

**Self-destruction:**  
**Clinical implications of the death instinct**

**Monique R. Nyemecz**

**Auckland University of Technology**

**2006**

This dissertation is submitted to Auckland University of Technology in partial fulfilment of the  
degree of Master of Health Science (Psychotherapy)

## Table of Contents

<i>Attestation of authorship</i>	3
<i>Acknowledgements</i>	4
<i>Ethics approval</i>	5
<i>Abstract</i>	6
Chapter One: Introduction	7
Chapter Two: Method	12
Chapter Three: Freud's concept of a death instinct	17
Chapter Four: Implications of internalising the death instinct	24
Chapter Five: Instinctual processes and contemporary biology	33
Chapter Six: Suppression of emotions, physiology and illness: An empirical perspective	39
Chapter Seven: Discussion	49
<i>References</i>	56
<i>List of Tables</i>	
<i>Table 1: Death instinct turned inward and physiological implications</i>	15
<i>Table 2: Death instinct and contemporary biology</i>	16
<i>Table 3: The effect of emotions on the body</i>	16
<i>Table 4: Author search</i>	16

**Attestation of Authorship**

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

## Acknowledgements

I would like to acknowledge and give special thanks to:

- ✧ Associate Professor Stephen Appel for his encouragement and enthusiasm during this work. I could not have imagined having a better supervisor and mentor for my dissertation, and without his knowledge, perceptiveness and guidance, completing this work would have been a much greater challenge.
- ✧ My bubbly daughter Golda Nyemecz for her patience and humorous contributions to the concept of a death instinct!
- ✧ My dear friend Caryn Truppmann for the many fun hours spent together discussing and editing this work, your encouragement and absolute confidence in me when it was most required.
- ✧ Dr Pieter Veenhuijsen, nechama sheli, for putting up with all that serious discussion, providing feedback and contributions from a medical perspective and ongoing encouragement to finish this work!
- ✧ Jenny Hylton and Malcolm Idoine, my special friends and colleagues on the great adventure in exploring the psyche, for reading the entire work and providing considered and helpful feedback.
- ✧ AUT staff, Josie Goulding and Andrew Duncan for graciously providing even more invaluable feedback on various sections of this work.
- ✧ The staff at the AUT Library Inter-Loans desk and Drew (Andrew) South, Liaison Librarian, for his referencing assistance.

### **Ethics Approval**

Ethical approval for this dissertation has been obtained from Auckland University of Technology Ethics Committee (AUTEC) on 27 April 2004 (ethics application number 02/33).

### **Abstract**

This dissertation is a modified systematic literature review of Freud's (1920) contentious concept of a biological death instinct turned inward, including commentaries and criticisms. It begins with a brief clinical vignette introducing a masochistic terminally ill cancer patient. Freud argued that externalisation of the death instinct in the form of aggressive and destructive expression is necessary in order to protect against our primary impulse to self-destruction. Possible psychosomatic aetiology of biological disease as a form of self-destruction is explored in connection with the death instinct. The biological underpinnings of psychoanalytic phenomena that led Freud to hypothesise a death instinct are illuminated by recent advances in cell biology. Empirical studies on the effect suppression of emotions has on immune function and the discipline of psychoneuroimmunology is introduced to demonstrate the biological advantage of expressing emotions and as a way of conceptualising Freud's theory of a death instinct. The implications for disease development and/or progression are discussed. The dissertation concludes by considering clinical implications of the death instinct.

## CHAPTER ONE

---

### Introduction

*A woman in her forties, Angela (not her real name) had suffered emotional and physical abuse at the hands of her partner over a twenty year period. Despite Angela's expression of deep despair and fear following her cancer diagnosis and terminal prognosis, much of her energy was expended protecting herself from an increasing rhythm of abuse by her estranged husband. Throughout her life, Angela managed her distress and fear by withdrawing into a state of passivity and 'nothingness' matching feelings of powerlessness and worthlessness. Painting a bleak picture of her life as a series of "bad events," she expressed feelings of bewilderment at not being able to get her emotional and physical needs met even during her last days. Speaking lifelessly she retold the story of when she first discovered her tumour as if her fateful predictions had finally been confirmed. She said, "I knew immediately it was cancer. I knew I was going to die. I expected something like this." Resignation permeated Angela's very being. While a sense of helplessness invaded the therapeutic space, it became her sanctuary; cocooning Angela from the chaos of her life. An eerie absence of anger, rage or fight prompted me to wonder how Angela might have metabolised these feelings throughout her life.*

This dissertation considers the development and physiological effects of self-destructive tendencies. My work with cancer patients in a hospice setting motivated my interest in exploring Freud's concept of a death instinct as a way of understanding the development of self-destructive tendencies. Review of his 1920 publication "Beyond the Pleasure Principle" highlights the importance of maintaining a state of equilibrium to preserve the individual's wellbeing. Psychoanalytic and empirical literature is reviewed providing a qualitative and quantitative approach to the subject of self-destruction, offering the clinician a broader perspective from which to consider their clinical practice with masochistic patients.

### *Proposition*

Based on a psycho-physiological model, the concept of a death instinct was presented by Freud (1920) as an active physiological process. While Freud (1915, 1920, 1933; Breuer & Freud,

1895) articulated a reciprocal relationship between the psyche and soma throughout his writings, in “Beyond the Pleasure Principle” (1920) he principally delineated the psychological consequences of the death instinct. Using biological concepts, he theorised that both the death and life instincts are produced and struggle against each other in every cell in the living organism. Freud (1915) defined an instinct as being “on the frontier between the mental and the somatic, as the psychical representative of the stimuli originating from within the organism” (p. 121-122). Instincts are the primary source of internal stimuli within the organism (Breuer & Freud, 1895). Their repercussions are experienced both at the cellular and psychical level.

The death instinct strives to return the organism to an inanimate state - a state of non-existence or peace, while the life instinct perpetually attempts and achieves a renewal of life. Fusion of the life and death instincts strive to maintain a state of equilibrium within the organism through the cathexis of internal excitations. The dominating tendency of mental life, to return the individual to a state of equilibrium, does not imply the individual is constantly in a state of peace, but rather this dynamic tendency of the psyche continually strives to remove internal excitations, returning the individual to a state of equilibrium following each disturbance. If internal excitations, which represent somatic demands upon the mind, exceed the psyche’s ability to maintain a state of equilibrium, conflicts arise requiring various defensive and other measures to be utilised by the psyche to maintain a stable state. These defensive manoeuvres aim to calm down or get rid of disturbing instinctual impulses and are discussed in more detail later in this dissertation.

While the ego is the primary cathexis of the life instinct, cathexis of the death instinct is achieved through the externalisation of aggressive and destructive expressions. In the case of decathexis of the death instinct, a state of non-existence ensues, paralysing or reducing the psychical functions and the human organism retreats towards an inanimate state. This retreat towards an inanimate state is a response to a lack of ‘free flowing cathexis’ or lack of a steady discharge of excitations and suggests the death instinct’s ascendancy in the individual. Psychological and physiological compromises develop in response to a lack of free flowing cathexis of internal excitations. This will be elaborated on in greater depth in Chapter Four.

Keeping the quantity of excitation within the organism stable is important for the individual’s wellbeing (Freud, 1920). Exposure to adverse environmental interferences may make this task more difficult, compromising the individual’s long term psychological or physiological wellbeing.

If we consider that instincts are a changing force within a changing environment and that one is affected by the other, then it might be reasonable to suppose that environmental interferences may heighten the death instinct's potency within the individual, influencing the development of self-destructive tendencies.

Freud (1915) was not alone in viewing mental life from a biological point of view. Deutsch (1933), for instance, believed that every psychical process has its organic correlate in the nervous system; consisting of a nervous, a chemical and an endocrine process. It was commonly believed by early psychoanalysts that every change in the affective equilibrium results in cell stimulations which are associated with the discharge of specific substances into the blood. Groundbreaking work in the field of biology and research into the mechanisms by which cells receive and process information has radically changed our understanding of life (Lipton, 2005). It is now thought that genes and DNA do not completely control biology. Rather, DNA is controlled by signals from outside the cell, including the energetic messages emanating from one's thoughts. That is, cells are sensitive to and are controlled by the cell's perception of the environment.

It is important here to make a distinction between 'hostile' and 'healthy' expression of aggression. Hostile expression may indicate a masking of denied feelings that result from a chronic frustration of needs, whereas healthy expression may represent the experience and release of one's authentic feelings. Bridging the gap between hostile and healthy expression may require working through the resistance to the denied feeling and underlying cause for the denial, liberating the individual by removing blocks to free flowing cathexis. This dissertation considers the physiological implications of the death instinct; that is, the effects of inhibiting expression of aggressive and destructive impulses. Interestingly, a biochemical link between hostility and depression (anger turned inward) has been implicated in the incidence of coronary heart disease (Gallacher, Yarnell, Sweetnam, Elwood, & Stansfeld, 1999; Stoney & Engebretson, 2000; Suarez, 2004). Perhaps, both hostility and depression can be considered defence mechanisms which mask and inhibit expression of authentic feelings of sadness, anger etc. The link between hostility and disease is discussed briefly in Chapter Six.

The validity or nonvalidity of Freud's (1920, 1923, 1924, 1930 & 1933) contentious notion of the death instinct and instinctual life in general continues to be debated. The existence of aggressive and destructive tendencies remains an important consideration within psychoanalysis; however,

whether these arise from a death instinct, as a biological phenomenon, remains hypothetical. Discussion continues as to whether aggression is innate or a response to frustration and deprivation. Pedder (1992) conceives that maybe both views are valid. He suggests “it is clearly an oversimplification to overemphasise the contribution either of instinct or of society, either of which polarities may then be used to exonerate each of us from personal responsibility” (p. 101).

### *Purpose of the literature review*

The aim of this dissertation is to consider the development of physiological manifestations of self-destructive tendencies. First, Freud’s concept of a death instinct, along with the reconsiderations and reformulations it has attracted, are considered in some detail. Then, the biological underpinnings of psychoanalytic themes are explored in light of advances in cell biology, and current empirical research on the influence of emotions on the body, disease development and progression and the discipline of psychoneuroimmunology are introduced as a way of further conceptualising what Freud struggled to articulate in his 1920 publication. That is, psychologic and physiologic phenomena are profoundly interdependent and that they both have a powerful effect on each other. Vital psychical and physiologic processes operate collaboratively towards maintaining a steady internal state balancing the divergent aims of the life and death instincts.

### *Dissertation structure*

- Chapter Two: *Method* - details and discussion.
- Chapter Three: *Freud’s concept of a death instinct* - systematic review, discussion and critique.
- Chapter Four: *Implications of internalising the death instinct* - systematic review.
  - ✦ The development of the concept of the death instinct is explored beginning with pioneers in the field of psychosomatic medicine who supported Freud’s concept
  - ✦ Defences and their consequences
  - ✦ Theoretical debate - origins of aggression - instinctual or non-instinctual
  - ✦ Early manifestations of the death instinct
  - ✦ Physiological implications
  - ✦ Psychoanalytic clinical observations of the physiological implications of internalising the death instinct

- Chapter Five: *Instinctual processes and contemporary biology* - instinctual processes are re-examined in light of advances in cell biology.
- Chapter Six: *Suppression of emotions, physiology and illness: An empirical perspective* - empirical research on the effects of emotions on the body and disease development and progression are explored.
- Chapter Seven: *Discussion* - summary of findings and clinical implications.

## CHAPTER TWO

---

### Method

#### *Outline*

This chapter outlines the research method employed in preparing this dissertation, including modifications made to accommodate psychotherapeutic sensibilities. How greater integration with other scientific disciplines may assist psychoanalysis' survival in the 21st century is considered. The evidence-based practice movement is discussed and critiqued along with how the discipline of psychoanalysis fares within this predominately positivist movement. Finally, the search strategy and data collection are detailed.

This dissertation draws on literature from two distinct epistemological and theoretical perspectives. Historically, psychoanalysis has defined itself independently of neurobiology and psychology because of the positivistic epistemology retained by these disciplines (Meissner, 2006). Freud looked to biology to support his theory of death instinct at a time when science could not substantiate his theory. However, recent advances in cell biology allow for greater understanding of Freud's theory. Empirical works are introduced in this dissertation as a way of conceptualising Freud's concept of a death instinct and its relation to possible psychosomatic aetiology of biological disease. Meissner argues, if psychoanalysis is to survive and flourish in the present century there must be greater relating and integrating of analytic perspectives with those of other disciplines. He notes that one of the central areas of interdisciplinary concern in the current scientific context is the relation between psychoanalysis and the neurosciences. He points out that advances in modern neuroscience have provided advantages and perspectives on the mind-body relation that were not available to theorists of previous eras. The future of psychoanalysis may well lie in the context of an empirical psychology where the ideas of psychoanalysis can be tested. This dissertation demonstrates the integration of two distinct disciplines and how one might support the other.

Psychoanalytic knowledge is constructed within and emerges from a dialectical relationship where both analysand and analyst are active participants in developing an emotional understanding and "making sense together" of experience (Wolf, 1997, p. 523). Medical and

scientific research on the other hand, is approached from a positivist paradigm predominately using randomised controlled trials to test hypotheses (Grant & Giddings, 2002). Knowledge within the positivist paradigm is gathered so people can explain, predict or control events.

