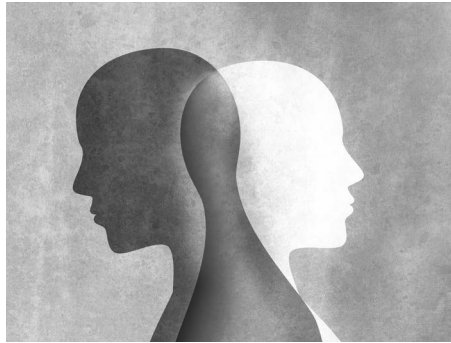


**A New Model
for Understanding
and Treating**

Borderline Personality Disorder

REVISED EDITION



**Lee Crandall Park, M.D.
& Thomas J. Park, Ph.D.**



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A THEORY OF MIND DEVELOPMENTAL MODEL (TOMDM) FOR UNDERSTANDING AND TREATING BORDERLINE PERSONALITY DISORDER:

Borderline Personality Disorder
is almost always a fully developmentally
engendered disorder of Theory of Mind,
in the absence of inherent
neurobiological deficits.



Necessary modifications to current
treatment models will resolve their
continuing failure to provide either
a positive sense of self or
successful intimacy with others.

*There are three things that are extremely hard:
steel, a diamond, and to know oneself.*

– Benjamin Franklin

*I hate and I love. Why do I do so, perhaps you ask.
I know not, but I feel it and I am in torment.*

– Gaius Valerius Catullus,
Carmina, c. 84 BC – c. 54 BC

Preface

The etiology and underlying nature of Borderline Personality Disorder (BPD) has remained a mystery for many decades despite a great deal of theory and research. Nevertheless, there has been the general conviction, without confirmation, that Borderline Personality Disorder is a “Diathesis-Stress Disorder”, meaning that it is a medically-based disorder resulting from inherent neurobiological limitations or flaws that become amplified or activated by childhood adversity. It has gradually become clear, however, that Borderline Personality Disorder is characterized by fundamental impairments in understanding self and others, which has led us to this radical reappraisal that Borderline Personality Disorder is not a Diathesis-Stress Disorder, but instead it is a fully developmentally engendered disorder of Theory of Mind (ToM), the term for the uniquely human Social Intelligence faculty for knowing of and understanding the mind of self and others. Theory of Mind does not even exist at birth. At birth the mind is only an informationally empty neurobiological potential that must be entirely constructed after birth while a child interacts in a very lengthy and vulnerable learning experience with the social environment, analogous to the learning of language. We will argue that the pre-borderline child’s Theory of Mind develops in a specific, adverse social environment, involving particularly routine, everyday, and generally somewhat subtle psychological interference with and neglect of the natural childhood learning of Theory of Mind. This psychological adversity persists throughout childhood, and the resulting maldevelopment of the mind becomes behaviorally clearly evident during the social challenges of adolescence. This lengthy, defective developmental learning experience of a faculty that is essential for functioning in the human social world is almost always the

full source of Borderline Personality Disorder, in the absence of any necessity for inherent neurobiological deficiencies. This new model, if fully confirmed, carries major implications for resolving the failure of all current psychotherapies to adequately resolve the severe social maladjustments of borderline patients.

While inherent neurobiological flaws are not necessary for childhood adversity to result in developmental failure of working Theory of Mind, the pre-borderline child does have two inherent but normal neurobiological features that are highly advantageous in supportive developmental social environments, but that together can be highly disadvantageous in adverse social environments. The first vulnerability is the natural “Differential Susceptibility” of Theory of Mind brain domains, providing the high level of flexibility that is necessary for Theory of Mind to develop collaboratively in a learning experience with the very varied and complex human social environment. However, this collaborative flexibility also provides a significant vulnerability to maldevelopment of Theory of Mind in adverse childhood social learning environments, particularly those involving persistent psychological/emotional interference with the Theory of Mind learning experience. This Differential Susceptibility of normal brain domains for Theory of Mind to developmental failure is a risk factor for all children, and is the theorized “p-factor” or “pathology factor” that provides a general vulnerability of the initially normal human brain to the development of mental illness.

The second vulnerability is specific to Borderline Personality Disorder. It is the inherent enhancement of brain domains for Theory of Mind in pre-borderline children, which is behaviorally manifested by their very high sensitivity to the social environment. Enhanced Theory of Mind provides a markedly enhanced potential for Theory of Mind to develop collaboratively and successfully with a positive social environment, but the associated increased Differential Susceptibility also provides a markedly increased vulnerability to maldevelopment in an adverse social environment, which can result in BPD even if there is only a mild level of adversity when it persists on an everyday basis throughout infancy, childhood and adolescence. In such an adverse childhood social environment, the initially collaborative sensitivity characteristic becomes perverted to be an active participant in the psychopathology, making it appear to be an inherent flaw rather than the asset that would be evident in a positive environment. The presence of

inherently enhanced yet developmentally impaired Theory of Mind provides for the uniquely complex and paradoxical symptomatology that identifies BPD. (The sensitivity characteristic is further discussed in the Introduction and is explored extensively in Section F, Etiology.) This initially normal Social Intelligence faculty of enhanced Theory of Mind in pre-borderline children is the risk factor for BPD and plays no etiological role.

There has not been prior theory or research exploring the possibility of a fully developmental alternative to the currently accepted Diathesis-Stress Model for BPD. This is remarkable considering that no neurobiological anomalies have so far been confirmed as inherent as well as playing an etiological role despite extensive research, whereas there is extensive confirmation of serious childhood physical/sexual adversity in a high percentage of cases, and there is still so much more to learn about the daily childhood social experiences in Borderline Personality Disorder. Several conceptual errors are contributing to the paucity of thoughtful and careful research about the routine, everyday childhood social experiences of borderline patients. One is the full reliance on the Diathesis-Stress Model to explain BPD. Another is the DSM error in allowing a moderate severity of impairment, which can make it difficult to carry out research separately identifying the developmental histories of patients having the high level of severity that characterized the discovery populations. We will argue that the discovery populations led to the identification of Borderline Personality Disorder as a severe disorder, and that the subsequent inclusion of moderate or less severity “spectrum” populations in research has seriously blurred findings. Since Theory of Mind limitations and flaws occur in all of us, ranging from minimal to severe, studies of patients with borderline features who do not experience the severity of the discovery populations may tell us a good deal about the workings of impaired Theory of Mind, but only studies of patients with severe symptomatology can lead us to a clear and full understanding of the disorder itself. Additionally, there is the general taboo about examining the caretaking role in the development of mental illness. We will argue here that more careful examination of the childhood social environment of borderline patients will reveal not only the well known histories of physical/sexual abuse and neglect, but also a history of everyday persistent psychological/emotional interference with and neglect of Theory of Mind development in most

patients diagnosed as borderline, and in all severely impaired patients.

This Differential Susceptibility Model for Borderline Personality Disorder, positing an inherently enhanced but very developmentally impaired Theory of Mind in BPD, is more evidence-based and explanatory than the currently accepted Diathesis-Stress Model that requires inherent limitations or pathologies to underlie the occurrence of BPD, and therefore this new model must be carefully investigated. It can fully account for both the severity and the complex symptomatology of the disorder, including the co-occurrences of abnormal, normal, and sometimes even enhanced, social perceptivity and mentalization (borderline empathy and the borderline empathy paradox), and it leads to a solution for the failure of all current psychotherapies to satisfactorily moderate the serious social maladjustments. Whereas the Diathesis-Stress Medical Model focuses on the identification and resolution of a disorder by means of traditional medical procedures of observation, interview, explanation, guidance, support and somatic treatments, successful treatment for developmentally impaired workings of the invisible social mind additionally requires engagement with the patient in an appropriately genuine personal relationship of meaningful duration, during which the therapist's mind can experience, learn from and benevolently influence how the mind of the patient is working, and at the same time the patient learns how to participate in genuine, healthy relationship, while simultaneously experiencing and learning from the contrast of this relationship with adverse childhood relationships. During this engagement the therapist and the patient are also collaboratively exploring the patient's developmental social experience and its influence on the current Theory of Mind impairments.

Since there is not published research specifically examining a fully developmental model for the etiology of Borderline Personality Disorder, an examination has been made of over six hundred studies and writings about the etiology, characteristics, and treatment of Borderline Personality Disorder, along with a review of other literature pertinent to the subjects being examined. These sources are persuasive in leading to the argument that Borderline Personality Disorder is almost always a defectively "learned" disorder of Theory of Mind (see Section F, Etiology). This new model of a fully developmentally engendered major mental disorder also leads to a paradigm

shift in understanding the origins, development and nature of the mind and its workings, as well as to improved understandings about mental illness in general.

Expanded Preface for 2023 Edition:

Reviews of our initial (2021) publication of this monograph have led to this revision. There is no change in the model itself but there are significant additions and corrections throughout that provide a clearer and stronger argument for three new concepts about the origins, nature and treatment of Borderline Personality Disorder. To our knowledge these concepts have not been considered previously. (1) External Etiology Factor: Borderline Personality Disorder is gradually and fully developmentally engendered during childhood and adolescence by everyday, often rather subtle, psychological/emotional adversity to the learning of Theory of Mind. (2) Inherent Risk Factor: Inherent vulnerability of the pre-borderline child to this adversity is manifested behaviorally by very high sensitivity to the social environment. This is not a sign of neurobiological flaws but instead, and very paradoxically, it is a characteristic of inherently enhanced, very differentially susceptible brain domains for Theory of Mind. They are particularly vulnerable developmentally to psychological/emotional adversity. These two concepts can fully explain the complex clinical features of borderline patients. There is no necessity to assume inherently defective neurobiology. (3) This new etiology model for BPD as a Disorder of Theory of Mind leads to psychotherapy modifications that will resolve the persisting failures of all current psychotherapy models to satisfactorily improve the core self/other impairments.

Numerous studies have made clear that Borderline Personality Disorder is characterized by severe and fundamental impairments in understanding and managing the self, and in understanding and developing successful relationships with others. For instance, Sharp et al. (2015) found that “BPD is unique in that impairment in the ability to maintain and use benign and coherent internal images of self and others are integrated into one disorder.” Sharp also states (2014): “Disrupted interpersonal relationships are a hallmark feature of BPD.” These self/other impairments are characteristics of flawed “Theory of Mind”, the uniquely human Social Intelligence faculty for knowing of the mind, understanding and managing one’s own mind, and processing, understanding, and responding to social information received from the minds of others. The creation of a working

Theory of Mind is fully dependent on receiving information provided by the social environment during the developmental experience (Fonagy et al., 2003; Nolte et al., 2023). In the absence of this necessary interactive learning experience with the social environment there would be no meaningful development of Theory of Mind at all. During this lengthy learning experience Social Intelligence brain domains for Theory of Mind are programmed to develop flexibly and collaboratively with the complex and often subtle requirements of highly diverse human social environments (epistemic trust), which provides a marvelous benefit for social learning, but it also provides a major vulnerability to developmental impairment or failure when this initially trusting and collaborative flexibility becomes engaged in a defective learning experience with an adverse social environment. This “for the better or for the worse”, natural vulnerability of normal Theory of Mind to participate in its own developmental impairment conforms to the “Differential Susceptibility to Environmental Influences Model” that posits an environmental source for a disorder, rather than to the “Diathesis-Stress Model that posits an inherent source (Belsky & Pluess, 2009; Kennedy, 2013). It is argued here that developmentally engendered serious dysfunction of Theory of Mind, a differentially susceptible faculty essential to human social life, can by itself easily account for a severe mental illness.

The overwhelming evidence of serious childhood adversity in Borderline Personality Disorder is in alignment with this Differential Susceptibility model of causative environmental influences, and directs us to a more careful exploration of the developmental social experiences of borderline patients. Although there is a caution that evidence of child adversity has not been confirmed in a full 100% of borderline patients, the generally intermittent adverse experiences of serious physical and sexual abuse that have been relatively easy to identify are most likely only the clear signs of a more subtle, but everyday rather than intermittent, adverse social learning environment that directly interferes with and fails to support the normal development of self/other faculties. We anticipate that more careful research of the routine family social environment will reveal much more about daily lives of pre-borderline children. This is not to say that there are no inherent variations of Theory of Mind potentials that could play a role in Borderline Personality Disorder. As will be discussed further in Section C, Theory of Mind is a feature of Social Intelligence, and all intelligences range from poor to gifted. A range of inherent Social Intelligence levels would certainly be

present in populations of borderline patients, as well as variations in temperaments (Hughes et al., 2012). These individual differences would contribute to the degree of vulnerability to and severity of Theory of Mind impairment but are not etiological factors.

In addition to the general differential susceptibility of normal Theory of Mind brain domains to psychological adversity, pre-borderline children also have a unique vulnerability to developmental adversity that is exhibited behaviorally by their very high sensitivity to the social environment. High sensitivity is also a prominent feature of adult borderline patients. This well-documented sensitivity is assumed to result from inherent neurobiological flaws or abnormalities, but it is argued here that it is a characteristic of enhanced Theory of Mind, providing an exceptional level of openness and sensitivity to the social environment (inherently enhanced epistemic trust), and an enhanced ability to interact successfully with a positive, well-matched social environment in developing a working Theory of Mind. The Theory of Mind brain domains underlying this enhancement also have an exceptionally high degree of natural Differential Susceptibility to maldevelopment in adverse developmental social environments, particularly those that directly interfere with a child's autonomous participation in learning about self and others. Orchids provide a perfect example for understanding that exceptional vulnerability to adverse developmental environments cannot be labeled as an inherent defect if this vulnerability can also be highly advantageous in a well-matched developmental social environment. Orchids are highly vulnerable to poor and even average developmental environments and fail miserably, yet in enhanced environments they thrive exceptionally well and produce marvelous flowers (Boyce, 2019; Kennedy, 2018). Likewise, and quite paradoxically, the higher is the level of the developmentally collaborative Social Intelligence faculty for Theory of Mind, the greater is the vulnerability risk to maldevelopment in mismatched developmental social environments. This high vulnerability can lead to BPD even when the parents' everyday verbal, behavioral and temperamental mismatches with the child's requirements would be considered, on their own, to still be within the range of "normal." Full confirmation that high sensitivity of borderline patients is a characteristic of developmentally vulnerable enhanced Theory of Mind will require research outlined in Section F, Etiology.

The needy behaviors of highly sensitive children can also elicit negative caretaking responses, whereas enhanced caretaking behaviors may be necessary for highly sensitive children to fully thrive, a 180 degree contrast. (See in Section F, the Suomi findings about Social Intelligence development in selectively bred “highly reactive” Rhesus monkeys.) Borderline Personality Disorder occurs when the level of caretaking adversity and the level of the child’s natural vulnerability together lead to developmental failure of Theory of Mind. Despite this defective development of Theory of Mind, the underlying brain domains of pre-borderline children retain their inherently enhanced potential for processing and understanding social information. The consequent co-occurrences of normal, and sometimes even enhanced, social perceptivity and mentalization in patients who are usually demonstrating severe impairment of Theory of Mind accounts for the uniquely complex clinical picture of BPD. The disturbed relationship behaviors of adult borderline patients are then features of a failed attachment/learning experience that began as early as the first months of post-birth life (Liotti & Farina, 2016; Lyons-Ruth et al., 2023), and that continues into adulthood despite the many efforts of borderline patients to establish a corrective attachment relationship with therapists and others. These persisting, never-ending efforts by individuals who generally have some awareness about their self/other problems and the necessity for a personal relationship to resolve them, are in alignment with this argument that BPD is an environmentally engendered disorder.

The many clinical studies of Borderline Personality Disorder have resulted in diverse, sometimes conflicting, findings that do not come together to reach a coherent understanding of BPD, a reminder of the blind man and the elephant (<https://allpoetry.com/The-Blind-Man-And-The-Elephant>). A major contributor to this problem is the incorrect DSM severity requirement for diagnosis. A “moderate” level of self/other dysfunction is allowed by the DSM for BPD. The word “moderate” opens the door to research populations that differ significantly from one another and from the discovery populations. It will be argued here that Borderline Personality Disorder as originally identified is a severe disorder, quite distinct from less impaired “Borderline Spectrum” populations, analogous to Major Depressive Disorder and Dysthymia. Corrections must be made in the DSM by introducing separate diagnostic categories for severe versus moderate or less impairments of personality functioning, so that research of Borderline

Personality Disorder can take this absolutely necessary distinction into account (Grenyer et al., 2022).

The remarkable success of psychotherapy for BPD, and the remarkable failure of pharmacotherapy and other somatic treatments, should also have stimulated new thinking about the nature/nurture basis of BPD. A disorder with underlying inherently defective neurobiology is likely to respond positively to somatic treatments but exceptionally poorly to psychotherapy alone, particularly to the relatively brief psychotherapies that can be so beneficial for BPD (see Kolthof et al., 2022). On the other hand, although current psychotherapies successfully resolve the presenting symptomatology to the degree that patients generally no longer fulfill the criteria for diagnosing BPD, they fail to resolve, or even to adequately moderate, the serious relationship impairments that are at the basis of Borderline Personality Disorder. Chapter two presents psychotherapy modifications, derived from this new developmental model, that can provide an answer for this failure. Firstly, the new model clearly directs the therapist's increased attention, in collaboration with the patient, to a much more thoughtful and careful exploration of the specifics of childhood interpersonal and other social experiences, and their relevance to the current Theory of Mind impairments. Developing an understanding of adverse social experiences and their influences on the working mind should provide patients with much improved clarity of thought while they struggle to understand and resolve their self/other problems. Secondly, a "corrective attachment and learning relationship" with the therapist is necessary, involving a more active and personal engagement by the therapist despite the countertransference and boundary risks with borderline patients (Liotti & Farina, 2016). Learning how to participate successfully within a healthy relationship dyad, while simultaneously experiencing the contrast with their developmentally learned maladaptive relationship patterns, should provide borderline patients with a much-improved ability to develop and retain healthy relationships. Unfortunately, developing a "real" relationship with the borderline patient, who has a deeply learned distrust of others, can be a challenge that many clinicians wish to avoid, and therefore neither the patient nor the clinician can experience the pleasure that gradually comes from working together to reach a hard-won therapy success. Thirdly, borderline patients often have underlying social intelligence potentials that can become advantageous if better understood and then used appropriately.

If the mind is wholly created after birth in a learning experience with the social environment, and if Borderline Personality Disorder can wholly result from a defective learning experience in the absence of inherent neurobiological deficits, then the study of BPD is uniquely a study of how the human mind is created and how it develops, for the better or for the worse, in interaction with the childhood social environment. This would suggest that careful examination of the childhood daily social experience of patients with Borderline Personality Disorder, as well as individuals with borderline spectrum symptomatology, will also lead to new understandings about the mind and its development in general. However, such research will likely not proceed as it should until we first recognize that the mind and its maldevelopment cannot be understood while relying only on the current reductionist medical model for BPD (McHugh, 2002). A fully developmental model for a major mental disorder leads, of course, to the likelihood that there must be a human source. In the case of BPD, this would involve particularly a flawed caretaker understanding for how to parent a highly sensitive child. The quality of parenting is a very delicate subject that can be off-limits for theory and research. However, if the underlying source of flawed parenting in BPD is lack of knowledge about how to understand and parent highly sensitive children, then this bias against researching caretaking becomes a bias against developing guidelines for parenting these children. Many parents of borderline patients have struggled with them for years, and many would likely agree to participate in a clearly non-blaming, fully research-oriented inquiry. Pickard (2013, 2014) provides highly relevant guidelines for benevolently working with individuals who carry some responsibility for personal failures, helping them to better understand, learn from, and then and move on from painful errors made during their lives.

Confirmation that Borderline Personality Disorder can be fully developmentally engendered would necessitate reconsideration of a general bias that major mental illnesses must be medical conditions with inherent neurobiological bases, and would also suggest that biological research focused on finding inherent brain anomalies, in the absence of also carefully researching the involvement of the developmental social experience on brain development of the mind, will never establish sufficient understanding of many, if not most, mental disorders. Combined nature/nurture research can be expensive, but the persisting limitations and failures of brain research alone can be even more expensive over time (Roberts, 2023; Integrated Network, 2023). It is our

expectation that combining research of the brain in BPD with examination of the developmental social experience will lead both to a clearer understanding of the critical importance of the psychotherapeutic personal relationship for Theory of Mind recovery, as well as to improved somatic treatments that can provide a degree of symptomatic relief, thereby adding to the helpful, if small, placebo effect that current prescriptions can bring to these patients during the course of psychotherapy.

In addition to reviewing the research literature, several brief patient histories are presented here in ways that protect confidentiality. They include examples of developmental adversity ranging from clear, episodic physical/sexual abuse to everyday often subtle adverse caretaker communications, including persistent misunderstandings, insensitivity, intrusions, disapprovals, controlling behaviors and rejections, as well as lack of sufficient warmth, empathy and other attachment requirements. Whereas studies of groups provide the statistical data, individual patient stories can provide the necessary illustrations of individual experiences and behaviors (Allen, 2022; Das & Sarkar, 2023; Gardner et al., 2021; Glucksman, 2018, 2023; Jamison, 2023; Jardino et al., 2023; McAdams, 2001; Sharp, 2021; Tedesco et al., 2023; Wilkinson & Gabbard, 1993; Woodbridge et al., 2023). Oliver Sachs stated (1985): “To restore the human subject at the centre—the suffering, afflicted, fighting, human subject—we must deepen a case history to a narrative or tale: only then do we have a ‘who’ as well as a ‘what’, a real person, a patient in relation to disease”(see also McAdams, 2018). The importance of case histories has been somewhat neglected in recent decades, but we should keep in mind that the discovery of BPD emerged from case illustrations, and that further examination of individual personal experiences may well help lead to new understandings about the origins and nature of BPD.

This argument for a new model to explain the origins and nature of Borderline Personality Disorder involves a significant revision of our prior writings about BPD. It is presented in the context of a historical story, beginning straightforwardly but gradually becoming increasingly complex. This complexity might help explain why it has not been considered before now. The Table of Contents serves as an index for major discussions of key terms and issues. The online text (<https://leecrandallparkmd.net/BPDmonograph>) can be fully searched by using Adobe Acrobat Reader for index. The DOIs can be opened in the online text. Readers with expertise about BPD who do not wish to read the entire

monograph can review core arguments in the Etiology Section. This developmental model for a major mental disorder may be regarded initially as heresy by some clinicians and researchers in the field of Psychiatry but it should be of considerable interest to professionals in Psychology and other mental health fields, as well as to academics engaged in studying the origins and workings of the mind.

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Introduction

Borderline Personality Disorder is a severe disorder of Theory of Mind, the uniquely human Social Intelligence faculty for knowing of and understanding the workings of the minds of self and others. It is fully developmentally engendered by routine caretaking misdirection to and absence of support for the natural childhood development of the Mind. Pre-borderline children have inherently enhanced Theory of Mind, behaviorally exhibited by their high sensitivity, that makes them highly differentially vulnerable to such a developmental social environment. The caretaking adversity largely proceeds from ignorance about how to parent a highly sensitive and therefore “difficult” child, rather than from willful behaviors. This everyday, often rather subtle psychological/emotional adversity to development of the working mind can fully account for the occurrence of BPD. There is no need to additionally assume inherently defective or limited neurobiology.

This new model of a fully developmental basis for the occurrence of Borderline Personality Disorder can easily explain the remarkable success of current psychotherapies in resolving symptomatology, the remarkable failures of somatic treatments, as well as the complexity of the often paradoxical symptomatology. It also leads to psychotherapy modifications that will resolve the failure of all current therapies to satisfactorily improve the social adaptations that are fundamental to the disorder, as well as to new understandings about the origins, development and workings of the mind.

Theory of Mind is only an informationally empty neurobiological potential at birth and must be entirely created during the childhood social learning experience, analogous to the learning of language from a neurobiological potential. As a result of psychological/emotional adversity throughout childhood, borderline patients struggle almost continuously against painful, enduring distress that includes a disturbed sense of self, deep distrust of others, and profound feelings of aloneness and emptiness. They persistently seek close positive relationships as a way to resolve the attachment/learning deficits underlying this symptomatology. However, they always fail in this

endeavor (Jeong et al., 2022). They also seek professional help but frequently fail to develop a working relationship with therapists. Instead, their complex and sometimes disturbing communications, their sensitivity, and their learned distrust of others, intensify as they begin to experience closeness, often resulting in inimical responses by unprepared clinicians that confirm for them that their distrust is accurate. Underlying these self-sabotaging and confusing behaviors is the co-presence of inherently enhanced programming for trusting, understanding and complying with communications from others (enhanced epistemic trust), and a developmentally learned, deeply imbedded, mistrust and anticipation that the minds of others will be disposed to be harmful to them (borderline empathy paradox). This complex, severe symptomatology uniquely identifies BPD. The DSM error in allowing moderate, i.e. “clinically significant”, severity of symptomatology for diagnosis has contributed to the conflicting theories and research findings. Current psychotherapy models, following on flawed theory and research findings, do not satisfactorily resolve the underlying relationship impairments.

Considering that Borderline Personality Disorder is a profound disorder of Theory of Mind, and that mental illnesses in general involve impairment to Theory of Mind, we believe that researchers will gradually come to understand that the study of BPD is essentially an exploration of the origins, workings and malfunctions of the mind.

Chapter One of this monograph presents the argument that Borderline Personality Disorder is a fully developmentally engendered, learned disorder of Theory of Mind that can occur in the absence of any inherent limitations. **Chapter Two** describes three necessary modifications to current treatment models that take into account this new model for BPD and that will satisfactorily resolve the serious social maladaptations that persist in all current psychotherapies.

Chapter One: There is increasing consensus that impairment in the ability to understand and manage the self, and to correctly process and understand social information about others, is at the core of Borderline Personality Disorder (Fonagy et al., 2016, 2017; Roepke et al., 2013; Sharp, 2014; Sharp et al., 2015, 2020; Skodol et al., 2019). Whereas such impairments play a role in personality disorders in general (Pincus et al., 2020; Sharp & Wall,

2021), they are uniquely pervasive and severe features of BPD. The term for the ability to know of and understand the self and the minds of others is “Theory of Mind” or “ToM” (Premack & Premack, 1995), and its neurobiological basis is “Social Intelligence,” a hallmark of primate evolution (Cheney & Seyfarth, 1990; Small, 1990). Social Intelligence in most primates provides only perception of and understanding about behaviors of others, without this additional Theory of Mind ability to know of the mind and its activities (Phillips et al., 2020). The general primate faculty is operational shortly after birth, does not require an extensive social learning experience, and has attained a high level in humans. With the appearance of more recent primates, precursors of a new Social Intelligence faculty for knowing of and understanding of the mind are already emerging, progressing to full Theory of Mind in humans. In contrast to the almost immediate operation of the general primate Social Intelligence faculty for perceiving social information, this uniquely human Social Intelligence faculty for understanding and processing perceived social information as a product of the mind is just an informationally empty neurobiological potential at birth, and the ability to make operative use of this potential can only be gradually established subsequent to birth while Theory of Mind and language brain domains are engaging in a long-term developmental learning experience with the childhood social environment. This creation of the working human social mind involves a very lengthy nature/nurture scenario beginning at birth and continuing through adolescence, which differs sharply from the general primate Social Intelligence faculty. In light of the very high frequency of serious abuse/neglect in the histories of borderline patients, this developmental requirement for the emergence and development of the Mind will be carefully examined as a likely key to understanding the origins and nature of the severe self/other impairments in BPD.

The Social Intelligence basis for Theory of Mind is termed “Personal Intelligence” by Howard Gardner (1993). He argues that this neurobiological faculty is programmed to be very flexible developmentally since it must be able to develop in a collaborative learning experience with very diverse family and cultural beliefs, dynamics and rules. This “malleability” or “developmental plasticity” (Belsky & Pluess, 2009) necessarily involves considerable sensitivity and openness to the nature of the human social environment for processing the complex, often subtle, and almost infinitely variable social

requirements of human social environments. Fonagy et al. (2017) recommend the term “epistemic trust” for such programmed openness to learning from, collaborating with and accommodating to incoming social information. However, although this inherent epistemic trust is necessary for a child’s learning experience of Theory of Mind, it also provides a natural vulnerability to maldevelopment when there is an adverse caretaking social environment, since the collaborative process will be initiated in response to any social environment encountered, in the absence of a yet-to-be learned ability to recognize or screen incoming adverse social information (Talia et al., 2021). This means that a working Theory of Mind can develop normally as a critical asset for good self/other understandings or, paradoxically, this natural vulnerability will be a major “risk factor” for developmental neuropathology and impairment of self/other faculties, depending on the nature of the caretaking social environment with which the child’s developing mind interacts.

The well-established “Differential Susceptibility to Environmental Influences Model” (Belsky & Pluess 2009), also termed “Biological Sensitivity to Context Model” (Boyce & Ellis, 2005), explains the many situations in the biological world in which there is such inherent programming to develop flexibility with variable environments. This collaborative programming can lead not only to developmental impairment or failure of an organism in an adverse environment, but also to its involvement as a participating factor in the dysfunctional state itself. It will be argued here that this is the fate of pre-borderline children, who experience persistent routine psychological adversity, during which their Theory of Mind brain domains participate somewhat collaboratively in the development of their own neuropathology, resulting in self/other flaws that can confusingly appear to be inherent cause of dysfunction rather than environmental consequence. This differential susceptibility of the necessary and highly advantageous faculty for Theory of Mind is the “p-factor” (general pathology factor), the hypothesized general vulnerability of the normal brain to the occurrence of mental illness (Caspi & Moffit, 2018; Choate et al., 2023; Fonagy et al, 2017). A better name would be the “v-factor” (general vulnerability factor), since this is a natural vulnerability of the uniquely human mind to developmentally engendered neuropathology. It is not pathological in itself.

The Differential Susceptibility of Social Intelligence brain domains

for Theory of Mind explains the vital importance of the nature of the childhood social learning environment for the proper development of Theory of Mind, and how this neurobiological faculty can participate in its own defective development in an adverse social environment. This is relevant for understanding personality disorders in general, but it does not explain the severe and complex symptomatology that uniquely identifies Borderline Personality Disorder. It is argued here that both of the two semi-independent neurobiological faculties for Social Intelligence (Dinsdale & Crespi, 2013) are inherently enhanced in Borderline Personality Disorder, one being the general primate faculty for perceiving social information, and the other being the more recently evolved human faculty for Theory of Mind. The occurrences of “Borderline Empathy” (Dinsdale & Crespi, 2013; Roepke et al., 2013) can involve both of these enhanced faculties, whereas the high “sensitivity” of pre-borderline children and borderline patients to the social environment (Goodman et al., 2009, 2010, 2013; Gunderson & Palmer, 2019) is a specific characteristic of inherently enhanced Theory of Mind that involves an increased ability and motivation to connect with and learn from the social environment (see Section F). Inherently enhanced Theory of Mind would be an exceptionally advantageous characteristic in a positive developmental social environment, but it also provides an exceptional differential vulnerability to developmental failure in an adverse social environment. Despite the resulting developmental impairment to the operation of ToM, the underlying Theory of Mind brain domains still retain their inherently enhanced potential and would be able to process social information normally or even excellently at times, particularly when the impaired person is in a calm state of mind. Inherently enhanced but developmentally impaired Theory of Mind brain domains underly the complex and often paradoxical mentalizing and self/other characteristics that identify BPD, such as “Borderline Empathy” and the “Borderline Empathy Paradox”. The sensitivity characteristic in BPD has been erroneously considered to be a manifestation of inherent neurobiological limitations, largely because it has become developmentally perverted to be an active participant in the psychopathology.

The high sensitivity of enhanced Theory of Mind in borderline patients provides a double-edged vulnerability, in that it not only provides this high vulnerability to adversity, but it is also associated with needy, insecure and

persistent attachment behaviors that can directly elicit adverse caretaker responses, resulting in increasing intensity of these behaviors (Franssens et al., 2021; Lyons-Ruth et al., 2013; Shapiro, 1992). This is particularly unfortunate since the needy behaviors are actually a signal that enhanced caretaking may be necessary for good social development. Stephen Suomi (1991a) has reported remarkable findings with rhesus monkeys that align with this scenario. Rhesus infants that were bred to be exceptionally “high reactive”, i.e. highly sensitive and reactive to their environment, developed to become severely socially impaired adults when raised by their natural parents, functioning at the bottom of their peer groups. However, these apparently very defective monkeys developed not only perfectly normally, but also became the dominant members of their adult peer groups, when raised by particularly warm and protective foster mothers who were quite tolerant and supportive despite their challenging reactivity and needy behaviors. These findings with monkeys align with Differential Susceptibility of Social Intelligence, and also with the argument that the unusual sensitivity of pre-borderline children should not be automatically considered to indicate inherently defective neurobiology. The differential susceptibility model, the high sensitivity characteristic of pre-borderline children and borderline patients, and Suomi’s study are examined in detail in Section F, Etiology.

