her mother. She would also have to face a conflict in a perceived forbidden

father who might not approve of Kai's success.

Shapiro (2003) thoroughly and pointedly addresses the affective consequences of

having a depressed mother:

I will discuss some of the psychosomatic effects. First, infants learn to regulate psychphysiologic states by internalizing good-enough dyadic regulation. Critical psychoneurophysiologic pathways are formed (Schore, 1994), affecting all

aspects of the nervous system, including the autonomic nervous system. Selfregulation involves regulation of the autonomic nervous system. Hyper arousal of the autonomic nervous system in itself is correlated with decreased tolerance for sensation, in which touch becomes painful, as in reflex sympathetic dystrophy (Gertzen et al., 1998). Second, a well meaning but depressed mother, although not able to attend to the baby's psychic needs, does, as Kai's mother did, attend to physical needs. Thus, somatic expression becomes an effective mode of communication and a means for interaction. Third, the vicissitudes of separation and the Oedipus may become insurmountable when the capacity for psychphysiologic regulation is not age and phase-appropriate. Fourth, the child is rageful, but fears destroying a fragile mother. The expression of aggression is diverted into somatic, masochistic, or passive aggressive pathways. Fourth, the baby may identify with the mother's depression. Finally, depression is a psychphysiologic phenomenon; the somatic effects of diffuse pain and profound fatigue are well known. (p. 557)

At Kai's own observation and inquiry, as Kai begins to recall her early relationship with her mother, Shapiro (2003) begins addressing Kai's depression and anger.

As Kai's treatment unfolds Shapiro (2003) reveals her wisdom in initially not confronting her patient in what she perceives to be a split, and also demonstrating her capacity to work from a biopsychosocial perspective. Throughout her presentation Shapiro (2003) expresses her willingness and skill at working dynamically and nondualistically with a complex psychosomatic problem. She suggests that different theories hold different value for different patients and warns that "adhering to one paradigm of mind-body interaction and avoiding another may supply an illusion of safety at the cost of dynamic range and flexibility" (p. 559). Shapiro (2003) adequately sums up the intention of this section. When we, as therapists, cling to one description of psychosomatic pain, we are replicating the internal splits of the client, as well as the splits within the system. Thus, we are challenged to not just think complexly, but to embody complexity.

Summary

If we look properly, we can see splits throughout this psychodynamic exploration of chronic pain, which starts with Freud's split with Janet. Freud stressed the nature of the symbol to the mind; Janet accentuated that a mind weakened by stress was not actually able to recognize the symbol (although post dissociation fragments may be able to symbolize themselves) (Gottlieb, 2003). Perhaps it is now clear to the reader that it is not helpful to turn any formulation of psychosomatic pain into an either/or situation. However, I hope it is equally clear that without the capacity of a practitioner to fully embody a both/and position, a presentation of this breadth can be weakened by a propensity towards shallowness and a lack of brevity.

Our challenge becomes finding a way to allow these theories to inform one another without necessarily contradicting one another. The chronic pain associated with FMS has been categorized as: hysterical conversion, repressed hostile impulses, and a reaction against the wish for dependency (Alexander, 1950/1987); a hypervigilant absorption in somatic sensations which guards against the danger of a particular affect (Coen & Sarno, 1989); oedipal conflict and inhibited aggressiveness which is equated with depression (Feinchel, 1945); a form of a split off body memory (Perlman, 1996); an attempt to keep the internal life internal in order to maintain safety (Sandler, 2003); a dissociative traumatic reaction which protects one from psychic pain (Bromberg, 1998); a self state which functions by balancing safety and needs and contains its own ego resources (Bromberg, 1998); an attempt to self regulate by maintaining symbiosis (Taylor, 1992); an attempt to restore safety by physically controlling affect regulation (Sandler, 1987); an attempt to restore agency lost in attachment problems by resorting to

the physical domain (Fonagy & Target, 1997; Van Houdenhove et al., 2001); a failure to internalize early relationships and subsequently process distressing emotions (Taylor, 1999); a failure of individuation combined with a false autonomy (McDougall, 1989); an attempt to protect the self in the face of a hostile and toxic environment (McFarland Solomon, 2004); a way of warding off death (Driver, 20005); a way of reassuring one's self that she is alive (McDougall, 1989); a breach in the boundary as well as a boundary which keeps intrusive objects out and restores normality (Kuchenhoff, 1998); a way of keeping another close (Gendrault, 2001); a false self (Bromberg, 1998); a false somatic self (Goldberg, 2004); and finally, any and all of the above operating differently in the same person in different situations (Shapiro, 2003).

Certainly it would be easier a clinician to pick one theory and stick with it. However, just as it is a human developmental achievement to be able to tolerate ambivalence and see the good and bad in one person, so must we be able to integrate multiple theories without diluting their capacity to help us comprehend and skillfully interact with another human life. This growth might require us to integrate, not just multiple ideas within psychoanalytic theory, but growth within field adjacent to psychoanalytic theory. On this topic Gottlieb (2003) writes,

At present the future of mind-body studies seems bright indeed. So far, psychoanalysis has had a role in these exciting developments, contributing to a more sophisticated understanding of unconscious mentation and function (Solms, 1995). But psychoanalysis as a science cannot afford to rest on the ideas that have served it so well in the past. The challenge is to coordinate our concepts and investigations with those of bordering disciplines, especially cognitive neuropsychology, molecular neuroscience, and linguistic studies, and to profit from the vast expansion of neuroimaging techniques. (p. 878)

Thus, the next chapter will examine chronic pain from both the cultural and the neuropsychological perspectives of stress and trauma. It is intriguing to remember that Freud actually was a neurologist and to think about how today we actually can prove some of his initial theories which included a biological and scientific perspective.

CHAPTER V

TRAUMA AND STRESS

..love and hate and anguish, the qualities of kindness and cruelty, the planned solution of a scientific problem or the creation of a new artifact are all based on neural events within a brain, provided the brain has been and is now interacting with its body. The soul breathes through the body, and suffering, whether it starts in the skin or a mental image, happens in the flesh.³

With chronic illness, women feel pain, fatigue, disorientation, fear, malaise, frustration, alienation, isolation, anxiety, and excitement. At the same time our bodies carry cultural markers that tag us as aged, raced, sexed, classed, sexualized, disabled, and ill...The corporeal spaces, where women live, think, act, and feel, recursively constitutes "bodies in context"...Bodies can be both ill and healthy, both abled and disabled, be neither ill nor healthy, abled nor disabled.⁴

Introduction

This chapter will attempt to begin to examine some of the social and biological substrates that interact with the chronic pain of FMS. We will begin with an examination of trauma, including the sources of trauma, an exploration of culture as a mediator of trauma, trauma as a boundary violation, and the relationship between trauma and stress. We will then examine aspects of the brain which have been implicated in the

³ Damasio, 1994, p. xxii

⁴ Moss and Dyck, 2002, p. 67

aforementioned relationship of the assessment of threat and chronic pain. This will involve neurohormonal systems such as the hypothalamic-pituitary-adrenal (HPA) axis and substance P. Using this foundation, we will consider possibilities for how trauma becomes transformed into somatic sensations. We will look at the role of other as a psychobiological regulator, as well as examining the internal responses of dissociation and hyperarousal. Finally, we will briefly touch upon emotional regulation in the chronic pain of FMS.

The broadest ambition of this chapter is an attempt to systematically show the reader that there is no person who suffers from FMS who exists outside of her environment. The very personal experience of the chronic pain is inextricably linked to another. Self and other do not arise in contradiction; they cannot arise without one another. However, although we share and are influenced by one another at the most cellular and fundamental level, we can never absolutely know another's pain, which is particular and individual. Nonetheless, as Judith Herman (1992) points out in her seminal book *Trauma and Recovery*, it is only because of our collective sense of pain, and the subsequent collective political movements that rallied around trauma, that we are empowered to acknowledge the trauma and pain of another.

In 1895 with his "Project for a Scientific Psychology" Freud attempted (and ultimately shelved his attempt) to bring forth a model of the mind that had neurobiological underpinnings (Schore, 1997). Originally, every psychoanalytic concept which Freud introduced was coupled with a neurological or biological foundation; ultimately however, because brain science was not mature enough (Kandel, 1988) Freud maintained the psychological mechanisms he introduced, but dropped any explicit

aspects of biological underpinnings in his theories (Schore, 1997). However, Freud predicted that psychoanalysis would eventually re-merge with biology (Schore, 1997). In fact, Freud was correct, as one contemporary edge of research on the mind and body explores the way that the brain regulates affect, motivation, and bodily states (Kandel, 1988; Schore, 1997), all of which have been subjects of psychoanalytic thought.

By choosing to utilize individual cases to formulate his theories, which are considered scientifically subjective, Freud discarded his attempt to bring the clinical and experimental nature of neurosciences in to psychoanalysis. The Nobel Prize winner Eric Kandel (1988) argues that Freud's use of individual cases devalued experimental inquiry, and that further, psychoanalysis "slid into an intellectual decline" because the practice "discouraged new ways of thought" (p.458). Bringing the neural and biological sciences back into psychoanalytic thinking can be mutually beneficial for the entire field of mental heath (Kandel, 1988).

Psychoanalysis can define the mental functions that need to be studied for a meaningful life. Kandel (1988) fills out his argument,

Psychiatry, cognitive psychology, and psychoanalysis can define for biology the mental functions that need to be studied for a meaningful and sophisticated understanding of the biology of the human mind. In this interaction, psychiatry can play a double role. First, it can seek answers to questions on its own level, questions related to the diagnosis and treatment of mental disorders. Second, it can pose the behavioral questions that biology needs to answer if we are to have a realistically advanced understanding of human higher mental processes. (p. 459)

The strength of neurobiological models is that they have the capacity to look at the biological substrate which forms the foundation for any individual's mental and physical experience (Kozlowska, 2005). In terms of the chronic pain of FMS pain, biological

models can conceptualize an affective experience as an individual responds to (real or

imagined) threat.

Kozlowska (2005) explains,

The key contribution of neurobiological theories are their emphasis on the role of the body and their analysis of neural representations of body states as the biological substrate both implicit cognitive processing and the individual's subjective experience of the body. This perspective emphasizes the interconnections among body, mind, and external environment. Emotional stimuli are processed in the unconscious mind, resulting in bodily action, and are perceived and evaluated subjectively on the basis of changes in the biological state of the organism. This view is consistent with two centuries of clinical observations that conversion symptoms are associated with strong emotions or situations that threaten the individual's physical or psychological integrity. (p. 12)

Yet, simultaneously, the human experience is ripe with mystery. As we begin delving into the topic of illness and suffering, and try to tie painful experiences to meaning and explanation, it is important to allow the freedom of the attitude of "not knowing" to pervade the question of how the pain of FMS might be connected to the brain and trauma.

Mystery should not belie rigorous study that science offers us as clinicians, nor does it devalue the value of explanation—however, no matter how clearly we can point to biological mechanisms, and this includes that create the chronic pain of FMS, there is something mysterious and inspired about the human capacity to shift (or not shift) the perception and attribution of a self which experiences pain. If we could really wrap our mind around the complexity of the neurological, biological, psychological, and social processes that are evident in any given moment of pain, we would not even take the self for granted. Our scientific inquiry is based on the knowledge that the science of neurobiology is a science of ever unfolding uncertainty (Damasio, 1994).

Just because a situation is complex does not mean that it ought to be overwhelming, as happens in the chronic pain of FMS. When all the factors are working harmoniously, the complexity is functionally invisible. Depending on her constitution and propensity, an individual has a particular and unique way of experiencing the environment; yet there is no individual who is actually separate from her environment. Biological responses are shaped by interpersonal and inter-environmental relationships. Thus, using the advances found in the neurological sciences, it is probable that a patient who presents with chronic pain should be evaluated for a past or present history of abuse or trauma (Rubin, 2005).

For instance, in the differentiation of chemical and structural differences in the nervous systems of abused and non-abused subjects, FMS, chronic pain, and some autoimmune diseases (among others) are shown to be the result of childhood mistreatment (McCollum, 2006). This biologic finding is supported by studies such as the qualitative study cited in Chapter III (Hallberg and Carlsson, 1998) in which the themes of traumatic life history such as early loss, responsibility early in life, helplessness and hopelessness are found in women with FMS and the study of Imbrierowicz and Egle (2003) which found that adverse childhood events combined with poor coping skills are implicated in the etiology of FMS.

Definition of Trauma

War victims have been the major subjects of study in the examination of the relationship between physical symptoms and post traumatic stress disorder (PTSD) (Mc Farlane and Yehuda, 1999) and, as we know, were the first to be diagnosed with what we now call fibromyalgia (Barker, 2005). The trauma field has been reluctant to

acknowledge just how common trauma is (McFarlane and De Girolano, 1996). Neborsky (2003) distinguishes between big T" and "small T" trauma:

When the child and his environment are out of balance, and *no repair takes place*, small-T trauma occurs, resulting in anger, and eventually defenses. What leads to a traumatized state of mind? The key ingredient seems to be a state of helplessness in the face of actual (or perceived) danger (Freud 1926/1959c). Attunement failures between parent and child are, by definition, small-T traumas. If they are repetitive, fixed, and rigid, there is no way to process the negative emotion that trauma creates, and the effects become cumulative (Kahn, 1963). Ideally, small- and even large- T traumatizing experiences are processed in the parent-child dyad. However, when there is *impairment of parental empathy*, these affects are not processed interpersonally, they are stored. (p. 290)

Some researchers (McFarlane and De Girolano, 1996) question if there are different subtypes of trauma. Although the nature of the stressor is important factor, it is equally important to as questions such as: Who is the person exposed? How long was she exposed for? What was the nature of the exposure? How did the person react? Most fundamental to the experience of trauma is the induction of hopelessness, helplessness, powerlessness, and an attack on one's sense of agency and the predictability of the world itself.