Evidence-based practice is a methodological approach for determining what is and what is not good treatment and is in practice usually an example of the positivist approach to knowing (Grant & Giddings, 2002). Beginning in the field of medicine, evidence based practice later spread to other healthcare disciplines (Starcevic, 2003). Evidence from experimental and non-experimental sources is gathered to create a specific body of knowledge aimed at guiding professional decision-making and practice (Grant & Giddings, 2002). However, systematic reviews of predominately quantitative works have been used within this movement to formulate 'best practice'.

Systematic reviews are concise summaries of the best available evidence (Cook, Mulrow & Haynes, 1998). A comprehensive search of all potentially relevant articles is conducted to provide in-depth answers to specific clinical questions. Practitioners' are kept up to date without having to read through a myriad of publications of original studies. Large bodies of evidence are summarised and help to explain differences among studies on the same question. Explicit and rigorous methods are applied to limit bias and random error. Like all types of research evidence, systematic reviews require critical evaluation to determine their validity and to establish whether and how they will be useful in practice. Prepared strictly according to prescribed scientific strategies, systematic reviews are more likely to be based on an unbiased summary of all relevant evidence. One strategy is to ensure all relevant articles are identified, critically appraised and synthesised.

Systematic reviews of quantitative studies however fail to address subjective experience (Grant & Giddings, 2002). This approach may "generalise the effects of therapy on patients and so may miss specific, pertinent information to individual patients" (Mallarkey, 2000, p. 22). A criticism of evidence-based practice has been its exclusion of treatments not firmly evidence-based, including qualitative data (Grant & Giddings, 2002). Though noted as (low-level) evidence, these have all too often been omitted from studies. However, with the advent of the post-positivist shift in thinking, there has been greater integration of quantitative and qualitative methods in research. The growing respect for qualitative research in evidence-based practice has increasingly allowed a

place for particular subjective experience (Greenhalgh, 2001). This dissertation has shown due respect to both qualitative and quantitative works.

A modified systematic literature review is the method used for this dissertation. While systematic reviews conventionally concentrate on quantitative studies, it has been necessary to modify this systematic literature review in two ways to accommodate psychotherapeutic sensibilities. First, including a clinical vignette from my own clinical practice to illustrate the formation of the dissertation statement and theoretical approach. Second, both qualitative and quantitative works were reviewed bringing together perspectives from two distinct disciplines; psychoanalysis and biology. Chapters Three and Four give a systematic review of qualitative studies. Psychoanalytic literature on Freud's concept of a death instinct and its relationship to physiological illness was systematically searched, identified and evaluated. A non-systematic or ad hoc selection of empirical studies on emotional suppression and immune impairment were reviewed in Chapters Five and Six. A link between psychoanalytic concepts on self-destruction and biological research findings on the effects of suppressing emotions and disease development and progression was endeavoured.

For the purposes of this dissertation I will refer to literature written prior to 1941 in past tense and literature written at and after this time in present tense.

### *Search criteria and strategy*

Literature was accessed through the following databases and resources:

- PEP: Psychoanalytic Electronic Publishing: An electronic library stack which includes the full text of the ten premier psychoanalytic journals from 1920 to 1998.
- PsycINFO: An electronic bibliographic database that provides abstracts and citations to the scholarly literature in the behavioral sciences and mental health.
- PsycARTICLES: A collection of 42 highly regarded full text journals from the American Psychological Association.
- Auckland University of Technology Library Catalogue.

- Reference lists.

The systematic search was limited to works exploring physiological implications of the death instinct. This covers material extending from 1920 through to the present day. The systematic search for psychoanalytic articles (Chapters Three and Four) was supplemented by a specific search of early psychoanalytic thinkers on psychosomatisation. Non-systematic or ad hoc selections of works on the death instinct and cell biology elucidating current understanding of instinctual life supplemented the systematic search of psychoanalytic literature. Limited and ad hoc selections of empirical studies on the effects of emotions on the body were reviewed, centring on citations discovered from the initial search result.

### *Exclusion criteria*

Articles relating to personality disorders other than masochism, death and dying, palliative care, euthanasia, suicide, language, dreams, film and theatre, literature, politics, gender, social issues, terrorism, sexuality, ethics, religion and mythology were excluded. Articles written in languages other than English were also excluded.

### *Data collection*

Table 1: Death instinct turned inward and physiological implications

**Key search terms:** "Death Instinct" OR "Death Wish" OR "Death Drive" OR "Thanatos"

<i>Suffixes</i>	<i>Results</i>		
	<i>PEP</i>	<i>PsychINFO</i>	<i>PsycARTICLES</i>
AND Self-destruction	197	29	8
AND Psychosomatic Disorder\$	119	11	0
AND Somatisation\$	53	10	0
AND Turned Inward	58	1	0
AND Cancer	160	10	21
AND Sickness	89	0	3
AND Illness	915	41	32

Table 2: Death instinct and contemporary biology

**Key search terms:** "Death Instinct" OR "Death Wish" OR "Death Drive" OR "Thanatos"

	<i>Results</i>		
<i>Suffixes</i>	<i>PEP</i>	<i>PsychINFO</i>	<i>PsycARTICLES</i>
AND Psychophysiology	21	1	0
AND Cell Biology	0	1	0
AND Biology	363	29	14
AND Psychobiology	45	2	0

Table 3: The effect of emotions on the body

**Key search term:** "Psychoneuroimmunology"

	<i>Results</i>		
<i>Suffixes</i>	<i>PEP</i>	<i>PsychINFO</i>	<i>PsycARTICLES</i>
AND Suppression	2	33	55
AND Cancer	3	130	119
AND Emotional Expression	2	5	11

Table 4: Author search

	<i>Results</i>		
<i>Key search terms</i>	<i>PEP</i>	<i>PsychINFO</i>	<i>PsycARTICLES</i>
Pennebaker J	14	166	30
Booth R	92	125	43

## CHAPTER THREE

---

### Freud's concept of a death instinct

#### *Outline*

This chapter introduces Freud's concept of a death instinct. Aspects of the publication "Beyond the Pleasure Principle" (1920), in which the concept first appears, are highlighted to illuminate Freud's thinking on the concept's inception. Freud's (1923, 1924, 1930 & 1933) later publications illustrating the concept's further development are also explored. The chapter concludes with a critique of the death instinct.

#### *Thoughts on Freud and the death instinct*

Freud, in "Beyond the Pleasure Principle" (1920), gave "free rein to the long-suppressed inclination to speculation" (Freud cited in Gay, 1998, p. 403). He considered the theory of a death instinct to go beyond psychoanalysis to advancing science. His 1920 publication was written during a dark period of history and at a time when Freud's experience with loss and grief may have heightened his sensibility to the subject of death. It was not uncommon for Freud to draw general propositions from his own intimate experiences (Gay, 1998). In fact, the theory of a death instinct may reveal Freud's integration of hitherto split-off aspects of himself and a loosening of the self-protective defensive manoeuvres mobilised against his own aggressiveness. Whether the theory of a death instinct was prompted by the era in which Freud lived or his personal experience, it encourages the reader to consider matters that may be felt as unsavoury.

Freud's addiction to smoking and dismissal of a large painful growth on his palate until it was too large to ignore six years later perhaps reflects Freud's self-destructive tendencies of which perhaps he was becoming aware. His theory of a death instinct may reveal not only his own intimate experiences, but also his internal conflicts, as might this dissertation reveal the writer's personal conflicts and desire to link the occurrence of illness to repressed aggressive and destructive expressions. These links, however, do not on their own mitigate against the strengths of the theory he proposed.

*Theory of a death instinct - Thanatos*

Freud introduced his new theory of instinctual dualism in “Beyond the Pleasure Principle” (1920). The clinical phenomena of repetition compulsion, sadomasochism, melancholia, obsessional neurosis, trauma, the negative therapeutic reaction, aggression and self-destructiveness led Freud (1920) to look beyond pleasure as the primary goal of human activity. He argued “if such a dominance existed, the immense majority of our mental processes would have to be accompanied by pleasure or to lead to pleasure, whereas universal experience completely contradicts any such conclusion” (p. 9). He went on to say, “the most that can be said, therefore, is that there exists in the mind a strong tendency towards the pleasure principle, but that that tendency is opposed by certain other forces or circumstances, so that the final outcome cannot always be in harmony with the tendency towards pleasure” (p. 9-10). Rather, he surmised that a tendency towards a state of equilibrium or stability, with the aim “to reduce, to keep constant or to remove internal tension” was at work in the human mind (p. 55). The expression “Nirvana principle” was used to describe this dominating tendency of mental life returning the organism to the “quiescence of the inorganic world” (p. 62).

Freud compared the beginning of instinctual life to the evolution of life on earth, postulating:

The attributes of life were at sometime evoked in inanimate matter by the action of a force of whose nature we can form no conception. The tension which then arose in what had hitherto been an inanimate substance endeavours to cancel itself out. In this way the first instinct came into being: the instinct to return to the inanimate state. (p. 38)

Freud considered the regressive character to be a “universal attribute of instincts and perhaps of organic life in general” (p. 36), returning the instinct to an earlier phase of the instinct’s history. His view of instincts changed from seeing in them a “factor impelling towards change and development” to recognising them as “an expression of the conservative nature of living substance” (p. 36). He came to believe that inherent to human beings, as well as to all living creatures from the very beginning of life, is an instinct propelling the organism towards its own death.

The life instinct - Eros - seeks to force and hold together, to unite the cells of living substance by an increase of tension, whereas the death instinct - Thanatos - opposes this tendency by seeking to abolish the chemical tensions which have created the living substance. By reducing or removing these internal tensions, it causes the eventual destruction and death of the organism. Freud (1933) contended “from the concurrent and opposing action” of the life and death instincts “proceed the phenomena of life which are brought to an end by death” (p. 107).

*Manifestations of the internalisation and externalisation of the death instinct*

The death instinct hardly ever appears in “pure form” (Freud, 1923), as it is always partially ‘fused’ with the life instinct. This fusion with erotic components renders the death instinct harmless. While the manifestations of the life instinct are considered to be conspicuous and noisy, the death instinct, the more powerful of the two, operates silently within the organism towards its dissolution (Freud, 1930). The portion of the death instinct that is diverted towards the external world, in the form of aggressiveness and destructiveness, is seen to serve the life instinct. Freud wrote:

The organism destroys some other thing, whether animate or inanimate, instead of destroying its own self. Conversely, any restriction of this aggressiveness directed outwards would be bound to increase the self-destruction, which is in any case proceeding. At the same time one can suspect from this example that the two kinds of instincts seldom - perhaps never - appear in isolation from each other, but are alloyed with each other in varying and very different proportions and so become unrecognisable to our judgment. (pp. 77-78)

Freud (1924) considered the portion of the death instinct which is placed in the service of Eros - life instinct - to be sadism proper, while the portion that remained inside the organism was recognised to be the “original, erotogenic masochism” (p. 163) or primary masochism. While he viewed sadomasochism in many different forms at different times (Blum, 1991), he now suggested it depicts the death instinct (Chessick, 1992). Prior to 1920 Freud was reluctant to accept an aggressive instinct independent of the libido. It was not until his hypothesis of a death instinct that an independent aggressive instinct came into view. The aggressive instinct was considered to be something secondary to, or a derivative of the primary self-destructive death instinct (Freud, 1930). In “Civilization and Its Discontents” he wrote:

I know that in sadism and masochism we have always seen before us manifestations of the destructive instinct (directed outwards and inwards), strongly alloyed with erotism; but I can no longer understand how we can have overlooked the ubiquity of non-erotic aggressivity and destructiveness and can have failed to give it its due place in our interpretation of life. (The desire for destruction when it is directed inwards mostly eludes our perception, of course, unless it is tinged with erotism.) I remember my own defensive attitude when the idea of an instinct of destruction first emerged in psychoanalytic literature and how long it took before I became receptive to it. (1930, p. 79)

Freud's (1930) pessimistic view of human nature is brought to view in "Civilization and Its Discontents," where he elaborated more emphatically than ever civilised man's extreme difficulties in taming his own aggression. He suggested "civilization has to use its utmost efforts in order to set limits to man's aggressive instincts and to hold the manifestations of them in check by psychical reaction-formation" (p. 69-70). Civilised man's inevitable dilemma in dealing with Thanatos - the death instinct - now became the focus of Freud's attention. By acting out his aggressivity, man risks destroying civilisation; by internalising it, he runs the risk of perishing with intolerable guilt.