The necessity for a long-term learning experience with the social environment in order to develop a working Theory of Mind, the exceptional differential susceptibility of enhanced Theory of Mind brain domains in highly sensitive pre-borderline children, and the extensive evidence of serious childhood adversity in BPD, all contribute to the likelihood that inherent neurobiological deficiencies are not necessary for the occurrence of Borderline Personality Disorder. Nevertheless, despite the multitude of well-documented histories of serious childhood physical/sexual abuse and neglect that provide convincing evidence of disturbingly mismatching developmental social environments, there is a conspicuous absence of conjecture that a flawed developmental social environment could, even sometimes, be the full source of the disorder (Belsky et al., 2012). A factor contributing to this is that research has not demonstrated a history of abuse/neglect in all borderline patients. However, the physical/sexual

adversity to the body that has been relatively easy to identify is most likely only the visible evidence of more subtle caretaking psychological influences that are directly interfering with, and failing to provide support for, healthy development of the mind, and that persist in effect during everyday social interactions, not only when there is clear physical/sexual abuse but also in its absence (Allen, 2003; Baldwin et al., 2023; Dube et al., 2023; Franssens et al., 2021; Kerr et al., 2021; Linehan, Lyons-Ruth et al., 2013; Schulze et al., 2022; Shapiro, 1978, 1992; Vanwoerden et al., 2021a; Yuan et al., 2023). Schlensog-Schuster et al. (2022) state: "Routine clinical practice and research predominantly focus on maltreatment exposures with more visible signs, such as physical abuse, and their mental health sequelae. Conversely, despite their higher prevalence, 'hidden' subtypes, such as neglect and emotional maltreatment, have been vastly understudied. Emotional maltreatment (EM) - also known as psychological maltreatment and mental cruelty - is difficult to define, detect and operationalize both in research and clinical practice...The high level of early dependance on the parent-child relationship may place EM at the heart of the pathogenic influence of maltreatment experiences."

It is necessary to examine routine caretaking verbal/behavioral communications much more carefully for evidence of such everyday parent/child psychological mismatches that could impair Theory of Mind development (Schlensog-Schuster et al., 2022; Schneider et al., 2023; Vanwoerden et al., 2019). A mismatch of parenting characteristics with the child's developmental requirements could lead to BPD even though neither the parent's nor the child's characteristics would be considered flawed in themselves. This means that research must include careful examination of the interactive social learning experience in addition to the separate examinations of the individual child and parent personality characteristics and behaviors. As will be discussed further, no one has a perfect Theory of Mind. Theory of Mind is created during a learning relationship with caretakers who always have imperfect Theory of Mind, thereby contributing to the imperfect Theory of Mind in their children. These imperfections range in a continuous path from minimal to severe. For research to be fully relevant we must separately examine the parent/child relationships of patients whose clinical severity level matches that of the discovery populations. There are, of course, many

other social influences on a child's developing mind, including school and peer experiences as well as other life situations and events. However the primary and continuous influences on the childhood development of Theory of Mind are the everyday caretaking learning experiences. Since these are also the most inadequately examined developmental social experiences, the daily routine social learning experience of the pre-borderline child and its relationship to the development of major mental disorders remains largely unexplored and unknown.

The current belief that inherently defective neurobiology underlies Borderline Personality Disorder aligns with the "Diathesis-Stress Model of Susceptibility to the Environment", the medical model holding that there are inborn limitations or flaws that can be activated or intensified by environmental stresses, thereby contributing to developmental failure (Choi-Kain, 2019). They would not provide benefit in any developmental environment (Winsper, 2018; Zuckerman, 1999). The narrow focus on this model in psychiatric research has seriously hampered creative thinking about the likely key role played by the developmental social experience in the development and maldevelopment of the mind. The alternative Differential Susceptibility to Environmental Influences Model for BPD has escaped consideration largely because it has been difficult or even impossible to imagine the paradoxical concept that an initially normal, necessary, and even enhanced neurobiological characteristic could also be the risk factor for a major mental illness (Amad et al., 2014; Brody & Mills, 1997; Frances, 2013a).

This concept of Borderline Personality Disorder as a developmentally engendered disorder of differentially susceptible Theory of Mind, involving an inherently enhanced yet very developmentally impaired ability to process and understand social information about the mind, can easily explain the complex and often puzzling features of BPD, as will be made clear in this review. Of particular significance, it can explain (1) the confusing mix of defective, normal, and sometimes enhanced mentalizing, often influenced by the level of immediate stress, as well as (2) the "Borderline Empathy Paradox," the occasional co-occurrences of enhanced perceptivity to mental states of others ("Borderline Empathy") despite a general impairment in processing social information about others. This model can also explain (3) why such interpersonally perplexed patients can, neverthe-

less, have the perceptive ability to engender serious countertransference disturbances and boundary violations, even in experienced mental health professionals, and why, very paradoxically, the more severe is the disorder, the greater can be this ability. (4) It can provide an easy explanation for the persisting attempts to find closeness with others despite deep distrust of and confusion about others that always leads to relationship failures. It can explain (5) why it has been so easy to discover a high degree of serious childhood adversity but so far impossible, despite extensive research, to confirm neurobiological processes that can be identified as inherently defective and also actively participating in development of the mind. We anticipate, however, that future research will confirm neurobiological anomalies resulting from developmental adversity (Hughes et al., 2012). Further, (6) a mental disorder that has a defective inborn basis is likely to be more responsive to somatic treatments than to psychotherapy, whereas BPD, as a developmentally learned disorder, responds particularly well to psychotherapy but remarkably poorly or not at all to somatic treatments. The model can (7) easily allow symptomatology of clinical depression, anxiety, and PTSD to be inherent to BPD as well as co-occurring, which has very often appeared to be the case. (8) Although symptomatic characteristics of hypermentalization, emotion dysregulation, impulsivity and rejection sensitivity are generally considered to indicate inborn limitations or deficiencies underlying BPD, a better explanation for this symptomatic picture, that aligns well with the differential susceptibility model, is that they result from persistent developmental interference with, and absence of proper guidance for highly sensitive children in learning how to understand and like self, how to understand, trust in and relate to others, and how to understand and manage feelings, thoughts, emotions, impulses, perceptions and boundaries (Bertele et al., 2022). This has resulted in persistently distressed and disturbed individuals who are generally quite aware of their great difficulties in managing themselves and in achieving closeness with others, and who are desperate to find someone who will engage with them in overcoming these overwhelming impairments, but who also have a learned fear and epistemic mistrust of anyone with whom they begin to closely engage (Cook et al., 2005; Fonagy et al., 2015; Nolte et al., 2023; Zanarini & Frankenburg, 1994). Finally, (9) the natural Differential Susceptibility of Theory of mind brain domains can be identified

as the elusive general p-factor of the normal brain and (10) the enhanced Theory of Mind brain domains in BPD can explain the heritability evidence. This story differs greatly from Schizophrenia, to which BPD has often been compared, in that Schizophrenia involves good indications of inherent neuropathology, no evidence supporting significant developmental adversity, poor self-awareness about their self/other impairments, limited motivation to seek psychological help, very poor response to psychotherapy alone, good response to drugs, and no evidence of differential susceptibility or enhanced social perceptivity. One of the more remarkable paradoxes about BPD is that it was initially identified as a close neighbor to or type of Schizophrenia, and yet developmental, clinical, and neurobiological evidence is so strikingly different. If we are correct that BPD is actually a developmental disorder of Theory of Mind that can occur in the absence of inherent neurobiological deficits, then research about BPD is essentially research about how the mind originates, develops and operates. Research that takes into account the possibility that this model could be correct should lead not only to new discoveries about workings of the mind but also to new understandings about mental illness in general.

The natural differential susceptibility of Theory of Mind, and the exceptional vulnerability of enhanced Theory of Mind in pre-borderline children, are “risk factors” for Borderline Personality Disorder, whereas childhood psychological adversity is the “etiology factor.” The argument for Borderline Personality Disorder as a developmentally engendered major mental disorder will be necessarily extensive here in order to make clear its ability to fully explain the complex characteristics of BPD, while also identifying the serious limitations of the medical model for BPD. Sections B to E lead to the key Section F, Etiology, that can be understood on its own if the reader prefers briefer content.

Chapter Two: This paradigm shift in understanding the nature/nurture sources of BPD leads to recommendations for necessary psychotherapy modifications. Current psychotherapies have been surprisingly successful in reducing symptomatology to the point that most patients who remain in treatment no longer meet sufficient DSM criteria for the diagnosis of BPD. However, they do not succeed in satisfactorily resolving the Theory of Mind

impairments that are central to the disorder, particularly the impairments in developing healthy, close relationships (Grenyer et al., 2022; Gunderson et al. 2011, 2014; Zanarini et al., 2016). Contributing very significantly to this serious problem is the absence of guidelines for psychotherapy when the source of the disorder is the developmental social experience. In Chapter Two of this monograph we strongly recommend three key modifications to current psychotherapy models. First, when the developmental social experience appears to be or could well be the major or full source of the disorder, rather than just a contributing factor, it is necessary to examine much more carefully, together with the patient, the specifics of childhood interpersonal experiences and the relationship of these experiences to the present self/other impairments. Patients with a history of childhood psychological adversity can gain much improved self-understanding and sense of meaning in their lives through understanding the origins and dynamics of their dislike of self and relationship disturbances, which should also result in improved mentalizing in general. Also, the more understanding the therapist can gain about the patient's social history and development experiences, the more effective she/he can be in developing a working relationship with the patient. Secondly, increased personal involvement by the clinician in developing a "corrective attachment and learning relationship" is necessary for a patient who has mislearned how to understand self and others during a mismatched childhood attachment and relationship experience (Alexander & French, 1946; Ono & Berger, 1995). Current psychotherapy guidelines stress the importance of guarding against the ability of borderline patients to engage clinicians into troubling countertransference responses and boundary errors, but they must emphasize even more strongly the central importance of also personally engaging with the patient in developing an appropriately genuine relationship despite the challenges and stress involved, in order to enable the patient to insightfully experience and learn from the contrast of this new relationship with prior adverse developmental relationships. Progressing to a successful relationship with a challenging patient requires a significant length of time, rarely developing sufficiently during very brief, structured psychotherapies or medication-focused treatments. The therapist must, of course, have completed appropriate training, have good self-understanding and empathic abilities, be able to maintain steadiness and objectivity when under stress

(Aquanimitas and Imperturability: Osler, 1958; Jamison, 2023), and have the flexibility to seek consultation.

Gaining insightful understanding about the developmental experience and its relevance to the current mental state, along with achieving a successful relationship experience, should be of major benefit as patients move on in their social lives away from the support of the psychotherapeutic environment. The engagement with a clinician who can understand and is prepared for the patient's self/other difficulties and behaviors has much greater odds for corrective success than the relationships so many patients continue to have in their personal lives with people who are not prepared to understand and to work sensitively, mindfully, objectively, patiently and constructively with the interpersonal challenges presented by them (Jeong et al., 2022; Nolte et al., 2023). These modifications should help to resolve the general failure of all current psychotherapy models to sufficiently decrease the disapproval/dislike of self, the relationship failures, and the sense of aloneness and emptiness that persist despite extensive treatment (Gunderson et al., 2011, 2014; Hutsebaut et al., 2020; Miller et al., 2020; Ociskova et al., 2023). Thirdly, patients must be encouraged to consider that, although their sensitivity and associated behaviors may have contributed to their lifelong stress and to stress for their caretakers, this sensitivity can also signal an unrecognized potential for future social and career success if better understood and managed (Park et al., 1992).

Finally, there needs to be significant improvement in psychotherapy education for residents in psychiatry (Jamison, 2023; Lin et al., 2023; Moran, 2011; Papathanasiou & Stylianidis, 2022b; Shapiro, 2012; Tadmon & Olfson, 2022; Woodbridge et al., 2023). Training for interviewing and engaging with patients who have mental illnesses has become simplified to resemble the medical model for biological illnesses. These programs do not prepare residents for working collaboratively with a patient in a careful examination of the developmental social history and its relevance to current mental difficulties, or for engaging in a genuine and corrective relationship experience with a challenging patient. Patients requiring such complex and difficult psychotherapy are frequently referred on to psychologists or social workers, with the rationale that such psychotherapy expertise is not pertinent to the medical model for treating mental disorders.



Chapter One:

Nature, Nurture and the Etiology of Borderline Personality Disorder

Section A: Outline

This new concept for the etiology of BPD can be summarized in one sentence: Borderline Personality Disorder is a fully developmentally engendered disorder of Theory of Mind. However, the argument for a developmentally engendered disorder must be very comprehensive considering the current conviction that a medical model can best explain this major mental illness. Also, there is a complexity that requires examination of information from several areas of study (Cicchetti & Toth, 1995). The strength of the new model, in contrast to other theories, is its explanatory power for all of the clinical features of BPD, per Occam's razor, rather than being explanatory for only some of them. Evidence and arguments are presented in several sections that provide a review of BPD theory and research, beginning with the discovery period and leading to the developmental theory of etiology presented in Section F. This is also a history of the first author's experience with and understanding of BPD as it has evolved during over 40 years of treating and studying borderline patients.

Section B provides a historical background for the arguments that follow. **Section B1** describes the serious self and relationship disturbances observed in the discovery populations that, along with the high level of symptomatic severity, led to the borderline diagnosis. **Section B2** describes the subsequent establishment of DSM criteria for identifying new populations of patients, along with concepts about how the condition is understood and how it originates. Premature embracement of these problematical concepts and criteria led to a blurring of the centrality of the self/other disturbances and the symptomatic severity that were the critical characteristics leading to the discovery of BPD. In **Section C**, Social Intelligence is identified as the neurobiological basis for “Theory of Mind,” the uniquely human ability to know of and understand the minds of self and others. This faculty is carefully examined in a search for understanding the self/other dysfunctions of BPD. **Section D**: The evidence for “Borderline Empathy” and for the borderline patient’s ability to engender strong countertransferences is examined. These phenomena suggest an enhanced level of Social Intelligence in an undetermined percentage of borderline patients that can provide heightened perceptivity to mental states of others, and an additional ability to then persuasively influence feelings and behaviors of others, abilities that they usually seem to be unaware of. In **Section E**, the “Borderline Empathy Paradox” is examined. Paradoxical co-occurrences of heightened perceptivity to mental states of others by individuals who also have a general impairment in understanding mental states of others can best be explained as resulting from the presence of inherently enhanced but also developmentally impaired Social Intelligence brain domains. Dinsdale & Crespi (2013) reason that there are two semi-independent sets of brain domains for differing Social Intelligence faculties in humans. “Part-One” brain domains provide the general primate Social Intelligence faculty for perceiving social/behavioral information. They are operative shortly after birth, and the initial level remains essentially unaltered by adverse post-birth social experiences. We argue that they are enhanced in BPD. Part-Two” brain domains have uniquely fully evolved in humans and provide the potential to develop a working “Theory of Mind”. In sharp contrast to the Part-One domains, the ability to make use of this potential in the social world requires a long-term engagement by these brain domains in a learning experience with the childhood social environment. We argue that these brain

domains are also inherently enhanced in BPD, and that this enhancement provides not only an enhanced learning flexibility for the development of Theory of Mind, but also an exceptional vulnerability to developmental harm when this learning enhanced flexibility engages in a learning experience with an adverse social environment. Persistent, everyday psychological/emotional adversity results in developmental failure of Theory of Mind in BPD. However, the inherently enhanced neurobiological potential is retained and contributes to the occurrences of normal, sometimes even enhanced, mentalization and social perceptivity despite general Theory of Mind impairments. **Section F, Etiology:** Part-Two brain domains for Theory of Mind are “Differentially Susceptible” to the nature of the developmental social environment, such that they are programmed to develop collaboratively with any social environment encountered without regard to its characteristics (Epistemic Trust), i.e. they begin to participate developmentally with adverse social environments at the same level of openness and vulnerability that they would with supportive environments, thereby contributing to their own maldevelopment (the general p-factor). The unique sensitivity of pre-borderline children and borderline patients is examined extensively in this Section as a behavioral characteristic of their exceptionally enhanced Theory of Mind. These sensitive, vulnerable and needy children require an above average level of supportive caretaking to establish their full potential during a healthy attachment experience, but instead they experience a very harmful level of everyday often rather subtle, psychological adversity. This adverse parenting is frequently due to deficient parental knowledge about the necessity for extra patience, comforting and reassurance for sensitive and therefore “difficult” children, rather than to intentionally adverse communications and behaviors. The presence of brain domains for ToM that are both enhanced and yet also severely impaired explains the complex and paradoxical Theory of Mind symptomatology that uniquely identifies BPD, as well as the severity of BPD. In **Section G**, suggested DSM categories for a fully developmentally engendered disorder of Theory of Mind are briefly reviewed, followed by **Section H, Discussion**.

Section B - Historical Background:

A review of the discovery of Borderline Personality Disorder (Section B1), and the subsequent development of DSM Theory, diagnostic category and criteria (Section B2), leads to an understanding for the continuing failure to clearly identify the etiology and nature of BPD, and it also directs us towards a solution.

Section B1 - History of the Discovery of BPD:

Two striking clinical characteristics that helped lead to the identification of Borderline Personality Disorder were severe regressions during psychotherapy, including particularly the increasingly severe interpersonal disturbances with therapists, and yet a surprising ability to entangle them into strong emotional responses and boundary difficulties.

Borderline Personality Disorder was first included in the Diagnostic and Statistical Manual of Mental Disorders (DSM-3) in 1980. During prior decades there had been increasing interest in certain patients who initially appeared to be neurotic, but as therapy progressed a very disturbed sense of self gradually became apparent, along with disruptive interactions with therapists, and, instead of improving, these patients frequently demonstrated increasing severity of symptomatology. This led to the concept that there was an underlying psychotic basis despite the “pseudoneurotic” presenting state (New & Triebwasser, 2018). Diagnostic labels included “Preschizophrenic Personality Structure,” “Pseudoneurotic Schizophrenia,” “Ambulatory Schizophrenia,” “Psychotic Character” and “As-if Personality.” Other diagnoses were “Borderline State” and “Borderline Personality,” based on the concept that the patients were “bordering” on Schizophrenia (Gunderson, 2009; Meehan, Clarkin & Lenzenweger, 2018a). In his 1984 book, “Borderline Personality Disorder”, Gunderson stated: “The confluence of four relatively distinct clinical observations formed the backdrop for the interest in developing the borderline diagnostic category.” These four observations were: (a) patients who “despite the appearance of healthier functioning, revealed unsuspecting evidence of primitive thinking on unstructured psychological tests,” (b) patients who were initially diagnosed as neurotic and referred for psychoanalysis, but who were

gradually discovered to be severely impaired, developing “primitive regressive transferences that eventually required the termination of their analysis, sometimes even requiring hospitalizations,” (c) patients “who regressed into primitive and highly destructive behaviors within the supportive confines of hospitals,” and (d) patients who engendered “intense countertransference reactions...in therapists.” To summarize, patients whose characteristics led to the discovery of BPD were initially given a diagnosis of neurosis, showed primitive thinking on psychological tests, frequently required hospitalization, often regressed quite severely in both outpatient and inpatient treatment settings, and although they could become increasingly disturbed and confused while interacting with therapists they could also, paradoxically, have a surprising ability to provoke troubling countertransference reactions and behaviors in them. Regarding countertransference in hospitals, patients could sometimes trigger a degree of staff chaos (Gabbard, 1993; Gunderson, 1984, 1989). Some of the mostly male residents in training would become rather attached to these sort of helplessly appealing and usually young adult female “waifs,” and yet some of the mostly female nursing staffs would report the very same patients to be hostile, sabotaging manipulators. Staff meetings between residents and nurses could evolve into strong disagreements and even verbal hostility. Patients sometimes seemed to tune into private feelings and other psychological characteristics of residents, and then transmitted this information back to the resident in such an influential way that there could be significant countertransference entanglements and boundary lapses by the resident.

In his classic book, “The Fate of Borderline Patients” (1990), Michael Stone reported a landmark outcome study of inpatients whose prior diagnoses were corrected to Borderline Personality Disorder by applying the newly-developed DSM-3 criteria in reviewing their hospital records. These patients had been hospitalized during the years 1963-1976, with almost all having the diagnosis of Schizophrenia, but follow-up revealed surprisingly positive outcomes compared to Schizophrenia. This was a remarkable finding, that there is a serious, somewhat dramatic and clearly not rare mental disorder, the occurrence of which must have been present but unknown for centuries, if not millennia, and which was never identified until researchers discovered a new category of patients who had seemed to be schizophrenic

and yet, compared to Schizophrenia, had strikingly differing improvement rates. The disturbed and disturbing sense of self and relationship patterns, combined with an unusual ability to engage others emotionally and to elicit boundary violations, were responsible in large part for the early fascination with borderline patients, and for the high interest in researching the condition (Shapiro, 1978). During the earlier years of discovery their likability could be rather favorable (Gabbard, 1993). For instance, in his forward to Stone's book (1990) Allen Frances, Chairman Emeritus of Duke University Department of Psychiatry, wrote: "On a personal note, I have enjoyed a long and rewarding relationship to this study. Approximately 15 of the people described in the follow-up were my own patients... I also got to know many of the others... Over the years I have maintained intermittent contact with a number of the patients... I feel a great gratitude to Dr. Stone and to the many wonderful, if once very unhappy, individuals he describes here. Their experience, and Dr. Stone's careful follow-up of it, provide a beacon of hope for many other such patients and their clinicians." This is in strong contrast to the negativity that so many professionals and lay persons subsequently expressed about these patients (Aviram et al., 2006; Chanen, 2021; Chanen et al, 2022; Das & Sarkar, 2023; McKenzie, et al., 2021; Mulder & Tyrer, 2023; Ociskova et al., 2023; Papathanasiou & Stylianidis, 2022 a, b; Ring & Lawn, 2019; Shapiro, 2018; Stiles et al., 2023; Wall et al, 2021). A very high percentage of clinicians are quite repelled, believing that it is in the nature of these patients to be unpleasantly difficult and obstructive, perhaps purposefully, and they avoid working with them if at all possible. What is behind this changed likability factor, from fascination to clear dislike? Did the ensuing DSM concepts and criteria contribute to this change? Did they also contribute to the media referring to troublesome, disliked or narcissistic people, as well as criminals, as "borderline"?

In summary, the striking self and relationship problems of borderline patients, and their ability to induce strong countertransferences and serious boundary violations in their clinicians, were key to the discovery of BPD. These self/other problems and influences suggested right from the beginning that BPD could likely be a disorder of Theory of Mind.

Section B2 - The problematic development of Theory, DSM Diagnostic Category and Criteria:

Insufficient attention in the DSM to the centrality of the self/other impairments and the severity of the symptomatology has resulted in diagnosing and researching patients as borderline who differ significantly from those in the in the discovery populations. This has contributed to the continuing failure to clearly establish the origins and nature of BPD.

Patients in the discovery populations were identified in a very different way from patients who are identified by means of the DSM criteria. Most patients in the discovery populations were initially in treatment with other diagnoses and were subsequently identified only after interacting with and getting to know them over time, gradually recognizing the severity of the condition and the extent and complexity of their self and interpersonal problems. In sharp contrast, the DSM criteria do not clarify the same level of severity (Meehan, Clarkin & Lenzenweger, 2018a), and selection of criteria to make a diagnosis is often based on information gained after one or very few interviews alone. The rule that only five of nine criteria need to be selected to make the diagnosis means that there are dozens of ways of meeting the criteria for BPD (Antoine et al., 2023; Lewis & Grenyer, 2009; Skodol et al., 2002; Wolf et al., 2023), making for very heterogeneous mixes of patients, and also means that a patient could be diagnosed without selection of a single criterion that clearly identifies the serious self and relationship problems that were at the core of the discovery populations (Mulder & Tyrer, 2023). In parallel with diagnostic focus on the presenting state, concepts about the nature of BPD have also largely focused on symptomatic features that can be observed or reported during early contacts, such as emotion dysregulation and impulsivity, which are then considered as likely involving inherent neurobiological limitations without sufficient consideration of alternative possibilities that could better explain the clinical picture.

With regard to severity of personality disorders in general, Zimmerman et al. (2018) state: "Severity is clearly of import to personality disorders, though the current diagnostic systems do not include any formal severity ratings...There is no clear mention of severity with respect to personality disorders in the main section II of DSM-5" (see also Kleindienst et al., 2020; Morey & Bender, 2021). There is the following statement in DSM-5, preced-

ing the listing of criteria for BPD: “A pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity, beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following...” The word “pervasive” indicates a thorough presence of a characteristic but not necessarily severity. In addition, neither the words “pervasive” or “severe” are present in the criteria listing of relationship problems, leaving the likelihood that neither may be sufficiently considered when making the diagnosis, and resulting in patient populations with significantly lower degrees of severity as compared to the original populations of patients. It has been suggested that cases of less severity provide a corrected understanding of BPD, but this is actually a circular argument in which we have developed a definition of BPD that allows for milder cases and then make the “discovery” that approximately 80 percent of currently diagnosed patients have never been hospitalized. Are we broadening the diagnosis or are we adding a group differing significantly from the discovery populations, analogous to combining Major Depression and Dysthymia?

A most important reason for establishing a clear level of severity for a disorder of self/other faculties is that there is no human being with perfect self/other faculties, but instead there is a continuum of imperfections beginning with minimal deficiencies, then increasing degrees of limitations, and finally significant impairments of increasing severity (Brager-Larsen et al., 2023; Wilson, 2023). This situation has become very clear to researchers of adolescents with borderline characteristics. As will be examined extensively in the following sections, working Theory of Mind is fully learned during childhood social development, during which time the learning experience is provided by human beings whose psychological characteristics are never perfectly matched with the child’s psychological characteristics and requirements (Fonagy et al., 2023). In other words, no childhood social learning environment is without limitations. The enormous variations of resulting self/other difficulties indicates that it is necessary to establish a clear level of self/other impairment severity for BPD. Otherwise, we will continue to have great difficulty in researching and understanding the disorder, including the influence of the caretaking experience. It is argued here that the level of severity for a BPD diagnosis should mirror that of the discovery populations, with patients having lesser severity being given a “spectrum” diagnosis,

particularly for research purposes.

With regard to severity of specific symptoms, it is notable that although there is a high risk of suicide (Lyons-Ruth et al., 2013) and that “recurrent suicidal behavior” is listed in the criteria, the word “depression” is completely absent. Instead, symptomatic states that do not fit the diagnosis of a personality disorder, such as clinical depression, anxiety disorder and PTSD, are always identified as “co-occurring” disorders (Da Costa, Sanches & Soares, 2019; Zimmerman, 2017; Watt-McMahon et al., 2023), without consideration that such states could be inherent to BPD as well as being present as co-occurring conditions. Trull and Widiger (1991) found substantial correlation between BPD criteria and dysthymia symptoms, suggesting the possibility of depression being inherent to BPD, but there has not been significant research to further examine the presence of such “borderline depression”. Research investigation of depression in BPD has been lacking partly due to the fact that a condition identified as a personality disorder cannot include clinical depression.

Can there really be a uniquely odd disorder in which frequent and serious suicidal ideation, intent and completion are prominent characteristics, and yet significant depression is never present as an inherent characteristic? Findings from a 10-year follow-up study of borderline patients suggest that much more must be learned about psychological characteristics of borderline patients who make suicide attempts. Yen et al. (2020) examined the relationship of specific DSM-IV BPD criteria with suicidal behaviors. It was found that impulsivity and affective instability were, as expected, risk factors for suicide attempts, but it was also found that chronic feelings of emptiness, identity disturbance, and frantic efforts to avoid abandonment were also significant risk factors. Surprisingly these three features were the only significant independent criteria associated with suicide attempts. It is hard to imagine that such painful disturbances in sense of self and security with others would never include depression (Miller et al., 2020; Zanarini et al., 1998). DSM criteria do identify “intense episodic dysphoria” but these episodes are most likely acute eruptions of a chronic, painful and debilitating underlying depressive state that is present as an integral element of the personality by adolescence, has become “masked” as the result of children trying to control it (Cytryn & McNew, 1972), and tends to wax and wane

rather abruptly according to what is immediately going on in the patient's mind and interpersonal life (Meehan, Clarkin & Lenzenweger, 2018b; Miller et al., 2020; Santangelo et al., 2020; Solomon, 2017; Stanley & Singh, 2018; Watt-McMahon et al., 2023; Yen et al., 2004, 2020; Zanarini et al., 1998). The rapidly occurring intensity of acute symptomatology then leads to the well-known impulsivity of serious suicide attempts by borderline patients (Andover, Schatten & Morris, 2018).

There is increasing evidence that a chronic sense of emptiness is a particularly painful characteristic of the borderline condition and frequently underlies suicide attempts. Unfortunately, emptiness has not been well-identified and described in the DSM. Miller et al. (2020) recently conducted a systematic review of emptiness in BPD, and they state, "Chronic feelings of emptiness is an under-researched symptom of Borderline Personality Disorder, despite indications it may be central to the conceptualization, course, and outcome of BPD treatment." In a study of 1870 adults presenting for outpatient treatment, Ellison et al. (2016) investigated the relationship of BPD criteria of impulsivity, affective instability, emptiness and anger, with psycho-social morbidity. They found that only the emptiness criterion was associated with all 8 indices of psychosocial morbidity examined (see also Campbell et al., 2021; Grillo & Udo, 2021).

The painful, persistent feeling of emptiness provides a clear indication of the severe nature of BPD. We will briefly describe a borderline patient whose most prominent sense of self was a profound, enduring feeling of emptiness, associated with low self-esteem and emotional pain (Kockler et al., 2022; Santangelo et al., 2020; Zanarini et al., 1998). Among the words she used to describe this empty feeling were "all alone all the time," "nothingness," "empty," "worthless," "agony," "just always want to end this thing one way or another." She said that although this feeling was underlying "forever," she had been a somewhat "exuberant" child whose high activity level and popularity with boys had helped to avoid these feelings. However, by adolescence she was experiencing clear depressive symptomatology which could rather abruptly increase in full force, often during a social experience of feeling apprehensive, criticized, disappointed or rejected. These episodes gradually became more lengthy and severe, and were increasingly accompanied episodes of self-harm and suicidal thinking. This led to a serious suicide

attempt, followed by electroconvulsive therapy. This patient was a highly sensitive, loving person who adored her children and would have done anything for them. She explained that the severity of her depression and painful sense of worthlessness and emptiness could fully block out her personhood, creating a “zombie” in pain who could maintain no thought or awareness of her children, family or anything else other than an urgency to somehow escape the pain or die. She was in psychotherapy for several years following the initial suicide attempt, during which there was one more, less severe suicide attempt. Over several years of an often challenging psychotherapy engagement she improved symptomatically to a significant degree, but she reported that the emptiness, always an essential part of her identity, would never go away completely (Miller et al., 2020). It is difficult to describe the experience of empathizing with someone who is feeling such persistent pain and despair. The interviewer may have a helpless feeling that any comforting words would be so superficial that they could only add to the pain. It was fortunate that she could grasp the clinician’s demeanor at times, perhaps providing some comfort. This patient had received trials with numerous medications over the years and was always quite compliant, but the drugs did not provide much help. Nevertheless, she always appreciated the prescription of medication. It is common for borderline patients to wish for meds even though they do not help much. The provision of a prescription may provide a sense of support that carries beyond the clinician’s office (Park & Covi, 1965).

What is the source of this lifelong feeling of emptiness? This patient recalled many disturbing family experiences during her childhood, but the factor that stood out most to her was that she could not recall experiencing any loving warmth in the family environment. Her mother disliked and disapproved of her spirited nature, and her father was a distant disciplinarian. Her memory did not, of course, go back to infancy/toddlerhood, but she assumed that the social environment was the same from the beginning of her life. It may be that the earlier a child experiences rejection, along with the absence of a warm or caring environment, the greater is the likelihood that characteristics of emptiness, self-dislike and distrust of others cannot be adequately resolved (see also Steele et al., 2015).