PTSD is not necessarily an abnormal response. It is a normal response to an abnormal situation (Shalev, 1999). Part of a normal situation in a home is attuned parent. Many studies of FMS report a history of sexual trauma (Boisset-Pioro, 1995; Castro et al., 2005; Taylor, Trotter, & Csuka, 1995) and other abuse mired in secrecy and non-acknowledgement from family members. We cannot assume that the home environment is the safest environment. Moreover, what happens in the home is an expression of what a culture values, which can unfortunately replicate distorted patterns of power and control.

Sources of Trauma

Challenging his own tradition, (and perhaps out of a place of direct experience and empathy as he dealt with the medical system as a child), the M.D. Robert Scaer (2001) suggests that the medical system itself can be a source of trauma because the system itself does not acknowledge procedures, behaviors, and traditions that violate an individual's integrity. Without careful self reflection on the provider's part, this trauma could also perpetuate itself in the mental health field. The various sources of trauma are located in every system an individual interacts with such as family, school, society and environment. For instance, trauma can come from exposure to combat, child abuse, incidents in society such as crime or racism, natural disasters, and rape (Scaer, 2001) as well as a family's or society's response to such incidents.

Culture as a Mediator of Trauma

Human being are exposed and transformed by a cultural transmission which actually affects our biology, but this transmission is not genetic. Kandel (1988) notes:

Simply stated, the regulation of gene expression by social factors makes all bodily functions, including all functions of the brain, susceptible to social influences. These social influences will be biologically incorporated in the altered expression of specific genes in specific nerve cells of specific regions of the brain. These socially influenced alterations are transmitted culturally...The capability is so highly developed in humans that humankind changes much more by cultural evolution than by biological evolution. (p. 461).

What Kandel (1988) suggests is profound—human biology is changed more by culture than by biologic evolution. However, Kandel (1988) also warns that the use of brain sciences and genetic explanations have been dangerously misused historically (for example, the eugenics movements of the 1920's and 1930's) and that, therefore, a simple biological analysis of the mind inherently contains a dangerous ethical edge. A titan in the field of trauma, Herman (1992) argues that we cannot study psychological trauma unless we study the context in which it arises and notes that the study of trauma itself has been dependent upon political movements. Herman (1992) remarks, "Repression, dissociation, and denial are phenomena of social as well as individual consciousness" (p.9) and further observes that over twentieth century one particular type of trauma has arisen three times: hysteria, shell shock, and sexual and domestic violence. This type of trauma has given rise to labels such as somatization disorder, borderline personality disorder, and multiple personality disorder. They are all disorders that were once categorized under hysteria and they are all diagnoses that characterize adults who are survivors of childhood abuse (Herman, 1992).

Remember, for instance, that a large subgroup of the Van Houdenhove et al. (2001) study reported experiencing lifelong victimization such as helplessness, powerlessness, violence, chaos, and unpredictability. As an M.D. who works with trauma, and bears witness to acute accidents which have stirred deep seated trauma, Scaer (2001) writes, "In addition, I believe that the definition of what specifically constitutes a 'traumatic life event' is based to a significant event on cultural bias, gender-specific definitions, and a general lack of understanding of the physiological tolerance to stress of the developing infant" (p. 81). Thus, the line that falls between what is tolerable and what is traumatic seems intertwined with our concept of boundary.

Trauma as a Boundary Violation

Boundaries begin with our physical senses, which we use in infancy to define our sense of self and safety (Scaer, 2001). A necessary part of development is receiving positive and negative signals that help us feel safe. Positive signals encourage exploration

and negative signals warn of danger. This reception of signals is an ongoing process in which, in some ways, the self can be seen as one that is shaped around safety and exploration. Scaer (2001) writes that a strong sense of self and boundaries creates resiliency in perceived threats to survival which "...allows us to understand why all the relatively disparate examples of trauma in the DSM-IV have in common the specific concept of threats to survival" (p.4). Boundaries both protect us from the impact of the world and allow us to experience the unique impact we each have on the world.

Scaer (2001) says that neuropsychological responses are central features of the boundary violation trauma and stress. Trauma is literally toxic because it creates a sense of fear and threat in the body (McFarlane and De Girolano, 1996). The most severe boundary violations begin at home and spiral outward. Scaer (2001) expounds,

The most devastating form of traumatic stress therefore clearly occurs when caregivers, the intrinsic safe haven, the providers of our basic sense of boundaries, become the existential threat. When the maternal caregiver at times is also the raging and alcoholic abuser, when the loving father is also the source of incest, molestation, or physical abuse, there is no safe haven and no safe boundary between the child and his or her outside world. The child's perception of self is constricted and shrunken, with little residual buffer between what is perceived as safe, bounded space and the unknowable threats of the external environment. As a result, it takes a much smaller or less intense perceived threat to create traumatic stress for such a child when the source of that threat is the caregiver. (p.5)

Herman (1992) concurs. "Psychological trauma is an affliction of the

powerless...Traumatic events are extraordinary, not because they occur rarely, but rather because they overwhelm the ordinary human adaptations to life" (p. 33). Our ability to adapt seems to have something to do with our ability to tolerate stress. This capacity seems to be diminished in women who experience chronic pain. PTSD, particularly intrusive thoughts and arousal, is more prevalent in women diagnosed with FMS

(Ciccione, Elliot, Chandler, Nayak, & Raphael, 2005).

Trauma vs. Stress

Ongoing stress will not necessarily produce the symptoms of PTSD in a healthy

individual. This distinction of health is why the particular meaning of any given incident

is critical in terms of whether an individual experiences an incident as traumatic or not

(Scaer, 2001). Shalev (1999) deconstructs the notion that trauma is easily identifiable:

Within psychiatric nomenclature, there exists many terms that are now obsolete or difficult to justify. Salient examples are diagnoses that locate the origin of psychological problems in body organs (e.g. "hysteria" and "hypochondria" or bodily humors (e.g. "melancholia"). Although the term "post traumatic stress disorder" (PTSD) is a much newer diagnostic label, it is an equally problematic term, for a number of reasons. First, "traumatic stress" confounds two distinct constructs—"stress" and "mental traumatization." Second, the idea of "posttraumatic" fosters a retrospective definition of events as traumatic, based on their long-term pathogenic effects. Third, the inclusion within a single framework of common unfortunate incidents (e.g. road traffic accidents) and colossal atrocities (e.g. the Holocaust) creates an unbalanced foundation for an etiological theory of stress related disorders. (p. 77-78)

Although I will utilize the concepts of stress and trauma interchangeably, trauma and

stress can be seen as either two discrete categories (which is a subject of some of the

FMS studies cites in Chapter II such as Ciccione et. al, 2005; Raphael, 2006), or a

singular category which evolves along a continuum (See, for example, Shalev, 1999).

Scaer (2001) identifies particularities along the stress/trauma continuum:

Prolonged stress and trauma, although basically part of the same continuum, differ in a number of ways. Stress may be defined in one sense as any negative stimulus that produces activation of the sympathetic nervous system and related HPA pathways. Trauma may be viewed in this light as an extreme form of stress, one that has assumed life-threatening proportions. Trauma also is usually a sentinel event or events of great threat that and magnitude, eliciting a maximal catecholamine-based arousal. On the other hand, trauma need not be *traumatizing* unless, as defined by the DSM-IV, it elicits a behavioral response of fear, horror,

or a sense of helplessness, a state very suggestive of the freeze/immobility response. (p. 71)

There are biological differences in physiological changes that occur in chronic stress, trauma, and traumatic stress (Scaer, 2001). Central to the stress theory is the homeostatic model in which the HPA axis cushions demands on the system and maintains stability (Shalev, 1999). Scaer (2001) separates PTSD from other psychiatric conditions. In trauma the HPA axis, which will be further explored in this chapter, is sensitized to shut down in chronic PTSD (while we would anticipate that it would be more active under duress and is more active under stress). Though, the findings around HPA axis dysregulation, trauma, and stress can be inconsistent (Scaer, 2001).

However, Scaer (2001) acknowledges that the physiological changes present in trauma and stress are in the beginning phases and he suggests that we begin create a discussion around *physioneurosis*, conditions which involve many systems of the brain and body and which may be ongoing and self-perpetuating. Shalev (1999) also supports the idea that PTSD is at one end of the stress continuum and cites Lazarus and Folkman's (1984) seminal study in which chronic mild stressors can result in poor somatic health.

Stress and the exposure to extreme stress affects every aspect of a person's being: somatic, cognitive, emotional, behavioral, and characterological (van der Kolk, 1996b). Complex adaptations to traumatic stress can include the absence of self-regulation, self destructive behaviors such as self-mutilation, eating disorders, substance abuse, dissociation, alexithymia, and somatization (van der Kolk, 1996b). In this thesis we are concerned with the consequences of trauma and somatization (although I consider somatization and dissociation to be inherently linked.) Diagnoses associated with trauma

can include borderline personality disorder (BPD), dissociative disorder, somatization, substance abuse, and eating disorders, among others.

What I am suggesting is that the chronic pain of FMS should be included in that spectrum. At least, we should consider how the chronic pain of FMS (perhaps a form of somatization) might be included in this spectrum. The temptation is to make a one-to-one correlation with trauma and stress and the subsequent pain of FMS. Van der Kolk (1996b) cautions,

Naive one-to-one notions about the causal relationships between trauma and these disorders would oversimplify the very complex interrelationships among specific trauma, secondary adversities, environmental chaos and neglect, nature of preexisting and subsequent attachment patterns, temperament, special competencies, and other contributions to the genesis of these problems...Therapists attitudes about these symptoms—whether they are viewed as bizarre behaviors that need to be abolished, or as misguided attempts at self regulation—will critically determine approaches to treatment. (p. 183)

As Shalev (1999) suggests earlier in this chapter, psychiatry and psychoanalysis are historically grounded in attempts to understand the physical manifestations of events that we now know are related to trauma. Schore (2003) suggests that psychiatric disorders are related to a person's ability to tolerate stress. Hopefully, our attempts to understand the neurological underpinnings of trauma and chronic pain can help us ask, How can we find ways to help this person heal? Not the question, how do these neurological finding further support a propensity to pathologize the pain we cannot seem to locate?

The Brain

Every single person who writes about and researches the brain makes some reference to the "sins of oversimplification" (See, for example, van der Kolk, 1996a, p. 215) and as a student I would be naive not to add the "sin of broad misapplication" to my

own roster of potential errors. Nonetheless, we will joyfully progress in this attempt to understand how the brain has the potential to affect the body and the ensuing development of the chronic pain of FMS.

Physical abuse and relational trauma are associated with bodily dysregulation and subjective pain (Schore, 2003). The most common reason that persons visit a physician is chronic pain (Bennett, 1999); and unfortunately many physicians continue to view chronic pain as a kind of acute pain that has continued for too long. Because chronic pain happens in areas where there is no tissue damage (such as in FMS), and because the pain locates itself in areas that are not normally associated with an injury (if the injury triggered the pain), chronic pain should actually be considered a discrete category of pain (Bennett, 1999). "To comprehend chronic pain, one must integrate the sensory and affective-evaluative elements of the pain experience. Focusing exclusively on the psychologic aspects of aspects of pain or addressing only the sensory component and ignoring the affective dimension are equally misguided approaches" (Bennett, 1999).

Even when the sensory component of pain abates, there is not a linear decrease in the perception of pain in persons with FMS (Bennett, 1999). As has been repeatedly stated throughout this thesis, the pain of FMS is subjective pain (Goldenberg, 1999). Let us be clear that by subjective I mean personal, not less real or less valuable to systematic inquiry. Bennett (1999) writes,

a common misconception is to view the nervous system as being "hard wired" that is stimulation of nerve endings (for example, a needle prick) always produces the same behavioral and affective responses. This concept implies that the same *intensity* of noxious stimulus will always elicit the *same degree* of nerve stimulation and hence the same *subjective* experience of pain. Investigators now know that this concept is wrong. (¶ 3, section 3) Instead of suggesting that the pain is not real because it is not predictable or objectively measured, perhaps it would behoove us to ask ourselves what we have to learn from the subjective nature of pain. Babette Rothschild (2000a), who works with trauma survivors, writes,

As no two life experiences are the same, even for identical twins, it is the brain's malleability that makes each of us unique...The infant brain has the instincts and reflexes that are needed for existence (search, suck, and swallow reflexes; digestion and elimination) and to benefit from contact (sensory pathways, grasp reflexes), etc. This basic brain system, though, is not enough to insure the infant's survival. The baby needs a more mature human (the primary caretaker—usually, but not always, its mother) to care for and protect it. Moreover, many believe it is the interaction between baby and caretaker that determines normal brain and nervous system development. (p.16-17)

It seems that she is suggesting that part of the subjective nature of pain is a direct consequence of brain development which has resulted from the earliest caretaking relationship.