The concept of a death instinct evolved over ten years from a "biological level where the threat was constituted by death in a proper sense, to a psychological scene with guilt as the annihilating agent" (Land, 1991, p. 70). The psychological aspect and relevance of the death instinct, not only to melancholia and masochism, but to neuroses in general is highlighted by Freud (1923) in "The Ego and the Id." While referring to melancholia, he wrote:

We find that the excessively strong super-ego which has obtained a hold upon consciousness rages against the ego with merciless violence, as if it had taken possession of the whole of the sadism available in the person concerned. Following our view of sadism, we should say that the destructive component had entrenched itself in the superego and turned against the ego. What is now holding sway in the super-ego is, as it were, a pure culture of the death instinct, and in fact it often enough succeeds in driving the ego into death, if the latter does not fend off its tyrant in time by the change round into mania. (p. 43)

Freud (1930) argued the development of the superego is employed by civilisation to inhibit or make innocuous man's aggressiveness, suggesting man's "aggressiveness is introjected,

internalised; it is, in point of fact, sent back to where it came from – that is, it is directed towards his own ego” (p. 84). This turning back of aggression against the self Freud (1924) suggested regularly occurs where a “cultural suppression of instincts holds back a large part of the subject’s destructive instinctual components from being exercised in life. We may suppose that this portion of the destructive instinct which has retreated appears in the ego as an intensification of masochism” (p. 170). Impediments to the destructive instinct finding satisfaction in the external world lead to grave psychological consequences to the individual by increasing the “amount of self-destructiveness holding sway in the interior” (Freud, 1933, p. 105).

### *Critique of Freud’s concept of a death instinct*

The death instinct being perhaps the most controversial psychoanalytic idea has attracted ongoing debate concerning its philosophical status and its clinical usefulness (Feldman, 2000). Freud’s own doubts to the validity of his hypothesis and his anticipation of its rebuff are reflected in his statement: “What follows is speculation, often far-fetched speculation, which the reader will consider or dismiss according to his individual predilection” (Freud, 1920, p. 24). Later on in the same publication: “It is perfectly legitimate to reject remorselessly theories which are contradicted by the very first steps in the analysis of observed facts, while yet being aware at the same time that the validity of one’s own theory is only a provisional one” (p. 59-60). Although there are doubts about a death instinct, as we shall see in Chapters Five and Six the theory has growing scientific backing and merit and deserves to be explored further. Theories, in the biological sciences are never in themselves absolute, they are reasonable basis for further exploration. Contradiction and division are part and parcel of theoretical development, and are a fundamental tenet of psychoanalysis (Virside, 2001).

The most consistent arguments opposing Freud’s death instinct are firstly, Freud’s experience with grief and loss and preoccupation with death, secondly, his use of biological concepts to support his theory; and thirdly, his illustration of Eros and Thanatos as mythological concepts. These are each addressed in turn.

Personal events of grief and loss in Freud’s life have been linked to the elevation of the death instinct to a primal force and the final revision of the drive theory (Anderson, 2001; Chessick, 1992; Gronseth, 1998; Hamilton, 1976; Quinodoz, 2004; Virside, 2001; Wallace, 1976). The

slaughter and brutality of World War I, in which all three of Freud's sons served, was said to have influenced his preoccupation with death (Anderson, 2001).

The early 1920s was also an especially painful time for Freud. A close friend, Von Freund, died of cancer at the age of 40 in January 1920. Freud's daughter, Sophie, died shortly before his introduction of the concept of a death instinct. In 1923 Freud was diagnosed with cancer and his four year old grandchild died (Anderson, 2001; Chessick, 1992). Hamilton (1976) considers that Freud's intra-psychic issues, deriving from the early trauma of the death of his brother Julius and the subsequent disruption in the relationship with his nursemaid and his mother, might have left a residue of excessive guilt and fear of the omnipotence of thought, especially death wishes. He might have been suffering from morbid depression suggests Virsida (2001).

While personal experiences may have contributed to Freud's preoccupation with the death instinct, it has been established that "Beyond the Pleasure Principle" was drafted in 1919, several months before the first of these events (Chessick, 1992). Those who challenge the validity of Freud's hypothesis are "strongly tempted to see them simply as an expression of Freud's own anxiety as regards death" (Quinodoz, 2004, p. 186). As previously discussed in this chapter, Freud was not immune to the idea of his personal experiences impacting his work. In fact, he said "my whole capacity for work probably springs from my character" (Wallace, 1976, p. 386). In short, any connection between Freud's personal concerns and his theoretical speculations are not convincing arguments against those theories.

It has been suggested that Freud's concept of a death instinct has not been taken seriously because the theory was based on flimsy biological speculation, which at the time could not prove his theory (Fox, 1943, Sternbach, 1975, Pedder, 1992, Ikonen & Rechart, 1978). Freud (1920) admitted, "The uncertainty of our speculation has been greatly increased by the necessity for borrowing from the science of biology" (p. 54). However, in the last quarter of this century, molecular biology has revolutionised our understanding of life, offering impressive arguments in favour of Freud's theory of a death instinct (Zurak & Klain, 1998). Perhaps Freud was simply ahead of his time. These discoveries will be considered more closely in Chapter Five.

Freud's (1933) illustration of Eros and Thanatos as mythological concepts emphasised the intangible nature of instincts, and raised criticism regarding their clinical usefulness. This depiction of instinctual life Chessick (1992) argues restricts their consideration to a purely

theoretical context, resulting in few accepting its clinical applicability without significantly modifying the concept itself (Wallace, 1976). Yet, Freud developed the concept on the basis of his clinical experience. The mystery that surrounds the 'fusion' and 'defusion' process responsible for the death instinct manifesting as an aggressive drive is according to Chessick (1992) ambiguous. Freud (1924) admitted to not understanding how the process of fusion and defusion of instincts works stating, "we are without any physiological understanding of the ways and means by which this taming of the death instinct by the libido may be effected" (p. 164). He later suggested that "future investigations may some day be of great importance for the understanding of pathological process" (Freud, 1933, p. 105). A scientific perspective of instinctual life is discussed in Chapter Five.

Finally, Eissler (cited in Hoffman, 1979) writes "since Freud has made death a central concept of his psychological system one would have expected that psychoanalysis would devote more effort to the study of death itself". Eissler questions the failure of psychoanalysis to build upon Freud's theory. "In general, death is still viewed as a purely biological phenomenon unless it is consciously or unconsciously induced by man himself" (p. 232). Similarly, Weissman (cited in Hoffman) observed, that along with psychiatry as a whole, psychoanalysts have avoided the subject. They prefer to "revise the inexorability of death into a more acceptable form, which can then be 'analysed' as a symptom of something else, and whisked away" (p. 232). However, is this an argument against Freud's idea or against his successors for not considering it seriously? Perhaps the necessity to build such strong arguments against Freud's concept reflects the degree to which the idea of a death instinct and perhaps death itself arouses such fear amongst psychoanalysts and people in general. "Like other people, psychiatrists are afraid of death" (Weissman cited in Hoffman, p. 232).

## CHAPTER FOUR

---

### Implications of internalising the death instinct

#### *Outline*

The preceding chapter outlined and critiqued Freud's death instinct. According to Freud, maintaining a state of internal equilibrium is achieved through the fusion of life and death instincts. Fusion of the two instincts binds and guides the external expression of aggressive and destructive impulses born of the death instinct; an essential process in preserving the human organism and in minimising self-destruction. Chapter Four will review literature on the effects of internalising the death instinct. It begins with a consideration of the death instinct's influence on the development of organic disease by introducing pioneers in the field of psychosomatic medicine. Then, a discussion of the impact of the death instinct on the development of psychological defences and their consequences is presented, along with theoretical considerations on the origins of aggression. The influence of early environmental interferences on the development of masochism will follow. In conclusion, analytic theories on the physiological implications of the death instinct will be reviewed.

#### *Pioneers in the field of psychosomatic medicine*

The essence of Freud's (Breuer & Freud, 1895) theory of 'hysterical conversion' was that every psychic tendency seeks adequate bodily expression. Somatic symptoms were said to have unconscious psychic influences, and were seen to give symbolic expression to the repressed wish or wishful fantasy. The aim of talk therapy was to make conscious the unconscious content. After becoming conscious, the repressed content "has the possibility of finding relief in the normal ways of expressing emotions which destroys the dynamic foundation of the neurotic symptoms" (Alexander, 1936, p. 548). Freud's view of "hysterical conversion was based on observation of phenomena in organs which are under voluntary nervous control and in the organs of sense-perception" (Alexander, 1936, p. 549). For example, somatic symptoms as paralysis, muscular contracture, and loss of sight, speech and hearing were seen as a result of emotional causes, rather than having an organic basis.

Conversion hysteria, in the 1920s and 1930s, gained popularity as a general medical notion (Alexander, 1936). Georg Groddeck (1923), Felix Deutsch (1933), Karl Menninger (1938), Sandor Ferenczi (1929) and Smith Ely Jelliffe (1933) were some of the early pioneers who extended Freud's theory into the realm of organic disease (Alexander, 1936)<sup>1</sup>. Patient's conscious psychological processes were believed to play a subordinate role in the causation of somatic symptoms leading to organic disease. The fact that these conscious emotions could be freely expressed and relieved through the voluntary system meant that they had little ongoing influence. Repressed tendencies, on the other hand, led to chronic innervations causing more serious dysfunction of the internal organs (Alexander, 1934).

Georg Groddeck, through his use of psychoanalysis in the cure of organic diseases, became known as "the father of psychosomatic medicine" (Biancoli, 1997, p. 117). "The Book of the It" (Groddeck, 1923) is, according to Balint (1951), "perhaps the very first writing in medicine that took seriously the idea that illness which impress us as somatic or organic are caused by emotions" (p. 250). Groddeck's entire work was inspired by his belief in the force of unconscious symbols. He believed that diseases of the body were symbolic creations and were curable through psychoanalysis. Groddeck referred to the unconscious as "Es," German for "It."<sup>2</sup> He believed that "human beings are experienced by the 'Es', which is ageless and in continuous movement; it holds life and death, it causes illness and recovery" (Biancoli, 1997, p. 118).

Karl Menninger (1938) considered Freud's death instinct to be the best theory to account for his own clinical observations. He was curious as to why many of his patients did not want to get well as much as they said they did. These observations led him to consider some other force, other than "nature, bacteria and toxins" (p. 5). He hypothesised that self-destructive trends manifest both psychologically, through conscious volitional expression and physiologically, through the unconscious attack on the internal organs or some part of the body. Menninger's theory of a disease form of self-destruction led him to suggest that the "postponement of death is sometimes purchased by the life-instinct at a great cost" (p. 6).

---

<sup>1</sup> Other psychoanalysts like Wilhelm Reich (Wilcox, 2003) and Karem Monsour (1957) also wrote about emotional factors in psychosomatic illness, however, without making any connection to the death instinct.

<sup>2</sup> It was from Groddeck and "The Book of the It" that Freud borrowed the term *Es* (Balint, 1951).

Smith Ely Jelliffe (1933) believed the ‘voice of thanatos’ or ‘death wish’ was expressed in somatic disorders. He considered ‘unconscious crimes’ to be responsible for the death instinct taking ‘hold’ in the individual and seeking gratification in the death of the organ affected. His article “The death instinct in somatic and psychopathology,” written over 70 years ago, painted a bleak picture of the success of psychotherapeutic treatment with such patients. Removal of the organ ‘attacked’ was considered the necessary intervention to release the intractability of patients’ disorders.

### *Defences and their consequences*

Melanie Klein is among the few psychoanalysts who kept Freud’s concept of the death instinct alive. She hypothesises that the primary cause of anxiety is the fear of annihilation arising from the working of the death instinct within (Klein, 1952). According to Klein, the struggle between life and death instincts emanates from the Id. The primordial fear of being annihilated forces the ego into action engendering the first defences. She argues the strength of the ego - reflecting the state of fusion between the two instincts - is constitutionally determined. The extent to which the strength of the ego can be maintained and strengthened is affected by external factors, in particular the mother’s attitude towards the infant (Klein, 1958). If the life instinct predominates in this fusion, implying an ascendancy of the capacity for love, the ego is relatively strong and is more able to counteract the anxiety arising from the death instinct.

Segal (1993), a follower of Klein, argues that the concept of the death instinct is indispensable to clinical work. She refutes the common argument that the death instinct ignores the environment, articulating “since the fusion and the modulations of the life and death drives which will determine the eventual development are part of developing relationships to the early objects and, therefore, the real nature of the environment will deeply affect the process” (p. 59). Like Klein, Segal focuses on the defensive manoeuvres adopted against the death instinct. These defensive manoeuvres “create vicious circles leading to severe pathology” (p. 59) which when analysed and the death instinct confronted, in the stable setting of analytic work, lead to a mobilisation of the life forces in the patient says Segal.

Klein becomes “a kind of specialist in showing the consequences of different ways the psyche deals with the death drive” (Eigen, 1996, p. xx) by emphasising the reactions of the ego to the death instinct. Anxiety, splitting, projective and introjective identification, denial and dispersal

are some of the ego's responses to this inner destructive force. Proliferation of these strategies that serve to dampen the effects of the death drive, may lead to "impoverishment of the ego" and the "dispersal of emotions" (p. 609). The result is emotional deadness, lack of emotion and unresponsiveness leaving the patient feeling disintegrated, emotionless and depleted.

*Theoretical debate - origins of aggression - instinctual or non-instinctual*

There is a theoretical debate as to whether the origins of aggression are instinctual. There are psychoanalysts who argue that aggression is instinctual, and is a manifestation of the death instinct. Others argue that aggression is instinctual, and exists independently from the death instinct. And still others who consider aggression as non-instinctual, brought about solely by frustration in relationship to the environment.