The Alternative DSM-5 Model for Personality Disorders also presents a severity problem. There is a requirement that at least two criteria for self/

other impairments must be selected for a personality disorder diagnosis to be made, but these need only be moderately impairing. However, the patients whose unique symptomatology led to the discovery of BPD had a severe illness. A consideration for allowing a moderate level of severity in BPD would have been the necessity to contain the borderline condition within the DSM definition of a personality disorder, resulting in the tail wagging the dog, i.e. the symptomatic picture being constrained to fit the diagnosis rather than the diagnosis modified to fit the condition. However, considering the symptomatic severity and the profound self/other impairments that were uniquely at the basis of discovering BPD, reconsideration of BPD as diagnostically belonging within the general personality disorder category is necessary.

In summary, the DSM inclusion of patients with significantly less severity than the discovery populations, and the automatic assignment of symptomatology unsuitable for a personality disorder to separate diagnoses has contributed to the difficulties in developing a coherent theory of BPD. New research is necessary, particularly more innovative investigation of the origins and nature of the core self/other psychopathology (Yen et al., 2020). The following three sections provide an examination of the fundamental role of Social Intelligence in the occurrence of BPD, firstly as the neurobiological basis for Theory of Mind, the faculty for understanding the mind of self and others (Section C), secondly as the basis for an enhanced ability to perceive mental states of others (Borderline Empathy) and then to influence their mental states and behaviors (Countertransference) (Section D), and thirdly, as the basis for the paradoxical co-occurrences of enhanced perceptivity to mental states of others by individuals who have a general impairment in understanding others, termed the “Borderline Empathy Paradox” (Section E). These sections then lead to the section F on Etiology that examines how the exceptional “Differential Susceptibility” of enhanced Theory of Mind brain domains in highly sensitive children provides exceptional vulnerability to developmental psychological adversity, leading to the development of Borderline Personality Disorder. In Section G we argue that the necessary severity level of self/other impairments for diagnosis of BPD should align with the severity in the original populations, and that lesser severities should be identified as spectrum disorders. This should be particularly helpful for research purposes.

Section C - Social Intelligence and Its Evolution; Childhood Development of Theory of Mind (ToM) and BPD:

Serious impairment in understanding the mind of self and others is a fundamental and pervasive feature of Borderline Personality Disorder. The uniquely human faculty for knowing of and understanding the mind of self and others is termed Theory of Mind, and its neurobiological basis is Social Intelligence. Theory of Mind is only an informationally empty neurobiological potential at birth that cannot become a working faculty until the brain domains for Theory of Mind become engaged in a learning experience with the human social environment. In the absence of this social learning experience there would be no working theory of mind at all. It is necessary to consider this developmental scenario when examining concepts about the Theory of Mind impairments in Borderline Personality Disorder.

In alignment with the originally identified key characteristics of Borderline Personality Disorder, researchers are now in full agreement that, whereas difficulties in understanding self and others are present in all personality disorders, they are very prominent, fundamental features of BPD (Agrawal, 2004; Bender & Skodol, 2007; Fonagy, 2017; Fonagy et al., 2002, 2016; Kernberg, 1984; Lind et al., 2019; Linehan, 1993; New & Triebwasser, 2018; Sharp, 2014; Sharp & Vanwoerden, 2015; Sharp et al., 2015; Yeomans, Clarkin & Kernberg, 2015). Sharp and Fonagy are in the vanguard of exploring this understanding. In a study of 966 hospitalized patients Sharp et al. (2015) found that “BPD is unique in that impairment in the ability to maintain and use benign and coherent internal images of self and others are integrated into one disorder.” Reviewing this study, Fonagy et al. (2016) state: “It appears that BPD might be better understood as being at the core of personality pathology more generally, rather than as a type of personality disorder. This approach would help make sense of the high levels of comorbidity found in BPD patients.” These views align with criterion A of the alternative DSM-5 model of personality disorders, “moderate or greater impairment in personality (self/interpersonal) functioning,” and they additionally suggest that, although self and interpersonal difficulties are also found in the other personality disorders, the self and interpersonal impairments are so central to BPD, and so severely compromised, that they are likely signposts to the etiology of the disorder.

Although there has been increasing interest in examining the self and interpersonal disturbances in BPD, there has not been sufficient consideration

that these clinical manifestations must involve dysfunction of brain domains for “Social Intelligence” (Humphrey, 1976, 2023; Vernouillet, 2018), perhaps because the field of the intelligences has not been a particular focus for BPD researchers. Howard Gardner, Hobbs Professor of Cognition and Education at Harvard Graduate School of Education, identifies the uniquely human Social Intelligence faculty for knowing of and understanding the mind as “Personal Intelligence.” Gardner is the author of the landmark book, “*Frames of Mind: The Theory of Multiple Intelligences*” (1983), as well as subsequent books and papers about this topic, and in them he has provided detailed evidence and argument that the human brain carries at least seven semi-independent or modular categories of intelligence: Linguistic, Musical, Logical-Mathematical, Spatial, Bodily-Kinesthetic, Naturalist, and Personal Intelligence. (IQ tests measure linguistic and logical-mathematical intelligences.) The inherent level of Personal Intelligence brain domains can range from limited, as in autism, to gifted. Gardner posits two neurobiological faculties for Personal Intelligence, one for processing information about self and the second for processing information about others. “Intrapersonal Intelligence” provides “access to one’s own feeling life—one’s range of affects or emotions: the capacity instantly to effect discriminations among these feelings and, eventually, to label them, to enmesh them in symbolic codes, to draw upon them as a means of understanding and guiding one’s behavior.” Subsequently he added that having an accurate model of oneself, which is necessary for effective decision making, is also an essential element of Intrapersonal Intelligence (1993 a, b). “Interpersonal Intelligence” provides “the ability to notice and make distinctions among other individuals and, in particular, among their moods, temperaments, motivations, and intentions.” This intelligence includes the “capacity to place one’s self into the skin of specific other individuals.” Personal Intelligence is only a great potential at birth, requiring appropriate childhood social learning experience with caretakers and the cultural social environment. During this developmental period it has the flexibility for learning from and adjusting to very diverse family and cultural social environments.

Gardner argues that confirmation of a proposed intelligence becomes more certain if evolutionary antecedents can be identified. Social Intelligence involving precursor characteristics for human Personal Intelligence is found in many animals (Krupenye & Call, 2019; Grimm, 2023), and is a hallmark

feature of primates (Brothers, 1989, 1990; Cheney & Seyfarth, 1990, 2007; de Waal, 2019; Goodall, 1986; Humphrey, 2023; Lovejoy, 1981; Ristau, 1991; Tomasello & Call, 1997). Small (1990) describes this general primate intelligence as “a knack for functioning as a social group, day in and day out, a special kind of intelligence...a social acumen calling for a good memory, the ability to recognize and categorize others and the capacity to act on that knowledge.” Terms used for this precursor Social Intelligence are “Primate Cognition” and “Primate Intelligence.” Until the appearance of recent hominids, Social Intelligence was limited to gaining information about behaviors and social roles of others, with no identified ability to know or examine the mental states of either self or others (de Waal, 2009; de Waal & Lanting, 1997; Phillips et al., 2020; Premack & Woodruff, 1978; Priselac, 2015; Savage-Rumbaugh, Shanker & Taylor, 1998). For instance, Cheney and Seyfarth (1990) demonstrated that vervet monkeys are able to acquire rather sophisticated social knowledge and to make use of limited abstract concepts, yet they do not show any evidence of a faculty for perceiving the mental states of others or to examine their own mental states. The uniquely human Personal Intelligence ability to know of the mind and to process social information about the mind is termed by Premack and Premack (1995) “Theory of Mind.” It is called a “theory” because the mind and its activities cannot be directly identified or observed and must therefore be inferred (Yaden et al., 2021). Although full Theory of Mind is unique to the human species, there are clear signs of an emerging ability in the great apes (Krupenye & Call, 2019). It has been theorized that only limited signs of Homo sapiens mental illnesses have been observed in these higher primates, such as indications of depression, because Theory of Mind has not been developed sufficiently for full development of these conditions. Such primate mental disturbances have been associated with environmental events such as parent or child loss, isolation and abuse, but not with evidence suggesting inherent neuropathology, which is pertinent to the considerations here about BPD (Reite et al., 1974).

There is a great deal to learn about the long-term childhood interaction with the social environment that is necessary to gain a working Theory of Mind (Barnett et al., 2021; Laland, 2018; Locke, 1689; Menand, 2019; Pickard, 2009). The first year of life may be a very significant period for this brain/

social environment interactive experience, particularly considering that human infants are born “prematurely” compared with other primates, and the brain then continues to enlarge rapidly after birth while interacting with the social environment. This very early brain interaction with the social environment differs markedly from other primates, in that during this same developmental period their brains are still in the uterus and separate from direct social interaction. Birth prematurity provides a head start for the necessary social experience in the development of Theory of Mind. However, this premature interaction with the social environment can make it particularly difficult to differentiate very early environmental influences from inherent factors involved in development of Theory of Mind. The prematurity of the brain at birth is a feature of the high degree of neoteny in humans (Lorenz, 1950; Montagu, 1989), and a suggested anatomical explanation is that a larger skull accommodating a more developed brain would not pass through the birth canal of a body structure that has evolved to the erect position (Barnett et al., 2021).

The evolutionary development of Theory of Mind has not only been accompanied by the very extended post-birth social learning experience, but also by the gradual loss of instinctive readiness to function at or shortly after birth. It can be helpful to contemplate the development of a “self” or “self-direction” in an animal kept in isolation from others beginning at birth and continuing for months or years. Most animals nevertheless have some inherent sense of self-direction, e.g. a chicken will still be very OK “knowing” it is a chicken, going about happily clucking and pecking (Menand, 2019). However, when we examine our primate relatives, long-term isolation experiments of infant monkeys have revealed severe and permanent adult socialization and other impairments (Harlow, 1964, Harlow, Dodsworth & Harlow, 1965, Harlow & Suomi, 1971). Then consider the human infant, who has almost no instinctive activation of body or mind at birth, and remains uniquely helpless for an extended length of time. If we imagine this infant being raised in full isolation from human contact for an extended period we would all picture a tragic entity with minimal or no self or self-direction, and without an emerging, inherent ability to know how to function or interact in the human social world or in the world in general (Rymer, 1993). This picture dramatically illustrates how critical the social environment is for activation and development of the human mind despite the remarkable initial potential,

i.e. there would be essentially no working mind in the absence of human interaction (Liotti & Farina, 2016). This can be a cautionary tale for avoiding the grievous error of expecting to understand the development of the human mind and its disturbances by simply studying the neurobiology of the adult human brain, as if its state is analogous to the brains of all the other animals that do not require this extensive brain/environment experience for the appearance and development of self-direction and a working social mind. It is also a compelling indication that we must examine the developmental experience of the pre-borderline child much more carefully and extensively rather than to rest so heavily on the conviction that inherently flawed neurobiology must underlie BPD. One factor contributing to the relative absence of studies about the childhood creation of the mind, is that most researchers have likely had a normal developmental experience, and mentally healthy persons generally feel that their mind has developed independently, without having experienced what happens when the music isn't playing.

The fact that the mind is to such a degree the creation of the developmental social environment could be off-putting to some of us since it indicates that we are not inherently who we are, but instead the adult mind and the workings of its underlying neurobiology are a product of the social experience to such a degree that if raised in a significantly differing developmental social environment a person could be essentially someone else. Would a mentally healthy person who had prospered in a good childhood social environment have become essentially a different person if raised in a harmful childhood environment, and if this resulted in a major mental illness would it be considered inborn (see also Hanh, 1999)? Research investigating the mind as possibly originating from a purely biological potential could be in conflict with the general belief that each of us is born with a unique soul that endures unchanged throughout life and afterwards. Nevertheless we must investigate all possibilities in order to identify the realities underlying mental health and illness. Development of the mind has also been a subject of right to life debates. Ova and sperm have life, and there is the argument that a human being is therefore fully present at conception. There is also the argument that a human being is not actually present until a newborn infant begins to actively engage with the others, while looking at them directly in the eye, thereby initiating the beginnings of a working mind from an informationally empty neurobiological potential.

It seems quite likely that there is an early period of high flexibility during the development of Theory of Mind, after which there is less flexibility for learning, as is the case with learning languages and the development of the senses (Leighton et al., 2017; Luby, 2020; Stepp, Lazarus & Byrd, 2016; Valdez et al., 2020). Could interference with and neglect of the natural development of Social Intelligence cause more profound harm during the pre-verbal and amnesia periods, such as deeply imbedded low self-esteem and a sense of emptiness, making it almost impossible to adequately repair, and how would we distinguish such very early developmental harm from inherent deficits (Luby, 2020; Valadez et al., 2020)? The significance of the early childhood social learning experience is very evident in the learning of language, another uniquely human social Intelligence faculty, which “endows human mental life with its complexity and texture” (Rothman, 2017; see also Boroditsky, 2019; Ibbotson & Tomasello, 2016; Laland, 2018; Orwell, 1949; Scott, 2019), and which provides for the verbal communications that are necessary for satisfactory development and operation of Theory of Mind (Astington & Baird, 2005; Astington & Jenkins, 1999; de Villiers & de Villiers, 2014; Ruffman et al., 2002; Satpute et al., 2020; Siu & Cheung, 2022). The importance of language as an adjunct to the mind becomes immediately clear when one considers the difficulty of thinking about self and others, or much of anything else, without words lurking in the mind (Perman, 2022). Language not only provides parents with a unique tool for conferring clear social information to their children, but it also provides them with a unique power to impair and pervert development of the mind. This direct avenue to the workings of the developing social brain in humans is not available in other primates, and may be another factor contributing to the limited evidence of mental illness in them (Suomi, 1991a). Patricia Kuhl, co-director of the University of Washington Institute of Learning and Brain Sciences, studies language learning and its developmental requirements. Her research (2015) provides “evidence that learning for the infant brain is not a passive process...the built-in capacity for language does not on its own propel the child past the first utterances of Mama and Dada. To learn this most important of all social skills requires that a baby pay careful attention to countless hours of parent-speak. It requires human interaction - a necessity that I call social gating.” Although both Theory of Mind and language faculties are only neurological potentials at birth that will remain essentially useless

without an extensive social learning experience, and are both quite vulnerable developmentally to the nature of the social environment, theories about the origins of defective language and defective Theory of Mind differ markedly. Whereas poor language proficiency is understood to usually result from inadequate education, in the absence of inherent neurobiological deficits, the poor self/other proficiencies of borderline patients have been considered, without confirmation, to always involve inherent neurobiological deficits. This very likely serious error is understandable considering that, although Theory of Mind and language are both learned faculties of human Social Intelligence, impairments to self/other abilities provide more serious risks to mental health and social adjustment than language impairments.

Dysfunctional operation of Theory of Mind and language as the result of a defective learning experience can both be easily mistaken as nature rather than nurture. A good example is the past assumption about levels of intelligence in African American slaves (Foner, 2022). The majority of them could not read or write and were limited in other important social skills. Such apparent incompetence contributed to the assumption by many abolitionists that slaves were of an inherently inferior species, and that they should be freed to live in Africa because they could not make it in our society (Guyatt, 2016). Only several decades after the Civil War did it become generally understood that slaves were seemingly socially and intellectually inept because they had been forbidden, with severe consequences, to learn to read and write, or to associate and interact in a free and equal way with the non-slave social environment (Bynum, 2000; Lepore, 2018; Wilkerson, 2020). Another example was the general assumption during, and for a time after, World War II that German and Japanese people were inherently and abnormally aggressive, racist, and dangerous. Subsequently, it gradually became clear that this was incorrect as these populations became socially indistinguishable from the rest of the social world. These are only two examples of a general tendency to over-attribute individual differences to expressions of inborn factors, as if the critical influence of the social environment on the development of human cognition does not uniquely differ from all other animals (Uomini et al., 2020). Further examination of the contributions of childhood/adolescent social learning and of inherent neurobiology to the working faculty of Theory of Mind follows in Sections E and F.

Section D - Borderline Empathy and Social Intelligence:

Enhanced Perceptivity to Social Information, and the Ability to Engender Clinician Countertransferences and Boundary Vulnerabilities.

Dinsdale and Crespi (2013) state, "Clinical anecdotes and empirical evidence have suggested that individuals with BPD may demonstrate enhanced empathy in spite of impaired interpersonal functioning." They define this "borderline empathy" characteristic as "an enhanced ability to perceive social information." Dinsdale and Crespi (2013) and Roepke et al. (2013) have provided a review of the considerable literature about borderline empathy, and a few notable observations are addressed here. Many of these observations were made during the discovery period of BPD, when clinicians had limited knowledge about or preparation for the challenges of borderline patients, and when psychotherapy was often psychoanalytically oriented, with the therapist sitting away from the patient's direct field of view and with minimal verbal interchange. This setting could be imagined as an experiment that tests an individual's ability to perceive social information about others when they are partially concealed. Krohn (1974), who originated the term, borderline empathy, states: "Yet the therapist discovered an uncanny capacity of the patient to recognize some very private impulses and judgments within other people... He would regularly put into words these private associations of the therapist just as the therapist was having them...that is, frequently a patient diagnosed as borderline...demonstrates a curious resonance with the immediate inner experience of other people...To hold that the borderline is in poor contact with others ignores the sort of responsiveness described here – a capacity known well by clinicians who have suddenly found their countertransferences articulated by their borderline patient...The therapist of the borderline is often suddenly surprised to hear the patient voice what the therapist comes to recognize as very private conflicts...It is as if the therapist has suddenly been dealt a very deep, confronting interpretation by the patient! Several borderline patients treated successfully by the author fared poorly with previous therapists in large part because the patients' primitive perceptions were essentially invalidated by the therapist's interpretations. Considered strictly as projections, the therapists failed to confirm for the patient that his perception was accurate." Masterson

(1976) found that borderline patients could be “exquisitely sensitive to the daily emotional state of the therapist, to his tone of voice and non-verbal messages conveyed by gestures and body posture.” Stone states (1985): “It is also worth noting that despite the prevalence of empathic difficulties in this category of patients, some borderlines are unusually capable of reasoning with those around them, including their love partners, as though whatever combination of constitutional and experiential factors rendered them overly sensitive to the actions of others, left them, as a compensatory advantage, so to speak, better able than average to sense the hidden feelings of those with whom they are close.” Gabbard states (1993): “Because they are so sensitive to the therapist’s choice of words and nonverbal nuances, they are able to evoke a sense of walking on egg-shells, as if our margin of error were very narrow indeed.” Carter and Rinsley (1977), Shapiro (1978) and others have also described perceptiveness in borderline patients.

Ladisich and Fell (1988) reported a controlled study of interpersonal perceptiveness in 20 borderline patients, 20 neurotic patients, and 19 patients with a history of schizophrenia. These were inpatients in therapy groups of four months duration, each group having six members and a therapist. Borderline empathy was defined as “accurate sensing or perceiving of other persons’ feelings or qualities.” Questionnaires measured empathy, personality traits and social attitudes. Patients rated themselves and other group members at the beginning and the termination of the group therapy program. The group therapists also rated the patients. Empathy was assessed by calculating how accurately a person could rate others’ ratings of themselves. The borderline patients scored significantly better than the neurotic and schizophrenic patients and, perhaps more significantly, they were as good as the therapists, who most likely had access to considerably more information about the group members. In another study, Frank and Hoffman (1986) compared two groups of patients, 10 borderline and 14 neurotic, using the Profile of Nonverbal Sensitivity. The borderline group demonstrated significantly higher nonverbal sensitivity, which provided “some empirical evidence for the concept of borderline empathy,” the “apparent ability to tune in quite accurately to the internal world of others.” In a more recent study, Franzen et al. (2011) compared 30 borderline patients and 30 controls in a game of trust that tested their ability to correctly detect mental states of others, and

then to adjust their own behaviors as a result of this detection. The borderline patients performed significantly better than the controls. “The authors state that this unexpected result suggests a “superiority of Theory of Mind in BPD” as demonstrated by a “superiority of mentalizing performance.” Kalpakci et al. (2016) examined the degree of “affective empathy” (Losoya & Eisenberg, 2001; Smith, 2006) in 252 hospitalized adolescent females with and without BPD, and they found that borderline patients exhibited significantly higher affective empathy than the controls. There continue to be reports of social perceptiveness in borderline patients, which is most likely not what most clinicians and researchers are expecting to identify in severely mentally ill patients. The reports do not suggest that patients have the ability to directly experience the minds of others by simply being near them, but that they likely have an enhanced ability to correctly infer feelings, attitudes, thoughts and beliefs while observing routine verbal communications and behaviors, including facial expressions, tone of voice, words used, body movements, etc. It is interesting that many incidences of enhanced perceptiveness about others (Interpersonal Intelligence) have been described, but few about the self (Intrapersonal Intelligence).

Confirmation of borderline empathy in borderline patients remains in abeyance since there is also research that does not find evidence of an enhanced perceptive ability (Dinsdale & Crespi, 2013; Roepke et al. 2013; Sharp & Vanwoerden, 2015). Does this mean that the observations and findings are incorrect, or that samples vary, or that there are other methodological issues? A prevailing view is that if there is an enhanced ability to perceive mental states of others, this must be an ingredient or consequence of the psychopathology. However, if a poor violinist could momentarily play with an apparently special ability, or if someone intellectually limited could surprisingly seem to understand a Shakespeare sonnet, or if a poorly functioning car or airplane could occasionally move with unexpected speed or maneuverability, we would very likely consider searching for a hidden asset rather than reasoning only that such an event must somehow be an inherent part of the problem. Nevertheless, there continues to be minimal interest in conceptualizing that borderline empathy might be demonstrating an unrecognized asset, and then contemplating what such an asset might tell us about BPD (see Section F).

Both words “borderline” and “empathy” provide inaccurate labeling for the borderline empathy characteristic, which has helped to lead us astray in examining it. Regarding the first word, there is no evidence confirming that the condition is borderline to Schizophrenia. The second word, empathy, is also incorrect and should be replaced with a term such as enhanced social perceptivity or “enhanced emotion recognition” (Sharp, 2014). Empathy is defined in DSM-5 as “comprehension and appreciation of others’ experiences and motivations; tolerance of differing perspectives; understanding the effects of own behaviors on others.” The American Psychological Association defines “empathy-altruism helping theory” as a concept that altruistic behaviors stem from a person’s empathic understanding of and compassion for others. Definitions and research clearly indicate a two-part basis for empathy (Choi-Kain & Gunderson, 2008; DeWaal, 2007; Kalpakci et al., 2016; McLaren et al. 2019; Nemeth et al., 2018; Roepke et al., 2013; Shamay-Tsoory et al., 2009; Smith, 2006; Wingenfeld et al., 2018), the first being the detection of another person’s mental state, and then there is a benign and compassionate affective response when this information is correctly processed and understood. However, we most definitely are not usually finding such benign and compassionate understanding and responses by borderline patients to what they detect. Whereas there is the evidence of an enhanced ability to perceive social information, there is commonly inaccurate processing of perceived social information, with inappropriate responses that can involve distrust, misinterpretation, confusion, romantic expectations, increased attachment demands, hostility and anger, as well as persuasive communications that can disturb, manipulate and seduce.

With regard to countertransference, the compelling, almost pathognomonic ability of borderline patients to entangle even experienced clinicians into strong emotional responses and boundary violations has been well documented (Allen, 2023; Gunderson, 1989; Gutheil, 1989; Zanarini et al., 1990). Although the term borderline empathy refers only to the enhanced accessing of psychological information about another person, these countertransference phenomena suggest an additional enhanced ability to strongly influence another person emotionally based upon this accessed social information, at times involving projective identification (Fonagy et al., 2003; Gabbard & Wilkinson, 1994; Lin et al., 2023; Shapiro,

1978, 1992, 2020). Gunderson (1989) states: “A good portion of the literature concerns the capacity of borderline patients to evoke intense feelings of rage and helplessness or to evoke sustained patterns of distortion in psychotherapeutic relationships....” Kernberg et al. (1989) state: “Uncannily, borderline patients seem to sense the therapist’s vulnerability and may choose the exact moment when the therapist wishes the patient dead to announce a suicide plan.” Gutheil (1989) states: “Patients with borderline personality disorder possess the ability, as it were, to seduce, provoke, or invite therapists into boundary violations of their own in the countertransference.” Gabbard (1993) states that borderline patients can have “expertise in identifying vulnerable areas and exploiting that awareness.” He also states “Borderline patients have an uncanny ability to tune in to the therapist’s vulnerabilities and exploit them in a manner that induces feelings of guilt... At the very moment when the therapist is wishing the patient would disappear, the patient may accuse the therapist of not caring and of disliking the patient. Such accusations may create feelings in therapists that they have been ‘found out’... The patient’s accusatory charges may strike at the very marrow of the therapist’s professional identity and create a form of ‘physiological countertransference’- such as a pounding heart, a dry mouth, and trembling limbs.” Averall et al. (1989) propose that some borderline patients may have “more projective or sending power, thereby transmitting unconscious fantasies and desperate neediness with more impact than some other patients.” During a discussion about countertransference, a psychiatry resident reported (personal communication 1991): “They can reach in under your skin and grab you emotionally in just the place in your head where you want to be grabbed or where you don’t want to be grabbed.” He described a patient who on occasion had sensed and communicated something about him that he did not mean to reveal, once even to himself, and then a complex emotional interaction could develop, created by the patient’s reaction to what she was perceiving, along with his responsive surprise, caring feelings, embarrassment, discomfort, and/or irritation. He felt that his reactions were somehow being guided by her in a directed yet unclear way that neither he nor she understood (Wilkinson & Gabbard, 1993). Based on her childhood history, he believed that her unawareness of this enhanced ability could involve a defense mechanism that

developed to escape parental disapproval. Unfortunately for the child, this worked to prevent her awareness of this ability but did not alter her actual communications.

It is remarkable that there is this considerable record of borderline patients having a rather unique ability to “manipulate” even experienced professionals, and yet there is such an absence of speculation that this ability might involve some kind of talent. Instead, the chief focus has been to make sure everyone is warned to guard against this unusual power of borderline patients rather than to examine it carefully. It is likely that we are now reading much less about the serious transference and countertransference problems that were so clearly evident in the discovery populations because we are more understanding of and communicating better with borderline patients, and since they experience more compatibility with our communications, along with our benign but steady boundaries, they are also experiencing improved processing and understanding of the social information we reveal about ourselves. It is also likely that many patients now diagnosed as borderline do not demonstrate significantly enhanced social perceptivity because it is most evident in severely impaired patients, and DSM allows for moderate impairment. This DSM severity problem is discussed elsewhere in the monograph. It will be argued in Section E that inherently enhanced Social Intelligence brain domains, even though developmentally impaired, underlie the enhanced social perceptivity of borderline patients and their ability to entangle others emotionally.

Section E - The Borderline Empathy Paradox and Inherently Enhanced but Developmentally Impaired Theory of Mind:

Separate, Inherently Enhanced Brain Domains for General Primate Social Perceptivity and for Theory of Mind; Enhanced Theory of Mind Brain Domains are very Developmentally Vulnerable; Childhood Everyday Psychological/Emotional Adversity Leads to Maldevelopment of Theory of Mind:

Introduction: The Borderline Empathy Paradox, i.e. the occurrences of enhanced perceptivity to mental states of others in patients who also have serious impairments in understanding others, provides important clues for identifying nature versus nurture sources of Borderline Personality Disorder. In their review of the literature about the Borderline Empathy Paradox, Dinsdale and Crespi (2013) propose a neurobiological basis for this paradox that involves two semi-independent sets of brain domains for differing Social Intelligence faculties. **Part-One brain domains** provide the “ability to perceive social information.” **Part-Two brain domains** provide the ability to process and understand the perceived social information. Arguments and evidence for nature and nurture factors involved in the performance of such brain domains in BPD are reviewed here, with the conclusion that Part-One brain domains provide a human level of the general primate faculty for perceiving and understanding “extra-mental” social information (Phillips et al., 2020), which is inherently enhanced in patients demonstrating borderline empathy. These primate domains are operational shortly after birth. They do not require an extensive learning experience and therefore do not become measurably impaired during adverse developmental experiences. Part-Two brain domains are for Theory of Mind and are also enhanced. They have evolved quite recently, providing the uniquely human potential, but not the immediate ability, to know of the mind and to process and understand social information about self and others as proceeding from the mind. In contrast to the Part-One domains, these Part-Two domains require an extended learning experience in interaction with the childhood social environment for this potential to gradually develop into a working mind. During this learning experience they are quite vulnerable developmentally to the nature of this social environment. Persistent psychological adversity during childhood has

interfered with this learning experience, with defective development of the Part-Two brain domains and serious impairment to the operation of Theory of Mind. However, the underlying enhanced potential remains. The presence of enhanced but impaired Social Intelligence brain domains in BPD underlies the Borderline Empathy Paradox.

1a: Part-One Social Intelligence Brain Domains: These general primate domains for perceiving and understanding “extra-mental” (“existing outside the mind”) social information are inherently enhanced in BPD. They are “automatically” working shortly after birth (Phillips et al., 2020), without the necessity for an extensive learning experience to become operational, and the initial level of this intelligence remains essentially unaltered by developmental experiences. They participate in the occurrences of “Borderline Empathy,” as do the Part-Two brain domains. Since the optimal level of any intelligence, e.g. social, linguistic, mathematical or musical, is set at birth, confirmation of enhanced social perceptivity in BPD would be strong evidence of an inherent rather than a developmentally engendered enhancement.

1b: Alternate Views about nature versus nurture factors underlying the instances of enhanced social perceptivity observed in BPD: Current theories argue that Borderline Empathy is a component or product of the disorder rather than an inherently enhanced faculty. Frankenhuus et al. (2020) state: “It is well established that people living in adverse conditions tend to score lower on a variety of social and cognitive tests. However, recent research shows that people may also develop ‘hidden talents’, that is, mental abilities that are enhanced through adversity” (see also Ellis et al., 2020). This research focuses on enhanced abilities that develop in response to adversity but does not entertain the concept that there could also be enhanced abilities that are inherently present rather than resulting from adversity, but that can remain undeveloped, and/or perverted due to adversity (Brody & Mills, 1997; Dare & Nowicki, 2015; Taylor & Vestergaard, 2022). Analogously, theories about the borderline empathy paradox almost never speak to the possibility that the signs of enhanced social perceptiveness might be evidence of an inherent ability or talent rather than simply a feature or product of the disorder. For instance, it has been proposed that the abnormal “hypermentalizing” observed in borderline patients could have a

relationship to borderline empathy. In 2011 Sharp et al. reported a study of hypermentalizing in adolescents with borderline traits. They define mentalizing as “the capacity to interpret other people’s behavior within a mentalistic framework to understand how self and other think feel, perceive, imagine, react, attribute, infer, and so on.” They define hypermentalizing as “excessive, inaccurate mentalizing.” The study demonstrated that “hypermentalizing was strongly associated with BPD features in adolescents. Participants with BPD features showed a tendency to make overly complex inferences based on social cues that resulted in errors.” It was also found that “undermentalizing” was not linked to borderline traits, with the conclusion that while there was defective mentalizing that used “unusual alternative strategies,” there was not loss of capacity per se to mentalize (See also Norman-Eide et al., 2020). This is compatible with the Fonagy and Bateman (2007) finding that “individuals with borderline personality disorder are normal mentalizers except in the context of attachment relationships,” with the Penner et al. (2020) finding that “when adolescents with BPD are forced to engage in controlled mentalizing ...they perform as well as other psychiatric youth,” and with the Meehan et al. (2018b) finding that “impairments in mental state recognition in those with BPD are likely best understood under conditions of social threat.” This context variability of hypermentalizing leads us to further questions about inherent versus environmental contributions to hypermentalizing.

There is a general consensus that inherently flawed neurobiology underlies the hypermentalization of borderline patients. However, if there is an inherently normal or even enhanced ability to access social information (borderline empathy), but there is also developmentally engendered impairment to the ability to correctly understand it, then the hypermentalizing would most likely be anxious and excessive efforts to understand others by individuals who can competently perceive social information, and who are also generally aware of and very stressed by their great difficulty in processing and understanding this information, rather than being a direct manifestation of inherently limited neurobiology (Back & Bertsch, 2020; Bo et al., 2017; Jeung et al., 2020; Nolte et al., 2023; Normann-Eide et al., 2020; Quek et al., 2018). The histories of persistently seeking successful relationships and psychotherapy despite continuing failures suggests that borderline patients

may have an implicit sense that their relationship impairments are not inherently inflexible and must be resolved through helpful interactions with others. As will be discussed further, the never-ending search for a successful relationship experience, as well as the very timely reductions of hypermentalization in current psychotherapies, are signs of developmental impairment rather than inherent flaws.