There are three interrelated aspects of the brain which each have their own anatomy and neurochemical substrates: (1) the *brainstem and hypothalamus*, which regulate homeostasis; (2) the *limbic system*, which monitors a balance between the internal world and external reality; and (3) the *neocortex*, which analyzes and interacts with the external world (van der Kolk, 1996a). Biologically, the psychologic aspect of pain is considered to be most closely interrelated with the limbic system, which will be explored more thoroughly in a subsequent section. Intriguingly, stimulating the limbic area of the brain in pain-free subjects does not inflame pain; but, in persons who have a history of pain, the stimulation can rekindle a historically painful experience (Bennett, 1999). How does the physical biology of the brain create a mental event; and how, in turn do social structures change the biological structure of the brain (Kandel, 1988)? As discussed in the previous chapter, when we reviewed this history of hysteria, and the attempts to locate hysterical suffering in both physical and symbolic causes (simplyorganic, having a physical lesion and functional, no known organic lesion), we now see that the relationship between mental events and the structure of the brain is not linear. We know that all diseases affect the mind through changes in the brain. Anything mental is biological, and any change in mind is therefore organic (Kandel, 1988).

In previous chapters we talked about functional somatic syndromes and discussed somatoform disorders; which are both diseases that point to the deeply intertwined relationship between mind and body. What Kandel (1988) essentially points to, is that no matter where we locate the chronic pain and physical distress of FMS, the etiology is social, biological, physical, and mental. Physical abuse in childhood may affect the physiological development of a child's brain, leading to organic changes in the body, and make a person more susceptible to pain, such as in the case of FMS (Rubin, 2005). Most excitingly, what these neurobiological findings seem to suggest is that the therapeutic relationship could actually have the capacity to create positive biological alterations in persons who suffer from FMS, thus pointing to the fact that therapeutic relationships have organic potential (Kandel, 1988).

Again, the pain of FMS is the pain of heightened pain perception (Goldenberg, 1999). Schore (2003) writes

Affect tolerance, which allows for the experience of emotion to enter into consciousness, is related to the adaptive capacity to bear pain (Krystal, 1988)...According to Emde (1983), the biologically based affective core becomes

biased with tendencies toward certain emotional experiences, depending on early experiences in the caregiving relationship...I suggest that the origin of mixed patterns of sympathetic and parasympathetic dominance that are found in individuals originates in the first 2 years of life. (p. 25)

Basically, Schore (2003) concludes that early affect experiences determine how the brain

develops, and this developmental experience manages stimulation, stress, and excitement.

All of these preceding factors would seem to be important factors in the perception of

pain.

When we talk about pain in terms of mind and body, we are making a basic

assumption that all functions of mind reflect functions of the brain (Kandel, 1988). In his

attempt to bring together psychiatry and brain biology Kandel (1988) offers five

contemporary basic principles that talk about the relationship between the mind and the

brain:

- 1. All mental process and behavioral disorders that characterize mental illness have their origin in operations of the brain, even when the causes of disturbances are environmental in nature.
- 2. One part of the development of major mental illness is genetic.
- 3. Social factors can change the brain and modify genes; therefore all of "nature" is ultimately "nurture."
- 4. Changes in genes change patterns of neuronal connections, which contribute to the biological basis of individuality, and sustain patterns which are induced by social factors.
- 5. Psychotherapy is effective when it changes expressions in genes, which changes synaptic and structural interconnections between nerve cells of the brain.

Yet, we cannot necessarily make clear distinctions between mind, body, self, and relationship (Kandel, 1988).

Like the maternal relationship which is physically linked to and influences the child, these ideas also point to the circular "cellularity" of the physical nature of the healing which happens in a therapeutic relationship. Perception does not change until the body changes and the body does not change until relationships change. This finding is highlighted in Blaustein's (2001) unpublished doctoral dissertation in which she finds that object relational deficits are related to chronic pain. How one understands one's self, and the subsequent pain one feels, is influenced both by how one both is actually related to and how she perceives those relationships. These relationships influence her brain. *The Limbic System*

The limbic system is the most susceptible to damage due to adverse childhood experiences (McCollum, 2006). Within the brain, the limbic system generates, inhibits, and controls emotions and is responsible for regulating the autonomic nervous system. The limbic system is related to memory, learning, the interpretation of emotional responses, and, along with connection to physical responses, the evaluation of danger and the subsequent fight or flight response (Rothschild, 2000b).

Two important structures within the limbic system are the *amygdala* and the *hippocampus*. The amygdala, which is mature at birth (Rothschild, 2000a), processes and stores the raw emotional experience. The hippocampus, which matures when a child is between 2 and 3 years old (Rothschild, 2000a), takes the content of an emotional experience and places it within a personal timeline, or context. The hippocampus can be suppressed by an extended period of cortisol secretion when stress increases (Rothschild, 2000a). Further, sensory information seems to travel through the amygdala to the right cortice of the cerebral cortex, while the left cortice of the cerebral cortex is related to the

hippocampus (Rothschild, 2000a). The roles of these developing structures are important when we look at the role of the relationship in the developing brain:

There is speculation that individuals that suffered early trauma and/or did not have the benefit of a healthy attachment may have a limited capacity for regulating stress and making sense of traumatic experiences later on in their lives. In some, it is possible that reduced hippocampal activity, either because it was never fully developed (attachment deficit) or because it became suppressed (traumatic events), limits their ability to mediate stress (Gunnar & Barr, 1998). Under those circumstances, later traumatic experiences might be remembered by some as highly charged emotions and body sensations. In others, it may be that survival mechanisms such as dissociation or freezing have become so habituated that more adaptive strategies either never develop or are eliminated from the survival repertoire. (Rothschild, 2000, p. 24-25)

Early stress would suggest that a person might be more predisposed to strong body

sensations which she might call pain.

Brain Pathology

This section on brain pathology will heavily utilize a summary from the Minnesota Medical Association (MMA) (McCollum, 2006). Brain pathology can be seen as the result of hormonal changes in the limbic structure. Typically the hippocampus and the hypothalamus work together to bring the brain back to a resting state after stress has set off a chain of hormonal and neural reactions. When a person perceives stress or danger the *hypothalamic-pituitary-adrenal* (HPA) axis is activated in the *locus coeruleus* and *the sympathetic nervous system* (SNS). This activation of the HPA axis sets off a chain of events:

- the subsequent release of the hormones norephinephrine, serotonin, and dopamine
- the amygdala reacts to the hormone release and stimulates the hypothalamus
- the hypothalamus releases corticotrophin releasing factor (CRF) which serves as both hormone, stimulating adrenocorticotropin hormone (ACTH) and a

neurotransmitter, and affects executive functioning areas in the cortex (e.g., motivation, planning, and logic)

- increased ACTH leads to elevated glucocorticoids (cortisol)
- high levels of glucocorticoids change the synaptic terminal structure, result in neuronal loss, decrease dendritic branching and negatively affect the hippocampus
- this process affects the feedback loop between the hypothalamus and the hippocampus which normally brings glucocorticoid levels back to their normal resting state

Ultimately, if this HPA stress response happens too frequently, structural changes can happen in the brain which keeps CRF and glucocorticoids (cortisol) levels high and hormonal levels imbalanced, an effect which will be outlined by van der Kolk (1996a) in the next paragraph.

The limbic system is replete with glucocorticoid receptors, thus is readily damaged during early childhood stress, loss, and trauma. HPA axis dysregulation has been found in the FMS population (Manu, 2004; McCollum, 2005).Van der Kolk (1996a) outlines the various abnormalities that PTSD can cause in the brain. The *hippocampus*, which affects memory and the ability to learn from experience, faces a possible loss in cell mass because of an increase in cortisol. Over activation in the *amygdala* (and various other related areas including the *orbitofrontal cortex*) will shut down a person's capacity to verbalize experiences, thus predisposing a person to interpret her experience as physical rather than verbal. *Lateralization*, increased activity on the right side of the brain, means that a person can experience a memory without conscious evaluation or words to express the experience, which can lead to acting out. The capacity to know one's own mind and envision what another is thinking or feeling is dependent upon the harmonization of the right and left hemispheres (Siegel, 1999).

The Orbital Structures

Genetic factors in combination with dysregulating psychobiological events can result in a predisposition for both psychiatric and psychosomatic psychopathology (Schore, 2003). This happens when an individual experiences deficits in flexibly adapting to both external socioemotional stresses and internal reparative mechanisms. This flexibility is generated by the orbital structures in the frontal brain (Schore, 2003). Schore (2003) writes

...the orbitofrontal system is also deeply connected to the autonomic nervous system and the arousal-generating reticular formation, and due to the fact that it is the only cortisol structure with such direct connections, it can regulate autonomic response to social stimuli (Zald and Kim, 1996) and modulate "instinctual behavior" (Starkstein and Robinson, 1997). The activity of this frontolimbic system is therefore critical to the modulation of social and emotional behaviors and the homeostatic regulation of body and motivational states, affect regulating functions that are centrally involved in attachment processes. The essential aspect of this function is highlighted by Westin who asserts that, 'The attempt to regulate affect—to minimize unpleasant feelings and to maximize pleasant ones—is the driving force in human motivation (1977, p.542).' p.61

When a person has experiences early stress or trauma, her preoribatal cortex is not as

capable of responding to internal and external stimulation, which could lead to

psychosomatic psychopathology.

The following summary of the role of the brain in regulation will be based on the

work of Allan Schore (1997, 2003). Calling upon the neuropsychologist A.R. Luria,

Schore (1997) observes that there is a relationship between the orbital prefrontal cortex in

brain and arousal and activity, two characteristics which are central to FMS patients

(Ciccione et al, 2004).

Changes in the *orbital frontal regions* affect inhibition, affect regulation, organization of personality, and self control (Schore, 1997, 2003). The orbital prefrontal cortex functions like an old fashioned operator, receiving information from all sensory areas in the *posterior cortex* and passing that information on to the motor areas in the *anterior cortex*. The cortical system creates routes throughout the brain, such as the limbic structures in the temporal pole and amygdala, arousal and reward centers in the mid brain, subcortical drive centers in the hypothalamus, and vagal nuclei and autonomic centers in the medulla oblongata. It is the center of emotional and social behaviors and the homeostatic regulator of the body and emotional states (Schore, 1997, 2003).

The limbic system is responsible for reward/excitement and aversion/inhibition features of emotion. The orbital prefrontal area is the holy of holies of the limbic system. Thus when emotion arises, the orbital prefrontal area controls the energy mobilizing nature of the *sympathetic nervous system* and the energy conserving nature of the *parasympathetic nervous system*. When the body experiences the onset of emotion, the orbital prefrontal area monitors changes in the neurohormonal levels of the hypothalamus, the pituitary, and the adrenals.

Because it interfaces between the higher and lower brain structures, the orbital system serves an "adaptive role" (Schore, 1997. p. 822). The system regulates homeostasis and modulates physiological states that relate to both internal and external feedback. Schore (1997) writes:

This system thus possesses the operational capacity to generate an internalized object relation—that is, a self representation, an object representation, and a linking affect state (Kernberg 1976), or a Representation of Interactions that have been Generalized (RIG) (Stern 1985). Similarly, Edelman (1987) describes the brain's creation of models of environment, images of a context, which consists of

the internal state of the brain as it responds to certain objects and events in the world. (p. 822)

"The prefrontal cortices thus contain some of the few brain regions to be privy to signals about virtually any activity taking place in our beings' mind and body at any given time" (Damasio, 1994, p.181). Essentially, the orbitofrontal system acts to regulate behavior in response to the significance of emotional stimulation. "The system thus enables the individual to recover from disruptions of safety and to integrate a sense of self across transitions of state, thereby allowing for a continuity of experience in various environmental contexts" (Schore, 1997, p. 825). In fact, Schore (1997) suggests that because of the orbitofrontal cortex's role in balancing the internal and external, it functions similarly to how Freud described the function of a drive.

However, the orbitofrontal cortex also plays an object relational role by functioning as a "template" which transforms external biological regulators into internal representations. Object representations are not just mental then, but actually psychobiological. Schore (1997) thus concludes that an object is actually a kind of bodily representation, a feeling state. These structures begin to help us conceive of how it is that interaction, emotions, and mind states are transformed into bodily experiences, including pain. In 2003 Schore adds,

Along this line, the recent findings that the orbitofrontal cortex represents an anatomical substrate for psychosomatic disease (Neafsey, 1990) and that an underactivation of the right brain is associated with a high degree of physical health complaints (Wittling & Schweiger, 1993) may help explain a recently established relationship between avoidant attachment and a risk factor for health (Kotler, Buzwell, Romeo, & Bowland, 1994). p. 35

Further research into the relationship between women diagnosed with fibromyalgia and attachment categories would be interesting.

The *anterior cingulate cortex* (ACC) is a part of the orbital structures in the frontal brain, is also a part of the limbic structure, and plays, along with the amygdala, a role in the modulation and subjective experience of pain by processing stimulation and assigning areas of control to other parts of the brain (Rainville, 2002). Thus, the ACC may be one of the neural mechanisms that interfaces between pain and emotions. What Rainville (2002) suggests is that there might be two separate structures that modulate the sensory and the cognitive aspects of pain, and that the ACC might be the structure which is more related to the perception and subjective emotional experience of pain. He (Rainville, 2002) further suggests that more knowledge about this are could be useful in treatment of pain:

...ACC activation is accompanied by a subjective experience of mental effort and emotional feelings associated with success or failure relevant to performing a difficult task. If this is confirmed, activation of the ACC might contribute to an increase in self-awareness and to feelings of self-agency that are associated with the voluntary engagement of cognitive and behavioral resources in response to novel, salient and affectively loaded stimuli. (p. 199)

Rainville's (2002) research seems to suggest that it might be possible to one day figure out how to actually motivate the structure that motivates agency. This could be an important biological finding because women with FMS are particularly susceptible to social stress, which weakens their internal coping strategies and makes them more vulnerable to overload (Davis, Zautra, & Reich, 2001).