Federn (1932) was among the few psychoanalysts who argued aggression is a manifestation of the death instinct and felt optimistic in observing pure manifestations of the death instinct. He distinguished between two forms of melancholia: genesis of melancholia and pure melancholia to demonstrate. According to Federn the "pure death instinct" (p. 140) is apparent in pure melancholia, where there is an absence of libidinal tendencies. Foxe (1943) considers the origins of aggressive tendencies from a non-instinctual theoretical position, whereby aggression is seen as a response to frustration. He surmises that parents, rather than the environment, are the counterforce that subjugates the destructive instincts in the child. On the other hand, Fenichel (1954) argues for the instinctual origins of aggression, as well as suggesting that aggressive tendencies are a response to eliminate frustrations. Dismissing social factors from the aetiology of neuroses, amounts to a "complete biologisation of neuroses" (p. 370), says Fenichel. Importantly, he cautions, the death instinct theory posits certain clinical dangers. The analyst, thinking he is faced with a primary biological phenomenon of masochism, stops analysing, instead of searching for determining experiences in the patient's life.

Similar debate is evident among contemporary psychoanalysts. Feldman (2000) suggests, "what we encounter clinically are not derivatives or compromises, 'fused' or 'bound' with life instincts, but the direct expression of a primary destructive drive directed towards the self and others" with the primary aim of not totally destroying life, but to "take the life out" (p. 54). Gratification is not gained in the annihilation of the perceiving and experiencing self or literal death or annihilation.

Rather, by certain patients attacking and distorting “their capacities for perception and judgment, incorporating their distorted perceptions into ways of structuring experiences that gratify deep destructive impulses” (p. 53) says Feldman. Mitchell (1993) proposes preservation of the essential features of both drive theory and non-drive theory. While the drive models of aggression have expanded our understanding of the inherent destructiveness in human motivation and its centrality in the development of the self, the non-drive models of aggression have expanded our understanding of the subjective context within which rage and destructiveness arise.

### *Early manifestations of the death instinct*

Ferenczi was among the first psychoanalysts to search for evidence of self-destructive trends in early childhood and to elaborate on the manifestations of the death instinct in human development (Cain, 1961). Ferenczi (1929) hypothesised in “The Unwelcome Child and his Death-Instinct” that growth at the beginning of life occurs with astonishing profusion and speed only under favourable environmental conditions. The inability of the mother to respond benignly to the infant’s needs was seen to be responsible for the immediate stirring of destructive instincts and the vulnerability to death. Many of these infants, “proffered organic possibilities for a quick exit, or if they escape this fate, they keep a streak of pessimism and of aversion to life” (p. 126) said Ferenczi.

Ferenczi, reformulating Freud’s meta-psychological concept, developed an alternative theory abandoning the assumption of a death instinct and embracing the idea that there are only life instincts. He believed that traumatic assaults experienced at an early developmental period (mimetic period), that exceed the ego’s capacity of tolerance, forces the ego to manage the overwhelming assault by a “mimetic reproduction of the aggressor’s desires” (p. 230). Excessive environmental pressure elicits “the protective response of ‘mimicry’ in order to comply with the pleasure principle” (p. 229). This mimetic reaction leaves an imprint in the subject, which he called “alien transplant” (p. 229). Passions of the soul, Ferenczi suggested, are created as a reaction to the suffering inflicted from outside.

Contributing to the effects of early transactional experience, Gronseth (1998) suggests parental misattunement is an influencing factor in the development of illness. Observations of certain clinical phenomena led him to conclude that these phenomena were not manifestations of a

primary death instinct, but rather secondary inventions of each individual. Many of Gronseth's patients experienced serious physical illness at one time or another in their childhood, frequently bringing them close to death. His observations influenced his linking serious childhood experiences of illness to "severe resignations in obtaining gratification of their basic needs" (p. 55). He suggests, these children enter into a process of resignation in the direction of death to get their needs met. In other words, they survive by "making themselves nearly dead" (p. 56). The resignation tendencies and death process become a part of the individual's psychic structure and is unconsciously fought against thereafter by developing a common self-destructive way of being.

### *Physiological implications*

This section explores some of the physiological manifestations of the death instinct.

McDougall (1974) suggests, regardless of the nature of the psychic productions created by man, they embody his wish to live and get along as best he can. She writes:

In the attempt to maintain some form of psychic equilibrium under all circumstances, every human being is capable of creating a neurosis, a psychosis, a pathological character pattern, a sexual perversion, a work of art, a dream, or a psychosomatic malady. In spite of our human tendency to maintain a relatively stable psychic economy and thus guarantee a more-or-less enduring personality pattern, we are liable to produce any or all of these diverse creations at different periods in our lives. (p. 437)

When highly charged affective experiences exceed the psyche's ability to discharge these experiences they may be vented somatically says McDougall. These experiences may cause the links between psyche and soma to become dissociated influencing the creation of survival techniques which could potentially threaten the individual's biological survival. McDougall writes:

When techniques of psychic survival are debilitated or extinguished, biological survival itself might be endangered: The sudden failure of symptomatic defences can lead to death that was not programmed by the individual's biological clock - such as suicide or a fatal psychosomatic 'solution'. (p. 240)

McDougall further contends that the infant's capacity to create psychic objects and symbolic structures to compensate for early experiences of loss and separation is in a large part circumscribed by the "limits of his parents' unconscious fears and desires" (p. 437). She suggests links between the soma and psyche are established as somatic functions achieve psychic representation. Failure in somatic functions achieving psychic representation threatens the biological body becoming a psychological one, increasing the eventuality of character pathology and psychosomatic vulnerability. Man's psychic creativity provides a defence against psychic loss in traumatic circumstances and in the long run against his biological destruction says McDougall. While the psyche adapts in whatever way is necessary to preserve life itself, should the psyche's creations falter, man may be threatened with biological death.

The development of psychic structures necessary for effective handling of painful experiences is dependent upon the pre-verbal infant's capacity for symbolic functioning according to Mitrani (1993). She suggests unmentalised experience is symbolically represented in the pre-verbal infant's somato-sensory memory. These "primitive defences against early anxieties eventually, in health, give way to thinking and constructive action which is attuned to reality through repeated reciprocal interaction with 'good enough' maternal holding and containment" (p. 326). According to Mitrani, unmentalised experiences in early object relations may account for the emotional aetiology of psychosomatic asthma in some patients. She believes, "the selection or choice of symptom, as an expression of a deficient environment or as a sign of developmental arrest, is determined by the unconscious phantasies, conflicts, wishes and fears of the primary object(s) which impinge upon the infant (and perhaps even the foetus) in the early, formative stages of development" (p. 337). Symptoms may be regarded as pre-historic self-survival tactics against the "primal organismic panic" (p. 326), which Mitrani equates to Freud's death instinct.

*Psychoanalytic clinical observations of the physiological implications of internalising the death instinct*

I have considered how psychosomatic vulnerability is initiated in human development as an attempt to maintain some form of psychic equilibrium. I will continue with psychoanalytic examples of the physiological implications of internalising the death instinct.

Drawing on her clinical experience and scientific research, Goldberg (1995) suggests that people with cancer are “typically extremely constricted when it comes to consciously experiencing their anger” (p. 84). Goldberg considers her patients’ illness as a manifestation of the death instinct and urges modern analysts to embrace the ‘dark’ aspects of being human. To be human Goldberg suggests is to be able to allow oneself to feel and express anger, hate, vindictiveness, the wish to hurt and harm as well as the wish to be hurt and be harmed - to acknowledge “the dark, ugly ones as well as the sweet, pleasant ones” (p. 84). She recommends that analysts be authentic in their own expression of emotion with clients: using induced feelings, differentiating one’s own self from the other, and using thoughts and feelings to stimulate in patients their own thoughts and feelings.

Rosenbaum (cited in Tabachnick, 1972) hypothesises in her article “Groupicide” that group institutions, by limiting external expression of aggression, may produce self-destruction in the form of physical illness. This is akin to Freud’s (1933) view on civilisation’s suppressive aim in taming instincts. Rosenbaum suggests such developments can force the death instinct back upon the individual. She argues “with the diffusion and depletion of libido in the service of group survival, there is less and less Eros available to bind and guide the aggressions born of the death instinct. To make matters worse, with the quantitative and qualitative growth of group function in our industrialised and fraternalised society, there has occurred a situation where ever-decreasing amounts of aggressive expression are possible. Raw unmodified aggression is like any other basic drive, it must eventually find expression and only so much can be absorbed by our guilt system and turned back against the self” (p.55-56).

The direct channelling of destructiveness into the body rather than the psyche prompts LeShan (cited in Tabachnick, 1972) to consider whether cancer is a form of self-destruction. He found a peculiar pattern in the life history of 72% of a group of cancer patients studied, which suggests a correlation between a particular adaptational mode and the appearance of their neoplastic disease. The life patterns of these patients included a fantasy of incompleteness centred on the feeling that something was basically wrong with them. These fantasies were reignited with full force later on in their life with the disruption of a relationship or a lost role. While a period of superficial adjustment followed, this phase was replaced by “resignation to utter isolation and rejection which they now felt was their eternal doom. The only way out was to cease existing. ‘Half in love with easeful death I cry’ seems to express their feelings” (p. 60) says Le Shan.

Le Shan, like other psychoanalysts discussed in this chapter, writes from a purely psychoanalytic perspective considering the effects of psychic stimuli. He links the patients' unconscious fantasy to their feelings of resignation and relates this to their cancer. The biochemical link between the patient's feelings and disease is not considered. Psychoanalytic works predominately focus on unconscious fantasy and repression of anger, whereas empirical studies focus on the effects of suppressing anger. This dissertation wishes to draw attention to the importance of considering both the psychoanalytic and biochemical aspects of disease. Beginning with Chapter Five where the nature of instinctual life and psychoanalytic phenomena will be explored from a biological perspective.

## CHAPTER FIVE

---

### Instinctual processes and contemporary biology

#### *Outline*

The preceding chapter explored the psychoanalytic concept of the death instinct. It considered the death instinct's significance in the development of self-destructive tendencies. We have seen that constitutional disposition, early transactional experiences and development of psychological defences contribute to the development of masochistic tendencies. These factors are considered to create a vulnerability to the death instinct's ascendancy in the individual and increase vulnerability to psychosomatic illness. This chapter aims to provide some understanding of the nature of instinctual life processes in light of advances in modern cell biology. First, the biological underpinnings of psychoanalytic phenomena that led Freud to hypothesise a death instinct are discussed. Then, I consider the impact negative environmental experiences have on physiological regulation and how these two factors influence the development of physiological illness.

#### *Instinctual life*

A highly regarded neuroscientist in his day, Freud believed advances in neuroscience would some day mean that the deficiencies in his description of instinctual life would vanish and psychological terms would be replaced by physiological and chemical ones (Solms, 2004). Freud was convinced that specific neurochemical foundations for instincts existed. Modern research is now able to show the neural equivalent to Freud's classification of human instinctual life.

Growing molecular support of Freud's theory means there is greater understanding of how repressed traumas, caused by overwhelming emotion, can affect the body (Pert, 1997). New discoveries suggest there are "infinite pathways for the conscious mind to access - and modify - the unconscious mind and the body" (p. 141). These findings broaden our understanding of the occurrence of a number of important psychoanalytic phenomena (Hoffman, 2004). Especially worth mentioning is repetition compulsion because after all, study of this led Freud to hypothesise

a death instinct. Present-day molecular biology allows us to appreciate the role physiology plays in these conditions (Hoffman, 2004). These recent contributions of biology reassert the specific qualities and attributes of psychoanalytic theory and clinical practice (Sanches Faveret, 2002). Linking psychoanalytic and biological concepts provides the practitioner with a greater appreciation of the physiological changes associated with the employment of defensive mechanisms.

Hoffman, linking cell biology's views on cell death (apoptosis)<sup>3</sup> to update Freud's original understanding of the death instinct, suggests "one can better comprehend the coexistence of instincts and tendencies toward life and death, the advantages to the organism of establishing a steady state, and the potential consequences, mental and physical, of its perturbation" (2004, p. 63). He contends that avoiding being overwhelmed by internal and external stimuli becomes an important consideration if life is to continue in a state of equilibrium. He argues that the tendency to keep things in check stimulates the development of defensive mechanism employed in the management of disturbances perceived to be progressing in the direction of uncontrolled excitation.

The repetition compulsion represents a basic, in-born, or pervasive type of behaviour ("instinct") that reflects a normal homeostatic activity in response to internal and environmental stressors. Whether this tendency is vestigial, efficacious, or pathological can only be assessed in a specific physiological (apoptosis) or mental (death-instinct) context. (p. 71)

Similar conclusions have been reached by other authors. In considering whether a parallel can be drawn between apoptosis and the conflict between life and death instincts, Quinodoz (2004) points out that, while it might not be possible to "make a simple transposition from the model of biological regulation that is apoptosis to that of mental regulation as postulated by Freud" (p. 193), it warrants further attention.