Sharp et al. (2011) found a relationship of hypermentalizing to emotion dysregulation in patients with borderline traits, which might be expected in individuals who have been in an enduring and painful double-bind of searching for someone to help relieve persistent distress and sense of aloneness, while also experiencing great difficulty while trying to identify the trustworthiness, genuineness and reliability of anyone with whom they try to closely engage (Bertele et al., 2022). The study makes reference to the evidence of “enhanced capacity to discriminate the mental state of others,” i.e. borderline empathy. The authors suggest that this “enhanced emotion recognition” could be an ingredient of the hypermentalizing (Sharp, 2014; Sharp & Vanwoerden, 2015), but the argument here is that the hypermentalizing demonstrates efforts to overcome developmentally engendered impairments in processing and understanding social information about others, whereas the occasional instances of enhanced social perceptivity can be much more economically explained as a feature of an underlying inherent enhancement of social intelligence. There are also proposals that borderline empathy could develop through heightened attention to anxiety-provoking behaviors of caretakers (Dinsdale and Crespi, 2013). However, paying extra attention to or having a general “interpersonal hypersensitivity” (Gunderson & Lyons-Ruth, 2008) to another person’s behaviors cannot by itself be the source of an enhanced Social Intelligence ability to correctly identify mental states of others unless there is a talent involved, just as demonstrations of enhanced mathematical intelligence cannot be explained as deriving purely from heightened attention or hypersensitivity to anxiety-provoking or intimidating mathematics teachers.

There are many studies of BPD that confirm frequent physical and sexual abuse, and it has been proposed that this abuse could motivate a child to try to better understand the mind of the abuser, thereby developing

borderline empathy. There are two problems with this theory. The first is that instances of borderline empathy, as well as good mentalizing about others, do not tend to occur when borderline patients are feeling threatened by others. Instead, this is most likely to be observed when patients are in a relatively calm state of mind. Perhaps more significantly, abusive behaviors are easily and painfully observed and felt by a child and do not need to be further detected and examined by struggling hard to understand the abuser's mental state. Multiple observations have indicated that the reverse is likely to occur, since children in toxic caretaking circumstances are very likely to assume that there is something wrong with themselves, while simultaneously blurring or repressing a painful understanding of misguided, abusive, unloving or neglectful parents (Hunter, 1991; Cicchetti & Toth, 1995; Sekowski et al., 2020). The data have also shown that children who are subjected to abusive environments are likely to develop antisocial characteristics, to get into trouble with authorities, and to have little interest in understanding others other than for self-centered purposes (Goldman et al., 2003). There is not good data supporting the alternative idea that child abuse fosters enhanced social perceptivity about others (James et al., 2018). Considering the very high percentage of borderline patients who have experienced abusive childhood social environments, how can the numerous observations of such heightened perceptivity to mental states of others be explained, something that is 180 degrees opposite to the more common result for abused children? The most obvious and economical explanation would be that this ability must be inborn.

2a: Part-Two Social Intelligence Brain Domains: These Theory of Mind domains process and understand human social information accessed by Part-One Domains as being a product of the mind. Although they are also inherently enhanced in BPD, they have become very developmentally impaired. Whereas the Part-One domains for perceiving social information in humans are an evolutionary continuum of the general primate Social Intelligence faculty, the Part-Two brain domains for processing and understanding perceived social information as product of the mind are newly emerging in higher primates, reaching full development in humans. In contrast to the Part-One domains, they require an extensive learning experience with the caretaking social environment to become a working faculty (see also Fonagy & Luyten, 2019), and during this lengthy engagement

they are developmentally vulnerable to the nature of this environment. Inherent enhancement of these ToM brain domains in pre-borderline children provides not only an enhanced ability to process social information, but also an exceptional vulnerability to developmental impairment in adverse social environments (see Section F, Etiology).

This learning experience of Theory of Mind brain domains gradually leads to the adult cognitive ability to correctly process and understand complex social information. Uomini et al. (2020) define “cognition” as “the brain’s synthesis of information from diverse sensory and memory sources to produce appropriate responses. We refer to skillsets as the combination of cognitive abilities possessed by a species or an individual... Extended parenting (protracted parent-offspring association) is pivotal in the evolution of cognition: it combines critical life-history, social and ecological conditions allowing for the development and maintenance of cognitive skillsets that confer fitness benefits to individuals” (see also Cooke, 2017; Sharp et al., 2008). The extended learning experience for Part-Two Theory of Mind brain domains involves interactive feedback between brain activity and the social information received, providing considerable difficulty in sorting out nature vs. nurture sources of deficits in processing social information since they could be fully nature, fully nurture, or a variable mix of both (McHugh & Slavney, 1998; Meyer, 1957; Ryan, 2005; Sharp & Fonagy, 2008b; Slavney & McHugh, 2016). The reports that flawed understandings of others by borderline patients are most severe when experiencing stress, whereas good understandings are particularly likely to occur when in a calm and steady state, suggests that misinterpretations of social information from and about others are not simply the result of inherent limitations, in which case the misinterpretations would likely continue largely unaltered despite varying contexts. A recent study of “mindreading abilities” in Borderline Personality Disorder by Colle et al. (2018) found that “When required to interpret states of mind from their own points of view, the individuals with BPD demonstrated a competent level of mindreading...Awareness of mental states per se does not appear to be particularly impaired... Individuals with BPD do not seem to find it difficult to recognize thoughts and feelings but rather to make sense of their mental states in relation to a specific context” (see also Shapiro, 1998, 2009, 2020). This context specificity, along with the requirement for an extended devel-

opmental learning experience are signs directing us to a much more careful consideration and investigation of the childhood social environment as a likely prime source for defective neurobiology underlying maldevelopment of Theory of Mind in BPD. It is well known that childhood adversity can interfere with the architecture and neurobiology of the developing brain, thereby impairing mental and physical development (Birn et al., 2017; Fonagy et al., 2003; Garner & Yogman, 2021; Goldman et al., 2003; Gur et al., 2019; Hengartner et al., 2015; Lippard & Nemeroff, 2019; Longden & Read, 2016; Lyons-Ruth et al., 2023; National Scientific Council on the developing child, 2012, 2014; Valadez et al., 2020). Marshall et al., (2015) report that child abuse can result in significantly defective impulse control in adults and state: "This substantially changes the way we think of how trauma increases the risk for illnesses. There may be brain changes after trauma that act as a risk marker for development of later illnesses, including bipolar disorder. These processes are much more fluid than are previously thought." Charles Nemeroff, Professor and acting chair at the University of Texas Department of Psychiatry, and Director of the Institute for Early Life Adversity Research states: "Early life adversity is the single biggest determinant of psychiatric illness, greater even than genetics" (Levin, 2019).

Studies of childhood adversity in BPD have generally found that over 80% but less than 100% of borderline patients have experienced significant childhood physical/sexual abuse and/or neglect, (Lewis & Grenyer, 2009; Linehan, 1993; Robin et al., 2021; Steele, et al., 2015; Steele, Townsend & Grenyer, 2019; Zanarini & Conkey, 2018; Zanarini et al., 1997). Michael Stone (2019) makes note of "these few borderline patients" who "had warm and loving parents, and who were not abused, molested, neglected." "Biparental failure," i.e. childhood adversity/neglect involving both parents, has also been found in a significant percentage of borderline patients (Robin et al., 2021; Zanarini et al., 2000; Zweig-Frank & Paris, 1991). It seems very unlikely that intermittent physical/sexual abuse by itself would result in the complex Theory of Mind impairments of borderline patients. Rather, this obvious abuse is most likely a glaring clue to an everyday invalidating social environment of the pre-borderline child (Kanj et al., 2023; Linehan, 1993; Paris, 1998). It is argued here that the identified childhood adversity is the most

visible sign of underlying, more subtle psychological/emotional adversity to and neglect of development of the mind that persists in regular communications, regardless of whether there are the more easily observed and usually intermittent physical and sexual abusive behaviors (Allen, 2003; Brassard et al., 2019; Dube et al., 2023; Franssens et al., 2021; Linehan, 1993; Lyons-Ruth et al., 2013; Miljkovitch et al., 2018; Porter et al., 2020; Riggs, 2010; Rutter, 1986; Schlensog-Schuster et al., 2022; Schneider et al., 2023; Schulze et al., 2022; Shapiro, 1998, 2009; Tschoeke et al., 2020; Vanwoerden et al., 2021a; Yuan et al., 2023). Persistent interfering and invalidating verbal and emotional interactions prevent the child from learning how to autonomously process and correctly understand social information (Kerr et al., 2021; Ryan, 2005). Fonagy and Bateman (2007) state about BPD: “We consider that the impact of trauma is most likely to be felt as part of a general failure of consideration of the child’s perspective through neglect, rejection, excessive control and unsupportiveness.” Gunderson and Chu (1993) state: “We contend, however, that it is not the trauma per se that results in BPD...but the gross disruptions of familial attachments and the massive failure of adequate care and protection of the child that results in distortions of normal character development.” Recent studies of hospitalized borderline patients (Botsford & Renneberg, 2020) and hospitalized adolescents with borderline pathology (Orme et al., 2019) found diminished trust in parents and close others, additional findings that should direct us to more extensive examination of developmental psychological harm. Liu et al. (2018) state “Emotional abuse has had considerably less attention in both research and clinical practice than childhood sexual and physical abuse...which might, in part, be due to the long-held view by clinicians and researchers alike that it is the least damaging form of abuse (see also Kanj et al., 2023). In contrast with this perception, the finding in our analyses of the largest effect for this maltreatment subtype adds to the accumulating evidence that its pathogenic effect is similar, if not larger than, that of other subtypes in relation to several mental health outcomes” (see also Baldwin et al., 2023; Dube et al., 2023; Schlensog-Schuster et al., 2022; Fonagy et al., 2015; Lippard & Nemeroff, 2019; Messman-Moore & Bhuptani, 2020; Porter et al., 2020; Riggs, 2010; Robin et al., 2021; Roepke et al., 2013; Schlensog-Schuster et al., 2022; Schulze et al., 2022; Tschoeke

et al., 2020.) These findings should not be surprising considering that the daily, routine emotional/psychological engagement of the mind of the caretaker with the developing mind of the child is the essential source of the child's working mind.

New research is necessary to more carefully investigate relatively subtle yet persistent caretaking psychological interference with and absence of support for learning how to autonomously feel about and understand self and others, as well as degrees of affectionless control and emotional neglect (Caspi & Moffit, 2018; Felitti et al., 1998; Fonagy, et al., 2015, 2016; James et al., 2018; King & Suh, 2018; King et al., 2023; Linehan, 1993; National Scientific Council on the Developing Child, 2012, 2014; Otani et al., 2016; Paris, 2018; Parker, 1979; Porter et al., 2020; Riggs, 2010; Robin et al., 2021; Robinson et al., 2013; Ryan, 2005; Schulze et al., 2022; Shapiro, 1998; Shonkoff et al., 2012; Skodol et al., 2019; Steele et al., 2019; Stepp, 2012; Tolpin & Kohut, 1980; Vachon et al., 2015; Vanwoerden et al., 2021a; Young et al., 2011; Yuan et al., 2023; Zanarini et al., 2019; Zweig - Frank & Paris, 1991). Studies must include information from as many sources as possible, since any person involved can be subject to bias or ignorance, e.g. the patient may not recall, understand, be in denial of, or untruthful about his/her childhood experiences, while the parent may be unaware of, not understand, be in denial of, or untruthful about ways she/he may have contributed to developmental harm (Boucher et al., 2017; Franssens et al., 2021; Fresco, 1984; Ha et al., 2014; Kerr et al., 2020; Khouri et al., 2020; Penner et al., 2019; Steele et al., 2019; Stepp et al., 2014a; Vanwoerden et al., 2017, 2021a, b). For instance, if a parent has had insufficient experience with sensitivity, either within herself/himself or while engaging with others, she/he may not have a necessary understanding of or empathy for, a sensitive, "difficult" pre-borderline child, even though otherwise being a reasonably caring parent with good intent (Fonagy et al., 2022; Nolte et al., 2023). New research must also examine other caretaker temperaments and emotions, including the ability to have and to maintain warmth and affection for a child regardless of her/his behaviors. Contributing to the absence of such studies is the continuing reluctance by researchers to examine possible parental contributions to maldevelopment of a child's mind (Cicchetti & Toth, 1995).

Although there is voluminous documentation of very frequent abuse

and neglect that provides pre-borderline children with disturbing social information, there has been an argument against considering childhood adversity as etiological for BPD because there is also evidence of childhood adversity in other personality disorders, although generally to a considerably less frequency or severity. This should not lead to dismissal but to more careful search for specific kinds and severities of adverse childhood experiences that are associated with specific disorders (Levin, 2019; Meehan et al., 2018b; Normann-Eide et al., 2019; Ridolfi et al., 2020; Tschoeke et al., 2020; Vanwoerden et al., 2019). In the case of BPD, it is particularly important to look for persistent psychological adversities that contribute directly to impairment of Theory of Mind development (Quek et al., 2018; Vanwoerden et al., 2021b), as well as specific temperamental characteristics of both pre-borderline children and their parents (see section F, Etiology).

2b: Alternate view that the impairments in processing social information in BPD involve inborn neurobiological deficiencies: The evidence for developmental harm in BPD is very strong, whereas evidence for inborn neuropathological flaws contributing to BPD is very weak despite extensive research. Neuroimaging, neurochemistry and genetic studies have resulted in inconclusive findings, and there is not confirmation that any findings are clearly harmful to development of the mind and also inborn, or whether they play any role at all in the disorder (Amad et al., 2014; Crowell et al., 2009; Distel & deMoor, 2018; First et al., 2018; Frances, 2016; Jasanoff, 2018; Kandel, 2019; Krause-Utz et al., 2018; Luyten, Fonagy & Campbell, 2023; Nasrallah, 2014; Pier et al., 2016; Skoldol et al., 2019; Weinberger, 2016). Nevertheless, a general belief continues that inborn neurobiological deficiencies must underlie BPD, and that research has provided confirmation. A contributing factor may be that researchers of the brain have expertise in highly technical fields, such as molecular biology, genetics and radiology, that can be difficult to adequately understand in the absence of specialized education. This can make it difficult for the reader to distinguish clearly pertinent and confirmed findings from complex theory and conjecture (Dumas-Mallet & Gonon, 2020; Lepore, 2023; Smith, 2023).

Efforts to identify behavioral and temperamental characteristics of children suggestive of inherently flawed neurobiology that will likely progress to BPD have also failed to produce clear findings (Goldman et al., 2013;

Lofgren et al., 1991; Stepp et al., 2014). For instance, although poor impulse control and emotion dysregulation in borderline patients have been attributed to inborn deficits, children with these characteristics are most likely to be on a path to ADHD or other disorders, rather than to BPD. On the other hand, there is evidence of some comorbidity and symptom overlap of ADHD and BPD (Akca et al., 2020, 2021; Calvo et al., 2020; Dietrich et al., 2021; O’Grady & Hinshaw, 2023; Stepp et al., 2012; Tiger et al., 2022). Weiner et al. (2019) state that “it is possible that ADHD symptoms in children, especially when untreated, may increase the odds of severe negative childhood experiences, and this in turn, may predispose to the development of BPD in adulthood in a subgroup of individuals.” There is strong evidence that high sensitivity is present in both pre-borderline children and borderline patients, and there is the theory, without confirmation, that “interpersonal hypersensitivity” and “rejection sensitivity” in borderline patients are signs of inherent neurobiological flaws (Gunderson, 2008, 2009; Oldham, 2009). This sensitivity characteristic is examined extensively in the next section, with the conclusion that the “unusual” sensitivity of the pre-borderline child is a normal characteristic of enhanced Theory of Mind, providing exceptional vulnerability to just moderate, or even mild, yet persistent psychological adversity.

There is evidence for heritability of about 55% in BPD, and this has been cited as evidence of inherent neuropathology in BPD (Belsky et al., 2013). However, evidence that there is heritability in a group does not by itself identify anything about the heredity factors. It is well known that there can be factors common to a selected group that are not in themselves a source of a disorder, but that have become co-opted as useful “risk factors” by an external causal agent (Dumas-Mallet & Gonon, 2020; Lewontin, 2000). Such risk factors can be perfectly normal, and could even have evolved as characteristics of evolutionary success. For instance, in the case of an infectious disease we might find this kind of interaction between the disease agent and some vulnerable risk factor within the person who becomes diseased, such as when an element in a normal immune system becomes captured by the disease agent to serve its requirements. Which is the “cause” and which is the “risk factor”? In the case of the infectious disease we of course assign the cause to the external disease agent and not to the otherwise normal immune system risk factor. It will be argued in Section F

that the exceptional “Differential Susceptibility” of enhanced brain domains for Theory of Mind is the neurobiological “risk factor” for BPD, and that this enhancement of a normal and usually very beneficial faculty accounts for the evidence of heritability.

Current response to treatment provides another strong indication that the borderline patient’s impairments in processing social information are not inherent. Although psychoanalysis and psychoanalytically-oriented psychotherapy were unsuccessful during the discovery period, often resulting in symptomatic worsening, borderline patients now respond very well to psychotherapy. Common features of current therapies are face-to-face supportive and exploratory engagement with appropriate boundaries, and guidance for learning how to tolerate stress, to self soothe, to be kinder to themselves, and how to develop healthy mentalizing while observing themselves in their interactions with others. This kind of engagement has been surprisingly successful for borderline patients, who now generally improve significantly over a very reasonable period of time. Remarkably, the prior psychotherapy failures, involving severe transference and counter-transference problems, have largely faded away. It can almost seem as if we have a new and milder condition. However if there are inherent neurobiological flaws underlying the disorder, the severity and duration of transference and other behavioral and symptomatic disturbances should have been rather independent of the psychotherapy method, at least for a considerably longer period of time. Instead, the very timely improvements of current patients gives considerable weight to the argument that the increasing self/other disturbances of patients in the earlier psychotherapies involved deep distrust and flawed attachment behaviors that had originated during defective childhood relationship experiences, and which had then persisted in the earlier, psychoanalytically oriented therapies because they did not provide a clearly positive, supportive and interactive patient/therapist engagement. Now that patients are being provided with psychotherapy that more closely matches their urgent requirement for a more secure interpersonal engagement, including very supportive “coherence, consistency and continuity” (Stolorow, Brandchaft & Atwood, 1983; see also Fonagy, Luyten & Bateman, 2017), they are finally experiencing a timely diminution of the profound distrust, severe symptomatology and confused efforts to influence and control.

Current psychotherapy models for borderline patients involve necessary elements of good parenting that are not that complicated. Considering how quickly and how well these therapies can work, it would seem that borderline patients must have reached adulthood in the absence of such parenting experiences. The following section explains how and why the natural “Differential Susceptibility” of enhanced Theory of Mind brain domains leads the “unusually sensitive” pre-borderline child (Goodman et al., 2010, 2013) to engage with deficient parenting in the development of her/his own Theory of Mind maldevelopment and associated symptomatology.

Section F, Etiology - Borderline Personality Disorder is a Fully Developmentally Engendered Disorder of Theory of Mind:

Differential Susceptibility of Theory of Mind Brain Domains and the P-Factor; Enhanced ToM leads to the Exceptional Vulnerability of Highly Sensitive Pre-Borderline Children, to the Heritability Evidence, and to the Unique Paradoxical Symptomatology of BPD; Childhood Psychological/Emotional Adversity is “Etiology” and the Differential Susceptibility of Enhanced Theory of Mind is the Neurobiological “Risk Factor” for BPD.

Introduction:

Preceding sections have provided argument and evidence that Borderline Personality Disorder is a disorder of the Social Intelligence faculty for Theory of Mind (ToM), second, that Theory of Mind is only an informationally empty neurobiological potential at birth that requires an extensive learning engagement with the childhood social environment to become a working faculty, third, that Social Intelligence brain domains for Theory of Mind are developmentally vulnerable to the nature of the childhood social environment, fourth, that these brain domains are inherently enhanced in pre-borderline children and are therefore exceptionally vulnerable to adverse environments, and fifth, that everyday psychological adversity during the development of the pre-borderline child's Theory of Mind causes these brain domains to develop very defectively.

In this Section the natural “Differential Susceptibility” of Theory of Mind brain domains is further examined. This characteristic provides the necessary flexibility for the child's Theory of Mind to develop collaboratively with the highly variable and complex human social environment, but paradoxically, in an adverse social environment this collaborative flexibility leads to active participation by these brain domains in their own developmental neuropathology. The very high sensitivity of pre-borderline children markedly increases this vulnerability to adversity. Key questions: What is Differential Susceptibility and why must it be present as a natural characteristic of Theory of Mind brain domains if this will also actively contribute to developmental failure in adverse developmental environments? What can we learn about the high sensitivity of pre-borderline children and borderline patients, and its developmental requirements? How can we determine

if this sensitivity is a feature of enhanced Theory of Mind, rather than a manifestation of inherently flawed neurobiology, providing an exceptional benefit in a healthy developmental social environment but also an exceptional vulnerability to developmental impairment in an adverse environment? What do we know about the parents of highly sensitive pre-borderline children? Do they provide specific kinds of adverse communications and behaviors that directly impact Theory of Mind development, and do highly sensitive pre-borderline children provide specific behaviors that can elicit adverse parenting behaviors? Could highly sensitive pre-borderline children actually require above average, enhanced parenting, and if this is provided would they develop not only normal, but enhanced, ToM abilities?

The Argument:

There are two models to consider in examining the developmental vulnerability of an organism to the nature of the environment. These are the “Diathesis-Stress Model of Susceptibility to the Environment” and the “Differential Susceptibility to Environmental Influences Model.” The classical Diathesis-Stress Model (Zuckerman, 1999) covers developmental impairments that occur when inborn limitations, predispositions or defects are engaged by environmental stressors. These inherent vulnerabilities do not interact differentially with variable environments, i.e. they are disadvantageous in certain developmental environments, but there are no environments in which they can be advantageous. This model fits many conditions and is the commonly accepted model for Borderline Personality Disorder (Oldham, 2009; Paris, 2021). However, the model does not offer an understanding for flexible inborn characteristics that will developmentally engage positively or even exceptionally with many or most environments, but will also engage very dysfunctionally with others that are incompatible with their requirements. The Differential Susceptibility to Environmental Influences Model covers such “malleable” characteristics that have “developmental plasticity” such that they will develop “differentially,” i.e. “for better or for worse,” depending on the nature of the developmental environment with which they interact (Belsky, 2013; Belsky & Pluess, 2009; Belsky et al., 2007; Ellis et al., 2011; Leighton et al., 2017; Meyer & Lee, 2019; Rioux et al., 2018). The Differential Susceptibility Model is labeled by Boyce as “Biological Sensi-

tivity to Context Model” in order to emphasize that differentially susceptible characteristics have developmental sensitivity and openness to the nature of the environment (Boyce & Ellis, 2005; Boyce et al., 1995; Ellis & Boyce, 2008; Fonzo, 2019; Quas et al., 2004). This phenomenon occurs commonly in the biological world, and the accepted explanation is that programming for developmental plasticity provides the opportunity for survival and evolutionary success while developing flexibly and collaboratively with variable or changing environments, even though this can also provide significant risk for developmental dysfunction or failure while engaging flexibly with significantly mismatching environments (Moczek et al., 2011; Pennisi, 2018; Pluess & Belsky, 2012; Wolpaw et al., 1991).

Are brain domains for Theory of Mind differentially susceptible to the nature of the developmental social environment? As discussed in Section C, Social Intelligence pathways for the Theory of Mind in the human brain have the major function of obtaining and using social information for survival and success in highly variable social environments. They must be very malleable developmentally in order to enable a child to learn from and conform to almost infinitely varying family and cultural environments, and this would include a high degree of openness and sensitivity for perceiving, understanding and collaboratively responding to complex and often subtle human social clues (Gardner, 1983). It therefore seems quite certain that the development of brain domains for Theory of Mind must involve high “biological sensitivity to context.” The exceptional plasticity of this unique human intelligence for learning from and adjusting to any developmental social environment encountered has been labeled “polymorphously educable” by Princeton anthropologist Ashley Montague (1989), and is one of the most remarkable and essential characteristics of our highly social species. However, since this intelligence is programmed to adapt to and conform with whatever social patterns and requirements are encountered, it will also begin to engage flexibly with adverse environments. Considering the histories of serious childhood adversity and the severe Theory of Mind impairments in BPD, it is imperative to consider this differential susceptibility scenario in examining the development of Borderline Personality Disorder.

Fonagy (Fonagy, 2014; Fonagy et al., 2015, 2016, 2017) recommends the term “Epistemic Trust” for a child’s natural openness to social informa-

tion. He defines epistemic trust as “trust in the authenticity and personal relevance of interpersonally transmitted knowledge. This describes an individual’s openness to learning from another person, acquiring information, and receiving and internalizing this new knowledge... The evolutionary purpose of epistemic trust is to enable social learning in an ever-changing social and cultural context by programming individuals to be very open for accessing new knowledge from their social environment.” Fonagy also states: “Put briefly, the theory of epistemic trust posits that the human infant - most usually first within the context of early attachment relationships - is instinctively inclined to develop openness to the reception of social communications from their primary caretakers. Stated otherwise, epistemic trust is an adaptation allowing the infant to receive social knowledge from... the complex edifice of human knowledge that their immediate culture has available to them.” This description of epistemic trust identifies it as a characteristic of the differential susceptibility of brain domains for Theory of Mind, providing a natural openness and vulnerability to learning from the developmental social environment. Fonagy posits that epistemic trust is interrelated in some way to a hypothetical, general neurobiological characteristic of the normal human brain, the “p-factor” (general psychopathology factor), that can render one vulnerable to experiencing epistemic “mistrust” and mental illness. It has been proposed that this p-factor provides a “quantitatively distributed, stable, generalized liability to develop any and all forms of psychopathology across the life course” (Caspi & Moffit, 2018; Choate et al., 2023; see also Caspi et al., 2014; McCabe et al. 2021). This statement can be modified to apply to brain pathways for Theory of Mind, since they are distributed in all activities of the brain involved in development of the mind, and their differential susceptibility is the p-factor, providing the inherent liability or vulnerability for participating in their own developmental failure in significantly mismatching social environments, leading to psychopathology. Of particular interest, Fonagy et al. (2015) propose that epistemic “mistrust” i.e. impaired Theory of Mind, can be an “adaptive consequence to the individual’s social environment,” and he refers to the extensive literature on childhood maltreatment in BPD (see also Fossati et al., 2016; Nolte et al., 2023; Shapiro, 2020). Fonagy et al. (2017a) state: “Findings on maltreatment...indeed point the way to understanding some of the mechanisms underlying the association

between the p-factor and vulnerability to (severe) psychopathology.” He suggests that inherent neurobiological factors could contribute to epistemic mistrust in BPD, citing the argument for brain deficiencies that fit the diathesis-stress model. However, his concepts about epistemic trust and the p-factor, when identified as features of the differential susceptibility of normal Theory of Mind brain domains to developmental neuropathology, eliminates a necessity to assume inherent neurobiological deficiencies.

Hermes et al. (2018) propose a neurobiological “dual-process theory” that can help to explain the progression from initial epistemic trust to “selective trust,” such as epistemic mistrust. “Type I processes” are functional shortly after birth, “operate fast, inflexibly, implicitly and automatically” and are “phylogenetically more ancient.” “Type II processes” are only potentials that gradually develop “selective trust” over time. Operatively, they are “relatively slow, flexible, and explicit. They depend on the availability of knowledge and cognitive resources...both types of processes continue to coexist in a person’s cognitive repertoire.” It is argued here that the Type I processes in humans are characteristics of the Part-One general primate brain domains for social perceptivity (see Section E). The Type II processes are characteristics of the Part-Two brain domains for Theory of Mind that gradually develop to provide a learned cognitive ability to select whom to trust (see also Apperly & Butterfill, 2009; Talia et al., 2021). Selective Trust becomes very dysfunctional in an adverse developmental environment.

In summary, the human Social Intelligence faculty for Theory of Mind is differentially susceptible during childhood development. This differential susceptibility is the p-factor, the natural, inherent vulnerability of brain domains for Theory of Mind to participate in the development of their own neuropathology. During a significantly adverse developmental learning experience the initial epistemic trust gradually becomes infiltrated with learned epistemic mistrust in response to interfering and invalidating communications. A child then progresses to the complex social challenges of adolescence carrying this very confusing and distressing combination of inherently programmed motivation to trust and learn from others, and a very apprehensive, learned mistrust of others.

Although the evidence is very strong that borderline patients have experienced a high degree of developmental adversity, the general differential

susceptibility of Theory of Mind cannot, by itself, explain the severe, complex and often paradoxical self/other symptomatology that uniquely identifies BPD. Could there be other inherent neurobiological vulnerabilities that are unique to BPD? For instance, inherently enhanced Theory of Mind would provide a very high degree of epistemic trust, but it would also provide exceptional vulnerability to developmental adversity. If this were the case in BPD, patients with more severe symptomatology should also, paradoxically, exhibit greater signs of enhanced Theory of Mind. It is interesting that Yeomans, Clarkin & Kernberg (2015) report: “As a rule, the sicker the patient, the more prominent is the patient’s transference in generating countertransference reactions.” Gabbard (1993) also notes that clinicians have more countertransference problems with more disturbed borderline patients.

Are there temperamental characteristics of borderline patients that would suggest the presence of such an enhanced neurobiological vulnerability? Siever states: “The signature of borderline personality disorder is the exquisite sensitivity to the vicissitudes of interpersonal relationships” (Goodman et al., 2009). There are many references in the literature to high “emotional sensitivity (ES)” in BPD, including “interpersonal hypersensitivity” and “rejection sensitivity” (Gunderson & Lyons-Ruth, 2008; Jeong et al., 2022; Pietrzak et al., 2005; Staebler et al., 2011). The DSM-5 diagnostic features section for BPD states “These individuals are very sensitive to environmental circumstances.” Since this sensitivity characteristic appears to be very dysfunctional in BPD, it is considered to be the expression of an inherent neurobiological flaw (Gunderson & Palmer, 2019), but the argument presented here is that the sensitivity characteristic is a feature of the “high sensitivity to context” (Boyce & Ellis, 2005) of enhanced Social Intelligence that has become quite dysfunctional during development of the mind in an adverse childhood social environment. (see also Robin et al., 2022 and Taylor & Vestergaard, 2022). This impairment to the operation of Theory of Mind can take full charge when the patient is stressed, particularly when anxiously involved in vulnerable engagements with others. However, the underlying, enhanced neurobiological Theory of Mind potential is retained, and enhanced processing of social information can sometimes occur, particularly when a patient is in a calm state of mind. The enhanced but impaired Theory of Mind underlies the complex and often contradictory self and relationship charac-

teristics and symptomatology of BPD.

Can the sensitivity observed in the adult borderline patient also be observed in the pre-borderline child? Goodman et al., (2010) stated: “Surprisingly little is known about the childhood and adolescent antecedents of adult BPD” (see Belsky et al., 2012; Lyons-Ruth et al., 2013; Sharp & Vanwoerden, 2015; Steele et al., 2015; Stepp et al., 2016). However, high sensitivity should be easily detectable. Goodman et al., (2010, 2013) carried out two excellent studies in which surveys were administered to parents of borderline patients, presenting them with questions about the childhood characteristics of their BPD offspring and non-BPD siblings, with one study of pre-borderline daughters and the other of pre-borderline sons. These two surveys covered three developmental periods, infancy/ toddlerhood, childhood, and adolescence. Some notable features characterizing the pre-borderline children as early as infancy and toddlerhood were “unusual sensitivity” (defined as “unusually stimulated and bothered by sensory or interpersonal stimuli”), “moodiness,” “inability to self-soothe,” and “excessive separation anxiety.” Such high sensitivity would likely involve exceptional vulnerability to feeling insecure in adverse and unsupportive social environments, giving rise to anxious attachment behaviors. Are the co-occurring inability to self-soothe, moodiness, and excessive separation anxiety signs of failing efforts to experience a secure attachment experience? Would a persisting failure to achieve a successful attachment have any relationship to caretaker communications and behaviors (Cervantes et al., 2023; Cicchetti & Toth, 1995; Fonagy et al., 2003; Riggs, 2010; Steel et al., 2015)? Would an enhanced degree of positive caretaker attention, warmth and support be necessary for such a pre-borderline child to develop healthy Theory of Mind? This crucial discovery by Goodman et al. of the pre-borderline child’s exceptional sensitivity carries a strong indication for extensive exploration of the everyday parent/child relationships in Borderline Personality Disorder (see also Tedesco et al., 2023).