HPA

The HPA axis is one of the basic stress response systems (Crofford, 2002). In a book length literature review of the functional somatic syndromes Manu (2004) cites multiple studies which show that the hypothalamus can become either hyporesponsive or

hyperreactive in the release of CRH in patients with FMS under the experience of stress.

The data seems somewhat inconclusive and sometime contradictory; although, it is still

interesting that there was dysregulation in the HPS axis in most of the cases of FMS.

Treatments which address the anxiety and depression in FMS (See, for example

Henningsen, Zimmerman, & Sattel, 2003) should address the HPA axis (Bradley, 2000).

Bradley (2000) summarizes the research and suggests that focusing on the HPA axis

offers a way of integrating neurohormonal findings with genetic and psychosocial

factors:

It may also provide a way of explaining the gender differences in the prevalence of mood and anxiety disorders. It appears that the HPA axis may be more susceptible to stress-induced dysregulation in females than in males (Weiss et al., 1999)...treatments that fail to address the HPA axis dysregulation should be relatively ineffective. (p. 196-197)

Van der Kolk (1996a) clarifies the role of the glucocorticoids:

Chronic exposure to stress affects both acute and chronic adaptation: It permanently alters how an organism deals with the environment on a day to day basis, and it interferes with how it copes with subsequent acute stress (Yehuda, et al, 1993). Whereas acute stress activates the HPA axis and increases glucocorticoid levels, organisms adapt to chronic stress by activating a negative feedback loop that results in (1) decreased resting glucocorticoid levels in chronically stressed organisms (Meany, Aitken, Viau, Sharma, & Sarieau, 1989), (2) decreased glucocorticoid secretion in response to subsequent stress (Yehuda, Giller, Southwick, Lowy, & Mason, 1991; Yehuda et al., 1995), and (3) increased concentration of glucocorticoid receptors in the hippocampus (Sapolsky, Krey, & McEwen, 1984). Yehuda et al (1995) have suggested that increased concentration of glucocorticoid receptors could facilitate a stronger glucocorticoid negative feedback loop, resulting in a more sensitive HPA axis and a faster recovery from acute stress. (p. 223)

Too much stress will make a person desensitized, thus the release of hormones are no

longer able to mobilize the energy needed to deal with stress. In an examination of the

role of the HPA axis and FMS Crofford (2002) concludes,
As can be easily seen, most studies show alterations of HPA axis but no consistent abnormalities have been demonstrated. This may be related, in part, to how FMS is diagnosed. The definition used to identify patients is pain, and there is no requirement as to the presence or absence of fatigue, other somatic syndromes, or psychological distress. It is likely that the influence of the HPA axis is largely manifested on those other features of FMS. Better methods to study the central components of the stress-response systems, including CRH functions unrelated to pituitary-adrenal activation will likely allow researchers to correlate specific symptoms associated with FMS that are influenced by differences in HPA axis activity. (p. 218)

One of our basic assumptions has been that the primary symptom of pain is related to stress. He seems to be suggesting that other symptoms are more closely related to HPA axis dysfunction than the main symptom of pain.

Substance P

Substance P is a nueropeptide which has been found at higher levels in the spines of those that have an abuse history. Substance P is associated with pain response and inflammation and has been implicated to an exaggerated pain response when a noxious stimulant was injected into rats. High levels of Substance P have been found in the FMS population (McCollum, 2006). These are two very simple examples to demonstrate how trauma damages physical or somatic regulation and which could be implicated in the pain of FMS.

The Transformation of Trauma and Stress into Somatic Sensations/ The Somatic Marker Theory

Somatization is one of the many available defenses that can follow a trauma (Neborsky, 2003). A simple biological model does not do enough to explain why various people can be exposed to the same event whereby some may develop PTSD and some may not (McFarlane and Yehuda, 1999). The authors suggest that the threat and horror that accompany a memory may be more related to PTSD than the original fear that

accompanied the incident. Physical symptoms could be an inherent part of PTSD, they may be caused by the development of PTSD, or they may be independent of PTSD and merely occurring simultaneously (McFarlane and Yehuda, 1999).

Damasio (1994) argues against simplistic linear explanations when we look for neurochemical explanations for the relationships between mind, experience, emotions, and consciousness. In other words, the simple presence of a neurotransmitter does not cause something like social adaptation, while its absence causes aggression. Neurochemicals operate within a dynamic operational system. What he means is that the presence or absence of neurochemical and social factors cannot be examined separately. Further, Damasio (1994) notes that the areas of the brain that are associated with emotion and decision making are also the same areas of the brain that are associated with social cognition and behavior. Thus, the psychobiology of an individual is inherently woven by the same threads of the family and culture in which she lives.

Damasio (1994) introduces *somatic markers* as a concept which is meant to explain how a person makes logical, affective, and intuitive connections with her environment. Essentially, "somatic markers are a special instance of feelings generated from secondary emotions. These emotions and feelings have been connected, by learning, to predict future outcomes of certain scenarios" (Damasio, 1994, p. 174). If a person encounters a certain situation for which she has negative somatic markers, she will feel alarm, versus a situation where she feels positive somatic markers, she will feel incentive. Somatic markers require a person to know both her own mind and to be able to theorize about the mind of others. In his introduction to *Descarte's Error*, Damasio (1994) writes,

The somatic marker hypothesis postulated from its inception that emotions *marked* certain aspects of a situation, or certain outcomes of possible actions. Emotion achieved this marking quite overtly, as in a "gut feeling," or covertly, via signals occurring below the radar of our awareness (examples of covert signals would be neuromodulator responses, such as those of dopamine or oxytocin, which can change the behavior of neuron groups that represent a certain choice. (p. xii)

In a sense, the markers signal safety or danger. Although childhood is the gathering ground for somatic markers, we continue to change and grow via experiences throughout our lives, thus experience adds markers to our repertoire.

The most important neural systems involved in the acquisition of somatic markers are the prefrontal cortices because they receive signals from all sensory regions from both the internal body and the external world. The prefrontal cortices also receive signals from the limbic brain. Basically, the prefrontal cortices categorize various combinations of experiences of events, interactions, and internal states. These categories of historical experiences help us make predictions about future outcomes. Working together with the amygdala, the prefrontal cortices signal the somatosensory cortex. With this signal, the self state is made conscious.

The somatic marker theory operates on a pain/pleasure signal. We are trying to acquire strategies which move us towards pleasure and away from pain. "What we call pain or pleasure, for example, is the name for a concept of a particular body landscape that our brains are perceiving" (Damasio, 1994, p. 263). Why are we biologically predisposed to feel pain? Damasio (1994) suggests that "suffering offers us the best protection for survival" (p.264). Is it also possible that the physical tension of FMS could be the body's attempt to prevent hyperarousal?

The mechanism by which Damasio (1994) proposes neural patterns become the subjective perception of body states is unknown, however it is a process believed to be hard wired into the neural substrate. Kozlowska (2005) comments,

The evolutionary perspective is integral to the somatic marker hypothesis. All levels of organization—homeostatic body states, emotions, and feelings—are understood as functioning to maintain life regulation by staving off danger, by helping the organism to take advantage of an opportunity, or indirectly by facilitating social relationships. The biological organization of the above regulatory reaction is underpinned by the "nesting principle," which refers to having parts of simpler reactions incorporated as components of more elaborate ones (Damasio, 2003). The ability to be subjectively aware of one's emotional state (that is, one's feelings) is understood to convey a significant survival advantage. It allows individuals to anticipate the outcome of events in an emotional sense, thus helping individuals make decisions that are advantageous to their well-being and survival (Damasio, 1994; Damasio, 2003). (p. 9)

However, sometimes individuals believe that they are still in danger when danger might not actually be present. Then, a person responds from what Damasio (1994) calls the "asif" loop, which is when the cortex works "as-if" it were receiving signals about a particular body state, and decisions are subsequently influenced as if the body and mind were in that real position.

The "As-If" Loop

A traditional view of the emotional relationship between the body and the mind would be that the emotions move from the mind/brain to the body and then loop back to the mind/brain again (Damasio, 1994). However, Damasio (1994) also suggests that the loop can actually only stay in the mind, the "*as-if*" loop, bypassing the body so that we only feel as if we experiencing a particular situation. The "as-if loop" is a learned adaptation to maintain an illusion of a predictable self in a predictable environment. In a spontaneous environment (life itself), the brain cannot predict how the body will result to

the various neural and chemical triggers, because there are just too many variables at play.

Damasio (1994) says that body state are not predictable algorhythms but that there is actually a spontaneous play between what the body reports and the brain experiences. So when body rhythms are not modulated by real events, they become "rebroadcasts" rather than "live performances" (Damasio, 1994). Damasio (1994) writes,

The brain cannot predict the exact landscapes the body will assume, after it unleashes a barrage of neural and chemical signals on the body, no more than it can predict all the imponderables of a specific situation as it unfolds in real life and real time. Whether for an emotional state or a nonemotional background state, the body landscape is always new and hardly ever stereotyped. If all our feelings were of the "as-if" type, we would have no notion of the ever changing modulation of affect that is such a salient trait of our mind. Anosognosia suggests that the normal mind requires a steady flow of updated information from body states. It might be that, as currently designed, the brain needs an affirmation of our living state before it cares to keep itself awake and aware. (p. 158)

Damasio (1994) has a wonderful capacity to point to something concrete with all the ephemeral beauty and mystery of the best moments of what it is to be alive, and free, and be in relationship to one's self and others.

However, Kozlowska (2005) laments that while Damasio proposes that powerful, but short-lived, shifts in body maps may be liable for conversion reactions he does not develop his hypothesis. Broadening his concept, to address the kind of conversion we might see in chronic pain, Kozlowska (2005) suggests three possible mechanisms by which chronic pain could happen according to Damasio's theory: 1) false body mapping could occur depending on which type of gray nucleus cells are stimulated—analgesic or noxious; 2) if the "as-if" body loop is providing false information, based on the prediction of danger, without the body actually being in danger, this could result in a perception of the situation that could instigate negative sensory and motor symptoms; and 3) the motor response would be the involuntary result of either an innate or learned emotional response.

Kozlowska (2005) critiques Damasio's model for depending upon a hypothetical construct of mental images without being able to explain how neural patterns become mental images. She also suggests that while the "as-if" loop explains how feelings can be created without the body being activated, that Damasio has also not explained the neural substrate for this function either. Kozlowska's (2005) criticisms seem fair in regards to one scientist pressing another in the field of scientific inquiry but unduly picky if we accept that there are possible aspects of the human experience that cannot be known.

It might also be possible that somatization of FMS emerges as a result of a patient repressing a painful memory while seeking validation for her suffering (Rubin, 2005). Rubin (2005) writes, "The patient may be highly focused upon a few symptoms or a multitude of symptoms...Symptoms include a variety of musculoskeletal disorders such as fibromyalgia syndrome, tension headaches, chronic neck or back pain. Conversion disorder is considered to be a more extreme example" (P. 110). Why would this happen?

Abuse is often connected to secrecy. Yet, health and sanity would also demand acknowledgement of trauma. Thus, these two patterns of secrecy and a desire to be acknowledged coupled together over a lifetime could lead to the chronic pain of FMS. Therefore, if the presentation of chronic pain originates in abuse, that abuse causes changes in biology and the brain. Thus Rubin (2005) surmises, "It seems that a more accurate term for psychosomatic disease is *psychophysiological* disease. Furthermore,

many medical illnesses are found to be more in common with this group of patients." (p. 1109).

Many researchers seem to be trying to find a work to describe the complex relationship between biology, body, mind, perception, and interpersonal relationships. In a way it is complex and in a way it is simple, because we each have the direct experience, for better or worse, of growing up in a family.

The Other as Psychobiological Regulator

If a trauma is related to power, as Herman (1992) suggests, then parents are profoundly responsible for how they utilize power in relationship to their developing child. When a powerful parent exhibits respect for a child, he or she is helping foster selfrespect and autonomy in the child. However, Herman (1992) writes, "Traumatic events violate the autonomy of the person at the level of basic bodily integrity. The body is invaded, injured, defiled" (p.53). In trauma, it is not safe to be one's self in relationship. This idea of the safety of being one's self, which would start in a family, seems related to the vulnerability to the effects of social stress found in the 2001 (Davis et al.) study. Herman (1992) continues,

Unsatisfactory resolution of the normal developmental conflicts leaves a person prone to shame and doubt...Shame is a response to helplessness, the violation of bodily integrity, and the indignity suffered in the eyes of another person. Doubt reflects the inability to maintain one's own separate point of view while remaining in connection with others. (p. 53)

Abuse and other early life stressors can cause immutable brain dysfunction, which in turn can later affect mental and physical health (Anda et al., 2006). Further, the current medical model does not encourage physicians to look towards sociological and etiological causes. Thus, childhood neurodevelopment is often overlooked when clinicians treat contemporaneous symptoms, such as those that present in FMS (Anda et al., 2006).