Brockman (2000) expounds on the biological basis of automatic or instinctual behaviour. He notes that Freud's focus on the consequence of instincts arose out of his belief that instincts cannot become an object of consciousness and therefore cannot be addressed as either an idea or affective

---

<sup>3</sup> Apoptosis plays a crucial role in regulating cell numbers by eliminating damaged or cancerous cells. Natural killer cells kill by activating apoptosis (Braun & Cohen, 2005). The role of Natural Killer cells is further elaborated on in Chapter Six where the impact, on the immune system, of suppressing emotions is explored.

state. Freud (1933) looked to the mental field for instinctual manifestations. He asserted that “from its source to its aim the instinct becomes operative psychically” (p. 96). Perhaps, it was the psychical representation of the instinct Freud believed was amendable to analysis. Uncovering and interpreting the unconscious motives of these manifestations in analysis may provide a pathway to influencing instinctual life.

Freud (1920) admitted that science of his day was too limited for proper understanding of instinctual processes. Brockman (2000) provides an understanding of the nature of instincts from a psychobiological perspective demonstrating the benefits advances in science have had in furthering our understanding of instinctual life, as predicted by Freud. Expanding on Freud’s views, Brockman suggests an instinct is “a psychobiological organisation of memory-affect-anticipation-action, an organisation of cell bodies that can be brought together and taken apart” (p. 509). Convinced there are biologic connections between instinct and consciousness, he asserts it would be incorrect to assume that an instinct cannot be fully known. Brockman compares contextual-fear and classical-fear conditioning to support his statement, “how one responds to a situation depends on how one perceives that situation,” (p. 500). He suggests contextual fear conditioning is biologically more complex. Delving into more detailed neurophysiology, Brockman describes how in classical fear conditioning the amygdala and noradrenalin are essential, while for contextual fear conditioning, an intact hippocampus and glucocorticoid release are also necessary. Hippocampus and glucocorticoids are required for the distribution and integration of experience. Brockman writes:

This is important - both for learning in general and for psychoanalytic learning in particular because it provides one of the biological underpinnings for transference: data can be associated from a powerful emotional experience that may both remain unconscious mediated through the amygdala and connect to conscious experience mediated through the hippocampus. When one places the anatomy of the amygdala and its circuitry in the context of hormonal and psychological factors, it seems plausible that they are the sites that regulate arousal abnormalities. It describes a frontier where the experience of one person could be transferred to another by virtue of an affective link. (p. 503)

According to Brockman, this frontier is where instinct and consciousness meets. His theory provides important insights as to the occurrence of the compulsion to repeat experiences seemingly against the wish of the individual. Brockman’s findings provide a physiological basis

for understanding how repressed experiences have a powerful impact on how we perceive situations. We are then able to appreciate the benefits of uncovering and bringing these powerful experiences to consciousness to allow the individual to experience and integrate new experiences.

Again Brockman describes fascinating research showing the neurophysiological changes associated with psychological processes. For instance, chronic stress and elevated glucocorticoids, if prolonged, are implicated in hippocampal degeneration, diminishing the capacity to encode new experiences (Brockman, 2000). According to Brockman, this compromises the “hippocampus’ ability to access the present context and to compare it with information learned in other contexts” (p. 507). Instead the recall of conditioned fear is facilitated. In that state it is hard to think because one only reacts, claims Brockman. These affects may reflect a generation of internal biologic states preventing new learning from occurring. Brockman points out that this “helps explain the tenacity of instinctive, illogical reactions, especially transference reactions” (p. 508).

In the preceding chapter the impact of adverse environmental interferences leading to self-destructive tendencies were considered from a psychoanalytic perspective. Now I consider the impact negative early experiences have on the development of self-destructive tendencies from a physiological perspective.

Research consistently suggests that deficient or negative environmental experiences, such as overt family conflict and deficient nurturing, have damaging outcomes for mental and physical health (Repetti, Taylor & Seeman, 2002). These deficient early environments create vulnerabilities and/or interact with genetically based vulnerabilities in infants that produce disruptions in emotional processing and in stress-responsive biological regulatory systems, including sympathetic-adrenomedullary and hypothalamic-pituitary-adrenocortical functioning. The need for children’s developing physiological and neuroendocrine systems to repeatedly adapt to threatening and stressful circumstances increases the likelihood of biological dysregulations. Ongoing threatening and stressful circumstances may contribute to a build up of allostatic load,<sup>4</sup> affecting the body’s ability to maintain or regulate homeostasis. An individual subjected to this type of environment develops a vulnerability to chronic disease and early mortality in adulthood. Brockman (2000) claims chronic allostatic adaptations take their toll. He writes:

---

<sup>4</sup> The term “allostasis” is used to describe the body’s adaptative responses to stress in an attempt to maintain stability, or homeostasis, through change. Constitutional sensitivity and exposure to different life experiences accounts for some people having a higher or lower “allostatic load” to others.

One of the advantages of an allostatic mechanism is also one of its disadvantages. An allostatic mechanism secures an advantage by anticipation, but just as conscious, psychological anticipation can lead to its own expectations, so too can unconscious biological anticipation. When the anticipation is of negative events, allostatic mechanisms may effect a biohormonal compromise that conceals for a time the real price that the body is paying for its vigilance. The arousal in anticipation of challenges to the organism results, at least temporarily, in a degree of stability in coping with the stressor; but there is a price - often hidden - to the prolongation of the arousal and maintenance of neural and hormonal activity. (pp. 504-505)

Brockman also states that the endocrine system plays a central role in the day-to-day allocation of physiological resources by modulating the metabolism. Although each person's endocrine system has the same basic design and functional architecture, each person's endocrine system functions somewhat differently because of genetic variation and environmental influences. Physiological regulatory mechanisms, such as the autonomic nervous system (ANS), sympathetic adrenomedullary (SAM) and parasympathetic nervous system (PNS), hypothalamic pituitary adrenal (HPA) axis, and limbic (serotonergic) system, have been shown to regulate several biobehavioural pathways that are significant for health. These systems are developmentally programmed in response to different social and behavioural situations, with varying patterns of autonomic reactivity developing in children in different environmental contexts.

Halfon and Hochstein (2002) extend this theory into the realm of illness. They point out that it has been found that different behavioural and autonomic reactivity patterns are associated with the development of acute illness and psychopathology. The damage done to physical health of individuals exposed to negative environments may come from the initiation of biologically dysregulated responses to stress, the effects of which may be cumulative over the lifespan. As a result, the cause of chronic diseases such as hypertension, cardiovascular disease, diabetes, and some cancers may begin as early as childhood in these biological dysregulations.

Spanning nearly a century, this chapter began by considering Freud's anticipation that in time his clinical observations of destructive behaviour would be supported and understood from a biological perspective. We have seen how modern research has begun to lay the biological foundations of important psychoanalytic concepts, enhancing the death instinct's credibility and clinical usefulness. Advances in cell biology allow us to better comprehend the mutual interplay

between psychical and biological stimuli and the physiological response to the death instinct's ascendancy. We have seen in this chapter that psychological and biological functioning is interdependent and the impact psychological disturbances have on the body. In the following chapter I will consider the benefits of emotional processing on immune function and health.

## CHAPTER SIX

---

### Suppression of emotions, physiology and illness An empirical perspective

#### *Outline*

Chapter Four considered self-destructive tendencies and the effects of inhibiting the expression of aggressive emotions from a purely psychoanalytic perspective. The previous chapter drew on advances in cell biology to elucidate the nature of instinctual life, a controversial aspect of Freud's concept of a death instinct. The physiological basis of psychoanalytic concepts such as repression of painful experiences, repetition compulsion and transference were discussed. The adverse effect of negative environmental experiences on the developing physiological and neuroendocrine systems and the role these regulatory systems play in emotional processing and health was introduced. In this chapter I will discuss the effect suppression of emotions has on the immune system and the influence suppression of emotions has in the development and progression of disease from an empirical perspective. The discipline of psychoneuroimmunology is introduced. This discipline studies the relationships between psychosocial factors, the central nervous system, the immune system and disease. A selection of studies highlighting the physiological implications of suppressing emotions on the development and progression of disease will be discussed. This chapter draws a link between the disciplines of psychoanalysis and biological psychology. Combining contributions offered by both disciplines provides us with a deeper understanding and appreciation of psychoanalytic phenomena.

#### *Suppression*

The suppression rather than repression of emotions and thoughts will be considered from an empirical perspective in this chapter. Studying the process of repression has been considered impossible as it requires the individual to report no longer thinking about something (Wegner & Zanakos, 1994). In Freud's earlier writings, he used the word repression synonymously with suppression (Werman, 1983). It has become customary in modern day psychoanalysis to speak of suppression as the conscious counterpart of unconscious repression. The process of suppression is eloquently expressed by Lewis Carroll (cited in Wenzlaff & Wegner, 2000):

Again and again I have said to myself, on lying down at night, after a day embittered by some vexatious matter, 'I will *not* think of it any more!....It can do no good whatever to go through it again. I *will* think of something else!' And in another ten minutes I have found myself, once more, in the very thick of the miserable business, and torturing myself, to no purpose, with all the old troubles. (p. 59)

The ability to suppress emotions and thoughts varies considerably from one individual to another, depending on the flexibility and overall character of the defence organisation (Werman, 1983). Werman defines suppression as the "volitional elimination or diminution from consciousness, by any means, of undesirable thoughts, feelings, or bodily sensations" (p. 413). He suggests that conscious defences, such as suppression, may lie at one end of a continuum, while those which are obviously unconscious, such as repression, are at the other end. The continuum is a useful way of conceptualising the process of suppression and how at times suppression may not always be a conscious process. My view is that suppression is a conscious and at times a preconscious process influenced by unconscious processes. It seems plausible that, at times, the individual may not always be consciously aware of suppressing emotions and thoughts. Emotions and thoughts consigned to the preconscious may be easily accessed when prompted, but provide the individual with the desired effect of removing unwanted emotions and thoughts from conscious awareness.

Repressed emotions are less accessible to conscious awareness than suppressed emotions, but this should not exclude the effects of repressed emotions from scientific investigation. It is more likely however that the process of uncovering repressed emotions is more arduous and timely. Further on in this chapter I introduce the writing paradigm - a process which involves expressing emotions through writing. Studies discussed later on in this chapter show the physiological effects of expressing emotions through writing. This process may be a medium by which repressed feelings may be accessed, perhaps even by-passing conscious awareness. For example, somatic illnesses considered to represent an unconscious conflict, may be relieved by expressing repressed emotions through writing. In this way, expression of emotions and thoughts through the medium of writing may be equally as important as other psychoanalytic media used to interpret unconscious process, for example, dreams.

*Empirical studies on the effects of suppressing emotions and thoughts*

The study of thought suppression has grown into a significant area of scientific inquiry. What has compelled the interest of the scientific community is that “suppression is not simply an ineffective tactic of mental control; it is counterproductive, helping assure the very state of mind one had hoped to avoid” (Wenzlaff & Wegner, 2000, p. 59).

Wegner’s (1992) study on “Instructed thought suppression” found paradoxically that the instruction to suppress a thought typically induced a remarkable preoccupation with that thought. He argues that two mental processes are activated following the intention to suppress a thought - a conscious, effortful operating process that searches for distracters, and an unconscious, relatively effortless monitoring process that searches for the unwanted thought. When people are instructed to suppress emotional thoughts, they found the resultant sensitivity to these thoughts appears to heighten emotionality. Furthermore they recorded that during suppression of emotional thoughts, intrusive recurrences were associated over time with electrodermal responses. Such an association was not found during intentional concentration on these thoughts. The conclusion was that emotional thoughts that are suppressed cause stronger psychophysiological responses than those that are not suppressed. While it might appear that the suppression of emotional thoughts prevents the person from habituating to the thoughts lessening their emotional impact, it may be that suppression promotes a habituation or relative elevation of emotional response to that thought. Wegner suggests that these findings warrant future research on whether the occurrence of chronic suppression may cause symptoms of obsession, depression and anxiety.

In subsequent research Wegner and Zanakos (1994) measure the tendency to suppress unwanted thoughts in the hope that this research might augment findings in Wegner’s 1992 study. The results of the 1994 study complemented the prior findings that suppression may be a precursor of psychopathological reactions ranging from obsession to depression to anxiety. They conclude that the tendency to dislike negative thoughts, and the inclination to react to them with suppression, is associated with depression severity. Thought suppression is therefore useful as a way of understanding how people may become depression-prone suggests Wegner and Zanakos.

The more standard view of suppression is that a proclivity to suppress thoughts is a response to a life of unwanted experiences rather than the cause of sensitivity to such experiences (Wegner and

Pennebaker cited in Wegner & Zanakos, 1994). Thought suppressors may exhibit symptoms of obsession, anxiety, depression, and other expressions of negative affect not because suppression creates these indications but because it follows them as a reaction to unwanted thoughts.

Interestingly, Wegner and Zanakos suggest thought suppression plays both roles - as a cause of distress and as an effect - implicating a cyclic relationship that promotes the continuation of distress.