Subsequent to infancy and toddlerhood the exceptional sensitivity of the pre-borderline children in the Goodman studies continues, and is also demonstrated in adult borderline patients (Dubose & Linehan, 2005). During childhood and adolescence other features gradually appear and become prominent, including impulsivity, acting out, relationship difficulties, and

self-harm. Increasing symptomatology emerging by early adolescence may well reflect a persisting failure to have the successful attachment experience that is necessary for developing self/other competence, while at the same time there are increasingly complex self and interpersonal challenges. Sharp et al. (2018, 2021) present convincing argument that the period of adolescence is a “sensitive period” during which “an agentic self-determining author of the self emerges... The monumental achievement of developing an agentic, self-determining author of the self during adolescence is offset by the significant vulnerability associated with failure of achieving such integration, consolidation and coherence” (See also Sharp, 2020; Sharp & Wall, 2021; Sharp et al., 2020, 2021). There is now firm evidence that borderline symptomatology can be present by age 11 or even earlier (Franssens et al., 2021; Chanen et al., 2022; Tedesco et al., 2023), and that this can progress to full BPD before adulthood is reached (Choi-Kain & Sharp, 2021; Wertz et al., 2019). For many years borderline symptomatology in adolescence was considered to often be an elevated level of general adolescent development (Chanen et al., 2022). However, Sharp and Wall (2018) found that “There is mounting evidence that personality pathology, in particular, borderline pathology, is a valid and reliable construct in adolescence, with prevalence, phenomenology, stability and risk factors similar to that of adult personality disorder.” Sharp’s groundbreaking work firmly establishes that Borderline Personality Disorder can have its symptomatic beginnings by very early adolescence and gradually progresses to the full disorder during later adolescence and early adulthood, with response to treatment in line with that of adult patients (Sharp et al., 2021 b). It is argued here that the underlying neuropathology of Theory of Mind brain develops progressively during the childhood social experience, and the symptomology then emerges with the failure to develop an “agentic self-determining author of the self” during the major social challenges of adolescence.

Lazarus et al. (2019) carried out a study that examined the association of borderline symptomatology in 15 to 19-year-old adolescent girls with characteristics of their romantic relationships. Greater borderline symptomatology was associated with more dating partners, higher self-reports of the importance of these relationships, higher relational insecurity, and higher be-

lief in romantic partner support. However, higher belief in partner support also predicted increases of BPD symptoms over time. Considering the extensive evidence of caretaking adversity in BPD, an explanation for this paradox can be that girls with higher borderline symptomatology are following a developmentally flawed attachment model involving intense, unresolved attachment needs, and an urgency to find and commit quickly to an intimate relationship. The frequency of dating partners suggests a frequency of relationship failures that would then contribute to further increases in symptomatology. Another study by Penner et al. (2019), involving younger adolescent females who were hospitalized with BPD, found riskier attitudes and perceived peer norms about sexual behaviors, and lower self-efficacy to refuse sex, as compared to inpatient females without BPD. However, there were not significant differences in actual risky sexual behaviors. This is compatible with the concept of increasing romantic relationship difficulties beginning in early adolescence and followed later by the more sexually active and failing romantic relationships found in the Lazarus et al. study.

Do the pre-borderline children persist during adolescence in a continuing search for an unmet primary attachment learning experience by unwittingly attaching themselves romantically to individuals who have some problematical personality characteristics and behaviors similar to those of the parents, as well as interacting with others as if they do (Allen et al., 2011; Cicchetti & Toth, 1995; Hepp et al., 2018; Jeung et al., 2020; Pickard, 2015; Riggs, 2010; Shapiro, 1992, 1998, 2009, 2020; Vestergaard et al., 2020; Wilkinson & Gabbard, 1993)? The differential susceptibility of Theory of Mind can provide an explanation for such a paradoxical scenario, in that the programmed epistemic trust of the pre-borderline child engages with the parent's adverse personality characteristics and behaviors to develop an imprinted but flawed attachment model that then persists into adulthood in spite of continuing relationship failures (see also "Epistemic Style" in Talia et al., 2021). A patient's unusual story suggests such an attachment model. Her father sexually molested her from a very early age and had made her his regular sexual partner from the age of 8 to 16 years, with the silent acquiescence of the mother. The patient was led to believe this was fine, although she worried a little about the strict rule to not speak of this to others. At 16 she learned this was "terribly wrong," and she left home carrying a great deal of anger.

Years later she still had the gun she had purchased when her father married his second wife, just in case they had a daughter who could be sexually abused. She had vowed to herself to find a man completely different from her father, and she married a very nice man whom she found to be extremely boring. She stayed with him until their child finished high school, and she subsequently met a “wonderful”, outgoing, handsome businessman. They married only 3 months after their first meeting. The marriage was very successful for about two years, but then she discovered he was having sexual encounters with other women. During marital counseling he revealed that his mother was a prostitute and that he was raised essentially in a brothel. There is an unusual ending to this story in that, although this man was behaviorally somewhat like her father, he was much more capable of warmth, sensitivity and empathy, and after a considerable period of individual and marital therapy they became close again, moved back together and started a new business together.

Interestingly, the sexual abuse itself did not appear to be a central issue in this patient’s Theory of Mind difficulties. When questioned about her experience of routine incest throughout childhood and adolescence until the age of sixteen, she reported that she did not experience it as abnormal because her parents created an atmosphere of complete normality about it. She assumed that the rule not to talk about sex with others was a general social rule. She said that she had always enjoyed sex and that she had no problems with sexuality itself. All of her problems appeared when she discovered that the parental guidance about sex and sexual behaviors had not only been very incorrect but that it had been totally bizarre, evil and extremely against social rules. She subsequently married inappropriate partners as a result of this flawed learning experience. This is a good example aligned with the argument presented here that routine, harmful psychological/emotional experiences are key to the development theory of mind flaws, with physical/sexual abuse providing a participating role (see also Kanj et al., 2023).

The task of learning about self and others begins with the infant’s initial contact with a human being, and each stage of subsequent social development requires further self/other learning in increasingly complex social situations. New learning is helped or hindered by what has been learned, mis-learned or not learned during prior experiences, and a very “gradual etiology” of BPD can be developing continuously during self/other mislearn-

ing throughout infancy, childhood and adolescence (Allen, 2003; Hughes et al., 2012; Lyons-Ruth & Brumariu, 2020; Masland & Hooley, 2020; Talia et al., 2021). This lengthy etiology scenario strongly suggests that the best interventions would be the earliest interventions (Brody & Mills, 1997; Chanen et al., 2017, 2021, 2022; Choi-Kain & Sharp, 2021; Cicchetti & Toth, 1995; Franssens et al., 2021; King et al., 2023; Schmeck et al., 2022; Sharp et al., 2021, 2021a). The notable “rejection sensitivity” of the adult borderline patient would then be the result of persistently failing relationship experiences that have accumulated into adulthood (Pietrzak, Downey & Ayduk, 2005; Sturrock & Mellor, 2014). In therapy, the borderline patient might understand guidelines for her/him to be open and trusting with an experienced mentor, but this vulnerable setting for trust can resonate strongly with the childhood caretaking experience, and with all the prior interpersonal failures, even though it seems to offer a new opportunity for a secure attachment experience. Despite this apprehension, borderline patients can be quite aware that they nevertheless require help for their troubling self/other problems and that they must take the chance of engaging vulnerably with someone (Zanarini et al., 2016). This combination of high sensitivity to others, urgency to personally connect with someone, and a painfully learned expectation to experience relationship failure, could quite understandably lead to the characteristic “rejection sensitivity” and “hypermentalizing” that occurs in the context of engaging in a psychotherapeutic relationship. At the same time, the patient’s distrust of the clinician can evoke adverse responses by the clinician. There is also a likelihood that the patient’s dysfunctional Theory of Mind may actually have involved a somewhat appropriate working model for engaging with an adverse caretaking environment. This would add further to the patient’s difficulties processing and understanding social information in the social world beyond the family social environment.

It is most important to replicate the Goodman findings, with the addition of careful examination of the psychological characteristics of, and the everyday communications and behaviors by, the caretakers (Cervantes et al., 2023; Cicchetti & Toth, 1995; Das & Sarkar, 2023; Fonagy et al., 2003; Riggs, 2010; Robin et al., 2022; Ryan, 2005; Schlensog-Schuster et al., 2022; Steele et al., 2015). The Goodman studies did not include pertinent inquiry about either the parents’ routine behaviors toward the pre-borderline children

or their reactions to the children's needy behaviors. Also, the patients were not carefully interviewed about their own views of the parenting experience (Franssens et al., 2021). What were the patients' memories about their childhoods, particularly the experience of having been identified as "unusually sensitive"? Were the parents in the Goodman studies largely in the audience observing the child's behaviors, or were they actively on the life stage with the child, acting in the role of mentors and guides, and thereby having interactions with the increasingly problematic behaviors (Lyons-Ruth et al., 2015; Quek et al., 2018; Vanwoerden et al., 2021b)? Did they provide love, warmth, parent-child physical proximity and emotional closeness at a level comparable to that provided to the siblings, and did they find any appealing characteristics in the pre-borderline children (Barnett et al., 2021; Kerr et al., 2020; Ridolfi et al., 2020)? Lyons-Ruth et al. (2013) found strong evidence that "maternal withdrawal in infancy predicts both borderline symptoms in general and suicidality/self-injury in particular, almost 20 years later." Did the parents have competent mentalizing abilities (Allen et al., 2011; Fonagy et al., 2003, 2022; Nolte et al., 2023; Sharp et al., 2020)? Did they consider that every child is born with its own emerging personality characteristics, and that the way these characteristics play out might depend to a significant degree on the caretaking experience? For instance, did the high behavioral reactivity of the sensitive pre-borderline child suggest to the parent that this child might require increased efforts to understand her/his needs and feelings, along with increased patience, reassurance, and comforting, or was the "unusual" sensitivity identified by parents who were not particularly familiar with sensitivity characteristics and behaviors, and who therefore might have found them unpleasantly foreign in a troublesome sense rather than eliciting any sense of familiarity or understanding (Brumariu et al., 2020; Khouri, 2020; Ryan, 2005)? Were sufficient degrees of psychological freedom allowed for the child to naturally learn about self and others (Bowlby, 1988; Fonagy et al., 2015; Kohut, 1979; Nolte et al., 2023; Sharp & Fonagy, 2018), or were parents "overprotective" in a restrictive sense, limiting a necessary degree of behavioral and mental autonomy, either because of their own beliefs or in reaction to the child's behavioral challenges (Levy, 2005; Ryan, 2005; Sharp & Kim, 2015; Vanwoerden et al., 2021b; Zweig-Frank & Paris, 1991)? Did the parents understand that learning is a two-way street in which children

learn about the social world from parents while at the same time the parents learn about who the child is temperamentally, or did the parents assume that the child's mind should present as more of a blank slate, and that temperamental characteristics are not something to be owned by a child but instead are factors to set aside or eliminated during a correct learning experience (Penner et al., 2019)? Were there routine invalidating and/or interfering communications (Linehan, 1993) directed to the child's natural experiences and communications of thoughts and feelings? Would such adversity have to be severe to result in borderline symptomatology, or could mild but everyday psychological adversity gradually bring about serious psychopathology in highly sensitive children? In addition to direct parent to child influences, what was the nature of parent to parent everyday communications and behaviors that the children were observing and experiencing?

Did the parents in the Goodman study nevertheless provide enough positive parenting behaviors that there should have been a reasonably secure attachment experience (Franssens et al, 2021; Valadez et al., 2020)? For instance, did the unusually sensitive children experience sufficient acceptance and love despite parental stress about and discomfort with their behaviors, or did they learn to feel flawed and unlovable during an insecure attachment experience (Bo et al., 2017; Crowell et al., 2009; DeWolff & van Ijzendoorn, 1997; Dixon-Gordon et al., 2020; Fonagy et al., 2003; Gambin, et al., 2020; Khoury et al., 2020; Linehan, 1993; Steele et al., 2015; Stepp et al., 2016; Stone, 2019)? Agrawal et al. (2004) reviewed 13 empirical studies of attachment in BPD and found that all of these studies demonstrated a strong association between BPD and insecure attachment. They state, "Because the insecure attachments of borderline patients are so manifest, so central to the problems that they present for treatment, and so central to theories about the pathogenesis of BPD, the empirical examination of these attachments has considerable clinical and theoretical significance."

Could the highly sensitive pre-borderline child have actually required an above average level of supportive caretaking to establish a good attachment experience? Suomi's remarkable study of Rhesus monkeys is highly suggestive that enhanced nurturing characteristics may be necessary to assure fully successful social development of sensitive children. Stephen J. Suomi, Ph.D. is Chief of the Laboratory of Comparative Ethology at NIH

and Professor at the University of Wisconsin and other universities. His classic study of Rhesus monkeys (1991a) provides fascinating findings that align with four concepts examined here: first, childhood development of a working Social Intelligence is differentially susceptible to the nature of the developmental social environment, i.e., biologically sensitive to context, second, high sensitivity to the social environment is a feature of enhanced Social Intelligence rather than flawed neurobiology, third, enhanced Social Intelligence is associated with exceptional vulnerability to the nature of the developmental environment, along with heightened attachment behaviors, and fourth, certain enhanced caretaking features could be necessary for successful social development of highly sensitive offspring. Suomi selectively bred Rhesus monkeys to be “high reactive” to their environment. The Infant monkeys were highly sensitive to their social environment and “react to brief social separations with unusually high cortisol and ACTH elevations, exaggerated noradrenaline turnover, and much more ‘depressive’ behavioral reactions than the other mother-reared subjects,” and they “display extreme behavioral and physiological reactions in other novel and/or challenging settings.” They maintained an anxious and fearful interactive pattern with other monkeys throughout development, reaching a very marginal adult social adjustment at the bottom of their peer group hierarchy. However, when these apparently inherently flawed “high reactive” monkeys were raised by very nurturing foster mothers who exhibited no or minimal discomfort in response to their anxious behaviors, they soon became quite stable and grew to be exceptionally socially skilled adults who were not only perfectly normal but who, very paradoxically, became the dominant members of their adult peer groups!!! The nurturing foster mothers were identified as “especially protective and supportive of their infants’ exploratory efforts, and much less punitive and rejecting during weaning than the norm for the species.”

It appears that Rhesus monkeys have some precursor characteristics of Theory of Mind. When these are enhanced, a distinctly supportive and protective attachment and learning experience is necessary for these monkeys to develop successfully. When this requirement is not met, they become anxious, fearful and very socially impaired adults, but when it is met they develop enhanced social skills. Suomi (2000) states that the “high reactivity

may be an advantage when raised in the appropriate context.” Analogously, Sharp and Kim (2015) suggest differential susceptibility in BPD, stating that the “greater sensitivity to negative environmental perturbations” of borderline patients may be a characteristic of “genetic vulnerability” that is “also likely to increase the potential to benefit from positive experiences under normal circumstances.” Amad et al. (2014) conducted a systematic review of the literature about the genetics of BPD. They found that although there is high heritability in BPD, there has been no identification of “susceptibility genes.” They suggest a “paradigm shift” to search instead for “plasticity genes” that can interact with adverse childhood environments to result in BPD but that can also interact with “supportive and enriching” environments to result in “other or no psychopathology.” Similarly Boucher et al. (2017) cite “plasticity genes...making one vulnerable to only negative outcomes,” but that could also “react significantly more positively to adequate parental care.” The Rioux, Sequin & Paris paper (2018) titled “Differential susceptibility to the environment and borderline personality disorder” states: “Less attention has been paid to the possibility that higher levels of emotional reactivity, which is likely at the root of emotional dysregulation, can sometimes be helpful and adaptive.”

It is argued here that the “high reactivity” of the rhesus monkeys and the “unusual sensitivity” of the Goodman pre-borderline children are both characteristics of enhanced, differentially susceptible Social Intelligence that provides exceptional vulnerability to the nature of the developmental social environment. Although the sensitivity and reactivity are features of neurobiological enhancement for social learning, these characteristics can become dysfunctional in mismatching developmental social environments, leading to the expectation that all social encounters and relationships are likely to be or become harmful. The finding that the high reactive monkeys develop to be socially defective unless nurtured by enhanced parenting strongly suggests the likelihood that the greater the sensitivity of a human child, the more sensitive the parenting should be to assure successful development of self/other faculties (Rioux et al., 2018; Valadez et al., 2020). In an editorial in the journal, *Clinical Child Psychology and Psychiatry* (2013), Kennedy states that the “idea that a group of children can be identified with underlying neurobiological sensitivity that can lead to bidirectional outcomes for ‘better or worse’

challenges the more prevalent ‘dual risk’ or ‘stress diathesis’ paradigm, i.e., that vulnerability and stress interact to produce adverse outcomes... Neurobiologically sensitive and reactive children are designated ‘orchid’ children in their capacity to develop beautifully given sensitive nurturance alongside their tendency to develop adverse developmental outcomes in less than optimal environmental conditions.” Results of the Suomi study also serve to remind us that a parent/child temperamental mismatch could be the source of Theory of Mind impairment even when neither the parenting nor the child’s behaviors and neurobiology are defective in themselves. Graybar and Boutilier (2002) state: “The goodness-of-fit literature considers the disparity between the demands of a child and the capacities of the environment to adequately meet these demands. When the disparity between the needs of the child and the capacity of the parents is too great, family dysfunction and psychological distress occur” (see also Garner & Yogman, 2021). An underlying goodness-of-fit disparity in BPD may well be the pre-borderline child’s elevated Theory of Mind, and the parent’s average or lower Theory of Mind (Shai et al., 2022; Vanwoerden et al., 2021b). The results of the Suomi study also suggest that parenting failures with pre-borderline children may be largely due to the absence of good sources for parents to learn how to raise very sensitive, needy children. The study additionally indicates that necessary parental communications for healthy development of a working Social Intelligence are not only the verbal communications, which monkeys are incapable of providing, but are also, and perhaps even more important, the non-verbal empathy and warm fostering of the comfort, security and autonomous learning of the child beginning in infancy, well before language interchange is established (Kohut & Wolf, 1979). The critical importance of early non-verbal communications is suggested by a study of “Kangaroo Mother Care,” in which parents of low-birth-weight infants were directed to immediately begin providing a high degree of long-term, skin-to-skin contact and exclusive breast feeding (Charpak et al, 2017; see also Barnett et al., 2021). Twenty-year follow-up studies showed that significantly fewer of these subjects were hyperactive, aggressive, or impulsive compared to controls, and they also were found to have somewhat larger brains and had better jobs.

The concept that inborn neurobiological factors provide a child with inherent resilience in the face of adversity has received considerable

attention (Fonagy et al., 2016). It is quite interesting that Suomi's monkeys were born without any evidence of inherent resilience in the face of adversity, yet they were able to gain remarkable resilience during a specific supportive child/caretaker relationship. These findings strongly suggest a likelihood that the most important source of resilience in humans may not be the inborn toughness observed in many animals, but is instead the experienced tenderness (Boyce, 2019; Fonagy et al., 2022; Garner & Yogman, 2021). The significance of the caretaking contribution to the development of resilience is demonstrated in Werner's longitudinal study (1989) of 545 individuals from birth to age 32. All of the children who managed to be resilient in spite of a combination of perinatal distress, family poverty, and family discord or parental mental illness, had "a close bond with at least one caretaker from whom they received plenty of positive attention during the first year of life," i.e. the intimate relationship of the infant with a nurturing caretaker provided a learned resilience that delivered relative invulnerability even in exceptionally adverse developmental environments (see also Cohen et al., 2020).

How often do the personality characteristics and behaviors of highly sensitive pre-borderline children engender significant disapproval, irritability or dislike in parents, perhaps somewhat analogous to negative reactions of some clinicians to borderline patients? This is another "paradox" of the borderline story, in that the child may require enhanced parenting behaviors of warmth, soothing and patience, and yet the child's needy behaviors and temperamental characteristics can instead elicit rejecting and other adverse parenting behaviors (Crowell et al., 2009; Dixon-Gordon et al., 2020; Franssens et al., 2021; Linehan, 1993; Ryan, 2005; Sharp & Fonagy, 2008b; Steele et al., 2015; Valadez et al., 2020). In a vicious cycle these adverse parenting behaviors can then intensify the child's "troublesome" behaviors, further alienating the parent (see also Lyons-Ruth et al., 2015). In his book "Fatal Pauses" (2015), Stuart Yudofsky, past Chairman of the Menninger Department of Psychiatry and Behavioral Sciences at Baylor College of Medicine, provides an interesting report of a patient, "Eleanor," whose disorder involved developmental dynamics similar to those proposed here, i.e. enhanced Social Intelligence with developmental interference and invalidation, and with parental discomfort with and dislike of her personality characteristics. She was

a Harvard sophomore who had been referred to Yudofsky with a diagnosis of Anorexia, but he found that her “childhood trauma was nearly identical to many people with Borderline Personality Disorder.” Eleanor was highly intelligent and sensitive, and she had an “innate, gifted” ability to perceive “cognitions and feelings of others,” which Yudofsky labeled “supermentalizing” (a contrast to “hypermentalizing”). These characteristics were risk factors for disapproval, dislike and abuse by her controlling and invalidating mother. She was fortunate to have a father who provided genuine love and acceptance, although he was unable to protect her from her mother’s adverse behaviors. Yudofsky refers to parents who are uncomfortable with a child who can “seem to read minds and feelings” because they “feel as if their boundaries are constantly being violated.” He believes that such gifted children have no escape from this predicament since they “can’t help what they are so clearly perceiving any more than they can be willing to turn on and off their vision or hearing without blindfolds or earplugs. In the case of supermentalizing, however, blockade of their special sensibilities would require general anesthesia.” With regard to Eleanor’s mother, it is interesting that Kernberg (1975) lists two notable characteristics of pathological narcissism as “remarkable absence of interest in and empathy for others” and “remarkably intense envy of other people who seem to have things they do not have or who simply seem to enjoy their lives... I stress the presence of chronic, intense envy, and defenses against such envy, particularly devaluation, omnipotent control, and narcissistic withdrawal, as major characteristics of emotional life.” This appears to be a perfect mismatch for a sensitive child, i.e. a parent who both dislikes and is envious of the child’s inherent nature. There are well-documented findings that perfectly normal children who have enhanced intellectual, musical or other intelligence can develop serious problems as a result of envious or other negative reactions by others, and who can even be “at special risk for being tagged with an inappropriate diagnosis of mental disorder” (Frances, 2013b; see also Brody & Mills, 1997). This kind of situation is described by Andrew Solomon in his National Book Award-winning book, “*Far from the Tree: Parents, Children and the Search for Identity*” (2012). Much of the book is about children with disabilities, but in the lengthy “Prodigies” section he states “Pity impedes the dignity of disabled people; resentment is a parallel obstacle for people with enormous talent. The pity and the resentment alike

are manifestations of our fear of people who are radically different.” Studies of caretaker personality characteristics and behaviors could provide information about such parent/ child scenarios in cases of BPD. The Johns Hopkins Center for Talented Youth (CTY), SENG (Supporting Emotional Needs of the Gifted), The Child Mind Institute, and The Stanford Neurodiversity Project, provide advice for working with “Twice Exceptional” or “2E” children, i.e. children with enhanced mental abilities and talents who also have vulnerabilities such as Dyslexia and ADHD (Brody & Mills, 1997; Dare & Nowicki, 2015). They have not yet provided significant advice for working with children who have vulnerabilities that are inherent to their enhanced mental abilities such as sensitive pre-borderline children (Aron, 2015; Baryla-Matejczuk et al., 2020; see also Taylor & Vestergaard, 2022).

Are there other mental disorders or states that involve high sensitivity? Individuals with Social Anxiety (SA) and Social Anxiety Disorder (SAD) also demonstrate sensitivity to others, with hypermentalizing apprehension that they will be assessed negatively. In a recent study of 113 young adults with SAD, Ballespi et al. (2019) found that hypermentalizing “was associated to SAD only when it was self-referential,” i.e., when the person was involved in an uncertain social situation in which she/he was personally engaged. The authors conclude that the hypermentalizing is “not stable but is context-dependent,” which “suggests that people with SAD can show adequate mentalizing capacity” when not experiencing interpersonal stress. Such context-dependent impairment in mentalizing about others has now been observed in both BPD and SAD. Weinbrecht et al. (2020) carried out a study examining individuals with BPD, SAD and normal controls. Self-report questionnaires revealed that both the borderline and social anxiety groups demonstrated high apprehension of both positive and negative evaluations by others, along with high rejection sensitivity and social anxiety. The scores of the two groups did not differ significantly from each other, but they both differed significantly from the controls. The two groups also demonstrated higher scores than controls in a test measuring “BPD specific cognitions.” Childhood adversity has been found to be a risk factor for both Social Anxiety Disorder and BPD. Could BPD and SAD be disorders in a continuum, in which there is a higher level of sensitivity and more severe caretaking psychological adversity in BPD?

What do we really know about the characteristic of “sensitivity” in BPD? What can we learn from the general literature about “The Highly Sensitive Child”?

Observation that a borderline patient is highly sensitive introduces us to a behavior but doesn't tell us what we really need to know about it (Hartmann, 1991; Lo, 2018; Pluess, et al., 2023; Wall et al., 2018). Should we continue to assume that there is simply a defective characteristic of “too” sensitive in borderline patients, or is there much more to learn? It is estimated that 20% to 30% of people in the general population are very sensitive to their environment (Lionetti et al., 2019). Is this general sensitivity characteristic comparable to the sensitivity of borderline patients? Sensitivity, along with ADHD, is often identified as a characteristic of “difficult” children (Baryla-Matejczuk et al., 2020; Lionetti et al., 2019). We know that sensitive children can be very reactive and susceptible to behaviors of parents as well as to their own discomforts, that they can cry easily but can also respond quickly to a smile, and that their neediness and sudden emotional changes can be bewildering and frustrating, especially for new parents. The “Sensitive Child” is a subject of novels and other literature, in which the sensitivity is often considered a harbinger of personality breadth and depth. Writers such as Dickens have understood that talents underlying sensitivity may not be recognized by others but instead the child can be seen as weak and/or irritating, with boys frequently subjected to bullying (Boyce, 2019). Could the sensitivity of the borderline patient be on a continuum with this sensitivity described in the literature, but involving a particularly high degree of developmental harm to this feature? Biographies of exceptionally talented artists who also had mental illnesses have described both sensitivity and adverse childhood histories (de Lima Martins & Chagas, 2022; Jamison, 2017; Miller, 1983; Storr, 1988; Thomson & Jaque, 2018), suggesting the dynamic described here for BPD. There are popular theories that the mental illnesses contributed to their artistic creativity or that artistic genius by itself can provide vulnerability to mental illness, but these theories do not take into account that it may be the inherent vulnerability to developmental adversity of enhanced Social Intelligence of these artists, rather than the artistic talent itself, that is the characteristic directly associated with mental illness. Kay Jamison, Professor of Psychiatry at Johns Hopkins University and Hon-

rary Professor of English at St. Andrews, published an excellent biography of Robert Lowell (2017), a gifted but troubled poet who had bipolar illness involving dramatic manic episodes followed by severe depressions. Jamison found that Lowell's poetic creativity and productivity increased when he was manic, which suggests a direct link between artistic creativity and mental illness. However, Lowell had been a sensitive child who grew up in a toxic, controlling and invalidating caretaker environment. Lippard and Nemeroff (2019) cite the accumulating evidence of a "link between childhood maltreatment and disease onset and course in bipolar disorder." It may be that the heightened artistic creativity during Lowell's manic states involved sudden, uncontrolled release of autonomous and creative thoughts and feelings from chronic, developmentally imposed constraints, but then this exciting state continued to progress out of control because there was absence of a learned supervisory sense of self. Manic episodes were then followed by severe depressions, perhaps at least partly because the manicky release of inner freedom was experienced as a guilty betrayal of harsh childhood maxims.

Necessary Theory of Mind Research:

This monograph presents an extensive argument that the natural Differential Susceptibility of enhanced Theory of Mind brain domains provides the inherent neurobiological risk factor for the development of BPD. **Figure 1** is an outline for the argument. Is this new theory fiction or is it reality? **There are two kinds of research** that should be of particular help in identifying a differentially susceptible neurobiological faculty underlying both healthy and defective development of the human social mind. **The first kind of research** would be further investigation of the nature and timing of caretaking influences and child responses during development of Theory of Mind (Cicchetti & Toth, 1995; Herman et al., 1989; Lyons-Ruth et al., 2013; O'Grady & Hinshaw, 2023; Riggs, 2020; Robin et al., 2022; Steele et al., 2015; Vanwoerden et al., 2021b). It is particularly important to carefully examine caretaker personality characteristics, and routine communications and behaviors over time, beginning as early in the child's life as possible since there is evidence that caretaking limitations and adversities during infancy and early childhood can result in particularly enduring harm to sense of self and ability to achieve intimacy with others (Boucher et al., 2017; Brumariu et al., 2020; Fonzo, 2019;

Enhanced Social Intelligence at Birth	Childhood Social Environment	Childhood into Early Adolescence	Adolescence into Adulthood
<u>Highly Sensitive Child</u>	<u>Positive</u>		
Enhanced General Primate Social Perceptivity: Minimal Learning Experience	Supportive	Enhancement Retained	Enhancement Retained
Enhanced Human Theory of Mind Potential: Extensive Learning Experience	Supportive	Well-Developing Theory of Mind and Very Successful Peer Relationships	Excellent Social Adjustment Leading to Successful Education and Career
<u>Highly Sensitive Child</u>	<u>Adversive</u>		
Enhanced General Primate Social Perceptivity	Persistent Psychological/ Emotional Adversity	Enhancement Largely Retained	Enhancement Largely Retained
Enhanced Human Theory of Mind Potential: Exceptional Differential Susceptibility	Persistent Psychological/ Emotional Adversity to and Neglect of the Development of a Working Social Mind	Working Theory of Mind Is Developing Defectively, but The Inherently Enhanced Theory of Mind Potential Is Retained	Very Impaired Mentalizing and Understanding of Self and Others, with Occasional Normal and Even Enhanced Mentalizing and Perceptivity about Self and Others
		Limited Social Skills and Peer Difficulties	Failing Romantic and Other Relationships
		Gradual Appearance of Borderline Symptomatology	Increasingly Severe Symptomatology Progresses to Full BPD
			Psychotherapy Modifications Help to Resolve the Persisting Theory of Mind Psychopathologies

Figure 1: Differential Susceptibility of Enhanced Theory of Mind and its role in the development of Borderline Personality Disorder

Johnson al., 1992; Kalin, 2020; King et al., 2023; Luby, 2020; Levy, 2005; Levy et al., 2015; Lyons-Ruth et al., 2013; Quek et al., 2018; Riggs, 2020; Rosenberg et al.,1992; Shapiro, 1978; Stepp, et al., 2014b; Suomi, 1991b; Valadez, 2020). Considering that the borderline condition could sometimes be engen-

dered when neither the parent's nor the child's personality characteristics are clearly problematical in themselves, and that both could even be considered within the range of "normal" although harmful in combination, this research must be very carefully planned and carried out. We argue that neither the characteristics of parenting nor the child's inherent neurobiology can by themselves separately explain BPD. The key is the *interaction* between parental ignorance of how to work with a highly sensitive child, and the child's initial absence of a working Theory of Mind faculty that could provide some self-guidance. Research can benefit from inclusion of patients and parents as acknowledged members of the research team (Ardito & Rabellino, 2011; Bo et al., 2022; Tusiani-Eng & Tusiani, 2018; Woodbridge et al., 2023). Patients and researchers with a personal history of having BPD would be particularly helpful as co-investigators since they have the minds that are under study (Chanen et al., 2017; Gabbard, 2018; Jamison, 2023; Kimhy et al., 2022; McAdams, 2018; Mehran et al., 2018; Park & Covi, 1965; Park et al., 1966, 1967; Tedesco et al., 2023; Wall et al., 2018; Young et al., 2011). Research collaboration with pediatricians to follow the course of sensitive children and their parents over time can also provide an opportunity to elucidate child and caretaker characteristics and interactions.