Using an ongoing study on Adverse Childhood Experiences (ACE) between the

HMO Kaiser Permanente and the U.S. Center for Disease Control and prevention

researchers (Anda et al., 2006) and basing their question in neurobiological research, the

researchers hypothesized that:

- 1. The damaging effects of adverse childhood experiences (ACEs) would be nonspecific, thereby affecting a variety of functions and behaviors, because abuse/traumatic stress affect a variety of brain structures and functions.
- 2. The likelihood of disturbances in any given function or behavior such as anxiety, sleep disturbances, substance abuse, sexuality, and hyperarousal or aggression would have a cumulative or "dose response" relationship with the number of ACEs, theoretically paralleling the total exposure to the developing nervous system to the activated stress response during childhood.
- 3. The number of comorbidities (Lilienfield 2003) (mean number of human behaviors and functions affected), which theoretically parallels the number of brain systems and associated functions affected, would also have a dose-relationship to the number of ACEs. (p. 176)

The eight adverse childhood experiences measured included abuse, witnessing domestic violence, and serious household dysfunction. These are all events that have been found in the childhoods of women with FMS (Van Houdenhove et al., 2001) What the researchers found was that as the ACE score increased comorbid outcomes, such as drug use coupled with obesity, or psychiatric problems coupled with other drug problems, also increased. For instance, increased norephinephrine activity caused by early stress could be decreased by heroin and alcohol. Specifically, the researchers (Anda et al., 2006) found that the risk for multiple somatic symptoms were increased 2.7 fold for persons with four or more adverse childhood events, such as could be the case with women with FMS.

Again, the limits of this thesis prohibit exploring the role of attachment theory in neurobiological regulation, but I will use some of Allan Schore's (2003) observations about the role of attachment in neurobiology to offer a brief summary of how early attachment relationships affect regulation. Early abuse affects the right brain, which affects the processing of socioemotional information which is below awareness. The right brain regulates body states and the ability to tolerate stress.

Threat is inherently intertwined with aggression. Schore (2003) suggests that deliberate hostility directed towards an infant is associated with the dysregulated experience of excessive body pain and distress and that the distress protects the infant from the caregiver. The orbitofrontal maturation of the brain is dependent upon attachment. When this part of the brain is not allowed to mature properly, as proper maturation is a result of secure attachment, it can lead to difficulty with affect regulation and particularly negative affective states.

Stress is defined as the lack of synchrony between the parent and the child. Schore (2003) writes,

...the mother must be psysiobiologically attuned to the dynamic crescendos and decrescendos of the infant's bodily based internal states of arousal. Within a context of visual-facial, auditory-prosodic, and gestural preverbal communications, each partner learns the rhythmic structure of the other and modifies his or her behavior to fit that structure, thereby cocreating a specifically fitted interaction. (p. 116)

Simply, it is the parents' job to protect the child from over arousal while making sure that the child is aroused adequately. In healthy attachment there is spontaneous play between the limbic systems of the mother and child as is demonstrated in simple interactions where the infant makes a face, the mother responds by something like mirroring or exaggerating the infant's face, and then the infant has a chance to respond again. A simple smile on the face affects the autonomic nervous system (ANS) which then creates the somatic aspects of emotion. Hyperarousal and dissociation are expressions of what can go amiss in this psychobiological regulation.

Hyperarousal and Dissociation

In the previous chapter we talked about the split between Janet and Freud and the use of the concept of dissociation. Spiegel (2006) clarifies, "Janet used the term *desaggregation mentale,* which is poorly translated by the word 'dissociation.' The English term merely implies separation, whereas the French indicates a kind of forced separation of elements that would normally aggregate, which is actually a better description" (¶1). In an editorial in the *American Journal of Psychiatry*, Spiegel (2006) points to the role of the hippocampus and the amygdala in buffering the stressful impact of HPA activation. The parasympathetic nervous system (PNS) then becomes *hyperaroused* and the infant responds by retreating into her inner world, *disassociation* (Schore, 1997). To maintain a sense of safety the infant responds to stress with increased sympathetic arousal, thus protecting the self from intense affects. This reaction can permanently influence the brain and influence attachment and affect regulation (Schore, 1997). What is interesting about this research is that adults who have experienced trauma face severe stress can then disassociate and return to an infant state.

Scaer (2001) believes that all conversion (or somatization) disorders represent a subset of dissociative disorders, writing "Conversion reaction, then, is an example of a regional somatic dissociation as a reaction to a trauma" (p. 107). He believes that what happens in the body is an attempt to move away from the threat. "In the traumatized

person, dissociation occurs in many forms, at many times in the evolution of traumatic stress and post-traumatic stress disorder, and has emotional, perceptual, physical, and memory-related manifestations" (Scaer, 2001, p.106). Although Scaer (2001) is focusing on the traumatic effects of motor vehicle accidents, I believe his idea is nonetheless relevant to FMS patients as he characterizes the pain as an attempt to simply move away from something (either external or internal) or more simple, as an attempt to survive.

Dissociation at the time of trauma is a predictor of PTSD (Scaer, 2001). Freezing is a form of dissociation, something which children are prone to do in the face of threat, which then becomes a self-perpetuating cycle as the world begins to appear more threatening. The limbic system is implicated in dissociation, setting a stage for "fear conditioning" (Scaer, 2001). Very simply, the amygdala becomes inhibited and the brain becomes more sensitive to internal and external trauma related cues which would then exaggerate the emotional and behavioral cues of PTSD (Scaer, 2001). Scaer (2001) also suggests that there might be some sort of opioid reward system that happens with dissociation as well. Dissociation is like an ongoing freeze response which, over time, leads to the active suppression of cortisol levels in the HPA axis which are normally elevated in stress responding systems.

Chronic pain then becomes an implicit memory of traumatic impairment. Scaer (2001) elaborates:

Pain "memory" may be viewed as a defensive survival tool in the face of an unresolved threat, a conditioned survival response and a perception rendered ineffectual because the physiological response of freeze/dissociation has literally blocked the survival brain from instinctively "realizing" the threat is over. (p. 123) Thus somatization or dissociation is not just an expression of emotions or a conversion of thoughts. The process present in the somatizing aspect of chronic pain is apparent through visible changes which happen in the autonomic nervous system as the result of trauma and traumatic stress. Scaer (2001) suggests that unless the field is able to break open the physiological dissociative aspect of chronic pain, we are not treating chronic pain effectively.

In the midst of a trauma a person's body becomes physiologically aroused in order to alert the self of danger. What happens is that the arousal continues despite the removal of the stimulus. This aspect of trauma is known as *hyperarousal* and is marked by a person who startles easily, is easily irritable at small provocations, and experiences poor sleep (Herman, 1992). Herman (1992) suggests that the psychosomatic complaints of WWI can be understood as a form of hyperarousal. If we think of FMS in terms of trauma, perhaps a similar association can be made. Like affect, hyperarousal is an attempt at regulation.

Affect

Emotions are considered subjective; yet to the biological mind they are a fact (Siegel, 1999). Emotion serves two functions. It is both regulated and regulating (Siegel, 1999). From the very first functions of internal regulation, such as the sleep-wake cycle and digestion, the parent serves as an external regulator which helps an infant orchestrate these functions. As the child becomes more complex, the sense of self becomes more complex, and the dyadic regulatory function of the parent becomes more complex (Siegel, 1999). Emotional regulation depends on the flexibility of the environment; and, as we see with Damasio (1994), a quality of inflexibility in the environment can be

reflected in a quality of inflexibility and a lack of spontaneity in an individual's organic response. Is it possible that this rigidity, which can begin in early interactions (Siegel,

1999) could lead to psychosomatic illness (Kozlowska, 2005)?

Emotion, meaning, and social interactions come together in the brain because they

travel on the same pathways. Siegel (1999) offers the orbitofrontal cortex as an example:

Neural firing patterns transmitting the "information" from these regions are directly sent to the orbitofrontal cortex. This information includes social cognition, autonoetic consciousness, sensation, perception, various representations such as words and ideas, somatic markers representing the physiological states of the body, the outpost of the autonomic nervous system (which allows for "affect regulation via the balancing of sympathetic and parasympathetic branch activity). As we've discussed earlier, the capacity to respond adaptively to the personal significance of an event, not merely with autonomic reflexive reaction, mat require both the capacity for responsive flexibility as well as its integration with these other prefrontally mediated processes. (p. 258-159)

There seem to be too many elements at play for any response to be precalulated or

premeditated.

Any attempt to maintain a state of readiness would diminish "responsive flexibility." Siegel (1999) speaks of a "window of tolerance" in which a flood of emotion takes over a person's capacity to both spontaneously respond to a situation and to recover from the same situation. Windows become narrower if an individual struggles to recover from the neurological effects of flooding. Siegel (1999) suggests that "consciousness can influence the outcome of emotional processing" (p. 266) of which it seems the first step of recovery for an individual suffering from the chronic pain of FMS might mean her becoming aware of her mind state. Furthermore, it would seem that pain can serve as both an emotion and as a mind state, which is why the regulatory effect of attachment in the therapeutic relationship could be seen as important (Siegel, 1999) with FMS patients as persons learn to tolerate and navigate their spontaneous responses in real relationships.

Summary

Melanie Thernstrom (2006) is a writer who recently published a piece in the *New York Times* about her personal struggle with chronic pain. She visits a California laboratory which is using functional Magnetic Resonance Imaging (f.M.R.I.) which allows subjects to watch the effects of their mind on the brain in real time in an attempt to help persons learn how to relate to their very personal pain. Thernstrom (2006) interviews researchers who say that when a machine looks at the mind it depletes the mystery of the nature of mind, because the mind does not have a "physical address." Nonetheless, she marvels:

Like everyone who suffers from chronic pain, I find it hard to believe that I have a pain modulation circuit. The aspect of my pain I feel most certain about is that it is not voluntary: I cannot modulate it. And this belief is reinforced every single day that I suffer from pain, which is every day. (\P 13)

I am sure her words, "And this belief is reinforced every single day I suffer from pain, which is every day" could be echoed by anyone who suffers from the chronic pain of FMS. Thernstrom (2006) wonders at the power of a brain that amplifies pain if it believes it is being hurt and shuts down pain if it believes it is being relieved. There is no singular pain center in the brain; pain is the result of 5-10 different centers transmitting information. The f.M.R.I technique offers hope that a person can learn to reduce pain because it shows that while the brain can be altered as a result of various life circumstances—in our case we are interested in trauma and stress—the brain can also has

the potential to relearn agency in relationship to pain, thus the brain, or the person, has the capacity to heal.

In the nature nurture debate, it can be difficult to grasp that the quality of nurture can negatively affect what has been provided by nature. Stress and trauma alter the physiology of the brain, thus blurring any clear line between nature and nurture (McCollum, 2006). Because of the power and fear that are inherent in stress and trauma (Herman 1992) what becomes clear for therapists is that the first goal in working with persons with FMS is the establishment of safety within the relationship (van der Kolk, 1999b). What we have learned in this chapter is that pain operates on every level from genetic, to cellular, to the physical and mental structure, to the interpersonal, familial, and societal levels; thus, whether we are looking at a genetic predisposition to pain or a socially induced and enforced experience of pain, pain needs to be addressed in all spheres in order to understand its nature thoroughly.

Thernstrom (2006) says that aspect of pain that she feels most certain about is that it is not voluntary. That doubt is a real experience for her and for the women who experience the chronic pain of FMS. Earlier, Siegel (1999) reminds us that while emotions are subjective, they are a fact to the body. So, it seems the real question in FMS is not that the body is affected, which is a fact, but how do we help alter the perception of the pain? One of the themes throughout both this chapter and the previous was the dance between the spontaneous and the inflexible. The spontaneous frees us to change and to respond; the inflexible traps us in a prison of an idea about body and mind. Pain seems to be a prison of inflexibility or an ability to be effective and affected.

This interdependence of levels is why the biopsychosocial perspective (Van Houdenhove et al., 2001) is so important in the assessment of someone who suffers from chronic pain. The following chapter will offer a biopsychosocial assessment for a hypothetical patient who suffers from chronic pain

CHAPTER VI

DISCUSSION

If any thing is sacred the human body is sacred.⁵

Introduction

In Chapter III we noted that certain questions are germane to thinking about pain, such as: What is pain? Can it truly be measured? Even if it is measured, can one person truly experience the pain of another? What biopsychosocial propensities make pain dehabilitating? What psychological propensities inhibit pain and allow a person to function? How is pain passed on and defined by a society? Why do some people feel emotional pain and some people feel physical pain? Throughout chapters IV and V we took certain theories, such as Winnicott's (1949) conceptualization of infant development and the environment, Bromberg's (1998) ideas about dissociation and the integration of the body and mind, Herman's (1992) treatise on trauma, Schore's (1997, 2003) understanding of the brain in relationship to a person's ability to self regulate, Damasio's

⁵ Walt Whitman from *I Sing The Body Electric in Leaves of Grass, 1900*

(1994) exploration of the relationship between the brain, perception, and the body, and Scaer's (2001) understanding of the neuropsychological response to stress and trauma and tried to answer some of these preceding questions. What we essentially learned is that, although we can talk about the body and mind as distinct entities for didactic purposes, experientially, body, mind, interpersonal relationships, and the environment can never be separated. An individual experience of pain is contingent upon the inherent interdependence of these preceding, and other, factors.