The following section considers the impact of psychosocial factors, for example, stress on the neuroendocrine system and the impact both stress and the neuroendocrine system have on the expression of emotions, behaviours and disease in later life.

### *Psychoneuroimmunology*

The nervous, endocrine, and immune systems were once believed to be autonomously functioning mechanisms, however, they are now known to be integrally connected, with finely tuned communications and interactions (Stein & Spiegel, 2000). The emergence in recent decades of the discipline of psychoneuroimmunology has advanced knowledge of the relationship between psychosocial factors, the central nervous system, the immune system and disease (Keller, Schleifer, Barlett, Shiflett, & Rameshwar, 2000). The theoretical consequence of this relationship is that psychological experiences, such as stress and anxiety, can influence immune function, which in turn may have an effect on disease development and progression (Azar, 1999). An increasing amount of scientific research supporting this relationship has meant that this theory is now more widely accepted (Pennebaker, Kiecolt-Glaser & Glaser, 1988).

Heijnen (2000) argues that to maintain a homeostasis it is helpful that the neuroendocrine system is sensitive and reactive, claiming “one’s body needs to be ‘tuned’ to various mediators of the neuroendocrine system” (p. 398). Decreased reactivity to, for example, catecholamines,<sup>5</sup> may negatively influence the course of the disease, diminishing the capacity to down-regulate response to a bacterial infection, for example. Heijnen considers whether stress is salutary or deleterious to one’s health from a psychoneuroimmunological perspective. He argues, the immune system “reacts mildly and transiently to acute stressors causing only minor disturbances in the homeostasis of the body” (p. 398) except when a person is already at ‘high risk.’ Because of the

---

<sup>5</sup> High catecholamine levels in the blood are associated with stress, which can be induced from psychological reaction or environmental stressors (Heijnen, 2000). Catecholamines cause general psychological changes that prepare the body for physical activity, e.g. fight or flight responses.

already high chronic exposure to severe stressors, acute stressors may tip the balance having a deleterious effect for the organism. Therefore, chronic stressors are considered to have a deleterious effect on maintaining the integrity of the body and may affect health. Heijnen contends the effects of major life events are less likely to have a negative effect than daily repeating stressors. Interestingly, an earlier study found that “it was the perceived controllability of the stressors, and not the number of these daily repeating stressors, that determined the effect on the immune response” (p. 398-399). A lack of perceived controllability of stressors may indicate a victim mentality and resignation tendency which may be bad for one’s health. Stress may be deleterious to ‘high risk’ individuals producing major disturbances in the homeostasis of the body. Removal of acute or chronic stressors is unlikely to significantly alter the ‘high risk’ individual’s already highly sensitive and reactive neuroendocrine system.

Fascinatingly, while acute stressors generally represent only minor disturbances for the immune system, their impact is significantly different when experienced during the perinatal period (Heijnen 2000). Laboratory studies have shown that exposure to an acute stressor during the perinatal period can cause static and long-lasting changes in the neuroendocrine system, the behaviour, and the immune system of the animal. These studies found that, the consequences of the stress associated with the animal being separated from the mother for a short period of time over a few consecutive days is still present during the adult life of the animal. The impact on the immune system is such that the animal’s capacity to mount a specific antibody response, as well as NK cell activity<sup>6</sup>, is decreased in comparison with the immune response of animals that have not been separated from the mother. Early dysregulation during the development of the immune system “may have implications for the development of the nervous and endocrine systems, thereby influencing the expression of emotions, behaviours, and disease in later life” (p. 400) according to Heijnen.

The idea that emotions and physiology mutually influence one another suggests that the immune system as part of our physiology may be effected by the expression of emotion (Booth, 2005). The expression and non-expression of emotion has been studied in chronic illness and in the quality of life of people living with or recovering from illnesses (Lepore & Smyth, 2002).

---

<sup>6</sup> Natural killer (NK) cells are cells that can react against and destroy another cell without prior sensitisation to it (“Definition of,” n.d.). Natural killer cells are part of our first line of defence against cancer cells and virus-infected cells. They destroy these cells.

Research findings provide strong evidence that the health benefits of emotional disclosure may result partially from effects on immune function (Booth & Petrie, 2002). The physiological effects of suppressing emotions and thoughts will be considered in the following section.

### *The writing paradigm and the benefits of expressing emotions*

Pennebaker pioneered research on the writing paradigm in the 1980's. He considers that the expression of emotions through writing has the power to affect peoples' lives and health (2002). He suggests the essence of the writing paradigm "is that it forces people to stop what they are doing and briefly reflect on their lives. It is one of the few times that people are given permission to see where they have been and where they are going without having to please anyone" (p. 282).

Individuals often suppress emotional thoughts that arouse negative emotions as a way of regulating mood and reducing distress (Petrie, Booth & Pennebaker, 1998). Attempting to gain greater understanding of the physiological effects of thought suppression, Petrie, Booth and Pennebaker undertook a study where participants wrote about either emotional or non-emotional topics with or without thought suppression. Blood was drawn before and after each experimental session. The results show a significant increase in circulating total lymphocytes and CD4 (helper) T lymphocyte<sup>7</sup> levels in the emotional writing groups. Thought suppression resulted in a significant decrease in CD3 T lymphocyte levels. The results of this study suggest that the act of thought suppression produced measurable effects on circulating immune variables independent of whether the thoughts suppressed were of an emotional or control nature. Suppression caused a significant decrease in circulating T lymphocytes (CD3) as well as marginal decreases in CD8 (T suppressor) cells and total lymphocyte numbers, suggesting that suppression over a longer term may cause changes in immune function that could compromise health. Emotional writing, on the other hand, increased the levels of circulating CD4 (T helper) cells and the number of total lymphocytes suggesting that expression of emotions may lead to immune changes associated with positive health outcomes.

---

<sup>7</sup> The lymphocyte is the crucial cell for identification of invading germs ("Lymphoma," 2006). There are two main subtypes: "T-cells" (Thymus) and "B-cells" (Bone). The T-cells are involved in stimulating (T-helper) and suppressing (T-suppressor) the immune system. The T-helper cells have "helper" functions. They help kill virally infected cells and tumours. The T-suppressor cells kick in and reduce the immune response. If the immune system doesn't work well, auto-immune diseases can develop. The system must stay in fine balance to function properly.

As our emotions change, “the structure of our bodies changes and we experience our lives differently” (Booth & Petrie, 2002, p. 159). In other words, physiological changes accompany expression and suppression of emotions. According to Booth and Petrie the suppression of emotions requires ongoing psychological ‘work’ in order to accommodate the disparity between what one is feeling and what one is experiencing. This work, reflects an increase in sympathetic nervous system activity, which may have unhealthy consequences if becomes habitual. The constant suppression of emotions affects the neuroimmune network resulting in immunosuppression, leading to adverse health outcomes says Booth (2005).

### *Personality traits, coping styles and cancer*

In O’Leary’s (1990) review of empirical evidence linking emotional processes to immune function in humans, she found, along with the findings that reveal the adverse effects of chronic stress on the suppression of immune function, that certain personality styles may also enhance or degrade immune response affecting disease susceptibility and progression. Personality traits and coping styles are of particular interest in psychoneuroimmunology research she suggests, because “some immunologic diseases are chronic or take much time to develop” (p. 374). Research conducted by Jamner, Schwartz and Leigh (1988) found that individuals who report being fatigued, less distressed, less hostile, helpless and failing to express negative affect are at greater risk of developing cancer. These personality traits may be associated with a masochistic character.

Tacon’s (1998) study was the first known study to examine cancer from an attachment theory perspective. Fifty two women with breast cancer and fifty two without cancer between the ages of 35 and 55 participated in the study. Parental care and control in childhood, general attachment style and emotional control in adulthood were measured. Emotional suppression or control of negative emotions, especially anger, was noted as a characteristic of the avoidant style of attachment. The most important finding of Tacon’s study was that women with breast cancer scored significantly higher than did the comparison group on avoidant attachment and on emotional control.

A study of breast cancer progression show that “neoplastic spread was associated with repression, reduced expression of negative affect, helplessness-hopelessness, chronic stressors, and comforting daydreaming” (Stein & Spiegel, 2000, p. 129). An important consideration not

mentioned in this study is whether the behaviours are a cause or consequence of the breast cancer diagnosis. Interestingly, they also found that positive personality traits, for example, optimism and an optimistic explanatory style, appeared to negatively impact immune function. A further study linked lower NK cell activity with patients who appear “well adjusted to their cancer” (p. 129). This study does not make a distinction between the individual authentically feeling optimistic and the individual adopting an optimistic attitude to mask the reality of an unpleasant situation. Consciously adopting a positive approach to an unpleasant situation rather than facing into the reality of the situation may be felt by the individual to facilitate a positive outcome, while negatively impacting immune function as found in Stein and Spiegel’s study. On the other hand, authentic optimism may positively impact immune function. Stein and Spiegel conclude that expression of intrapsychic distress may contribute significantly to delay in tumour progression. They argue “although spectators may prefer the patient to be pleasantly quiet, the immune system response does not justify this preference” (p. 130). This may suggest that ‘difficult’ noncompliant traits may predict a better prognosis than masochistic traits.

An early study conducted by O’Donnell (1993) drew similar conclusions. Semi-structured questionnaires were used to measure the psychological responses and psychosocial adjustment of 53 patients with early breast cancer to their illness. Blood was collected for serum estimation of natural killer cell activity. Patients were followed up after five years to determine disease recurrence and survival. Consistent with the initial hypothesis suppression of anger was found to significantly predict recurrence of disease within five years. This suggests that suppression of anger is a strong predictor of disease progression.

Greer and Morris (1975), as part of an interdisciplinary study of breast cancer, undertook psychological investigation of 160 women admitted to hospital for breast tumour biopsy. Of the 160 women, 69 patients were found to have breast cancer and 91 patients had benign breast disease. They hypothesise that psychosocial variables may be among the factors which contribute, via neuro-endocrine and immunological mechanisms, to impairment of homeostatic regulation of cell growth and function. They found a statistically significant association between the diagnosis of breast cancer and abnormal release of emotions. In most cases, this abnormality was extreme suppression of anger and of other feelings. Interestingly, extreme expression of these emotions, though less common, also appeared in a higher proportion of cancer patients than controls. While they could not prove conclusively whether this behaviour pattern was an antecedent, rather than a concomitant, of breast cancer, they were able to establish by careful

questioning of patients and their close relatives that the pattern had at least persisted throughout adult life, and often since childhood. No definitive conclusions could be drawn regarding aetiology. Greer and Morris suggest however that the findings raise valuable questions as to whether emotional release is related to specific hormonal patterns or immunological responses and whether emotional release in terms of the diagnosis and prognosis of breast cancer has predictive value.

This chapter has predominately focussed on the effects of suppressing emotions on immune function and disease development and progression. The expression of anger has also been implicated in the development of certain illnesses, for example, heart disease. Studies on the relationship between expression of anger and illness will now be considered.

While it has long been thought that anger is important in the development of essential hypertension, tests of this hypothesis have yielded conflicting findings (Everson, Goldberg, Kaplan, Julkunen & Salonen, 1998). In a study on the emotional factors in cardiovascular disorder, Ohman and Sundin (1995) found that hostility is a risk factor for coronary heart disease. Everson, et al.'s study examining the relationship between anger expression style and incident hypertension in a population of middle-aged men, found that that extreme expression or extreme inhibition of anger both have adverse cardiovascular consequences. Stoney and Engebretson's (2000) study shows that men who inhibit anger and high-hostile men, have high homocysteine levels - a blood chemical strongly associated with coronary heart disease. Depression, anger and hostility are known to be linked to a higher risk of heart disease (Suarez, 2004). It could be that normal or healthy expression of anger produces relief by returning the individual to homeostasis, whereas chronic anger, like chronic stress, has adverse physiological implications and health outcomes.

In the studies discussed above, questionnaires were used to measure the expression of anger. These studies do not reveal the details of the criteria applied to distinguish between the expression of anger and hostility. Worthy of mentioning is Julkunen, Salonen, Kaplan, Chesney and Salonen's (1994) study on hostility and the progression of carotid atherosclerosis. Fascinatingly, the components of hostility most related the predicted progression of atherosclerosis were cynical distrust and suppressed anger, rather than overtly aggressive behavior. I would suggest that the conceptual commonalities between depression, anger and hostility require greater clarification.

Linking depression, anger and hostility's connection with the history of the patient may also provide for better measures that offer more conclusive findings.

We have seen how psychosocial factors, attachment style and personality traits influence, in the individual, a tendency to suppress emotions. This tendency to suppress emotions impacts negatively on immune function, which if experienced over a long period may have adverse health outcomes. Conversely, research shows that positive physiological change accompanies stressor modulation and expression of emotion. An exception to this may be the excessive expression of anger, which has been implicated in the incidence of coronary heart disease. Current research supports the notion that modulation of stressors affects disease progression, however, Stein and Spiegel argues "there are no studies which suggest that stressor modulation prevents the development of cancer" (p. 112). They further contend, that for the time being this remains equivocal because of the length of time necessary for tumours to become clinically detectable making the aetiology difficult to pinpoint. The selection of studies examined indicates inconclusive evidence linking the development of cancer and inhibition of expression of negative affects.