Research that examines caretaker verbal, temperamental and behavioral involvement in a child's psychological maldevelopment can be difficult to initiate considering the general discomfort and reluctance about investigating parenting as a possible source of mental illness. It is most important to be mindful about the "blame" debate over who carries responsibility for the occurrence of mental illness (Kerr et al., 2021; Pickard, 2013, 2014). At the American Psychiatric Association Annual Meeting in May 2016, Gabbard cautioned that we do not want to return to blaming mothers for BPD, as was the story of the "schizophrenogenic mother" and the "refrigerator mother" of autism. It was a serious error to blame parenting flaws as the source of Schizophrenia and Autism, and we may now be making a serious over-corrective error in "blaming" the child's inherently flawed neurobiology as providing the source for BPD, in the absence of carefully examining the match between parenting characteristics and the child's developmental requirements and behavioral challenges (Gabbard & Crisp, 2018; Graybar & Boutilier, 2002; Johnston, 2013; Quek et al., 2018). Regardless of the child's

challenges, it is nevertheless the full responsibility of parents to search for resolution since children are the innocents, just as it is the full responsibility of the therapist to find a way to develop a positive relationship with borderline patients regardless of their challenging behaviors (Schneider et al., 2023). Pickard's "responsibility without blame" concept (2013, 2014) provides excellent guidelines pertinent to tactfully researching parenting contributions to developmental failure of Theory of Mind. With regard to the mother's versus the father's influence in BPD, there is the considerable research literature about the significance of maternal factors, but much less information about paternal factors, (Cooper, et al.; Keng & Soh, 2018; Kerr et al., 2022; Kim et al., 2014; Robinson et al., 2013; Sharp et al., 2020; Stepp et al., 2016; Vanwoerden et al., 2017). It still usually falls on the mother to spend the majority of time with children and to carry the major responsibilities for nurture during early critical years, and so the mother is likely to be identified more frequently as playing an important role in both successes and failures in guiding a child's development of self/other faculties. There is good evidence that more active participation by the father can add significant benefit for these traditionally largely maternal responsibilities (Miljkovitch et al., 2018; Robin et al., 2021; see also Sharp et al., 2020). The mother/daughter relationship often involves a particular intimacy that can influence the development of the self. This could help to explain the higher frequency of reports of problematical maternal contributions, as well as the higher frequency of females with BPD (Park et al., 1992; Robinson et al., 2013; Stone, 2019).

In addition to examination of parenting characteristics, it is also important to identify other temperamental characteristics of borderline patients since they could also play a role in caretaker responses to these children, in addition to the influence of the sensitivity characteristics themselves (Boucher et al., 2017; Rioux et al., 2018; Skabeikyte & Barkauskiene, 2021; Stepp et al., 2014). For instance, could sensitive children differ in the ability or willingness to accommodate to parental rules and biases? A female borderline patient who had responded well to psychotherapy had an older sister who was also borderline. This sister was an artistically gifted scholar who had been hospitalized in late adolescence for severe depression and suicidal tendencies. She subsequently committed suicide after several treatment failures. The mother had clearly been moti-

vated to be a good mother. However she had very strong beliefs and rules about correct ways of thinking and behaving, dress, friends, etc. The successfully treated borderline patient had been quite compliant with her mother's demands and rules and did not become significantly conflicted until late childhood/early adolescence (Schlensog-Schuster et al., 2022). However, her sister had struggled against the mother's overcontrol throughout childhood, and the mother's responses had moved gradually from disappointment and disapproval to increasing dislike. Did the mother's differing responses to temperamental and behavioral differences between the sisters contribute to severity of the disorder? The sister's exceptional talents may have involved particularly accurate perceptions about the mother's feelings and vulnerabilities, leading to communications that further irritated her. Such a scenario could be analogous to occurrences of borderline patients triggering negative clinician countertransferences.

With regard to differential susceptibility to general cultural norms (Keng & Soh, 2018), anthropologist Ruth Benedict reported a study of children whose temperamental characteristics would be highly advantageous in one cultural environment but highly disadvantageous in another (Benedict, 1934; see also Menand, 2019). The two Native American cultures she examined were the "Dionysian" culture of the Kwakiutl tribes, and the "Apollonian" Pueblo culture. The Dionysian culture valued extroversion, courage, competition and frenzied dances leading to ecstatic states, while the Apollonian culture valued introversion, calmness, quietness and conformity. An extroverted, aggressive child would be a fine success in one culture but an outstanding failure in the other, while an introverted, vulnerable child would experience the reverse. Margaret Mead, Benedict's former student, said (1959): "She was rather concerned with the question of how narrow definitions of normal behavior penalize or give preference to certain innate capacities, and of how the widening of cultural definitions might enrich our culture and lighten the load of rejection under which the cultural deviant now labors."

The second kind of research for identifying the engagement of a differentially susceptible characteristic in development of the mind would be demonstration that the high sensitivity characteristic observed in pre-borderline children and borderline patients can be an exceptional asset in a well-matched developmental social environment. The sensitivity

characteristic must first be more clearly identified and understood in order to find children and adults in the general population who have this characteristic (Pluess et al., 2023; see also Paris, 1998). The social adjustment of such individuals can then be examined as it relates to their developmental social environment (Plakun, 2016; Rocha et al., 2016). At least three scales that measure sensitivity have been developed so far. These are the Highly Sensitive Child Scale (HSC) (Pluess et al., 2018), the Highly Sensitive Child Rating-System (HSC-RS) (Lionetti et al., 2019), and the Highly Sensitive Person Scale (HSP) (Aron & Aron, 1997). The HSC Scale was used in a study of “Environmental Sensitivity (ES)” in adolescent twins (Assary et al., 2020). Results supported a genetic basis for ES, with a “multi-dimensional genetic structure,” and also the involvement of environmental influences. The HSP Scale has been used to study “Sensory Processing Sensitivity (SPS),” defined as “a personality trait that entails a low sensory threshold and high sensitivity to subtle stimuli, deep cognitive processing of stimuli, behavioral inhibition in novel situations or in situations generating conflicting responses, and high emotional and physiological reactivity” (Sadowski & Szpitalak, 2022; Slagt et al., 2018). Pluess et al. (2023), using a newly developed “HSP-12 Scale” for adults, have carried out research showing that people who score high on sensitivity are more negatively affected by adversity, but can also benefit more from positive exposures. Pluess and Belsky (2012) refer to the enhanced ability to respond to positive environments as “Vantage Sensitivity.” We anticipate that further examination of the sensitivity characteristic will be much more likely to lead to new understandings about the etiology of BPD than examination of other symptomatologies, since the latter are consequences of, rather than inherent to, the origins of the disorder.

Although studies of the borderline sensitivity characteristic in the general population are yet to be done, there are now numerous studies demonstrating differential susceptibility in children, adolescents and adults that may very well involve the sensitivity characteristic of enhanced Social Intelligence (Belsky et al., 2007; Pluess et al., 2023; Pluess & Belsky, 2012; Rioux et al., 2018). For instance, in two studies of respiratory illness in preschool children, Boyce et al. (1995) identified subsets of “high reactive” children who had significantly higher rates of respiratory illness than their

“less reactive” peers when living under high stress conditions, but lower rates than the less reactive peers when living under low stress conditions. The less reactive children on the other hand did not demonstrate a difference in illness rates in relation to the level of stress. In the first study, cardiovascular reactivity to challenging tasks was used to identify high reactive children, and teacher ratings of stress along with a measure of stress in the childcare environment were used to identify child stressors. In the second study, immune reactivity to pneumococcal vaccine was used to identify high reactive children, and parent interviews along with a family conflicts measure were used to identify family stressors. The two studies demonstrated “remarkably similar findings.” The authors suggest that these high reactive children may possess “a heightened sensitivity to the social world.” Quas et al. (2004) reported a study of stress and memory in sensitive children versus a control group, with analogous results (see also Boyce, 2019). Gannon et al. (1989) reported a study of college students with high “psychobiological reactivity,” who showed higher rates of depression under stressful circumstances than less reactive peers, but lower rates than the peers under low stress circumstances. Pluess and Belsky (2009) compared data on children found to have “easy” vs. “difficult” temperaments. Children with difficult temperaments had more behavior problems than children with easy temperaments when raised in poor childhood social environments, but they had fewer behavior problems than children with easy temperaments when raised in good environments. There are also laboratory findings that are of interest (Assary et al., 2020). For instance, Bakermans-Kranenburg et al. (2008) found that children carrying the 7-repeat DRD4 allele who were raised by insensitive mothers exhibited significantly more behavior disorders than those without the repeat allele, and yet when children with this allele were raised by sensitive mothers they exhibited the least behavior disorders. Caspi et al., (2003) and Rocha et al. (2015) found evidence of differential susceptibility in studies of serotonin-transporter-linked polymorphisms and depression in the context of childhood maltreatment. Individuals with homozygous short alleles were at a significantly increased risk of depression when there was a history of childhood maltreatment but were at a significantly decreased risk of depression when there was no history of childhood maltreatment.

Section G: What is the correct DSM classification for Borderline Personality Disorder?

Borderline Personality Disorder is identified in the DSM as a Personality Disorder. However, we are recommending that the severity level for diagnosis should be aligned with that identified in the patients in the discovery populations, whose severe Theory of Mind impairments and associated symptomatology so frequently resulted in hospitalizations and suicidal completion. A required level of severe impairment would necessitate the removal of BPD from Personality Disorders to a new diagnostic category, and the addition of a new diagnosis of “Borderline Spectrum Disorder” for the moderate to mild cases. This would be of particular benefit for the kind of research we are recommending.

This review presents the argument that BPD is a “Disorder of Theory of Mind” of a severe degree, engendered by the developmental social environment. New and Triebwasser (2018) propose that BPD is a “Disorder of Social Interaction.” It has also been suggested that BPD could be identified as an “Attachment Disorder” considering that attachment insecurity is a key feature of the borderline condition (Agrawal et al., 2004; Fonagy et al., 2003; Kim et al., 2014). Characteristics of BPD listed in DSM-5 that indicate major attachment impairments are “frantic efforts to avoid real or imagined abandonment,” “the perception of impending separation or rejection, or the loss of external structure, can lead to profound changes in self-image, affect, cognition, and behavior,” and “they experience intense abandonment fears.” Kohut’s concepts and findings about “Disorders of the Self” are also highly relevant to diagnostic classification of BPD (Kohut, 1979; Kohut & Wolf, 1978).

BPD might best be identified in the DSM under a new category of “Complex PTSD (CPTSD)” or “Developmental Trauma Disorder” (Herman, 2015; Herman et al., 1989; Kwon, 2022; Robin et al., 2021). However, DSM-5 does not currently permit a trauma-engendered diagnosis unless there are certain trauma circumstances, i.e. “exposure to actual or threatened death, serious injury, or sexual violence.” Although it is clearly understood that childhood adversity can engender trauma symptomatology in borderline patients, the occurrence of PTSD must always be identified as a separate, co-occurring disorder (Masland et al., 2019). If a borderline patient’s

symptomatology also meets the DSM criteria for a diagnosis of PTSD, but the only trauma identified is persistent psychological trauma to development of the mind, a trauma diagnosis for this would not be available (Herman, 2015; Stein et al., 2016). Can it be correct that a trauma disorder can result when a person witnesses one or a few traumas or threatened traumas to the body, but can never be the direct result of everyday psychological interference to the development of a child's mind that persists throughout infancy, childhood and adolescence, with severe impairment to the crucial faculty for understanding self and others (Lewis & Grenyer, 2009; Liotti & Farina, 2016; Penner et al., 2019)?

Zanarini et al. (1998) found that 56% of 379 inpatients with BPD met the criteria for PTSD. They stated, "PTSD was found to be a common but not ubiquitous comorbid disorder among borderline patients...The fact that the rate of PTSD among borderline patients was found to be substantially less than 100% is inconsistent with the theory that borderline personality disorder might better be conceptualized as a chronic form of PTSD." A problem with this argument is that trauma requirements and their effects in this study were considered in line with those listed in DSM-5. Psychological traumas persistently directed to the developing mind in children would differ considerably from traumas directed to the body, producing a contrasting clinical picture. How would we investigate the occurrence of a chronic trauma disorder resulting from routine childhood psychological adversity? PTSD was established by identifying specific traumatic experiences that were followed by specific symptomatology. Identification of psychological trauma and its effects on a child can be challenging considering that pre-borderline children and their parents may not have understood that there was trauma. A history of childhood physical traumas could be relatively easy for patients to recall, but they are likely to have suppressed an understanding of harmful parental verbal communications in order to preserve the image of a caring parent. Nevertheless, it is time to move beyond routine dismissal of the concept of BPD as a chronic trauma disorder and get to work on more extensive, innovative research (Tedesco et al., 2023).

There was actually considerable interest in including a Developmental Trauma Disorder category in DSM-5, but the DSM-5 Task Force of the National Childhood Traumatic Stress Network was unsuccessful in gaining its

inclusion. In support of a developmentally engendered trauma disorder, Ford et al. (2013) stated: “Maltreatment, family violence, and disruption in primary caregiver attachment in childhood may constitute a developmental form of trauma that places children at risk for multiple psychiatric and medical diagnoses... Even before the PTSD diagnosis was formalized, clinicians had identified subgroups of childhood interpersonal trauma survivors with symptoms of dysregulation... including problems in managing extreme emotion states, disruptive behavior, somatoform symptoms, conflict or withdrawal from relationships, and identity impairments...that are more complex than those of PTSD.”

“Complex PTSD” was finally included in the 2018 edition of the International Classification of Diseases (ICD-11)(Maercker et al., 2022). In addition to criteria for PTSD, three criteria for “Disturbances of Self-Organization (DSO)” are included for this disorder. They are emotional dysregulation, interpersonal difficulties and negative self-concept (Jowett et al., 2020). These three criteria for CPTSD are also key characteristics of Borderline Personality Disorder. Numerous criteria that are listed for PTSD in DSM-5 describe characteristics that also occur in BPD, i.e., “hypervigilance”; “problems with concentration”; “persistent and exaggerated negative beliefs or expectations about oneself, others, or the world, (e.g. I am bad and no one can be trusted)”; “persistent negative emotional state (e.g. fear, horror, anger, guilt or shame)”; “feelings of detachment or estrangement from others”; “persistent inability to experience positive emotions”; “irritable behavior and angry outbursts”; “reckless or self-destructive behavior”; “dissociative reactions.” This great “symptom overlap” of PTSD with BPD (Jowett et al., 2020; Kolthof et al., 2022; Krause-Utz, 2021; Lewis & Genyer, 2009) has been noted in studies following the inclusion of CPTSD in ICD-11. One might expect that these findings would lead to considerable speculation that BPD could well be a complex trauma disorder. Instead, there are rationales that BPD must nevertheless be a fully separate disorder. For instance, there are arguments that “BPD does not require an index traumatic event” (Krause-Utz, 2021), that self/other disturbances change more abruptly in BPD, and that suicidal tendencies and self-harm are more prominent in BPD (Karatzias et al., 2023; Maercker, 2021; see also Ford & Courtois, 2021). In other words the symptomatology can be largely the same, but their expressions, histories or other characteristics

differ too much. If such arguments were applied to the variations of symptomatology allowed by selection of five of the nine criteria for BPD, we might have to devise multiple disorders for reclassifying borderline patients (Wolf et al., 2023)

Why is there such full dismissal of the obvious likelihood that BPD could be a form of CPTSD? In considering this question, it can be helpful to review the problems encountered prior to including the diagnosis of PTSD itself in the DSM. Maercker (2021) states about PTSD: “An externally caused mental disorder was introduced into the state of the art of psychiatry and clinical psychology—a kind of scientific recognition, which has never been seen before in classification systems of mental disorders. The introduction of the PTSD diagnosis followed a political negotiation process in U.S. psychiatry, in which scientific practitioners played an important role with Vietnam veterans on the one hand and the women’s rights movement on the other hand—”. This lengthy and continuing reluctance, beginning with Freud, to consider adverse “external” (environmental) factors in addition to “internal” (inherent neurobiological) factors as likely sources of major mental illnesses is discussed elsewhere in this monograph. In light of this historical context, and of the power of “groupthink” (Brookwood, 2021), we can understand why there is a great blind spot obstructing any satisfactory consideration that BPD could be an “externally” caused trauma disorder.

The absence of a DSM category for a developmentally engendered major mental disorder suggests a problem that goes well beyond BPD. It is clear that Theory of Mind, the ability to process and understand the workings of the mind of self and others, is “externally” developed and is an essential feature of what it is to be human (Sharp & Wall, 2021). Significant impairment can be devastating to any chance for living a normal or satisfying life. It is also clear that there is a great amount of childhood physical and emotional abuse, neglect and invalidation in this world (Cicchetti & Toth, 1995; Minnis, 2023), and it is more than obvious that very disturbed Theory of Mind in adulthood can stem from such harmful childhood experiences, and yet there is not a single DSM diagnostic category that can satisfactorily accommodate this reality (Stein et al., 2016). In ruling out developmental adversity as the possible full source for a major mental illness, the DSM leaves us to a narrow medical concept that inherent neurobiological flaws or limitations are a nec-

essary basis for developmental adversity to even be considered as playing an essential role in the etiology of major mental illnesses. Is this a thoughtfully considered concept or is there an underlying bias that major mental illness must fit a reductionist medical model, thereby eliminating any necessity to investigate the murky mind and its complex vulnerabilities to childhood maldevelopment? Does this model serve as an almost insurmountable barrier to fully researching and understanding the enormous influence, for better or for worse, of the childhood social environment on the development and maldevelopment of our uniquely human mind (Belsky et al., 2007; Groopman, 2019)? Are there any signs of rethinking this model? “Plank’s Principle” says, “A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die and a new generation grows up that is familiar with it” (Planck, 1950; See also Richtel, 2022).

Borderline patients very often reach out for help and are largely seen in outpatient and inpatient mental treatment settings, but there are estimates that a significant percentage of individuals in forensic settings are also borderline (Chapman & Iranoff, 2018). It is unlikely that very many of these individuals have actively sought help from mental health services or have the degree of interpersonal sensitivity that is so prominent in general borderline populations. Absence of the sensitivity characteristic would suggest that some or all of the unique interpersonal features of BPD would be absent. Chapman and Iranoff (2018) state: “Compared to individuals diagnosed with BPD in more traditional outpatient or inpatient settings, those with BPD in forensic settings differ in important ways. The most obvious differences are the high rate of co-occurring antisocial features.” In addition to differing temperamental features, these authors indicate somewhat differing developmental histories. If individuals are included in studies of BPD who have characteristics and histories differing significantly from those seen in regular mental health care settings, the data may well add further confusion to understanding BPD. If the severity level for the diagnosis of BPD were corrected to align with that of the discovery populations, it is likely that many or most of the patients in forensic settings would fall into a new DSM category of “Borderline Personality Spectrum Disorder”. Currently Borderline Personality Disorder is listed in the DSM as a categorical disorder, as either present or

nor present, with only one diagnostic category available. However, none of us has a perfect Theory of Mind, which would require perfect parenting, and flaws occur in all of us in a continuous path from very slight to moderate to severe (Brager -Larsen et al., 2023; Fonagy et al., 2023). We are interested in the severe disorder that was identified in the discovery populations. Those patients not only had a high level of Theory of Mind severity, but they also had other key characteristics that would not be clearly identified in an inclusive group that also has patients with only moderate or less borderline features. In summary, in order to understand Borderline Personality Disorder as originally identified, we must separately examine severely impaired patients, including particularly those who present clear interpersonal challenges, as likely comprising a distinctly separate population, analogous to Major Depressive Disorder and Dysthymia.

Section H: Discussion

It is clear that inherent neurobiological deficits underlie major mental disorders such as Schizophrenia and Bipolar Disorder. It is also clear that Borderline Personality Disorder is a major mental disorder, and it has been reasonable to assume that inherent deficits underly this disorder as well. Speculation about the alternative possibility of a fully developmental source for BPD is still lacking, partly because there is general confidence that inherent deficits have already been confirmed. For instance, Choi-Kain recently stated (2019): “BPD is no different from any other medical entity. This is why GPM incorporates the term psychiatric rather than psychological...Importantly, GPM medicalizes BPD as an illness rather than as an amalgam of psychological traits.” Groopman (2017) states “Science is an accretion of provisional certainties.” Boorstin is quoted as saying “The greatest obstacle to discovery is not ignorance – it is the illusion of knowledge.” However, although this medical model works well for examining organs that can be physically identified, and for processes that are generally operational at birth, e.g. processes of the heart and lungs, the mind is only a grand but informationally empty neurobiological potential at birth that cannot even begin to exist as a working reality until human social contact is initiated, and even when operational the mind is still a “theory” since it cannot be directly identified or observed by any traditional methods (Chisolm & Lyketsos, 2012; Francis, 2021; McHugh & Slavney, 1998; Slavney & McHugh, 2016; Yaden et al., 2021). Our only direct “proof” of the existence of the mind is our subjective experience of our own mind. The human mind is an evolutionary development of sensory processing abilities that are present in virtually all life forms (Barkow et al., 1992; Jacobsen, 2023; Levin, 2019), and it appears that no life form can directly experience how this processing is experienced by another life form (Finkel, 2023; Yaden et al., 2021; Yong, 2022). It has been suggested that if we could directly experience the minds of others it might be quite shocking and disturbing to discover how very limited we have always been in understanding the workings of the minds of others. This limitation in understanding and connecting to others could help to explain the high frequency of marriage and other relationship failures. It could also contribute to a low level of loneliness occasionally experienced in all of us.

Psychiatrists, who are also physicians, established the DSM, but that does not confirm that “Mental Illness” must necessarily be a “Medical Illness.” We argue that the DSM should identify separate categories for “Medically-Based Mental Disorders” and “Mental Disorders not confirmed as Medically-Based”, with research of the latter focused on ALL possible causes. Considering that Borderline Personality Disorder is a disorder of Theory of Mind, the study of BPD is actually a study of the mind, how it develops and what it does. The medical model has constrained us from creatively examining this uniquely human faculty that is not shared in its full development with any other known life form, has not been identified anywhere else in the universe (Hawking, 2018; McHugh 2002), and that may be as different from the standard medical model as general relativity and quantum mechanics are from classical physics. In particular, reliance on a medical model to explain the etiology of BPD has prevented any consideration that this Theory of Mind disorder could be fully the result of the developmental experience in the absence of inherent flaws, even though the working mind is fully created by the developmental social experience. If Borderline Personality Disorder is actually a developmentally engendered disorder, then the medical model would be focusing incorrectly on symptomatology resulting from the etiology rather than focusing on the etiology itself. The medical model has also inhibited examination of borderline empathy as possibly a manifestation of inherently enhanced social perceptivity, and examination of countertransference and other boundary problems of clinicians as possibly resulting from an inherently enhanced ability of borderline patients to then influence the minds of others. It has inhibited examination of the high sensitivity of borderline patients as a possible characteristic of inherently enhanced but developmentally impaired Theory of Mind. There is a Buddhist saying, “Sometimes somewhere you take something to be the truth. If you cling to it so much, when the truth comes in person and knocks on your door you may not open it” (Hanh, 2005; see also Brookwood, 2021; Grant, 2021; Harari, 2018).

This review presents argument and evidence that borderline personality disorder is almost always a fully developmentally engendered disorder of Theory of Mind, in the absence of any inherently limited or defective neurobiology. To recap, the argument is: (1) Severe impairment of Theory of

Mind, the uniquely human faculty for knowing of and understanding one's own mind, and for processing and understanding social information about the minds of others, is the core clinical feature of Borderline Personality Disorder. (2) Social Intelligence brain domains provide the neurobiological basis for Theory of Mind. (3) At birth these brain domains are providing only an informationally empty potential for developing Theory of Mind, which will remain essentially useless unless there is an interactive learning engagement with the human social environment, with gradual development of a working mind that can correctly process and understand social information about the mind. (4) During this lengthy learning experience, the Differential Susceptibility of Theory of Mind brain domains provides developmental plasticity that gives them the ability to develop flexibly in alignment with the uniquely variable characteristics and requirements of human social environments. This programming to collaborate in a learning engagement with any social environment encountered is not accompanied by an ability to screen the characteristics of the social environment until there is some social learning experience. Therefore, although this essential neurobiological asset will develop as a marvelous benefit for social success in a well-matched developmental social environment it will also begin to develop somewhat collaboratively with adverse social environments, and can thereby become an active participant in its own defective development. (5) There is extensive evidence of adverse childhood social environments in BPD. We argue that persistent, often rather subtle but routine everyday psychological adversity directly interferes with and perverts proper development of Theory of Mind. However, although Theory of Mind becomes impaired, the adversity does not impair the semi-separate general primate faculty of Social Intelligence for perceiving general social information, which does not require an extensive learning experience and is operational, largely "automatically", shortly after birth. (6) The high sensitivity of pre-borderline children and borderline patients is a characteristic of enhanced Theory of Mind. Social Intelligence brain domains for enhanced Theory of Mind provide for excellent social adjustment in supportive developmental social environments. (7) However, the enhanced Differential Susceptibility of enhanced Theory of Mind brain domains also provides exceptional vulnerability to developmental failure in adverse social environments. This can lead to severe developmental impair-

ment of Theory of Mind even when there is only mild, yet persistent, psychological adversity. (8) The enhanced Theory of Mind brain domains, however, retain their inherently enhanced potential, and excellent processing of social information can occur at times, particularly when borderline patients are in a calm state of mind. (9) Significantly enhanced yet significantly impaired Theory of Mind is unique to BPD, and underlies the complex, sometimes paradoxical, self/other symptomatology that identifies BPD. (10) Borderline Personality Disorder occurs when the level of adversity and the level of vulnerability together result, over time, in severe developmental impairment to working Theory of Mind. (11) The exceptional developmental vulnerability of enhanced brain domains for Theory of Mind is the neurobiological “risk factor” for BPD. Chronic everyday psychological adversity during the development of these brain domains is the “etiological factor”. (12) The enhanced level of Social Intelligence underlying the high sensitivity of pre-borderline children and borderline patients explains the evidence of heritability in BPD that has been attributed to inherent neuropathology. (13) BPD is classified in DSM-5 as a Personality Disorder, but the severe self/other impairments, along with other severe symptomatology, are evidence that BPD is a major mental disorder that differs distinctly from a Personality Disorder. DSM Classification as a “Disorder of Theory of Mind” or “Complex Trauma Disorder” (CPTSD) should be considered. The term “Theory of Mind” might be preferred to “Trauma,” carrying implications for understanding the nature of BPD rather than for immediately signaling the caretaking role. It has also been suggested that Borderline Personality Disorder could be classified as “Severe Personality Disorder”, a category fully separate from the other personality disorders (see Chanen, 2021). (14) The natural Differential Susceptibility of Theory of Mind brain domains to become developmentally impaired is the “p-factor” of the human brain, the “generalized ability to develop any and all forms of psychopathology across the life course” (Caspi & Moffit, 2018).

This concept that general primate Social Intelligence brain domains for perceiving social information are enhanced in BPD, and that separate Theory of Mind brain domains for understanding and processing received social information as a product of the mind are also enhanced but developmentally impaired, provides a much improved fit for the complex and often paradoxical clinical characteristics of BPD. It can explain why the ability to

mentalize and to process social information can range widely in the same patient from very defective to normal, and even to enhanced, depending on the nature of the immediate social context and the degree of stress being experienced (borderline empathy paradox). It can explain the high sensitivity of pre-borderline children and borderline patients, and the ability of severely interpersonally impaired individuals to nevertheless draw clinicians into strong emotional responses and boundary violations. The exceptional vulnerability of enhanced Theory of Mind to developmental harm can explain why borderline patients with more severe illness can paradoxically be more capable of inducing countertransference difficulties. This concept of a developmental origin of BPD is also in alignment with the extensive evidence of serious childhood adversity, and with the absence of neurobiological findings confirmed to be defective, inherent and involved in development of the mind. Theory that the borderline patient's Theory of Mind brain domains are not inherently defective but became operationally defective during the childhood learning experience can also explain the borderline patient's painful self-awareness about the self/other impairments, and the good response to a psychotherapy learning experience but minimal or absent response to somatic treatments that should benefit an inherently defective disorder. The theory can explain the profound difficulty in trusting others, the persistent efforts to find a helpful psychotherapeutic relationship despite this distrust, and the timely decrease of distrust in an empathically accurate psychotherapy holding environment. The many clinical characteristics of hypermentalization, emotion dysregulation, impulsivity, rejection sensitivity, attachment insecurity, anxiety, depression, self-injury, suicide and PTSD can all be explained as features of an enduring sense of confusion about self and others, along with very painful self-disapproval, self-dislike, great difficulty understanding, trusting and achieving closeness with others, and a profound sense of aloneness and emptiness, that began when a sensitive child experienced persistent everyday interference with, and insufficient support for, the development of a successful attachment experience that would lead to liking, enjoying and managing self, and to understanding, trusting and developing healthy relationships with others. Increasing symptomatology gradually becomes evident during the social challenges of adolescence, and

continues unrelieved unless and until a successful attachment and learning experience finally brings relief.

It is necessary to direct much more research attention to careful examination of the childhood social learning experience, with particular focus on routine caretaker empathic encouragement of, neglect of, or interference with the natural development of a child's working mind, and on caretaker feelings about and responses to a sensitive child's needy behaviors (Fonagy et al., 2003; Valadez et al., 2020; Zweig- Frank & Paris, 1991; Ryan, 2005; Schlenzog-Schuster et al., 2022; Shapiro, 2020). It is imperative to learn much more about the general psychological characteristics and behaviors of both the caretakers and their children, and about the psychological/behavioral match between the caretaker and the child (Quek et al., 2018; Steele et al., 2019; Vanwoerden et al., 2021b), not only to better understand and treat Borderline Personality Disorder, but to develop general guidelines for successful parenting of sensitive children. Even in the case of Schizophrenia, Major Depression and Bipolar Disorder, there is evidence that the severity of the disorder can be moderated by or might even be prevented by, an enlightened caretaking social environment (Begemann et al., 2016; Betz & Whitehorn, 1956; Kurtz, 2023; Gilman et al., 2003; Kendler, et al., 2020; Moran, 2007; Tienari et al., 2004; Whitehorn & Betz, 1954). It is also essential to learn a great deal more about human Social Intelligence and its developmental requirements, potentials, and vulnerabilities. Since Theory of Mind is developmentally engendered in all of us, research about Social Intelligence in BPD can lead to new understandings not only about mental illness but about the workings of the mind in general (Normann-Eide et al., 2020). We might learn much more about difficulties not only within the mind but also between minds. Such research could also bring back to life the necessity to improve psychotherapy training in psychiatric residency programs, including particularly learning how to engage with patients in exploring the developmental social experience and its relevance to the present mental state, and how to successfully engage with a challenging patient in a corrective relationship experience.