In chapter III one of the extrapolations we might make about Barker's (2005) exploration of sociocultural factors such as race, class, and gender present in the chronic pain of FMS is that a white woman is potentially more likely to locate pathology internally, rather than in the social or economic causes of suffering. Van Houdenhove et al. (2001) speaks of the biopsychosocial characteristics in groups of "predisposing, precipitating, and perpetuating" factors (p. 21) which we used to examine some of the dynamics present in FMS. Chapters IV and V allowed us to examine how these factors manifest neurobiologically, intrapsychically, interpersonally, and culturally. In this discussion chapter we will look at a hypothetical case of a single client who presents with the symptom of chronic pain.

It is possible that each of these preceding factors constitute one dimension (Henningsen et al., 2003) in the complex experience of a client who experiences chronic pain. The purpose of this discussion and biopsychosocial assessment of this client is to explore how we can validate and legitimize a symptom that has no known origin or explanation. In this attempt, we are intending to lift the power and stress of stigmatization

that follows these clients who present with FMS and chronic pain with no evident cause (See, for example, Solomon & Liang, 1999).

A Review of the Methodology

This basic format for this biopsychosocial assessment has been formulated by two health psychologists (Smith and Nicassio, 1995). The model is useful in harmonizing medical and psychological models of assessment, as opposed to dichotomizing the medical and the psychological based on bias and propensity (Hazemeijer and Rasker, 2003). The strength of this style of methodology is that we are able to assess a syndrome with comorbid biological and psychological symptoms, thus assess for the particular situation of an individual experiencing chronic pain (Gatchel, 2004; Henningsen, Zimmerman, & Sattel, 2003). The weakness of this particular methodology is that we are looking at a single case, which is hypothetical, and which, while allowing us to play with concepts, would be difficult to draw broad conclusions for all clients struggling with chronic pain and FMS. Nonetheless, this discussion chapter is useful in providing a model of assessment for a clinician who encounters a patient who presents with the symptom of chronic pain.

The Client

Robin is a 54 year-old white woman who found this low-cost psychotherapy clinic in the phone book and referred herself for treatment. When this therapist went to meet the client in the lobby she was gregariously questioning another patient. Although the second client appeared slightly uncomfortable, Robin did not seem to notice and cheerily wished him well as she exited the waiting room. Robin looked a bit worn and tired in her face and around her eyes. Robin took off her coat and sat on the edge of the

sofa nearest the therapist with her coat on her lap. The client remarked that it was hot, taking off her outer layers until she was only wearing a tank top. This gesture intuitively felt like an act of exposure, and I speculated that the client had a trauma history. She was able to give a very complicated background clearly and thoroughly. Her affect seemed to match her words. She also laughed at herself quite easily.

The Illness

Robin said she had come to therapy because her "desires are changing" and that she felt that she needs to make "decisions." The client described a 15 year seemingly symbiotic relationship she has been in with a man she described as a "200 lb. baby." At the time of the intake, her partner was in an in-patient drug rehabilitation program. She expected him to be released within the week and described his lifelong addictive history with crack, heroin, and pot abuse. Robin's partner, Jack, is a survivor of sexual abuse and neglect, and is also diagnosed with conversion disorder. He has seizures every time he senses that the client is moving away from him—in fact, she first diagnosed it herself, noticing he would have a seizure every time she was on the phone. Robin described losing her home and livelihood because of this man, but says she continues to worry about leaving him. The client stated that he has been called "hopeless" so many times that she fears that he might die if she left. The patient stated, "All my focus has gone on Jack and I feel held hostage."

Pathophysiology

The client suffers from chronic pain. In addition to her partner, she also takes care of an uncle who is diagnosed with parkinson's disease, her uncle's wife, and his wife's brother who is brain damaged. The patient says she is beginning to question her instinct

to take care of people and says she needs "someone saner than I am to bounce things off of." It is evident that due to her pain the client is barely able to take care of herself, much less her partner and her family. Nonetheless, she persists.

Because of lack of her insurance and distrust in the traditional medical system, and because Robin does not have a primary physician and does not have a copy of her medical records, and further, because the Agency is not working in conjunction with Robin's alternative pain care providers, we are initially limited in our capacity to respond to Robin's diagnosis beyond her reports of pain. The client suffers from chronic pain, which she believes is stress related. She is primarily under alternative medical care for this pain, and sometimes takes sleep medication or pain killers. However, the client says taking medication makes her uncomfortable and she prefers vitamins. Further, her pain diagnosis has not been named, the naming of which could offer the potential of a measure of some relief (Åsbring & Närvänen, 2003).

Robin is not clear about what she anticipates from therapy. She said, "I just want my life better. I want to make some decisions. I wake up and I am in a lot of pain. My mind is out the door and my body is still in pain." She did not state this directly, but it appears that Robin believes that if her interpersonal obligations and stressors were relieved, that her pain would also be relieved.

Risk Factors

The risk factors in Robin's life are likely closely related to Van Houdenhove's et al. (2001) psychosocial stresses, including support, critical life events, and posttraumatic experiences. Each factor will be examined in more detail in this section.

Support. As will be shown throughout this chapter, Robin has been responsible for her own care from very early on in her life. The adults were not capable of supporting her. She does not seem to anticipate receiving support from others; in fact, she appears to believe it is her job to support others.

Critical Life Events. Robin was raised in poverty by a schizophrenic mother. Her grandparents, who were Holocaust survivors, did not appear capable of protecting her either. She was also physically threatened by a mentally ill uncle who lived in the household (the uncle she cares for today). At age thirteen, Robin entered the foster care system. Her mother later became homeless and Robin had little contact with her from that time forward. Like their mother, and later uncle, Robin's sister also suffered from psychotic disintegration.

Posttraumatic Experiences. Although the Robin was aware of feeling pain previously, the pain became more dehabilitating after the events of 9/11. The client was close enough to the events to receive chemical burns on her lungs. It was also at this point that she started to question her relationship with her current partner. As a child, the client experienced serious early abandonment and neglect which will be explicated more thoroughly in the following sections. In addition to the trauma and loss in her life, Robin's family is embedded in a context of intergenerational trauma. If cultural conditions can change biology (Kandel, 1988), is it possible that the intergenerational trauma and family dysfunction could have predisposed Robin to be hyperresonsive to stress from birth? This predisposition might have weakened her system and left her more vulnerable to further stressors and traumas (Raphael, 2006).

Feeling homeostasis (such as feelings of safety) is normally in balance with bodily homeostasis (such as neurochemical regulation) (Sandler, 1972/1987). However, in Robin's case, it is possible that her state of chronic pain has sustained a feeling homeostasis, the illusion of safety, at a cost to her bodily homeostasis. While it is not clear that Robin should be diagnosed with PTSD, she does seem to have encountered multiple small-T traumas (Neborsky, 2003) that were never repaired, including helplessness in the face of danger, a lack of parental attunement, and a lack of parental empathy. The fear and trauma that Robin experiences is literally toxic (McFarlane and De Girolano, 1999).

Robin's somatic expression of pain is an expression of an exposure to extreme stress (van der Kolk, 1996a, 1996b) which has affected her body, her mind, her emotions, her behavior, her character, and her ability to self-regulate. It is likely that Robin has some form of HPA axis dysregulation (Shalev, 1999) which would have caused physiological changes (described in the previous chapter) in order to maintain homeostatic stability. These real bodily changes would then affect how Robin perceives herself and subsequently relates to others.

Prognosis

Using Turk and Okifuji's (2002) model, which divides pain patients into subgroups characterized by psychosocial factors and physical pathology, Robin falls into the interpersonally distressed group, which is marked by some of the characteristics of the dysfunctional group such as high emotional stress, severe pain, compromised life activities, and a reduced sense of control, and then further compounded by a perceived low level of support from others. Poor social support and social skills increase the

likelihood that this client is also experiencing comorbid Axis I and Axis II disorders (Thieme, Turk, & Flor, 2004). We would need to know more about Robin's methods of adaptation to pain to understand how her symptoms might interact with neurological, hormonal, endocrine, and psychological factors (Turk and Okifuji, 2002).

Diagnostic procedures

At this clinic, Robin is being diagnosed for psychological conditions and referred to a consulting psychiatrist for psychiatric conditions. She would benefit from some sort of overarching diagnosis and treatment plan that includes her alternative medical pain management, psychiatric medication, therapeutic diagnosis and treatment. However, this is a psychoanalytic clinic and we do not have the capacity to provide her with a case manager, nor is that a role traditionally provided in psychoanalytic treatment. Thus, her diagnosis is limited and contained by the treatment available in this low-cost clinic. *Treatment procedures*

At this clinic, multiple sessions in a week are available at even further reduced costs to clients. I suspect that, while she modulates her tolerance for the therapeutic relationship, Robin is going to struggle to make it in to sessions even once a week. As her tolerance builds, I believe she would benefit from multiple sessions per week. The work with Robin should initially be supportive, as she is developing safety in the relationship. Maintaining the boundaries of the therapeutic frame will be very important to developing this safety (McWilliams, 1994).

The patient

DSM Axis I conditions

Because of both her pain and her familial history, this client should continue to be assessed for depression and other mood disorders (Hudson, Goldenberg, Pope, Keck, and Schlesinger, 1992; Walker, Keegan, Gardner, Sullivan, Bernstein, and Katon, 1997; White, Carette, Harth, and Teasell, 2000.) It is possible that Robin is suffering from a depressive disorder that is manifesting as a somatic complaint (Lipowski, 1990). From outward appearances, Robin is a person who seems to be able to generate positive affect and resilience in the face of pain, which would be considered a tremendous strength (Zautra, Johnson, & Davis, 2005). Although, it is possible that upon contained and sustained work we would find that her capacity to be "positive" could be considered a kind of mania that is also being utilized to ward off depression (McWilliams, 1994). A tentative DSM diagnosis is listed below:

Axis I

V61.10 Partner Relational Problem r/o 296.90 Mood Disorder, NOS r/o 307.80 Pain Disorder with Associated Psychological Factors, Chronic r/o 300.81 Somatization Disorder

Axis II

799.9 Diagnosis Deferred on Axis II

Axis III

Deferred

Axis IV

Problems with primary support group: no evident support group beyond alternative medical treatment and therapy

Problems related to the social environment: negative abusive relationship with drug addict

Educational problems: reports learning disability, trouble reading and writing

Occupational problems: unemployed, on disability, trouble working due to pain

Housing problems: continued loss of housing due to drug abuse of partner

Economic problems: currently on disability in one of the most expensive cities in the U.S.

Problems with access to health care services: does not trust the traditional health care system, minimal income to pay for other services

Other psychosocial and environmental problems: persistent and unabating chronic pain

Axis V

GAF=50

Disease history

Robin's bodily dysregulation and subjective pain could be the result of physical abuse and relational trauma (Schore, 2003). The way that Robin's brain perceives pain is completely unique to her individual person (Rothschild, 2000b), the subjective perception of which is a result of her earliest caretaking relationships. Her present emotional pain in her relationship, which is stimulating her limbic system, could be regenerating historical pain (Bennett, 1999). When a child encounters abuse and neglect early in life, the limbic system is the part of the brain most susceptible to damage (McCollum, 2006). Simply, the etiology of Robin's pain is social, biological, physical, and mental (Kandel, 1988). Because of the neglect and trauma, her brain might have literally changed in childhood, which would make her more susceptible to the pain she is presently experiencing (Rubin, 2005).

Deficits in Robin's brain would actually render her more susceptible to socioemotional stressors and render her less flexible in adapting and repairing internally to these stressors (Schore, 2003). Because she is less able to respond, she is more likely to experience psychosomatic psychopathology. Another person, such as her partner Jack, is not just a representation in Robin's mind but is actually an internal psychobiological regulator, or bodily representation (Schore, 1997). Thus, she could be literally feeling the pain of her current relationship because the person she is using to regulate herself, Jack, is deliberately (or at least unconsciously) causing her pain. Damasio (1994) does not separate the presence of neurochemical and social factors in the presence of pain.

Thus, he (Damasio, 1994) would suggest that right now Robin is experiencing a situation in which she has a history of negative logical, affective, and intuitive connections. Therefore, her neuromodulator responses are probably signaling alarm, predicting for Robin that her present situation is going to have an outcome which she has already experienced, most likely a dangerous outcome. Further, Robin's mind might be actually bypassing her bodily signals, an "as-if loop", and only responding to signals in her mind as a way of preserving her experience of safety and predictability in an unpredictable environment. She is not allowing her body and brain to "play" spontaneously because the unpredictability of the variables could be just too scary for her. Winnicott (1974) suggests that what we fear the most when we fear a breakdown is that which has already happened to us. His characterization fits Robin.

In healthy attachment there is spontaneous play between the limbic system of the mother and child (Schore, 2003). It is unlikely that Robin experienced this kind of play. We do know that she actually experienced hostility and aggression in her childhood, which could lead to hyperarousal, dissociation, and the later response of bodily pain (Schore, 1997). Robin's pain could literally be an attempt to move away from something dangerous (Scaer, 2001), which at one point was her mother and presently is her partner Jack. Also, her pain could actually be a kind of biological reward, which by freezing and repressing cortisol levels which are normally elevated in stress (Scaer, 2001) creates an opioid state which alters her experience of fear. The paradoxical reward of the pain is that Robin's biological responses, thus safety, then become more regulated. The second reward of the pain is that she does not feel as much fear.