Ader (cited in Azar, 1999) cautions against premature claims that the mind can cure cancer and other diseases due to the lack of definitive evidence. However, he also says that we cannot deny a connection between the brain and the immune system just because researchers have yet to find a biological mechanism linking the two systems.

## CHAPTER SEVEN

---

### Discussion

#### *Outline*

This chapter summarises the psychoanalytic and empirical research literature on self-destruction. How this knowledge might provide a theoretical understanding of Angela's development of masochistic tendencies, subsequent cancer diagnosis and disease progression is then discussed. Clinical implications of the findings of the dissertation are discussed along with the limitations of this dissertation and suggestions for further research.

#### *Summary*

This dissertation explored Freud's concept of a death instinct in order to conceptualise the development of cancer and other illness as a form of self-destruction. The death instinct was presented by Freud as an active physiological process supporting his belief in a mind-body parallel and provides a powerful way of thinking of the creation of somatic phenomenon. Underpinning this theoretical stance is the belief that psychologic and physiologic processes operate collaboratively and have a powerful effect on each other.

Death instincts, like all instincts, originate in every cell in the living organism and are considered the primary source of internal excitations. In somatopsychic life, messages pass between the psyche and soma. Somatic demands on the psyche are communicated by means of instinctual excitations. These somatic functions achieve psychic representation as the individual develops from birth to adulthood. This process is responsible for the biological body becoming a psychological one. Links between soma and psyche are established as somatic functions, for example emotions, achieve psychic representation. Cognitive exploration of somatic and psychic experiences is compromised if links between the soma and psyche are not established. A severing of these links may also increase the eventuality of character pathology and psychosomatic vulnerability.

Reducing, keeping constant or removing internal excitations is the prevailing tendency of mental life according to Freud. The tendency to return the individual to a state of equilibrium implies a dynamic tendency by which the psyche successfully removes internal excitations returning the individual to its initial position following disturbance, preventing either the life or death instinct establishing a dominant position. Cathexis of internal excitations is achieved by the fusion of life and death instincts returning the human organism to a state of equilibrium. However, if excitations exceed the psyche's ability to return the individual to a state of equilibrium conflicts arise necessitating the psyche's utilisation of various defensive and other measures to regain stability.

The superego is identified by Freud as the main obstacle impeding the cathexis of the death instinct through the externalisation of aggressive and destructive impulses. With the superego only able to absorb so much aggressive and destructive impulses, impediments to their externalisation forces these impulses back against the ego increasing the individual's vulnerability towards self-destruction. In this way, the death instinct establishes a dominant position within the human organism.

Of the psychoanalytic literature reviewed only a scanty selection of articles on the physiological implications of the death instinct was identified. These articles largely focussed on defensive strategies utilised by the psyche against the death instinct and their contribution to the development of psychological pathology. The literature did reveal however that while a proliferation of these defensive strategies serves to dampen the effects of the death instinct; they may lead to immobilisation of the life instincts influencing the development of either psychological or physiological pathology. Early transactional experiences and temperamental sensitivities were noted as having an influencing effect on the emerging personality and the death instinct's ascendancy, predisposing the individual to masochistic tendencies. It is the complex interaction between instinctual stirrings, constitutional sensitivities, environmental transactions, and the psyche that has a determining influence of the individual's emerging personality and ability to keep the death instinct in check.

While it was previously impossible to consider the death instinct empirically, advances in molecular biology have broadened our knowledge of the existence and nature of instinctual life. Biological underpinnings of the clinical phenomenon of repetition compulsion, which led Freud to

hypothesise the existence of a death instinct, and the psychoanalytic concept of transference, can now be empirically understood. Moreover, changes in affective equilibrium at the cellular level have been scientifically studied supporting Freud's contention that instinctual repercussions are experienced at the cellular and psychical level confirming a mind-body connection. Recent discoveries also explain how memories are stored not only in the brain, but in the psychosomatic network.

In short, blockages preventing cathexis of the death instinct through the externalisation of aggressive and destructive impulses is seen as the primary cause of self-destruction according to Freud. Empirical studies reveal that suppression of emotions has a negative impact on immune function disturbing the equilibrium of the body which in the longer term may lead to adverse health outcomes. Both psychoanalytic and empirical approaches suggest that physiological changes accompany emotional changes. This suggests a mind-body parallel rather than a mind/body split as suggested by Descartes' theory that the mind and the body are distinct. These studies support Freud's contention that the repression of emotions presents a significant psychical and physiologic burden to the individual leading to illness. Talk therapy was introduced by Freud as a way of uncovering repressed conflicts by facilitating cathexis of emotions through the technique of free association. This process focuses on clearing blockages inhibiting the release of internal excitations returning the individual to a state of equilibrium. This too has been empirically demonstrated in the field of psychoneuroimmunology.

While psychoanalytic knowledge is not measurable in the same way as empirical research on psychosomatic disorders, linking Freud's concept of a death instinct to empirical studies on psychosomatic disorders allows for measurable and practical knowledge gained from research to be integrated into the psychotherapeutic setting. These findings empirically support what Freud attempted to articulate in his 1920 publication: that the development of blockages impeding the external expression of aggressive and destructive impulses has grave psychological and physiological consequences for individuals' health. And conversely, psychological and physiological changes accompany expression of emotions.

*Clinical implications*

I will now consider how the psychoanalytic and empirical findings on self-destruction discussed in this dissertation may provide a theoretical understanding of Angela's development of masochistic tendencies, subsequent cancer diagnosis and disease progression. This dissertation set out to examine the development of physical illness as a form of self-destruction within the context of Freud's contentious concept of a death instinct. It is important to keep in mind that the death instinct's involvement in the development of physical illness as a form of self-destruction remains inconclusive and is purely theoretical. We have examined various other possible contributing factors that should not be excluded from consideration when working with patients. For the purpose of this dissertation, I will discuss the clinical implications within the context of working with the death instinct.

Angela had a history of emotional and physical abuse stemming back to her childhood. These experiences influenced her maintaining object ties through masochistic submission throughout her life. Strong resignation tendencies meant Angela anticipated only what she had previously known despite a longing for her life to be different. To propose that Angela might have unconsciously influenced her premature death may seem unfair. Yet psychoanalytic case studies and empirical research suggest that Angela's retreat from life and her management of negative emotions in a masochistic way may well have contributed to her developing cancer and/or influenced the progression of her disease.

The threat of violent retaliation from her environment, chronic stress and her own guilt system limited safe and healthy pathways for Angela to express negative emotions, which in the long term may have had detrimental consequences for her health. The literature speaks of varying constitutional sensitivities setting some individuals apart from others in their emotional response to adverse environmental experiences. This sensitivity together with unfavourable life experiences may explain why in some individuals the death instinct's ascendancy is more pronounced.

We have seen that the repression of emotions, from a psychoanalytic perspective and the suppression of emotions, from an empirical perspective has a negative effect on health. A remarkable absence of conscious awareness and expression of negative emotions and a strong presence of resignation tendencies was evident in my work with Angela. Neither able to feel nor

express negative emotions, perhaps these had been repressed into her unconscious and found expression in her disease. Without denying other external contributing factors, the psychoanalytic literature calls attention to the unconscious motive of the individual when evaluating disease in patients. Identifying and relating specifically the emotional factors contributing to somatic disease is the task of psychotherapy. Treatment involves clearing blockages to healthy expression of these emotions thereby returning the individual to a state of equilibrium through the mobilisation of the life force in the patient.

My clinical work with Angela was cut short with the ending of my clinical placement. In the time we worked together, she required palliative care intervention to manage severe pain and discomfort, affecting her ability, at times, to concentrate and stay awake during sessions. This was exacerbated by Angela's fear that she was going to be murdered by her estranged husband, preventing her from sleeping at night or when alone. Perhaps these experiences also contributed to the severity of symptoms she was experiencing. Angela's erratic attendance, severity of symptoms and her dozing intermittently throughout our sessions challenged any in-depth explorative work. I often felt Angela entrusted me with her life instinct to guard her while she slept in my presence, taking refuge from her chaotic life. Necessarily, supporting Angela through the end stage of her terminal illness became the therapeutic focus.

It is difficult to speculate about benefits to Angela's health had she begun psychotherapy early in her illness (or earlier in life). However, I would like here to address how we might have worked had this been the case. Understanding the unconscious significance of Angela's psychosomatic manifestations would have been the primary therapeutic aim. The creation of a safe and supportive environment in which Angela and I were able to explore her associations, transference feelings and fantasies, metaphors, dreams would have facilitated her ability to access buried conflicts, primitive fantasies and forgotten memories. Equally important would have been careful observation and capture of Angela's subtle non-verbal communication to trace the gradual coming into consciousness of the as yet unverballed apprehensions struggling for expression. These regressive and archaic forms of communication would have provided insights into the relationship between Angela's unconscious motivation and her psychosomatic symptoms revealing the hidden symbolic meaning of her illness. It is through the process of psychotherapy that biologic expressions can be translated into psychologic expressions. Bringing these expressions to consciousness we would have been able to explore their meaning releasing their intractable and

destructive influence, re-establishing links between her soma and psyche. Confronting the death instinct by identifying and understanding the defences created against negative emotions, Angela may have been able to begin to recognise her aggressions and come to regard all her emotions as healthy and natural. Using countertransferential feelings I would have been given a sense of Angela's fears and the way in which she survived early psychic trauma. This would have allowed me to further my understanding of the defensive value of her symptoms as a sign of deep, unrecognised distress. While Angela's protective shield helped her cope with daily life, her psychic and symptomatic defences threatened her biological survival through the development of a fatal psychosomatic solution. Facilitating Angela's awareness of her internal dynamics may have strengthened her capacity to utilise multiple pathways and outlets for her internal excitations. She would have then been more able to recognise the consequences of external forces and events on her psyche. Angela could then have begun to differentiate and flourish as dictated by internal and environmental reality strengthening her ability to maintain the death instinct in check. Research suggests that the course of her illness may have been changed through this rechannelling of bound up emotions. But even if this hadn't have been the case, good psychotherapy would have contributed to happier final years. Sadly this was not achievable with Angela. I hope that in preparing this dissertation my understanding of the workings and clinical implications of the death instinct has deepened and strengthened my ability to work with patients to be less afraid of the very emotions they may wish to avoid.

*Limitations of literature review*

Literature reviewed for this dissertation has been largely limited to psychoanalytic articles written on Freud's concept of the death instinct and its contribution to the development of somatic illness. While the review narrowly focused on somatic manifestations of the death instinct, acknowledgement and discussion of relevant articles written in languages other than English was not possible. A significant limitation of this review was the selective reading of empirical studies elucidating the development and consequence of self-destructive tendencies because of the word-limitations of the study.

*Future directions*

Further clinical studies of group and individual psychotherapy with psychosomatic patients would strengthen our knowledge of mind-body medicine and the potential benefits of psychotherapeutic intervention in relieving psychosomatic expression. Clinical studies would involve observing whether a reduction in patients' somatic symptoms accompanied the patients' improved ability to access and express emotions following the translation of archaic forms of communication to more symbolic forms.

## References

- Alexander, F. (1934). The influence of psychologic factors upon gastro-intestinal disturbances: A symposium – 1. General principles, objectives, and preliminary results. *Psychoanalytic Quarterly*, 3, 501-539.
- Alexander, F. (1936). Addenda to “The medical value of psychoanalysis”. *Psychoanalytic Quarterly*, 5, 548-559.
- Anderson J.W. (2001). Sigmund Freud’s life and work: An unofficial guide to the Freud exhibit. *Annual of Psychoanalysis*, 29, 9-34.
- Azar, B. (1999). Father of PNI reflects on the field’s growth: Robert Ader finds the rise in popularity of psychoneuro-immunology gratifying and frightening. Retrieved May, 4, 2006 from: <http://www.apa.org/monitor/jun99/pni.html>.
- Balint, M. (1951). Exploring the unconscious. *International Journal of Psycho-Analysis*, 32, 250-251.
- Biancoli, R. (1997). Georg Groddeck, the psychoanalyst of symbols. *International Forum of Psychoanalysis*, 6, 117-125.
- Blum, H.P. (1991). Sadomasochism in the psychoanalytic process, within and beyond the pleasure principle: Discussion. *Journal of the American Psychoanalytic Association*, 39, 431-450.
- Booth, R. (2005). Emotional disclosure and psychoneuroimmunology. In K. Vedhara and M. Irwin (Eds.). *Human psychoneuroimmunology* (pp. 319-341). Oxford: Oxford University Press.
- Booth, R.J., & Petrie, K.J. (2002). Emotional expression and health changes: Can we identify biological pathways? In S.J. Lepore & J.M. Smyth (Eds.). *The writing cure: How expressive writing promotes health and emotional well-being*, (pp. 157-175). Washington DC: American Psychological Association.