There is a great deal of research focused on discovering inherent neuropathologies underlying mental illnesses, with the hope that this can

lead to a full understanding of mental disorders and their causes (Amad et al., 2014; Crowell et al., 2009; Distel & de Moor, 2018; Dumas-Mallet & Gohon, 2020; Insel, 2022; Jasanoff, 2018; Lewis-Fernandez et al., 2016; NIMH Strategic Plan, 2020; Ross & Margolis, 2019; Smoller, 2019). However, the argument presented here that Borderline Personality Disorder can be developmentally engendered in the absence of inherently flawed neurobiology contributes to the increasing calls for a correction to this reductionist model of mental illness (Glucksman, 2018; Kurtz, 2023; Plakun, 2006, 2022). Researching the brain alone may tell us a great deal about how it is working in the here and now, but it will not tell us much at all about how, when or why it got there (Balter, 2017; Bracken et al., 2012; Francis, 2021; Goldfried, 2016; Kendler, 2020; Zimmerman, 2015). Braslow et al., (2020) state: “We suggest that clinical psychiatry’s take-for-granted, everyday beliefs and practices about psychiatric disease and treatment have narrowed clinical vision, leaving clinicians unable to apprehend fundamental aspects of patients’ experiences.” Richard Friedman, Professor of Clinical Psychiatry at Cornell states (2015), “I’m all for cutting-edge neuroscience...and lots of it...but we are all more than a brain in a jar.” Joyner et al., (2016) state: “For several decades now the biomedical community has pursued a narrative positing that...ever-deeper knowledge of subcellular biology, especially genetics...will lead to transformative improvements in health care and human health...This approach has largely failed.” The authors propose “a wholesale reevaluation of the way forward in biomedical research,” including “more funding to be directed toward...imaginative biomedical research that is truly innovative and not restrained by current narratives.” In a recent article in the *New England Journal of Medicine*, Gardner and Kleinman (2019) state: “Yet over the past half century, biologic research has come to replace all other forms of psychiatric research... Biologic psychiatry has thus far failed to produce a comprehensive theoretical model of any major psychiatric disorder, any tests that can be used in a clinic to diagnose clearly defined major psychiatric disorders, or any guiding principle for somatic treatments to replace empirical use of medications” (see also Scull, 2022). Whereas research about the brain alone can be productive for learning about disorders that are clearly brain-based, such as Schizophrenia and Autism, the much higher frequency of mental difficulties, impairments and disorders

stemming largely or entirely from the developmental experience requires coordinated psychological, biological and social environment research. In particular, studies of the brain must examine the brain as it changes during the developmental social experience (Assary et al., 2020; Fonzo, 2019; Luby, 2020; Sharp & Kim, 2015; Sharp & Vanwoerden, 2015; Valadez et al., 2020). For instance, if neurobiological anomalies are identified in brains of borderline patients and can then be identified in infants or toddlers, such children and their interactions with parents could be followed during the developmental years along with studies of the brain. If such anomalies are not found in infants or toddlers, studies of older children and adolescents may reveal them, and family social environments can then be examined. It would also be of interest to identify neurobiological changes or absence of change as borderline patients improve, do not improve, or regress in various psychotherapies. We are not going to adequately understand the participation of the human brain in many illnesses without such complex and necessarily expensive studies of the state of the human brain as it interacts over time with social environments (Balter, 2017; Bowlby, 1998; Caspi & Moffitt, 2018). Fritz Zwicky, who was Professor of Astronomy at Caltech, was a brilliant researcher who identified supernovae as resulting from the collapse of massive stars, as well as the likely existence of dark matter, among numerous major accomplishments (Johnson, 2019). His recommendation for the optimal way to examine difficult and complex problems, which he labeled as "The Morphological Approach," was described by Freeman Dyson (2020), Professor of Physics Emeritus at Princeton: "The morphological thinker discards all prejudices and all prior knowledge. Even highly reliable prior knowledge may be misleading. The thinker then makes a list of all possible explanations for a phenomenon and all possible interventions that might help gather information... The prime directive was to generalize all problems before drawing fallacious conclusions. In practice this meant keeping one's mind open to all possible conclusions... no matter how seemingly impractical." The seemingly impractical argument presented for consideration here is that the borderline condition can be fully developmentally engendered in the absence of inborn neurobiological deficits. The question is: Why does this clear possibility remain so unconsidered and unexamined in theory and in research?



Chapter Two:

Treatment of Borderline Personality Disorder: Necessary Modifications to Current Treatment Models

Section A: Introduction

A most important reason for examining the nature/nurture sources of Borderline Personality Disorder is the necessity to find a solution for the failure of current treatment models to adequately resolve the Theory of Mind impairments. These treatments are very successful in resolving DSM-identified symptomatic features. Choi-Kain stated (2019), “The ‘horse race’ of building better and better treatments is subsiding, and now we can focus on making all the good treatments that we know work more available, realistic, and practical.” For instance, Kolthof et al., (2022) recently reported a study of intensive eight-day “trauma-focused therapy’ for patients with both BPD and PTSD (16 sessions of 90 minutes duration). There was significant improvement in PTSD symptomatology at post treatment, and at one year follow-up, 69.2% of patients no longer fulfilled the diagnostic criteria for PTSD. There was also significant improvement in BPD symptomatology at post-treatment, and at one year 73.1% of patients no longer fulfilled the DSM diagnostic criteria for

BPD. This is a remarkable result for a brief therapy focused specifically on trauma, and if replicated it would contribute to the increasing evidence that BPD is a learned trauma disorder that requires therapy focusing on insightful understanding of the influence of past adverse experiences.

However, although numerous studies have demonstrated that most borderline patients who remain in treatment will improve symptomatically over time until they no longer meet sufficient DSM criteria for a diagnosis of BPD (Stone, 2016, 2017a; Zanarini & Conkey, 2018; Zanarini et al., 2012), it has also become clear that none of the current psychotherapy models result in sufficient improvement in certain key areas (Christea et al., 2017; Grenyer et al., 2022; Gunderson, 2011; Hutsebaut, Debanné & Sharp, 2020; Kernberg & Michels, 2009; Miller et al., 2020; Moran, 2011; Santangelo et al., 2020; Woodbridge et al., 2023; Zanarini et al., 2016; Zanarini & Conkey, 2018). Most problematically, they do not satisfactorily resolve the psychosocial maladjustments that are fundamental to the disorder, particularly the continuing serious impairments in establishing healthy relationships and career success. Gunderson et al. (2014) reported “A second major gap concerns the overall ineffectiveness of existing treatments to greatly improve the social adaptation of patients with BPD. Evidence that the social adaptations of patients remain persistently impaired even after the symptoms remit indicates that treatments need to address this other major sphere of outcome” (see also Gunderson et al., 2011). It is argued here that these serious Theory of Mind impairments persist largely because they are developmentally learned in BPD, and conceptualizing them as simply part of the general symptomatology deprives patients from carefully examining their childhood interpersonal experiences and how they are affecting their current relationships. Reliance on the concept that defective neurobiology always underlies BPD reinforces this error. Specific modifications to psychotherapy models are proposed for resolving this problem. Recommendations are also made with regard to group therapy, group living, family engagement, and pharmacotherapy.

Section B: Psychotherapy

Outline: Following are recommendations for three psychotherapy modifications, derived from the concepts presented in Chapter One, that will address the persisting Theory of Mind impairments. The first is **“Learning from Verbal Interaction”**: Since the childhood social learning experience is the source of a working Theory of Mind, therapeutic work must entail much more careful exploration, in a collaborative engagement with the patient, of that experience and its relationship to the present mental state. During this collaborative exploration, the therapist’s thoughtful questions, comments and suggestions can also provide guidelines for learning how to explore and understand the self, and how to better understand and engage with others (Folmo et al., 2022). The second modification is **“Learning from Behavioral Interaction”**: More active participation by the clinician in developing a genuine corrective learning relationship will help to resolve flawed patterns of relating that have resulted from childhood defective relationship experiences. Joining together with the patient in examining transference and countertransference interactions as they relate to the patient’s childhood social experiences is a key component of this work. **Thirdly**, the Differential Susceptibility of Theory of Mind tells us that it can be important to identify undeveloped Social Intelligence potentials of borderline patients, including possible talents, and to then to encourage good understanding and active use of them.

Section B1- Learning from Verbal Interaction:

Insight-oriented psychotherapy that involves careful exploration of the childhood interpersonal developmental experience and its relationship to the present mental state:

There are several excellent psychotherapy models for BPD, including particularly Dialectical Behavior Therapy or DBT (Linehan, 1993, 2015), Good Psychiatric Management or GPM (Gunderson, 2014; Choi-Kain & Gunderson, 2019), Mentalization-Based Treatment or MBT (Bateman & Fonagy, 2012; Choi-Kain 2018), Transference-Focused Psychotherapy or TFP (Yeomans, Clarkin & Kernberg, 2015; Yeomans & Delaney, 2018), and Schema-Focused Therapy or SFT (Young et al., 2003). These evidence-based therapies deal largely with practical problem-solving in the here-and-now, with the assumption that the disorder involves inherent neurobiological limitations or deficiencies that provide heightened vulnerability to adverse experiences during childhood. Psychotherapies focus particularly on defective mentalization, emotion dysregulation, impulsivity, self-sabotaging and self-injurious behaviors, excessive aggressiveness, interpersonal hypersensitivity and impaired psychic structure. It is recommended that therapists and hospital staffs have genuine interest in treating borderline patients. The therapist is encouraged to connect with the patient in a positive way, providing a structured holding environment of reliability and acceptance, while at the same time being self-observant and quite careful about boundaries. Guidelines encourage “sustained countertransference awareness” that helps therapists and staff protect themselves from the ability of these patients to entangle others emotionally. It is also considered important in this regard that therapists be very open to consulting with other clinicians when concerned about the relationship situation.

These treatment programs are excellent as far as they go, but while GPM, MBT and TFP focus excellently on collaborative examination of the present mental state, close examination of the childhood caretaking experience as possibly the essential source of the present state is not considered a necessary path for enabling the patient to understand and resolve their self/other impairments (Paris, 2018). DBT and SFT provide significant attention to childhood adversity in their treatment programs but, as with the other models,

inherently limited or defective neurobiological factors are nevertheless considered to underlie the occurrence of the disorder (Gunderson et al., 2018). With regard to such inherent factors, patients can be reassured that although they underlie the condition, this is not at all their fault and they can work to master these characteristics. However, it is argued here that if there is a discoverable history of significant childhood adversity, it is necessary to instead encourage the patient to carefully examine the influence of these experiences in order to discern if they could provide a significant or full narrative understanding for the self/other impairments (Allen, 2003; Cicchetti & Toth, 1995; Gunderson & Chu, 1993; Jardim et al., 2023; McAdams, 2018; Penner et al., 2019; Perry et al., 1990; Pickard, 2015; Porter et al., 2020; Quek et al., 2018; Robin et al., 2021; Ryan, 2005; Sekowski et al., 2020; Steele et al., 2019). A subject to consider in this regard is psychotherapy for PTSD (Gunderson & Chu, 1993). In the case of PTSD there is, of course, appropriate treatment for the present symptomatic state, but the clinician also engages with the patient in a joint examination of prior traumatic experiences as an essential component of therapy (Brunet et al 2018). These experiences are considered to be the likely source of the disorder, and any inherent vulnerabilities to them are considered to be risk factors.

Fonagy et al. (2017b) make the argument that the defective social understandings of borderline patients can be an “adaptive consequence of the social environment...a learned response to the transmission of social knowledge,” and they suggest that inadequate attention to this “explains the lack of clinical response of patients with BPD features to many traditional psychotherapeutic interventions.” Enabling borderline patients to grasp the specific connections between childhood interpersonal experiences and the current mental state can help them to overcome deeply ingrained biases about others that persist in current relationships (Herman et al., 1989; Perry et al., 1990). For instance, if a patient anticipates that anyone with whom she/he is becoming close will ultimately cause pain, mentalizing about this is likely to improve greatly if a relevant prior social history and its influence is clearly identified and understood, particularly when the patient is also overcoming a built-in suppression of painful truths about the childhood social experiences. Such insight can facilitate progress in understanding that people are not all identical with the caretakers, thereby helping to provide resolution for chronic

self-defeating patterns such as the persistent distrust of others, and repetitive efforts to gain what was unavailable in the past from persons who may have some personality characteristics and flaws similar to those of the parents, along with expecting and thereby inducing others to behave somewhat as the parents did (Celani 1994; Pietrzak et al., 2005; Park & MacDonald, 2019). If the specific connections with the childhood developmental experiences do not become clearly understood, then this person may do well in a controlled, supportive therapy environment, but in the more complex general social world the deeply embedded misunderstandings about self and others will re-emerge in situations of emotional arousal, such as during the development of romantic intimacy, since the continuing influence of an unexplored childhood experience on the current processing of social information by the brain will have remained largely unchanged (Powers, 2017). It can also be very beneficial to encourage patients to think about how their parents' minds were working during verbal/emotional interactions. For instance, did the patient see caring when it wasn't there, or not see uncaring when it was there? Conversations about how the parents may have understood themselves and others can lead not only to new insights, but also to viewing parents in a more neutral way as imperfect human beings who were often trying to do what they thought was correct. This can help to gradually free oneself from the past and move on in a new direction. In addition to seriously flawed understanding of others, such developmentally impaired persons also have flawed realities about themselves, the origin of which can only become clear to them if they understand developmental sources of poor self-esteem, sense of shame, self-blaming and low self-compassion (Jeung et al., 2020; Messman-Moore & Bhuptani; Ociskova et al., 2023; Penner et al., 2019; Santangelo et al., 2020, 2022; Shengold, 1995; Wall et al., 2021a). Examples of such learned self-concepts and feelings are: I am a flawed, worthless or bad person, I dislike myself, no one could really like or love me, I cannot or must not enjoy myself, the reason for trying to perform well is not for personal satisfaction but to avoid disapproval (Kanj et al., 2023).

Gabbard states (2017): "Central to dynamic psychotherapy is a search for the truth about the self that leads to a greater sense of authenticity." There has long been the general principle that awareness of and understanding about the impact of significant past situations and events can be necessary for good

understanding of self and for maintaining or regaining mental health (Bowlby, 1988, 1998; Buckley, 2016; Fresco, 1984; Glucksman, 2023; Jamison, 2023; Jennison et al, 2018; Lind et al., 2019; Pickard, 2009, 2014, 2015, 2019; Ryan, 2005; Sharp et al., 2018). Whereas animals that have been traumatized must be behaviorally retrained in the absence of the ability to adequately recall and understand the past harm, humans have the advantage of self-awareness, recall and reflection, and they recover best from adversity when they make use of these abilities to understand the influence of the past on the present (Stein, Wilmot, & Solomon, 2016). As Faulkner said, “The past is never dead—It’s not even past” (see also Shapiro, 2020). Victor Frankl, the author of *Man’s Search for Meaning* (2004) and survivor of concentration camps, wrote about his experience in finding meaning in life while painfully recalling and understanding his experiences of extreme invalidation and terror. He believed that finding meaning in one’s life is a fundamental urge and necessity for humans that must be pursued in the context of examining past experiences no matter how disturbing or painful (see also Wiesel, 1958; McAdams, 2001; Yiu et al. 2022). There are many statements asserting this necessity for an enlightened life such as “The unexamined life is not worth living” (Lindsay, 1910), “If you want the present to be different from the past, study the past” (Spinoza), “Those who cannot remember the past are condemned to repeat it” (Santayana, 1998), “To study the past is to unlock the prison of the present” (Lepore, 2018), “History is often hard to digest, but it must be swallowed whole to understand the present and inform the future” (Lowenthal, 2016), and “It’s the past that tells us who we are—without it we lose our identity” (Hawking quote in Ruell, 2016).

When initiating psychotherapy with a borderline patient it is most important to begin with as open a mind as possible, leaving aside theories, opinions, assumptions, expectations, as well as views by associates about BPD (Allen et al, 2011; Woodbridge et al., 2023). The mind of each human being has a unique combination of characteristics that are best identified by clearing one’s own mind as much as possible while interacting with the other mind, gaining not only verbal information but also experiencing and learning how the other mind is working. This form of “observation” differs uniquely from the medical examination of a body. It is essential that the clinician does not present as an expert who uses a formal medical

model in gaining personal information from a borderline patient, but instead presents in a somewhat conversational manner as a genuinely interested and concerned person who wishes to enlist the patient in collaboratively reviewing her/his condition, life history and treatment expectations (Bo et al., 2022; del Rio Olvera, 2022; Frances, 2013a, 2017; Ono & Berger, 1995; Woodbridge et al., 2023). This is because, first, if a patient was subjected to childhood manipulation and control, she/he may well experience a more formal or structured interview as having a similar, underlying purpose, and second, by initiating a collaborative engagement in exploring the relationship of the past to the present, the therapist is encouraging the patient to discover or rediscover the ability for autonomous self-examination that may well have been suppressed (Folmo et al., 2022; Lin et al., 2023; Nolte et al., 2023). Although it can be tempting to provide some obvious interpretations early on, the very obviousness can tell us that the patient has defenses against knowing, and that immediate interpretation may evoke defensiveness and distrust, without the necessary emotion that comes with self-discovery and self-acknowledgement. This is especially important when a topic has to do with insights that are likely to bring significant distress. One example was a highly intelligent patient who Kernberg (1975) would likely have diagnosed as “narcissistic personality structure with overt borderline functioning.” Her mother had been very controlling, disliked ‘weak’ people, and was hostile to anyone who she felt was in her way, but this was well-disguised by very proper behaviors that led most people to consider her an upstanding woman of social and moral significance. As a child the patient had strongly allied herself with her mother in the dysfunctional family structure, including trying to be like her although without such a good disguise. As she moved into adolescence, she was troubled by a sense that she didn’t know who she was, and she began to develop borderline symptomatology. After marriage she had three children, and she was particularly attached to her talented and sensitive son. She had been in mental health treatment for several years for “depression,” and she began seeing a new therapist after she became distressed about the mental disturbances of this early adolescent son. She had raised him very obsessively and “correctly” and could not understand why he was “falling apart.” It quickly became clear to her therapist that, although she consciously wanted

the very best for him, she was also motivated, without self-understanding, to undermine any confidence in himself by sabotaging the sensitive and loving characteristics she most admired in him (her identification with her mother), such as saying something clearly meant to make him feel bad just as he was the most open and trusting. The therapist showed an interest whenever the son came up in conversation but did not challenge her directly or give her an opportunity to detect what he was easily knowing, somewhat judgmentally, and what she was working on not knowing (see also Pickard, 2019). It took a few months before the patient could begin to grasp, largely on her own, some painful truths about the influence of her mother's behaviors, and about the serious harm she was causing to her son, which was accompanied by considerable distress and regret, and subsequently by much better parenting and improved spirits.

The clinician must avoid expressing a predetermined theory about BPD that might draw the patient into more confusion rather than clarity (Allen et al., 2011; Fonagy & Bateman, 2007). It is important to keep in mind that if the clinician focuses on a theory about a patient's problems before engaging with her/him personally, this can be analogous to the patient entering treatment with an immediate transference bias about the clinician. If the therapist communicates a view that the patient is neurobiologically her/his own source of the disorder, while bypassing a genuine exploration of the lifetime experiences, the patient may well re-experience a repeat of a caretaker's pressure to abandon the natural self in order to be what the guiding person requires (Gunderson & Chu, 1993). It is also important that the therapist does not present a theoretical bias that there definitely must have been or not been flawed parenting, or that maltreatment did or did not engender the condition. Exploring, together with the patient, an unclear or unexamined past is not the same as directing a search for an already decided past. The ability to join with a challenging borderline patient in a careful exploration of the developmental social experience, while at the same time avoiding communications that could interfere with trust and self-discovery, can be difficult. It may take a while before the patient's developmental history can become a clearly working topic of discussion. The clinician must be willing to patiently spend some time in "active listening" (Bhatia, 2017; Shapiro, 2012; Woodbridge et al., 2023), being fully in the moment with the patient while learning about and making

sense of the patient's expressed thoughts and feelings, and while withholding advice or interpretation based only on theory or simple guesswork (Choi-Ka-in, 2018). Relatively silent yet engaged communication has been called "deep listening", "rich silence", "watchful waiting", "non-interfering attentiveness" and "compassionate listening", (Epstein, 2022; Frances, 2013a; Hahn, 2005; Ono & Berger, 1995), and is accompanied by natural facial expressions and body postures of focused attention to and empathic engagement with the patient, rather than the distancing required in classical psychoanalysis. An excellent way of pursuing information while not being experienced as intruding or interfering is to ask questions that appear to be simply follow-ups on something the patient has been talking about, at which point the patient may be encouraged by the interviewer's cautious questioning to consider both the obvious and the subtler details of his/her experiences (Kohut, 1979). Sensitivity and tact are particularly important when a parent considered to be a caring person was also the person whose communications may have helped to engender the disorder (Denny et al., 2018). Although this cautious approach takes time, trying to move along rapidly by means of a medical model of more formal question and answers will likely only sabotage a working relationship with a borderline patient (Paris, 2018). There are the well-known and well-understood pressures to complete psychotherapy in as timely a way as possible. This should also be the aim of psychotherapies for BPD. However, we must understand that change in Theory of Mind psychopathology requires the development of a personal relationship with a patient who has deeply ingrained, defective ways of feeling and thinking about self and others, associated with underlying developmentally engendered neuro-pathology that must gradually become modified during psychotherapy. We should always try to complete treatment of borderline patients in a timely a way as possible, but with the wisdom that we must take the time that is necessary for satisfactory recovery (Shapiro, 2012).

Insightful understanding of a defective learning experience that led to the current ToM impairments should not only significantly improve the borderline patient's mentalizing about self and others, but it should also improve the therapist's mentalizing and understanding about the patient's self/other difficulties. This collaborative exploration and understanding of the patient's life history and its effect on the present mental state provides an excellent

avenue for developing the patient/therapist personal relationship that is key to recovery (see Section B2). Following is an example of a borderline patient who did not understand what had happened during her childhood and how it had affected her, and the benefit as she and the therapist gained an understanding of her developmental story. As a child this patient was quite well-behaved and compliant, and she was clearly her mother's favorite of four children. She was very bonded to her very supportive but controlling mother. However she experienced genuine warmth only from her troubled father. Her mother strongly supported her musical education and school activities, as well as moving up the social ladder, and she was always very pleased with her daughter's successes. During adolescence the patient presented herself to the world as a very friendly and spirited person, but by then she was actually experiencing poor self-esteem, and was increasingly perturbed and unhappy within the persistent family turmoil. She was a good high school student, member of the student council, violin player and a popularity contest winner. She was enrolled at the age of 15 in a summer music camp away from home. The social environment there was highly supportive and she had a wonderful time, unlike anything she had ever experienced. She made new temporary friends and felt an exhilarating sense of inner freedom. However, when she returned home she began to feel increasingly depressed and also hopeless about her future for no apparent reason. She subsequently went away to college on scholarship, where she remained depressed and was an average student. By that time, she was developing multiple symptoms and behaviors, including sudden mood swings, episodes of anger at her mother, relationship problems, some sexual recklessness, feelings of emptiness and worthlessness, and some suicidal thinking. After college graduation she went to work in an office, having given up her music entirely. She continued to engage in troubled, unhappy relationships with individuals who often seemed to use her for their own needs. She had psychotherapy with a social worker, and subsequently met with a psychiatrist who diagnosed chronic depression and prescribed medications that did not provide significant relief. Following a failed marriage and another failed effort to benefit from psychiatric help, she finally received insight-oriented psychotherapy. As she began this treatment, she was both desperate for help and yet quite fearful that there would again be no benefit. Very gradually and painfully she "opened my eyes" to her

learned submissiveness to her mother's self-centered ownership of her mind and her achievements. She realized that when she had returned home from music camp she was beginning to exhibit a sense of freedom and of "owning myself", and that her mother was taking it all away by subtly sabotaging her, with added participation by her envious brother. She began to grasp that her childhood successes had been for her mother's pleasures and not at all for her to personally enjoy, and that her mother was unable to tune in empathically or understand her. She had not previously understood this story because she had very successfully learned as a child to not understand, with internalized rules about what to know and what to not know. It was very difficult and painful to fully acknowledge to herself that this same mother with whom she had always been bonded, and to whom she still felt bonded, was also the chief source of her disturbed sense of self and relationship difficulties. All of her life's experiences and achievements were now clearly understood as having been largely for the mother's needs, with the patient left to experience even more feelings of emptiness and distress. Analogous stories have been reported by other borderline patients, suggesting that there may often be a confusing good parent/bad parent scenario, with both attachment seeking yet an underlying distrust, making it particularly difficult for them to understand their parent/child relationship experience (Sekowski et al, 2020). It has been suggested that dissociative states in BPD may be related to the cognitive belief that parenting was okay, but with an emotional sense that something about it was harmful. The patient's therapist had become somewhat over involved in this appealing patient's plight and her desperate need for a caring relationship, which became corrected as he now experienced her outbursts of vitriol and anger while being accused of not caring, of leading her to turn against her mother and her brother, and of causing her to be even more severely depressed and alone as a result of knowing now that they had never really loved or cared for her. Her gradual understanding of the developmental story, gained over four and a half years of treatment, helped her to mentalize about herself and others in a much-improved way, to free herself significantly from self-blame for her problems and failures, and to establish more healthy relationships "with my eyes wide open." She rediscovered earlier enthusiasms for music and has since been successful in career and remarriage. It seems likely that little of this would have occurred

without the benefit of insight-focused therapy in which she could explore developmental truths that she had not understood or had hidden from herself.

Considering the abundant evidence of disturbingly adverse childhood experiences in BPD, why has the consequential influence of the developmental social experience on the state of the adult mind remained so poorly considered in psychotherapy models for BPD? Three contributing factors are reviewed here: (a) premature conviction that inherent neurobiological deficits always underlie BPD; (b) past dramatic failures of psychoanalysis and psychoanalytically-oriented insight psychotherapies; (c) the clinician's distrust of the patient and the patient's story, and the patient's distrust of the clinician and of her/his own story.

(a) *Premature conviction that inherent neurobiological deficits always underlie BPD:* The medical model of BPD holds that defective or limited neurobiology always underlies BPD, with environmental stressors facilitating, triggering or contributing to the occurrence of the disorder. Conviction without confirmation has resulted in assumption of this theory as fact in treatment programs. For example, Gunderson states in *Handbook of Good Psychiatric Management* (2014): "Borderline Personality Disorder is significantly heritable. This means that families need to customize their caregiving to accommodate the handicaps due to the ... genetic disposition." Interestingly, there is also the statement, "What the pre-BPD child has inherited isn't clear." Clinicians can acknowledge that there is still much unknown about heritability in mental illness, yet they may nevertheless work with psychotherapy models that present overconfidence about unclear factors, including conviction that the unclear hereditary factor in BPD must be defective (Dumas-Mallet & Gonon, 2020; Gabbard, 1993; Gould, 1993; Joyner, et al., 2016; Schroder et al., 2020; Whitehorn, 1963).

In the field of psychiatry the medical model is considered explanatory for serious mental illness in general (See also Pickard, 2009). This model is the "concept that mental and emotional problems are analogous to biological problems, that is, they have detectable, specific, physiological causes and are amenable to cure or improvement by specific treatment" (Vandenbos, 2007). Why does confidence in this general model for mental illness remain so unchallenged in psychiatric theory despite increasing evidence of its limitations (Groopman, 2019, Harrington, 2019; Luhrmann, 2000)? One factor

is that an inclusive biological theory for both physical and mental disorders provides a much more economical model that is easier to understand than a separate model for mental illness that requires a distinctly differing learning experience for understanding and treating the obscure mind. This narrow focus on inherent neurobiology as the source of mental illnesses has a long history. Sigmund Freud initially presented a “seduction theory” for neurosis, apparently based largely on patient reports of childhood sexual abuse, but he subsequently moved rather rapidly to the theory of “infantile sexuality,” which holds that the child’s inherent oedipal drives are the key to understanding the mental disorders that he had first attributed to caretaker abuse. How do we understand such a rapid shift from the patient’s reported childhood trauma experiences to a hypothetical theory of inherent neurobiology? An important factor for Freud may well have been the social risk of identifying flawed or abusive parenting as a source of mental maldevelopment. We highly value the sanctity of the family as a social structure that inherently “knows” how to raise children, so much so that efforts to explore family caretaking environments as sources of psychological impairment in children can be heavily criticized and even prevented. For instance, if a school child demonstrates emotional problems it can be easy to examine the teaching environment while the home environment can be off limits. One can imagine that Freud became so perturbed and embarrassed about the recurring patient stories of childhood sexual abuse that he could not continue to believe in his initial seduction theory and had to find an alternate explanation. Unfortunately, this resulted in a shift from fully “blaming” the parenting for mental illness to fully “blaming” the child’s inherent biology, a shift that continues today. Analogously, multiple reports by patients that they had been sexually abused as children by clerics were so disturbing that there were persistent efforts to find alternate explanations such as the “false memory syndrome” (Pope, 1996). The neglect of careful examination of childhood social experiences as possible prime ingredients of mental illness has persisted throughout the history of psychiatry, from the classical psychoanalytic focus on the child’s instincts, to cognitive behavioral therapy that focuses almost entirely on the present state, and now back to the child’s inherently flawed brain neurobiology (Goldfried, 2016), all the while dancing around consideration that there is a great interval between birth and the present mental state, during which

the mind originates and develops in a highly vulnerable relationship with the social environment.

(b) *Past failures of psychoanalysis and psychoanalytically-oriented insight psychotherapies:* Dramatic failures of these therapies helped lead to the discovery of Borderline Personality Disorder. We understand now that classical psychoanalytic technique is quite contraindicated for borderline patients. (Fonagy et al., 2023). There is minimal verbal communication from the analyst, who may also sit behind and out of sight of the patient according to theory that the patient must imagine the therapist's personal characteristics, i.e. develop a transference that then becomes central to the therapeutic work (Gabbard & Crisp, 2018). However, borderline patients are already fully marinated in an entrenched, developmentally engendered anticipatory transference that can quickly lead to increasing apprehension and distrust when engaging with others, and which becomes immediately activated by an approach that does not provide clear signs of a genuinely interested and benevolent clinician who wishes to participate collaboratively in helping the patient discover a path to recovery (Branas et al., 2021; Shapiro, 2009; Yeomans et al., 2015). In addition, classical psychoanalytic theory holds that everyone's mind works in a certain inherently constrained way, which can be experienced as controlling by a borderline patient (see also Frank & Frank, 1991). This theory can also divert the therapist away from examining the patient's developmental history. One example is the concept of "The Unconscious", defined in the American Psychiatric Glossary (2003) as "that part of memory and mental functioning that is rarely subject to awareness,—a repository for data that has never been conscious or that may have been conscious and are later repressed". In the APA Dictionary of Psychology (2007) The Unconscious is described as "the region of the psyche that contains memories, emotional conflicts, wishes—that are not directly accessible to awareness but that have dynamic effects on thought and behavior". This somewhat abstruse concept about memory can distract the therapist from simply exploring the patients' memories of the childhood social environment and its likely influence on the present mental state.

Nevertheless, there is good evidence that modified psychoanalytically-oriented, psychodynamic psychotherapy can be quite successful when

therapists are well-acquainted with and understand the requirements for and challenges of engaging with a borderline patient (Perry et al., 2017). Frieda Fromm-Reichman was an excellent psychoanalyst and teacher who successfully treated hospitalized patients diagnosed as having Schizophrenia with psychoanalytically oriented “intensive psychotherapy” (Fromm-Reichmann, 1950, 1958; Silver, 2000). This took place at Chestnut Lodge, a prominent private hospital that specialized in the treatment of Schizophrenia. Fromm-Reichmann died in 1957, long before the category of BPD was included in the DSM. Records of patients who had been discharged from the hospital between 1950 and 1975 were subsequently examined (McGlashan 1986, 1989; Paris, 2005), and it turned out that many patients who had been diagnosed as schizophrenic were actually borderline, most likely including Fromm-Reichman’s patient who wrote “I Never Promised You a Rose Garden” (Greenberg, 1992). These follow-up studies revealed that most of the patients in the group who were later re-diagnosed as borderline had improved significantly. The surprising success of Fromm-Reichman’s method for treating such patients most likely resulted from her key modifications to the classical psychoanalytic model. She did not sit silently behind a couch and conceal herself from patients, and she was very open to the patient’s life experiences as being possible keys to understanding the condition. She was quite interactive as a genuinely interested person who made it clear that she personally cared, and she was also very alert to structure and boundaries. She understood and wrote about transference/counter-transference problems with patients and how to be aware of one’s own vulnerabilities. She made a strong point of not being intrusive, yet being interested in exploring any information about the childhood developmental social experience, and then helping patients connect past experiences with the present state. Her successes and those of her trainees at Chestnut Lodge provide good evidence for the benefit of modified psychoanalytically oriented psychotherapy for borderline patients. (She did make the error of mislabelling the “schizophrenogenic mother”, which most likely reflected her view of childhood histories obtained from the borderline patients who were misdiagnosed as schizophrenic (see also Hill, 1955).

Two excellent, evidence-based psychotherapies, Mentalization-Based

Treatment (Bateman & Fonagy, 2012; Choi-Kain, 2018), and Transference-Focused Psychotherapy (Yeomans, Clarkin & Kernberg, 2015; Yeomans & Delaney, 2018) provide psychoanalytically-oriented treatment models for BPD that follow in the path of Fromm-Reichmann's modified methods (see also Fonagy, Hepworth & Campbell, 2023). They focus on the transference and mentalizing problems of borderline patients, providing interventions for enabling them to overcome these barriers to mental health (Gabbard & Horowitz, 2009). They acknowledge contributions of childhood abuse and neglect. However, they also include the concept of inherently limited neurobiology. Treatment guidelines, therefore, do not include careful exploration of parental routine behaviors, temperaments, beliefs, rules and sensitivities as possible key sources for the self/other difficulties and the symptomatologies. For instance, Yeomans, Clarkin & Kernberg (2015) state: "We are not concerned about what is actually fantasy and what is a precise description of the past. It is a current psychic reality that is a fundamental motivational factor in the patient's life because it reflects a psychic structure, and this structure is the focus of modification in the treatment... Patients with BPD are by nature insecure in their attachment status." This view aligns with the diathesis-stress model. The argument here is that, whereas a "precise description of the past" may not be necessary for the clinician to grasp the current psychic reality of the patient, it can be crucial for the patient to gain a precise understanding of the developmental past and its specific role in the current psychic reality. In the absence of this understanding the underlying Theory of Mind impairments will remain unresolved.