Personality traits and coping styles and mechanisms

Robin meets many of the psychosocial vulnerability and maintaining forces factors of Hallberg and Carlsson's (1988) study which looked at the belief systems around pain of women who had been diagnosed with FMS. Robin has a traumatic life history, she suffers from ambiguous loss around a relationship with her father, had a schizophrenic mother who was erratic and violent, lived with grandparents who were trauma survivors, and was partially raised by a violent uncle before she entered the foster care system. Robin's circumstances were unpredictable and she became responsible for her own care very early on. Robin continues to overcompensate for these early losses by taking care of not only her partner, but her uncle, his wife, and his wife's brother, even as she struggles emotionally, financially, and physically.

Because of a learning disability Robin has taken jobs that respond to her inherent industry and creativity, but these have not been jobs which have been valued by society. Upon the initial meeting with Robin, it did not appear that she was as gratified by any secondary gain or maintaining forces (Hallberg and Carlsson, 1988) such as increased attention and care; in fact it is probable that reaching out in her pain has tremendous benefit for Robin because this contact leaves her less enmeshed in unilateral relationships, where she is the only one giving, and more in contact with bilateral relationships, where she would have the capacity to receive care.

Conceptualization of disease and treatment

In addition to transgenerational trauma, Robin seems to have experienced some very early neglect. She seems to have mothered herself with her own industry and mind (Winnicott, 1949/1975). Perhaps her overactivity and unduly solicitous caretaking keep her own depression and profound sense of aloneness at bay (McWilliams, 1994). The pain might also function as a kind of boundary, to preserve her sense of self. She didn't mention menopause, but the possibility seems age appropriate. Perhaps the real physical and hormonal shifts in her body are straining and shifting the capacity of her mind. Object relational theories (See, for example Winnicott, 1949/1975) are more relevant than conflict theories (See, for example Alexander, 1950/1987) in explaining Robin's pain (See, for example, Helling, 2005). However, we will begin with a brief exploration of possible conflicts before we look at relational issues that might be present in Robin's pain.

Conflict. Alexander (1950/1987) would suggest that Robin's musculoskeletal pains are the result of repressed hostile tendencies towards those in power and that she is

further relieving her conscience about this hostility by trying to serve others. As stated previously, Alexander (1950/1987) believes the pain becomes a reaction against real dependence and a wish for dependency. Most likely that Robin would experience hostile feelings towards Jack, someone she has described as "holding me hostage." Further, it would be natural that Robin would feel resentment towards a man she has been caring for fifteen years who has offered her very little relatedness, comfort, or nurturing in return. However, I would critically suggest that we hold Alexander's (1950/1987) conceptualization very lightly as he seems to equate dependency with submission to male authority.

More likely, Robin's pain protects her against the danger of a particular affect (Coen & Sarno, 1989) and that by subsequently avoiding that conflict Robin is thus absorbed by her pain. What the particularly dangerous affects are for Robin warrant much further exploration. Anger would seem obvious, but it is probable that under the anger lie even stronger and more possibly terrifying feelings for Robin, such as grief, disappointment, and fear. This affective conceptualization is closer to Feinchel's (1945) idea that pain is a kind of suppression of aggressiveness which is actually the equivalent of depression. Regardless of what we identify as the conflict, it seems important that the first therapeutic task with Robin be the establishment of safety in the therapeutic relationship (Perlman, 1996).

Early Relationships. Robin has experienced a childhood defined by neglect, violence, chaos, unpredictability, and inadequate family limits, a history which concurs with studies (See, for example, Van Houdenhove et al., 2001) which correlate early adverse conditions to the development of the chronic pain of FMS. Robin's mother was

schizophrenic and probably literally could not make room in her own mind for a separate daughter (Driver, 2005). Robin shared a memory with this therapist whereby her mother actually deliberately terrified and threatened her after Robin had witnessed the sudden death of her grandmother by saying, "I struck her down and I'll strike you down too."

The role of the mother is to help the child develop mentalization (Fonagy, 2001). My guess is that Robin did not have adequate internal models to interpret her mother's behaviors and threats, a deficit which possibly left her to conclude that there was something wrong with her and could have further led her to her conclusion that her bodily experiences were more real, safe, and trustworthy than her mental and emotional experiences (Fonagy & Target, 1997). She learned to trust the domain of her body because the mental realm of her mother was not safe.

Although I asked Robin about a history of a history of sexual and physical abuse (Green, Flowe-Valencia, Rosenblum, and Tait, 1999) she denied having any memory of abuse, as well as any abuse in her present relationship. She remembered feeling terrified of her uncle and was not clear if he ever actually physically hurt her. Because Robin has trouble representing these experiences in her mind (Fonagy, 1997), which could also come from hippocampus dysregulation (Rothschild, 2000a), she is likely to be more prone to represent these experiences somatically (Taylor, 1992). These early experiences are represented both in her pain and in her overactivity. Further, somatic and psychological overactivity and underactivity can be attempts to avoid annihilatory fears (Driver, 2005).

However, on her own initiation the client acknowledged that there is something "interesting" about both working in the sex industry and solely forming relationships with

gay men. "I guess I have something to work out with men but I'm not sure what that is." As the client begins to develop trust, it is possible that more memories of abuse might arise. It is evidently clear that the client was raised in an atmosphere that was predominately unsafe and unpredictably violent. It is also possible that this client is turning early unsafe and negative feelings towards early caregivers (and interesting that the pain is amplifying as she is beginning to feel how negative she feels towards her present partner) towards her own body as a substitute for the object (Edgcumbe and Sandler, 1974/1987). These (Edgcumbe and Sandler, 1974/1987) authors suggest that how a person turns against the self depends on how the environment has responded to her.

For instance a child might feel that her negative feelings would destroy the parent because the parent cannot tolerate the strong feelings (McWilliams, 1994). McWilliams (1994) has further suggested that this style of protecting the mother through identification and a subsequent depressive solution are particularly feminine. Robin uses a kind of overly solicitous feminine caretaking along with her own particular texture of mania to avoid depression. Even though I found her overtly friendly behavior in the lobby somewhat inappropriate, in sitting down with Robin I also felt strong countertransferential feelings of protection and bubbly joy, a kind of giddiness that, while pleasurable and a refection of her ability to utilize humor as a source of resiliency, also might indicate her tendency towards mania as a defense.

Object Constancy. Robin appears to struggle with sustaining object constancy, as embodied in her projective fear that if she leaves her current partner he will die. This is possibly true, or at least biologically true in his mind as evidenced by the conversion

seizures he experiences wherever her attention is not focused on him. However, I also speculate that some of Robin's own fears of her separation and his death are projected annihilatory fears. Winnicott (1949) suggests that a failure of the environment (the mother) to respond to the developing infant can become a kind of traumatic impingement. Given the absence of her father, her mother's schizophrenic condition, and my questions about the nurturing her own mother received from parents who had suffered serious and dehabilitating trauma in the loss of all their siblings in the Holocaust it is likely that her mother, and family, were not able to buffer and contain Robin. There never appeared to be two discrete people in her relationship with her mother. Thus, if a person in charge of her care died, it would feel to Robin that a part of her had died as well.

A lack of care by the caretaker might actually be translated by the infant as a tangible experience of physical pain to the infant (Jones, 1999). Winnicott (1949/1975) suggests that when the mind takes over the function of buffer and protector for the mother that a person can become a "marvelously good mother to others" (p. 247) in an attempt to return to a kind of dependent state in which the psyche and soma are almost merged, but not in a way that suggests a healthy continuity of being and interdependency of both mind and body. This dependency means a loss of spontaneity and a situation in which the body and mind are fragmented, or as Bromberg (1988) would suggest, an existence in which the body and mind never had an opportunity to become wholly related and integrated.

If one has to dissociate from real toxic experiences in the caretaking relationship in order to survive (McFarland Solomon, 2004) she has internalized a void in place of a caretaking parent. For Robin, it was not safe to take others in and, because she was

probably not adequately responded to, letting aspects of her self out to be related to by others was not safe either. This early experience left Robin in a purgatory, where she was not one place or another, and where she seems to be living (somewhere between her body and her mind) presently. Thus, it is possible that environmental failures forced Robin to give up that which she authentically desired and forced her to change herself in order to meet what was offered. It is also possible that Robin's pain is preventing the reexperiencing of a very early trauma of an environmental failure (Gendrault, 2001). Likely, her physical pain is actually an attempt to prevent further psychic disintegration (Giovacchini, 1993). Finally, by attacking itself, her body is attacking the trauma, the toxicity, and the stress, and Robin is acknowledging that her defenses are no longer working (McFarland Solomon).

Ability to Engage in Mutually Satisfying Relationships.

Because of her own mental health limitations due to schizophrenia that Robin's mother was not adequately able to identify with Robin's affective experience, an experience which would create more anxiety, more fear, and less safety for Robin as a child (Sandler, 1995). Simply, a child in pain would draw her mother closer and this pain would provide the child with an opportunity to reintroject a caretaking other (Gendrault, 2001). Is Robin's pain today an attempt to draw a caretaking other closer? Probably not; a soothing other might not even be in the realm of possibility for her because she never originally had the experience of being able to reach out to another for care. Moreover, as Robin learned to create safety for herself as a child, this original dearth of safety could have dictated how she created safety in her internal and external world.

Perhaps Robin learned that if she shared her inner world she was rendered less safe. This experience of being left less safe after sharing would leave Robin's inner world even more dangerous for her to acknowledge. Acknowledging her inner world might mean the loss of the relationship with her mother, no matter how unsafe, through death or abandonment, or the loss of the love of her mother, which might seem equally as dangerous to Robin.

Is Robin's pain a kind of dissociation? Bromberg (1988) suggests that Robin cannot feel both fear and security towards an object at the same time. Thus Robin might retreat to the pain, which would keep her more regulated emotionally but less spontaneous intrapsychically and interpersonally. Spontaneity and desire have proven dangerous in the past; thus it is possible that in the pain that Robin is creating a kind of safety that, although it leads to suffering, does protect her from historically dangerous interactions (Ciccione, Elliott, Chandler, Nayak, and Raphael, 2005). A fear of letting another know about what she feels might have contributed to the emergence of her pain (Goldberg, Pachas, & Keith, 1999; Imbrierowicz & Egle, 2003; Mikail & Henderson, 1994; and Van Houdenhove, 2004).

Goldberg (2004) describes the body as a place of safety and containment where one can protect oneself against unpredictability and the chaos of desires that cannot be met. Despite the fact that the pain is unpleasant, the pain itself allows Robin a kind of control because she knows what to expect. The internal consistency of her pain could also be creating the illusion of an ever present internal mother for Robin (Goldberg, 2004). In fact, the pain might be thee one thing that Robin is consistently able to trust will be available.

*Trust.*⁶ The misattunments of her early environment make it more likely that Robin struggles with regulating her own affect around emotional arousal and distress (Taylor, 1992). Any relationship for Robin will probably stimulate a question of arousal, distress, and distrust. Trust contains an inherent dilemma. To be able to trust another she would have to get in touch with previous feelings of not having been able to trust another. In contacting those feelings, she would be re-living how little safety and containment she actually received. If she is able to do this, it will have to happen slowly, piece by piece, in order to sustain safety. In a sense, Robin has to feel safe enough to break down (or as Winnicott would suggest, to break down again).To really trust after the very early levels of developmental deprivation she has experienced is going to involve some serious grappling.

In a way, Robin's dysfunctional symbiotic relationship could be more trustworthy in her experience, because her partner literally cannot and will not leave her. However, this is not a level of trust based on mutuality and autonomy. It cannot be reiterated enough that trust in the therapeutic relationship will be primary for Robin because she already anticipates abandonment, violence, misattunments, and betrayal in relationship. Until Robin feels enough safety and trust to begin differentiating her affect and regulating her arousal, she will not be able to work with her somatic symptoms.

Her ability to take in the therapeutic relationship, by necessity, for safety, has to happen slowly. It is like feeding someone who has been starving too quickly; even

⁶ Many thanks to my clinical supervisor Maureen Sennott for helping me clarify my understanding of the therapeutic relationship and trust.
though a person feels hungry, the body only has a limited capacity to absorb the food. Therapeutically, this means we most work gradually with the client, or in what Strachey (1934) would call "minimal doses." It is incumbent upon the therapist to monitor the speed and the intensity of the relationship.

Separation/Individuation. Some have suggested that the core dilemma in somatic illness is the choice between intrusion and abandonment (Kuchenhoff, 1998). Because of the probable early neglect (although we do not actually know when Robin's mother started manifesting symptoms of schizophrenia we can guess that her mother most likely failed to protect her from either overstimulation or understimulation) Robin probably did not learn boundaries about what is internal, what is external, what is self, and what is other (McDougall, 1989). As a consequence, Robin could have developed a kind of early autonomy (Winnicott, 1949/1975); however she might have needed to generate an illusion of fusion with her mother to create a feeling of safety (McDougall, 1989). Separation means autonomy, and in Robin's case it is possible that she created a kind of mental autonomy that she actually kept hidden from herself (McDougall, 1989).

Mc Dougall (1989) would suggest that perhaps Robin is protecting her mother by keeping her thoughts separate from her body, and that further Robin's bodily pains might represent a psychotic wish that she were actually both still merged with her mother because the protection and care of her body would then still actually be under the care of her mother. In Robin's constant activity and caretaking of others, there is not room for an authentic inner life, thus by exorcising an awareness of an inner life she might be actually maintaining the connection to her mother that she believes that she needs for survival. Further, Driver (2005) has suggested that for some people to rest might internally mean

death (a lack of an internalized maternal reflection), whereas constant activity (or constant caretaking) might be equated with life, a defense against nothingness.