- Braun, L., & Cohen, M. (2005). *Herbs and natural supplements: An evidence-based guide*. Sydney: Elsevier Mosby.
- Breuer, J., & Freud, S. (1895). Studies on hysteria. In *The standard edition of the complete psychological works of Sigmund Freud: 2*. (J. Strachey, Trans., pp. 185-251). London: Hogarth Press.
- Brockman, R. (2000). Instincts and their physiologies – A clinician's perspective. *Journal of American Academy of Psychoanalysis*, 28, 501-512.
- Cain, A.C. (1961). The presuperego 'turning-inward' of aggression. *Psychoanalytic Quarterly*, 30, 171-208.
- Chessick, R.D. (1992). The death instinct revisited. *Journal of the American Academy of Psychoanalysis*, 20, 3-28.
- Cook, D.J., Mulrow, C.D., & Haynes, R.B. (1998). Synthesis of best evidence for clinical decisions. In C. Mulrow & D. Cook (Eds.). *Systematic reviews: Synthesis of best evidence for health care decisions*, (pp. 5-12). Pennsylvania: American College of Physicians.
- Deutsch, F. (1933). Studies in pathogenesis: Biological and psychological aspects. *Psychoanalytic Quarterly*, 2, 225-243.
- Definition of natural killer cell (n.d.). Retrieved October 18, 2006 from <http://www.medterms.com/script/main/art.asp?articlekey=21219>.
- Eigen, M. (1996). *Psychic deadness*. New Jersey: Jason Aronson.
- Everson, S.A., Goldberg, D.E., Kaplan, G.A., Julkunen, J., & Salonen, J.T. (1998). Anger expression and incident hypertension. *Psychosomatic Medicine*, 60(6), 730-735.

Federn, P. (1932). The reality of the death instinct, especially in melancholia. *Psychoanalytic Review*, 19, 129-151.

Feldman, M. (2000). Some views on the manifestation of the death instinct in clinical work. *International Journal of Psychoanalysis*, 81, 53-65.

Fenichel, O. (1954). *The collected papers of Otto Fenichel*. London: Routledge and Kegan Paul.

Ferenczi S. (1929). The unwelcome child and his death instinct. *International Journal of Psychoanalysis*, 10, 125-129.

Foxe, A.N. (1943). Critique of Freud's concept of a death instinct. *Psychoanalytic Review*, 30, 417-427.

Freud, S. (1915). Instincts and their vicissitudes. In *The standard edition of the complete psychological works of Sigmund Freud*: 14. (J. Strachey, Trans., pp. 109-140). London: Hogarth Press.

Freud, S. (1920). Beyond the pleasure principle. In *The standard edition of the complete psychological works of Sigmund Freud*: 18. (J. Strachey, Trans., pp. 3-64). London: Hogarth Press.

Freud, S. (1923). The ego and the id. In *The standard edition of the complete psychological works of Sigmund Freud*: 19. (J. Strachey, Trans., pp. 3-66). London: Hogarth Press.

Freud, S. (1924). The economic problem of masochism. In *The standard edition of the complete psychological works of Sigmund Freud*: 19. (J. Strachey, Trans., pp. 157-170). London: Hogarth Press.

Freud, S. (1930). Civilization and its discontents. In *The standard edition of the complete psychological works of Sigmund Freud*: 21. (J. Strachey, Trans., pp. 59-145). London: Hogarth Press.

- Freud, S. (1933). Anxiety and instinctual life. In *The standard edition of the complete psychological works of Sigmund Freud*: 22. (J. Strachey, Trans., pp. 81-111). London: Hogarth Press.
- Gallacher, J.E.J., Yarnell, J.W.G., Sweetnam, P.M., Elwood, P.C., & Stansfeld, S.A. (1999). Anger and incident heart disease in the Caerphilly Study. *Psychosomatic Medicine*, 61, 446-453.
- Gay, P. (1998). *Freud: A life for our time*. New York: Norton.
- Goldberg, J.G. (1995). Psychoanalysing the body. *Modern Psychoanalysis*, 20(1), 79-91.
- Grant, B.M., & Giddings, L.S. (2002). Making sense of methodologies: A paradigm framework for the novice researcher. *Contemporary Nurse*, 13, 10-28.
- Greenhalgh, T. (2001). *How to read a paper*. London: BMJ Publishing Group.
- Greer, S., & Morris, T. (1975). Psychological attributes of women who develop breast cancer: A controlled study. *Journal of Psychosomatic Research*, 19, 147-153.
- Groddeck, G. (1923). *The book of the It*. London: Vision Press.
- Gronseth, R. (1998). On the question of the death instinct. *Nordisk Psykologi*, 50(1), 42-59.
- Halfon, N., & Hochstein, M. (2002). Life course health development: An integrated framework for developing health, policy and research. *The Milbank Quarterly*, 80(3), 433-596.
- Hamilton, J.W. (1976). Some comments about Freud's conceptualization of the death instinct. *International Review of Psychoanalysis*, 3, 151-164.
- Heijnen, C.J. (2000). Psychoneuroimmunology: Perspectives of an immunologist. In K. Goodkin & A.P. Visser (Eds.). *Psychoneuroimmunology: Stress, mental disorders, and health* (pp. 395-405). Washington DC: American Psychiatric Press.

- Hoffman, I. (1979). Death anxiety and adaptation to mortality in psychoanalytic theory. *Annual of Psychoanalysis*, 7, 233-267.
- Hoffman, T. (2004). Revival of the death instinct: A view from contemporary biology. *Neuro-psychoanalysis*, 6(1), 63-75.
- Ikonen, P., & Rechardt, E. (1978). The vicissitudes of thanatos: On the place of aggression and destructiveness in psychoanalytic interpretation. *Scandinavian Psychoanalytic Review*, 1, 79-114.
- Jamner, L.D., Schwartz, G.E., & Leigh, H. (1988). The relationship between repressive and defensive coping styles and monocyte, eosinophile, and serum glucose levels: Support for the opioid peptide hypothesis of repression. *Psychosomatic Medicine*, 50, 567-575.
- Jelliffe, S.E. (1933). The death instinct in somatic and psychopathology. *The Psychoanalytic Review*, 20(2), 121-132.
- Julkunen, J., Salonen, R., Kaplan, G.A., Chesney, M.A., & Salonen, J.T. (1994). Hostility and the progression of carotid atherosclerosis. *Psychosomatic Medicine*, 56, 519-525.
- Keller, S.E., Schleifer, S.J., Bartlett, J.A., Shiflett, S.C., & Rameshwar, P. (2000). Stress, depression, immunity, and health. In K. Goodkin & A.P. Visser (Eds.). *Psychoneuroimmunology: Stress, mental disorders, and health* (pp. 1-25). Washington DC: American Psychiatric Press.
- Klein, M. (1952). The mutual influences in the development of ego and id - discussants. *Psychoanalytic Study of the Child*, 7, 51-53.
- Klein, M. (1958). On the development of mental functioning. *International Journal of Psycho-Analysis*, 39, 84-90.

- Land, L. (1991). Thanatos: The drive without a name: The development of the concept of the death drive in Freud's writings. *Scandinavian Psychoanalytic Review*, 14, 60-80.
- Lepore, S.J., & Smyth, J.M. (2002). The writing cure: An overview. In S.J. Lepore & J.M. Smyth (Eds.). *The writing cure: How expressive writing promotes health and emotional well-being*, (pp. 3-14). Washington DC: American Psychological Association.
- Lipton, B.H. (2005). *The biology of belief: Unleashing the power of consciousness, matter & miracles*. California: Elite Books.
- Lymphoma (2006). Retrieved October 18, 2006, from <http://www.canceranswers.com/Lymphoma.html>.
- McDougall, J. (1974). The psychosoma and the psychoanalytic process. *International Review of Psychoanalysis*, 1, 437-459.
- Mallarkey, G. (Ed.). (2000). *Cascading evidence: Achieving skills in evidence-based practice*. London: Adis International.
- Meissner, W.W. (2006). Prospects for psychoanalysis in the 21st century. *Psychoanalytic Psychology*, 23(2), 239-256.
- Menninger, K.A. (1938). *Man against himself*. New York: Harcourt, Brace & World.
- Mitchell, S.A. (1993). Aggression and the endangered self. *Psychoanalytic Quarterly*, 62, 351-382.
- Mitrani, J.L. (1993). 'Unmentalized' experience in the etiology and treatment of psychosomatic asthma. *Contemporary Psychoanalysis*, 29, 314-342.
- Monsour, K.J. (1957). Migraine: Dynamics and choice of symptom. *Psychoanalytic Quarterly*, 26, 476-493.

- O'Donnell, M.C. (1993). Psychosocial factors predicting recurrence in breast cancer patients: Neuroimmunological correlates. *Dissertation Abstracts International*, 55(02), p. 625.
- O'Leary, A. (1990). Stress, emotion, and human immune function. *Psychological Bulletin*, 108(3), 363-382.
- Ohman, A., & Sundin, O. (1995). Emotional factors in cardiovascular disorder. *Current Opinion in Psychiatry*, 8, 410-413.
- Pedder, J. (1992). Psychoanalytic views of aggression: Some theoretical problems. *British Journal of Medical Psychology*, 65, 95-106.
- Pennebaker, J.W. (2002). Writing about emotional events: From past to future. In S.J. Lepore & J.M. Smyth (Eds.). *The writing cure: How expressive writing promotes health and emotional well-being*, (pp. 281-291). Washington DC: American Psychological Association.
- Pennebaker, J.W., Kiecolt-Glaser, J.K., & Glaser, R. (1988). Disclosure of traumas and immune function: Health implications for psychotherapy. *Journal of Consulting and Clinical Psychology*, 56(2), 239-245.
- Pert, C.B. (1997). *Molecules of emotion: Why you feel the way you feel*. London: Simon & Schuster UK.
- Petrie, K.J., Booth, R., & Pennebaker, J.W. (1998). The immunological effects of thought suppression [Personality processes and individual differences]. *Journal of Personality and Social Psychology*, 75(5), 1264-1272.
- Quinodoz, J.M. (2004). *Reading Freud: A chronological exploration of Freud's writings*. London: Routledge.
- Repetti, R.L., Taylor, S.E., & Seeman, T.E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin*, 128(2), 330-366.

- Sanches Faveret, B.M. (2002). Psychoanalysis and biology. *International Forum Psychoanalysis*, 11, 202-208.
- Segal, H. (1993). On the clinical usefulness of the concept of death instinct. *International Journal of Psychoanalysis*, 74, 55-61.
- Solms, M. (2004). Freud returns. *Scientific American*, 290(5), 82-88.
- Starcevic, V. (2003). Psychotherapy in the era of evidence-based medicine. *Australasian Psychiatry*, 11(3), 278-281.
- Stein, S., & Spiegel, D. (2000). Psychoneuroimmune and endocrine effects on cancer progression. In K. Goodkin & A.P. Visser (Eds.). *Psychoneuroimmunology: Stress, mental disorders, and health* (pp. 105-151). Washington DC: American Psychiatric Press.
- Sternbach, O. (1975). Aggression, the death instinct and the problem of sadomasochism. A reinterpretation of Freud's second drive theory. *International Journal of Psychoanalysis*, 56, 321-333.
- Stoney, C.M., & Engebretson, T.O. (2000). Plasma homocysteine concentrations are positively associated with hostility and anger. *Life Sciences*, 66(23), 2261-2275.
- Suarez, E.D. (2004). C-Reactive protein is associated with psychological risk factors of cardiovascular disease in apparently healthy adults. *Psychosomatic Medicine*, 66(5), 684-691.
- Tabachnick, N. (1972). Theories of self-destruction. *American Journal of Psychoanalysis*, 32(1), 53-61.
- Tacon, A.M. (1998). Parent-child relations, attachment, and emotional control in the development of breast cancer (Doctoral dissertation, University of Texas). *Dissertation Abstracts International*, 59(03), p. 972.

- Virsida, A.R. (2001). The death drive: Psychic construction or destruction? *Psychoanalytic Review*, 88(4), 511-524.
- Wallace, E.R. (1976). Thanatos – a re-evaluation. *Psychiatry*, 39(4), 386-393.
- Wegner, D. (1992). You can't always think what you want: Problems in the suppression of unwanted thoughts. In M. Zanna (Ed.), *Advances in experimental social psychology*, (pp. 193-225). San Diego: Academic Press.
- Wegner, D.M., & Zanakos, S. (1994). Chronic thought suppression. *Journal of Personality*, 62, 615-640.
- Wenzlaff, R.M., & Wegner, D.M. (2000). Thought suppression. *Annual Review of Psychology*, 51, 59-91.
- Werman, D.S. (1983). Suppression as a defense. *Journal of the American Psychoanalytic Association*, 31(S), 405-415.
- Wilcox, R.M. (2003). A skeptical scrutiny of the works and theories of Wilhelm Reich as related to The Cancer Biopathy. Retrieved February, 15, 2006 from <http://home.netcom.com/~rogermw/Reich/cancer.html>.
- Wolf, E.S. (1997). Emotional understanding: Studies in psychoanalytic epistemology. *Psychoanalytic Quarterly*, 66, 523-524.
- Zurak, N., & Klain, E. (1998). Freud's theory of thanatos and the concept of programmed cell death. Retrieved November, 26, 2005 from <http://www.psychomedia.it/neuro-amp/98-99-sem/zurak.htm>.