If she does not allow her body to rest, she protects herself against the chaos of spontaneous desire; she creates an illusion of safety which protects her against dissolution (Goldberg, 2004). Further, the stimulation of the pain could provide Robin with a kind of familiarity, almost a kind of friend which might help Robin feel less lonely. Finally, McDougall (1989) would suggest that in the pain Robin is reassured that she is alive; thus in pain she has created a defense against grief, depression, and further, death.

Educational and vocational status

Robin reported she suffers from a severe learning disorder and has minimal reading and writing skills. Again, she demonstrated industry by describing how she trained her mind to memorize medical books so that she could figure out what was happening with her partner. The client appears to be very creative and industrious and to have held down many jobs simultaneously. At one point Robin seemed to have been involved with designing sets for the television industry. She also created a career for herself as a dominatrix, laughingly reflecting on how she used the work to work through some of her "issues" around men. She described how she kept the men safe from their own desires to go "too far" as well as describing her ideas of why the men wanted to see someone who would hurt and humiliate them.

Robin suggested that she was excellent at reading and monitoring her clients and protecting them against their own dangerous inclinations. This seemed believable and completely in line with Winnicott's (1949/1975) idea that when a real mother has become absent and the client becomes a mental mother to herself, that she can mother others in a

very particular way that she has not been mothered. Finally, Robin is currently on disability because she cannot work due to her pain.

Impact of illness on subjective distress, social functioning, activity level, self-care, and overall quality of life

Robin's pain has definitely negatively altered her quality of life. She is no longer able to work. This leaves her at home with her partner, which renders her more socially isolated. Likely, the isolation leaves her feeling more subjectively distressed. However, in terms of her social activities, particularly in regards to caretaking others in her family, Robin has maintained her same level of activity. In a way, although not positively, Robin's pain actually brings her into closer contact with her family. The overall quality of Robin's life seems to be decreased. However, as has been repeatedly discussed, the subjective quality of her pain might be fulfilling internal and relational functions which are not easily quantifiably measured.

Social, family, and cultural contexts

Patient's cultural background

Robin grew up in a very poor family, in a very poor neighborhood, in one of the poorest urban areas in the United States. Her grandparents were Holocaust survivors. Robin made no reference to ever having participated in any Jewish religious or cultural practices. It would appear that the Holocaust stripped her grandparents of both their religious and cultural heritage. Thus, it is not just that Robin's grandparents as people were traumatized, but that Robin's cultural history in and of itself is one of violence, exile, and trauma. Even having the words to express this cultural trauma might be helpful

for Robin. I do not believe anyone in her family was in a position to help her find the words to express this cultural trauma.

Quality of marital and family relationships

Robin grew up in one of the poorest urban areas in the United States. She was told her father was dead, but later found out that the reports of his death were a lie. However, the client did not appear to have a relationship with her father. Her relationship with her father will warrant further exploration. Robin's grandparents lost all of their siblings in concentration camps. Until 11 she was raised in a household with her grandparents, mother, uncle, and sister. Her mother was diagnosed with schizophrenia, as was her uncle.

At age 11 her grandmother died of a heart attack while fighting with her mother. The client's uncle, who she described as violent and unpredictable, attempted to raise the two girls. At age 13 Robin entered the foster care system. She later asked to be moved to a group home, referring to the "camp" atmosphere which she preferred. The client's sister was also later diagnosed with schizophrenia.

Robin has a history of being sexually involved with gay men; she understands that she has done this because she sees gay men as "softer, kinder, and less threatening." The client met her current partner in a gay bar, where he was prostituting himself. Previous to her relationship with her current partner, the patient was in a long relationship with a transsexual. Robin said that she has "some interest" in women, but has never been in a long-term relationship with a woman. When asked if she has ever attended Al-Anon, the patient says she worries about being judged for her sexual history.

Use and efficacy of social support

The only social support Robin appears to have been able to make use of has been her alternative care providers. However, it is not clear how often Robin meets with these providers. Turning towards therapy can be seen to be a positive development in Robin's use of social support.

Patient-physician relationship

Robin did not directly discuss her patient-physician relationship. I would be interested in investigating if Robin's choice of alternative pain management practitioners comes from actual negative historical experiences or from an anticipation of a negative response and judgment about her lifestyle and livelihood choices (a fear she expressed when I asked her if she had ever attended Al-Anon.)

The health care system

Medical organization, setting, and culture

The chronic pain of FMS has been linked to an abuse history and a family life ripe with secrecy (Boisset-Pioro, Esdaile, & Fitzcharles, 1995; Castro et al., 2005; Taylor, Trotter, & Csuka, 1995). In a family filled with secrecy and silence, a child's abuse and pain are not acknowledged. When a medical doctor believes that the pain is "all in your head," the medical system is replicating early trauma (Scaer, 2001). I believe Robin is taking care of herself by choosing providers who offer alternative perspectives. In a sense, she is taking a deficit, powerlessness, and turning it into strength by identifying with others who do not identify with the dominant majority. She might have been attempting to do this historically by identifying with the gay and transgender community as well; however, by choosing drug addicts Robin chose the least empowered and most

self destructive members of the community. In the case of her partner, she was identifying with another trauma survivor. Thus, why she chose these particular alternative medical practitioners warrants further exploration.

Insurance coverage for diagnostic treatment procedures

Robin does not have health insurance. She is covered by disability; however at this clinic we do not take payment from any government programs.

Geographical, social, and psychological barriers for accessing health services

Robin's main barrier to the access of services is her partner. He has seizures when she leaves the house. She brings him to treatments with her and bribes him with the purchase of marijuana to wait for her in the lobby.

Existence of disability benefits for medical conditions

Robin receives disability due to her chronic pain and inability to work.

Implications for Social Work Practice

In the beginning of this study we learned that war victims were the first persons to be diagnosed with the mysterious chronic pain condition we call FMS (Barker, 2005). Hysteria, shell shock, and domestic and physical violence are all a singular type of traumatic condition which required political movements to bring them to the forefront of our conscious awareness (Herman, 1992). Further, each of these diagnoses is a diagnosis that characterizes adult survivors of childhood abuse (Herman, 1992). What we call something is inherently political. The context of how we understand a diagnosis affects how we are going to respond to it, fund it, research it, and treat it. Right now, FMS seems to be primarily dismissed as a disease for attention-seeking women. We do a disservice to our clients if we do not understand that treatment itself is inherently political. The cover story of the April 9, 2007 *The Nation* is aptly titled "Thanks for Nothing: How Specialist Town Lost his Benefits." The story talks about how military psychologists are predominantly diagnosing veterans who are returning from the Iraq war with personality disorders, which prevents them from collecting billions of dollars in disability and medical payments because a personality disorder diagnosis is considered a pre-existing condition. That means the military does not have to take financial responsibility for the culture of trauma it created. However, that does not mean that no one pays for the trauma.

The first person who pays for any trauma, neglect, or abuse is the survivor. An anonymous lawyer who defends the soldiers is quoted as saying, "Right now, the Army is eating its own. What I want to see is these soldiers getting the right diagnosis, so that they can get the right help, not be thrown to the wolves right away" (p. 17). Scaer (2001) acknowledges that what we call trauma is based on cultural bias and gender specific definitions. We protect what we value.

And when we do not value life, whether it is the life of a solider or the life of a woman raised in a situation of neglect and abuse, the price of that blindness ripples outward into our culture. As clinicians, when we disavow the pain of another, we become the wolves. This means that believing the person who experiences the pain of FMS is political act. Belief is the first act in generating a therapeutic environment of safety and trust. As Scaer (2001) points out, the binding between all types of different traumas is survival. Survival is contingent upon feeling safe in the presence of another. Biological instinct is not enough to ensure survival (Rothschild, 2000b).

Regarding her work with a psychosomatic client, Leininger (2006) writes:

Also problematic is the view that compassion with such patients is counterproductive—that responding to their needs and requests (e.g., for medical tests or medications) rewards a maladaptive behavior pattern, and that in order to encourage more adaptive behaviors, clinicians should in no way reward the patient for being in the sick role. While it is clearly important to set limits when appropriate, such limit-setting, in order to be therapeutic, must come from a place of compassion. This means that the first order of business must be to hear patients out in order to learn how they understand the symptoms they are experiencing, and to understand the reasons underlying any requests they are making (Kirmayer et al., 2004). Such listening is therapeutic and may in itself be transformative (Griffith & Griffith, 1994). (p.166)

It seems that it is the way we approach the relationship itself which assures our client that she is safe.

Suggestions for the Field of Social Work

Given the evidence that shows that pain can result from early deficits, such as relational trauma, as well as ongoing relational and social deficits, such as war, the National Association of Social Workers (NASW) should lobby congress to have more access to disability payments and long-term psychological help. I believe this issue is going to become more relevant as more veterans return home from the war in Iraq; thus, we may also see a shift in the predominately female demographic make up of the FMS population. Social workers have an obligation to be aware of, and educate our clients about, the personal and social complexity of the FMS diagnosis. Clients should have the opportunity to choose whether to identify with a biomedical diagnosis, particularly when the label has the power to stigmatize the clients. This is also true for many of the labels we use to diagnosis trauma survivors, such as Borderline Personality Disorder (BPD).

Mind/body problems are not only clinical, they are political as well. Whether we are working in inner cities, with veterans, or in private out-patient clinics, workers are

encountering more small-t and classical trauma than is politically and personally acknowledged. Social work education programs should prepare students to encounter and address mind/body manifestations of trauma-whether these manifestations are from the stresses of poverty and racism, physical and sexual abuse, benign neglect, early loss, or war. This preparation should include theoretical material, such as historical ways that he mind/body dilemma has been understood, as well as clinical practice measures which focus both on the therapeutic as well as practical techniques that offer a client more agency in addressing pain. Unfortunately, this present body of work has focused more on relationship and less on other mind/body cognitive behavioral techniques. One tangible practice that positively addresses stress, regulation, agency and depression is Mindfulness Based Stress Reduction (Sephton et al., 2007).

The manner in which each client we encounter experiences her pain is going to be contingent on factors such as early development, stress tolerance, and current levels of social support. There is no magical, systemic treatment for a client who experiences the chronic and dehabilitating pain of FMS. She may function poorly across multiple social and emotional realms, or she may have developed hyperresonsive strengths in particular areas to compensate for early deficits. As clinicians, it is most useful to think of our work with these clients as both relational and integrative. Slowly and safely we want to begin to help the client trust herself. This trust is also a kind of hope, and a slave, which helps a person integrate and bind various dissociated and disorganized parts of self into a cohesive feeling of a whole self.

Ideally, clinicians should be prepared for long-term work with these clients. It is unfortunate that FMS s seen as a kind of malingering, or something to be "gotten over."

In order that we do not stigmatize or perpetuate the trauma in these clients' lives any further, social workers are obliged to educate themselves about their own biases about the mind and body. American values are particularly stifled by a kind of Calvinistic notion that if we work hard enough we can "get over" anything by ourselves. This attitude leaves people isolated and in pain. Further, the attitude in and of itself is a source of trauma and pain. Ultimately, our personal understanding of the mind and body affects us internally, interpersonally, and socially. This understanding affects what we as social workers offer our clients. If we want to create a safe and spontaneous space for our clients, then we must remember how to "play" in our own bodies and minds.

Conclusion

It seems that both survival and pain are contingent upon the relational sense of safety which comes from the earliest caretaking relationships. Damasio (1994) suggests that the reason we suffer is that it offers us a chance for survival—when we feel pain we move away from that which is unpleasurable or dangerous. Thus, it must be tremendously confusing for a child when the person or people who are responsible for her survival are the source of her pain. Where could she move away to when she is bound by the physical circumstances of her survival? Further, where can she go as an adult experiencing pain with no known origin when the people society deems safe and responsible (doctors, therapists, and social workers) believe the pain is in her head?

As a culture we need to question what we mean when we say that something is in someone's head and why that makes a person's experience a less socially valid experience than something we can explain away and categorize. What should be clear from his work is that changes in the body, brain, and mind that result from early stressors

or trauma are completely interdependent. Stress is a lack of synchronicity between the parent and a child (Schore, 2003). That lack of synchronicity can develop into rigid and inflexible ways of being and relating, which we learned in Chapters IV and V are part of the rigid intrapsychic and neurological underpinnings which are present in the chronic pain of FMS.

This capacity for flexibility is why it is imperative that synchronicity be present in the therapeutic relationship. The relationship provides the client with a new dynamic relationship which actually has the possibility to shift, not just her intrapsychic and interpersonal ways of being, but her actual neurobiological substrate in a movement towards complexity and spontaneity (Siegel, 1999), the very qualities that are present in health and absent in the presence of FMS and chronic pain. Ultimately, research on the role of the therapeutic relationship in the presence of the chronic pain of FMS is worthy of further attention.

Further, if we really think about the transformative power of the therapeutic relationship, it should become evidently clear that there is no way for the relationship to be healing *unless* the clinician is allowing herself to respond freely and be spontaneously transformed by the other. How is it that only a couple of paragraphs ago we were talking about the political nature of the therapeutic relationship and now we are talking about a quality in the relationship that sounds suspiciously spiritual and almost ineffable? In *I Sing the Body Electric* Whitman (1900) expresses the inherent inextricability of the body and mind, self and other, the personal and the interpersonal, the powerless and the powerful, and the scared and the mundane. Like this poem, we can do our best to express

that which cannot be explained, yet this complexity he manifests so brilliantly is the mystery we can only live, but we can never control.

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