(c) *The clinician's distrust of the patient and the patient's story, and the patient's distrust of the clinician and of her/his own story:* Distrust is a huge challenge in the treatment of Borderline Personality Disorder (Allen, 2023). It is common for clinicians to distrust borderline patients before they even meet them, and for patients to distrust both themselves and anyone they begin to personally engage with. A clinician may trust or rely more on the childhood story provided by the borderline patient's parent than on the story provided by the patient, despite the fact that "the patient-and only the patient-knows what it feels like to be him or her" (Gabbard, 2018). However, there is good evidence that mentally ill patients

in general are motivated to be honest contributors of information about their caretaking experiences (Herman, 1992; Otani et al., 2016; Young, et al., 2011), and there is not good evidence confirming that borderline patients are significantly less so than patients with other mental disorders. John Bowlby, a founder of attachment theory, focused on the importance of unambiguously choosing to accept a patient's story initially, while also retaining alertness for errors or falsehoods. He states, "It has a very adverse effect on the patient to doubt their story. I believe it is far better to believe a story even if you subsequently find it isn't quite true than the reverse... In my experience the shortcoming of what patients tell you is that they don't tell you important things, partly because they don't remember them. Our job is to help the patient explore his own past, his own thoughts, his own feelings, discover who he is or what he is. It is important to help a patient sort out what was real and what is or was fantasy. I would encourage a patient to give me, in the greatest possible detail, all the memories she has of what was done or what she thinks was done or said. And I would encourage a patient to go over it, scrutinize it, look at it, consider it" (Hunter, 1991).

A major problem for obtaining clear and relevant information is the difficulty developmentally harmed persons can have in understanding and communicating their childhood histories (Bendstrup et al., 2021; Cicchetti & Toth, 1995; Herman et al., 1989; Lind et al., 2019). Sufficient information may be quite a while in coming, and it can certainly be missed if we are not giving careful attention to clues about the childhood social experience. There can be a learned obtuseness or "compulsive naivete" in many borderline patients about what had happened to them because they were often in a catch-22 situation as children, in which they needed to misunderstand or had learned well that they were not to correctly understand an adverse caretaking social environment (Fonagy & Bateman, 2007; Park & Park, 1997). Fonagy (2000) reported that children can inhibit capacity to mentalize in order to limit understanding of adverse signals from caregivers (see also Allen et al., 2011). Bowlby points out that in the case of flawed caretaking, "the last thing a child wants to believe is that that was horribly true" (Hunter, 1991). Borderline patients have often become unhappy with and/or angry at their parents beginning by adolescence, while also developing an increasing sense that something bad had happened to them. Their ideas about what happened

may be spotty and distorted, leading to stories that are vague or incorrect in some ways, but this should not be simply discarded since a confusing story combined with distress and/or anger is often an important signal of unrevealed truths. There is a quote from Carlos Zafon (2001). “One of the pitfalls of childhood is that one doesn’t have to understand something to feel it. By the time the mind is able to comprehend what has happened, the wounds of the heart are already too deep.”

“Experiential Avoidance” (EA) is the term for a defense mechanism that serves to avoid painful or uncomfortable thoughts, feelings and memories, even if this avoidance leads to poor decision-making (Hayes et al., 2016). Jones et al. (2019) recently reported a study of experiential avoidance in inpatient borderline adolescents compared with inpatient non-borderline adolescents and healthy controls. They found that the borderline group demonstrated a higher mean experiential avoidance score than either the non-borderline inpatients or the healthy group. They concluded that “EA has previously been positively linked to many different types of pathology in adolescents...results indicated higher levels of EA are uniquely associated with adolescent BPD.” Defense mechanisms often serve to protect persons from knowing truths about themselves (Kernberg, 1975; Perry, 2013), but in the case of flawed caretaking they can be particularly helpful as defenses against understanding painful truths about caretakers, particularly the experience that as children they were never loved for who they were. When a therapist does not anticipate that childhood experiences of a patient could be a major source of her/his symptomatology, the therapist may be joining with the patient as a partner in this experiential avoidance enterprise (Woodbridge et al., 2023).

Section B2 - Learning from Behavioral Interaction:

The development of a genuine, corrective attachment and learning relationship requires increased interpersonal participation by and accessibility to the clinician:

The development of an appropriately genuine therapist/patient relationship experience is an important factor in the treatment of mental illnesses in general, and is critical for successful treatment of Borderline Personality Disorder. (Allen, 2023; Jamison, 2023; Shapiro, 2020). When self/other dysfunction has been engendered by flawed learning in a mismatched developmental attachment relationship, the verbal learning presented in Section B1 must be accompanied by a corrective attachment and learning relationship experience (Alexander & French, 1946; Allen, 2023; Arditì & Rabellino, 2021; Bo et al. 2017; Branas et al., 2021; Folmo et al., 2022; Fonagy & Allison, 2014; Hutsebaut et al., 2020; Jamison, 2023; Kim et al., 2014; Liotti & Farina, 2016; Miljkovitch et al., 2018; Ono & Berger, 1995; Penner et al., 2019; Riggs, 2010; Ryan, 2005; Skodol et al., 2019). Learning to successfully participate in healthy relating while insightfully experiencing the contrast with their maladaptive relating can provide borderline patients with much improved processing of social information (Riggs, 2010; Sekowski et al., 2020). Hutsebaut et al. (2020) state that the therapist/patient relationship can be “a vehicle to unlock social learning,” in which this relationship provides “a mirror of other relationships enabling learning through experience and establishing renewed opportunities for learning.” Sharp et al. (2013) conducted a study of psychotherapy for adolescent inpatients in which their hypermentalizing was found to be malleable rather than inflexible, and it decreased significantly in a treatment program in which emphasis was placed on forming “close relationships with mental health workers.” Establishing such a genuine relationship with someone is a gradual process, which can explain why successful psychotherapy for BPD takes time. Increased research about how to develop a genuine corrective relationship with a borderline patient, while at the same time managing the boundary risks, should contribute to reducing the length of psychotherapy (Lin et al., 2023).

It is remarkable that psychotherapy guidelines for borderline patients, who have severe impairments in achieving successful relationships, focus

so strongly on the risks of personal involvement by therapists while having so much less to say about the necessity to engage in developing a genuine, interactive relationship for the purpose of helping them to overcome their severe relationship impairments. What modifications must be made to current psychotherapy models to achieve a successful patient/therapist relationship (Bo et al., 2022; Finsrud et al., 2022; Stepp et al., 2012; Stone, 2017b; Straus, 2017)? A major challenge for the therapist in working with borderline patients is the risk of actively engaging in a genuine relationship when it is specifically with these patients that this can be a such a perilous enterprise (Liotti & Farina, 2016). We know that if we are distant, as in the classical psychoanalytic model, the borderline patient will most likely become increasingly disturbed, but we also know that if we are too open and vulnerable, the patient and the therapist can both become disturbed. How does the therapist find a way to engage more actively and genuinely within these boundaries? It is easy to understand the discomfort and perplexity these patients can engender when we consider trying to establish a relationship with a person who can appear to be appealingly very eager to engage in a genuine relationship, and yet when one becomes at all personally engaged, this same person can then begin to demonstrate increasing distrust, along with a surprising ability to influence, confuse and aggravate in ways that sabotage the mentalizing and objectivity of both the patient and the therapist. If the therapist's personal involvement includes a need to resolve his/her own concerns, problems or desires, boundary violations are particularly likely to occur (Gabbard & Crisp, 2023; Jeong et al., 2022; Wilkinson & Gabbard, 1993). Nevertheless, since engagement involving a meaningful degree of personal involvement is necessary for good recovery, it is our responsibility to take on this challenge even though it may seem formidable at times. This is necessary both despite and because of the well-known interpersonal challenges and boundary problems that borderline patients present. Instead of remaining in the stands as a coach who provides more of a one-way relationship involving "technical neutrality," the therapist must get down on the playing field of genuine engagement, while keeping in mind that moment-to-moment self-awareness is necessary, and that communications must be compatible with the goal of establishing a trusting and healthy relationship (Allen, 2022, 2023). Genuine, congenial and respectful interaction by the therapist, involving good mentalizing in an

appropriately “real” relationship, accompanied by sensitive guidance and healthy management of boundaries, can provide new learning in a somewhat parenting experience for a patient whose actual parenting lacked a necessary degree of these characteristics (Folmo et al., 2022; Glucksman, 2023; Sharp & Fonagy, 2008a; Vanwoerden et al., 2019), but it can place the therapist in a much more difficult situation than the parent whose child enters the world with an interpersonal blank slate. By the word “guidance” we mean encouraging patients to autonomously and thoughtfully explore their own feelings, thoughts, beliefs and behaviors rather than simply imposing our own feelings, thoughts, beliefs and behaviors. Borderline patients with significant narcissistic characteristics can be particularly challenging and require special caution (Choi-Kain, 2018; Gabbard & Crisp, 2018; Kernberg, 1975). Considering the widespread views that borderline patients are likely to be quite difficult and manipulatively perilous, there could be considerable reservation about this recommendation to establish a significantly interactive and genuine engagement that involves the opportunity for increased therapist vulnerability (Fonagy, 2000; Ociskova et al., 2023).

The American Psychological Association Dictionary of Psychology (2007) defines “boundary” as “a psychological demarcation that protects the integrity of an individual or group or that helps a person or group set realistic limits on participation in a relationship or activity.” A key to helping borderline patients resolve their relationship difficulties is the establishment of a working dyad involving two minds that initially engage with considerable caution, but have the opportunity for “thinning,” over time, of the boundaries of both the clinician and the patient (Hartmann, 1991; see also Whitehorn, 1955). The therapist is not the only person at some risk in this engagement of boundaries since the borderline patient can be very vulnerable to boundary intrusions. Paradoxically, along with this boundary vulnerability, borderline patients can also have a strong boundary against taking risks in trying to make a change, which hinders new learning (Rizvi & Roman, 2018; Sharp & Kim, 2015), and which may have become firmer after prior failed therapy experiences. This challenging psychological boundary area, in which the mental states of the two participants begin to personally engage, is not only the area for transference risks for both the therapist and the patient, but it is also the prime area in which the well-prepared therapist can be of the greatest benefit

in engaging the patient in an enlightening relationship learning experience (Bo et al., 2017; Gabbard, 2020; Ono & Berger, 1995; Schenk et al., 2019; Wilkinson & Gabbard, 1993).

Following are comments about the beginnings of the therapist/patient relationship. When a borderline patient enters the office for the first time and feels encouraged to be vulnerably open, she/he may not be anticipating this simply as the beginning of a longed-for new relationship, but also as a possible repeat of many prior painful relationship failures. This is yet another paradox of the borderline condition, in that in order to benefit from psychotherapy the patient must allow access to her/his mind in a vulnerable relationship with a mentor, and yet it may have been this identical relationship scenario during childhood development that opened the door to harm and mistrust. In other words, the psychotherapy relationship setting can return the borderline patient emotionally to the original trauma setting (Allen et al., 2011). It is therefore necessary for the clinician to understand that his/her office can paradoxically be both the symbolic location for a longed-for holding environment and simultaneously the location for psychological harm (Davidson, 2018; Fonagy & Bateman 2007; Fonagy et al., 2014; Wilkinson & Gabbard, 1993). It can increase the clinician's patience with and tolerance for this difficult situation if she/he anticipates that the patient truly wants help but can also have a valid historical basis for apprehension and mistrust (Allen, 2022, 2023; Gunderson & Chu, 1993; Gunderson & Choi-Kain, 2019; Lin et al., 2023; Masland & Hoolley, 2020; Woodbridge et al., 2023). It can also be helpful to appreciate the likely length and depth of the patient's enduring distress (Glucksman, 2023; Zanarini et al., 1998), as well as her/his apprehension in returning to this perilous interpersonal setting when prior relationships or treatment efforts have led to painful disappointments (Brodsky, 2018; Levy, 2005; Sekowski et al., 2020; Zanarini & Frankenburg, 1994). An elephant in the office that interferes with rapport during this initial period of contact is the immediate negative countertransference of a clinician who is quite wary of the label and concept of "borderline" even before meeting the patient (Aviram et al., 2006; Chanen et al., 2017, 2022; Das & Sarkar, 2023; Mulder & Tyrer, 2023; Ociskova, 2023; Papathanasiou & Stylianidis, 2022a,b; Shapiro, 2018; Stiles et al., 2023). Since borderline patients can be very sensitive and alert to how others think and feel about them, it is likely that they will quickly

detect initial degrees of guardedness, unease, disinterest or dislike on the part of the clinician and then respond in kind (Houben et al, 2018). It is also likely that they will detect the presence of interest, warmth, and kindness, even while distrusting this. Since these patients have a profound need for positive signs, the absence of an initial congenial demeanor or an expression of genuine interest most likely portends treatment failure even before the first therapy session is over (del Rio Olvera et al., 2022; Frances, 2013a; Frank et. al., 1959; Jankowsky et al., 2023; Woodbridge et al., 2023).

Current treatment models do recommend a steady, positive approach to the borderline patient. It is recommended in GPM (Gunderson, 2014) that we encourage patients and their parents to have positive expectations for treatment success, and we certainly must add encouraging clinicians to have positive expectations to this list (Baumer et al., 2022; Bo et al., 2022; Park & Covi, 1965; Wenzel et al., 2008). The literature suggests, however, that positive views by clinicians about borderline patients and their treatment are not common. For instance, Yeomans et al., (2015) state: “In conjunction with allying with the patient’s observing ego, it is important that the therapist find some likable, authentic human aspect of the patient.” This is a step in the right direction, although the way it is written can suggest that we might have to search hard to find something human to like. Carl Rogers (1956) coined the term, “unconditional positive regard” for an approach to others that clearly signals they are inherently worthwhile. Therapy might be particularly successful when the therapist can experience natural feelings to some degree compatible with those expressed by Allen Frances (1990), Chairperson of the APA Task Force on DSM-IV, about his borderline patients: “I feel a great gratitude to Dr. Stone and to the many wonderful, if once very unhappy, individuals he describes here.”

To summarize, the clinician/patient relationship can begin with distrustful transferences on both sides, and whereas the immediate transference of the patient can be based on the developmental experience, the immediate countertransference of the clinician can be based on the widely accepted concept that borderline patients can be unpleasantly treatment resistant, uncooperative, deliberately provocative, irresponsibly suicidal, and have a knack for manipulating or trapping others into poor decisions

and boundary violations (Brodsky, 2018; Fonagy, et al, 2015; Ociskova et al., 2023; Papathanasiou & Stylianidis, 2022 a, b; Shapiro, 2020). The automatic assumption that the borderline condition is based on inborn neurobiological deficiencies can also interfere with an appropriate degree of compassion for a patient who may have experienced lifelong, developmentally engendered pain (Dumas-Mallet & Gonon, 2020).

As therapy sessions progress beyond initial contacts, new barriers to a working relationship can emerge (Liotti & Farina, 2016). When the patient begins to experience a vulnerable sense of closeness and trust there are likely to be more alarm bells of being on a journey to harmful intrusion or duplicity, with increasing hypermentalizing, the “social-cognitive process that involves making assumptions about other people’s mental states that go so far beyond observable data that the average observer will struggle to see how they are justified” (Sharp et al., 2013). While this hypermentalizing is considered to involve inherent neurobiological limitations, a better explanation can be that when these patients experience more vulnerability they also begin to inaccurately attribute characteristics to the clinician that they may have rather accurately perceived in their caretaking social environment. Increasing uncertainty about the feelings and motives of the therapist can quickly lead to increasing apprehension of psychological danger. Alternatively, the urgency to find acceptance and love can sometimes turn uncertainty into intense anticipation of developing a uniquely special or even romantic relationship. This hypermentalizing should gradually decrease as the patient continues to experience a reliable, steady relationship. (The frequent failures of marriages may not be due simply to the borderline person’s impaired interpersonal behaviors but also due to selection of inappropriate partners. A developing healthy intimacy with a potential partner can elicit the inherent epistemic trust that has become permeated with mistrust, leading to the paradox of selecting an inappropriate partner who does not elicit this disturbing mix of trust and distrust.) When interpersonal stress rises in the clinician/patient relationship it can be helpful to inform the patient that this is understandable, and that successfully working it through together can be a key to establishing successful engagements with others in the future (Gutheil, 1985). There was a compassionate young resident who repeatedly hurried over to provide a

crying young patient with kleenex for her tears, until she slapped him firmly and exclaimed that it was her right to cry if she needed to. After the resident recovered from brief feelings of hurt and invalidation, and also expressed an empathic understanding of her reaction, there was much improved discussion and rapport (Wilkinson & Gabbard, 1993).

What kinds of professional and personal characteristics will provide the clinician with the best tools for success in treating borderline patients? Gabbard and Crisp (2018) state: “Psychoanalytic thinking has evolved beyond a one-person psychology in the past few decades such that the inter-subjectivity of any therapeutic dyad is a given. In other words, each member of the dyad enters the relationship with an internalized family system and idiosyncratic self-structure that has emerged from an imperfect past. With all their baggage in tow, the two partners in the enterprise then jointly create the atmosphere of the therapy” (see also Allen et al., 2011; Glucksmann, 2023; Shapiro, 2012). Examination of the psychological characteristics of both members of this therapist/patient dyad must be included in research investigating optimal ways to help the borderline patient have a relationship experience that can lead to successful relationships beyond the therapy setting (Bernanke & McCommon, 2018; Betz & Whitehorn, 1956; Bo et al., 2017; Brandchaft & Stolorow, 1984; Folmo et al., 2022; Fonagy & Allison, 2014; Gabbard, 1993; Gardner et al., 2021; Gunderson, 2014; Nolte et al., 2023; Ono & Berger, 1995; Ryan, 2005). There is still much to learn about how the therapist can best elicit healthy, natural mentalization in patients, while also demonstrating appropriate management and flexibility of boundaries, and exhibiting her/his own management of stress that may be engendered by challenges from the patient (Shapiro, 2020). Should there be, and when should there be, appropriate degrees of self-disclosure by the therapist of personal thoughts and feelings that might facilitate patient improvement, such as acknowledgement of similar experiences, acknowledgement of errors in communication, presentation of thoughtful agreements and disagreements, communication of warmth, empathy and the feeling of caring, confirmation that the patient’s verbalizations and behaviors have engendered feelings of stress, approval, disapproval, apprehension, warmth, closeness, irritation or distancing, and provision of advice about constructive ways to express one’s ideas and feelings to others (Allen, et al., 2010; Allen, 2022, 2023; Branas et

al., 2021; Dubose & Linehan, 2005; Gabbard, 2020; Glucksman, 2023; Hepp et al, 2018; Moody et al., 2021; Nolte et al., 2023; Wiesel-Barth, 2018; Wilkinson & Gabbard, 1993)? The patient's experience of the therapist's ability to mentalize appropriately when under interpersonal stress engendered by the patient, while also respecting and encouraging the patient's right to express his/ her own thoughts and feelings, may be particularly valuable for a borderline patient (Davidson, 2018; Fonagy et al., 2015, Shapiro, 1978; Woodbridge et al., 2023). This of course requires the therapist to have a well-working Theory of Mind, with clarity about his/her own self/relationship functioning, sensitivity to and perceptivity about others, and the maturity, preparation and courage for managing uncertainty and the persuasive abilities of a challenging patient (Davidson, 2018; Fonagy & Bateman, 2007; Jamison, 2023; Osler, 1958; Whitehorn, 1963). These characteristics would be of great benefit for any practitioner of medicine or other health-care professional, but are of particular significance for engagement with the troubled mind of the mentally ill.

It can occur to us, as we work with these patients, that we are learning something about ourselves, including gaining more clarity about our own childhood experiences and their influence on our adult relationships (Frances, 2013; Glucksman, 2023). It is generally understood that all parenting has imperfections and flaws, and that we all have some degree of self/other limitations resulting from our developmental experiences. Might research reveal that therapists who work particularly well with borderline patients have a significant degree of interpersonal sensitivity and a natural inclination to be trusting and open with others, as well as having had to resolve issues about their own childhood developmental experiences (Betz & Whitehorn, 1956; Fonagy & Allison, 2014; Frank & Frank, 1991; Whitehorn, 1955)? Would therapists having such personality characteristics also be more susceptible to boundary violations? Some borderline patients who had a needy parent learned to provide a caring or nurturing feeling to the parent, a role-reversal labeled "parentification" (Hooper, 2007, 2011; Liotti & Farina, 2016). Such patients can be very appealing for a sensitive therapist who is nurture-deprived himself/herself and who communicates vulnerability (Jeong et al., 2022).

Section B3:

Identifying Social Intelligence Potentials, including possible talents, and then encouraging patients to make good use of them.

Borderline patients can simultaneously feel desperate for something to change in their lives, and yet quite fearful of taking the risk of making any changes. DBT emphasizes the importance of resolving this resistance to change, advising therapists to not be “afraid to push clients in a way that could be beneficial to them” and to encourage patients “to try harder and be more motivated to change” (Rizvi & Roman, 2018; see also Branas et al., 2021; Grenyer et al., 2022; Woodbridge et al., 2023). This can be particularly important for patients with a history of misdiagnoses and failed treatments, who experience some solace and security in simply finding a comfortable treatment relationship that requires little or no change or progress. It can be very helpful for motivating change if the clinician observes signs of possible unrecognized or undeveloped potentials and abilities, such as special interests or talents, creativity of thought, quest for knowledge about a particular subject, signs of interpersonal abilities, sensitivity to, empathy for or perceptivity about others, or a desire to help others, and then encourages the patient to consider how to better understand and to benefit from these characteristics and interests, such as exploring social, educational and career opportunities, or volunteering in community or other organizations (Kernot et al., 2023; Pickard, 2015; Zeitler et al., 2020).

Following is an example of a borderline patient’s discovery of unrecognized and undeveloped abilities as he gained insight and understanding about his childhood history of flawed learning rather than just a history of flawed behaviors. The patient was a bright young scientist who had received prior treatment for chronic stress and depression, episodic heavy drinking, self-dislike, disturbed relationships, setbacks in career goals, troubling interactions with his wife, and occasional suicidal thinking. He had responded poorly to medications, cognitive behavioral therapy and marital therapy. He was an only child, and he pictured himself as having been a burden on his very proper parents because he was “difficult” and “too touchy.” Over time a story emerged of an authoritative mother and a somewhat distant father. The patient’s wife confirmed her observations of this parental sce-

nario. In a meeting with the parents, the mother appeared cooperative, but with many strong opinions, and the father deferred to her opinions. Early in treatment the patient avoided discussion of the quality of parenting except when it came up during joint sessions with his wife, and he then tended to make excuses for his parents. Any symptomatic progress came slowly. At times he appeared to think about and understand workings of his mind more clearly, but then he would return to a state of discouraged perplexity. This was in clear contrast to his progress in group therapy, where he soon began to demonstrate good and on occasion excellent understandings about other members that could sometimes be surprising. Group members began to engage with him for his comments and advice. In individual therapy he was encouraged to contemplate and take advantage of these interpersonal abilities, and to consider them in exploring his developmental experiences. During an individual session one day when he was in a somewhat buoyant mood he rather abruptly went into more detail about his childhood, insisting that the therapist must understand and believe how destructive his parenting had been. He colorfully described his childhood environment as an oasis in the desert where, as an only child, he was isolated with his parents. The oasis had no well water (nurture), and so to stay alive he was forced to spend his time alone, lying face down and sucking on the damp sand which was also covered with dog dung, his description of combined neglect and abuse. He described confusing criticisms and occasional mild physical abuse from his stern mother, along with absence of warmth or affection. This included criticism of his “girly” sensitivity and occasionally being confined in a closet for reasons he could not recall. After this session, the topic was dropped as he moved to other issues. Several weeks later, during discussion of an incident involving his parents, he was reminded that his story was well-remembered and understood. At first, he appeared bewildered and asked what story was this, and when it was presented he became distressed and said that he didn’t really believe that story, that he must have been in an altered state when he told it. When urged further he finally said that it was important for the therapist to know and to believe because then he could be helped, but that probably he could never believe such an awful story, even though true. In subsequent sessions he gradually became able to maintain attention to and understanding of past childhood realities, putting two and two together

regarding his pattern of experiencing the present in terms of the past. This was accompanied by considerable depression, which is the case for many borderline patients as they better understand past truths, since although “the truth will set you free,” the full truth can also bring out much pain about the past, including deep regret over never having been able to experience a loving and happy childhood (Gunderson & Chu, 1993; Meehan et al., 2018b). Subsequently, he told the group that he had to go through the pain of looking at his past in order to change his future rather than to keep repeating his past in the present over and over. By the conclusion of four years of therapy he was doing well, was in good spirits, and his marriage had improved markedly. He had developed social skills during the group therapy experience that helped lead to a successful business enterprise involving good working relationships with a partner and employees. In the group he quoted Shakespeare while describing his therapy experience: “Ignorance is the curse of God; knowledge is the wing where-with we fly to heaven” (Shakespeare: Henry VI; see also Yiu et al., 2022). Interestingly, his parents had sought professional help for him as a difficult child, and he recalled that during meetings his mother was the perfect picture of a concerned mother who was knowledgeable about child-raising literature, while his father was the very picture of a responsible gentleman. He believed that nothing in those interviews would suggest adverse parenting behaviors, such as his mother’s likely responses if anyone would actively explore or challenge her views.

Section C: Group Therapy and Group Living

Group therapy provides the borderline patient with a real-life opportunity to work through difficulties in developing satisfactory relationships (Arntz et al., 2022; Bo et al., 2017; Folmo et al., 2022; Pickard, 2009; Price, 2019; Woodbridge et al., 2023). Arranging for hospitalized borderline patients to live together in monitored, interactive environments can also have significant benefits, particularly if group therapy is included (Barr et al., 2020; Beck et al., 2017; Gunderson, 2014; O’Connell et al., 2016). This can provide the “horizontal identity” experience described by Andrew Solomon (2012). He identifies two modes for the transmission of identity. The principal one is “vertical identity” that is passed from parent to child. However, sometimes a child has traits that are quite foreign to and/or bothersome to the parents (Wall et al., 2018), as may often have been the case for borderline patients. Such individuals can develop a sense of horizontal identity during the experience of engaging with peers who have similar childhood histories and/or traits, appreciating and empathizing with them, and thereby with themselves. Solomon’s book covers many traits that can benefit from a horizontal identity experience including Gay, Deaf, Dwarfism, Down Syndrome, Autism, Schizophrenia, and also “Prodigy.”

Section D: Family engagement in treatment programs

It may be indicated or necessary for the clinician to engage with the parents of adolescent and young adult borderline patients, as well as with other family members and non-relatives (Choi-Kain & Sharp, 2021; Shapiro, 1992). As with many treatment protocols, it is good to keep in mind that one size may not fit all. We have the responsibility to consider the patient’s wishes rather than to immediately press for conformity to a particular treatment model that includes family participation. A patient’s preference for very limited or no involvement at all with parents can be appropriate when she/he is searching for autonomy of thoughts and feelings that may have been suppressed during the caretaking experience. It can often be a good idea to see parents of adolescents separately for counseling, especially when this

is welcomed by the patient (Choi-Kain & Sharp, 2021; Sharp, 2021). Parents can also benefit from inclusion in parent groups that include a mentalizing experience about self and others (Brumariu et al., 2020; Hutsebaut, et al., 2020; Penner et al., 2019; Sharp et al., 2020; Stefanatou, 2022; Vanwoerden et al., 2021b).

Gunderson (2014) has made important contributions for resolving incorrect family beliefs and pessimistic expectations about the borderline condition and its treatment, that can then enable the family and the patient to engage with one another in a more positive way (see also Furnham et al., 2015; Gunderson & Palmer, 2019). Patients and parents are informed that prognosis with treatment is quite favorable, and that no one is responsible for an illness involving inherent limitations. The patient is relieved that she/he is not personally to blame as a difficult person, and the parents are relieved that they are not to blame for their understandable failure to resolve the patient's troubling characteristics. An important modification to this approach would be to emphasize that much about the borderline condition and how to prevent it remains unknown, rather than to suggest inborn deficiencies (Cooper et al., 2018), and to add that although the patient's temperamental features have presented difficulties for parenting, therapy may well reveal that there are underlying positive potentials that can actually be of benefit in the future (Boyce, 2019). The patient may now experience improved rapport with more hopeful parents, along with the prospect of discovering something of value within herself/himself. Some treatment programs have recommended that patients can move forward by forgiving the parents for child-raising errors. This can muddy the waters since "forgiving" can be a cousin to "blaming." Family reconciliation goes best with new mutual understandings, along with regrets about what happened, and then embarking positively in discovering a new kind of relationship (Gunderson & Chu, 1993). Informing families that progress is being made in understanding the nature and origins of BPD, and that borderline patients may even harbor inherent mental assets, can also open the door for both patients and parents to participate in investigational research. Many parents and patients would be enthusiastic about altruistic collaboration in research that searches to understand the borderline condition, to identify pre-borderline children, and to discover how to parent them (Dare & Nowicki, 2015; Tusiani-Eng & Tusiani, 2018).

Section E: Pharmacotherapy

There have been valiant efforts to develop successful drug and other somatic treatments for BPD. However, results have been very disappointing (Chanen et al., 2022; Gunderson & Choi-Kain, 2018; Gartlehner et al., 2021; Lieslehto et al., 2023; Mercer & Links, 2019; Paris, 2015; Shapiro-Thompson & Fineberg, 2022; Silk, 2018; Stoffers-Winterling, Storebo & Lieb, 2020; Stoffers-Winterling et al., 2022). Even more surprising has been the discovery that BPD nevertheless responds very well to psychotherapy. Jonathan Lear and others have argued that drugs can resolve symptoms but do not solve problems (Lear, 1990; Mintz, 2019; Park & Imboden, 1970), and borderline patients are overwhelmed by complex problems in understanding self and others. Lear states: “For all their immense value in relieving human suffering, there is no evidence that drugs can treat more than the grossest of psychic phenomena. That there will be marvelous advances in neurology and psychopharmacology is beyond question; that they will solve the conflicts inherent in living this particular life is fantasy” (see also Jamison, 2023; Ono & Berger, 1995).

Borderline patients frequently express a wish for medication. Despite the poor research evidence for pharmacological benefit in BPD, there is good evidence that patients can nevertheless experience a helpful placebo benefit, particularly when the patient is in psychotherapy and the therapist presents positivity about likely helpful symptomatic relief during the therapy (He et al., 2018; Kirsch, 2017; Park & Covi, 1965; Rickels et al., 1971.) Empathic collaboration with the patient in making a medication decision can also contribute to the development of a working clinician/patient relationship (Fineberg et al., 2019). When prescribing a drug for a borderline patient, it is important that the clinician emphasizes that this is for symptomatic relief and may not help in resolving self/other problems, such as difficulties with self-esteem and relationships, that will respond best to working together for resolution. This can help in two ways. The patient will be less likely to be painfully disappointed and discouraged if there is no or minimal benefit from the drug, which can be accompanied by decreasing expectation for treatment success. (Baumer et al., 2022). Secondly, the patient will be less likely to conclude that a somatic treatment means that her/his condition must have an inherent basis. There

are good research findings with depressed patients showing that when they believe there is an inherent, biological basis for their condition, not only is expectation for improvement diminished, but improvement itself is diminished (Dumas-Mallet & Gonon, 2020; Lebowitz et al., 2021; Perricone & Woo-kyoung, 2023; Schroder et al., 2020).

Drugs should be helpful, of course, for separate, co-occurring disorders such as Major Depression, PTSD and Anxiety Disorders (Stoffers-Winterling, Storebo & Lieb, 2020). However, even when prescribed specifically for co-occurring conditions, drugs are often not as helpful as one might hope (Silk, 2018; Shapiro-Thompson & Fineberg, 2022). This is likely because there can be differing sources for similar or even identical depressive, anxious and PTSD symptomatology in BPD, one being symptoms that are integral to the painful self/other impairments, and the other being the separate conditions that may or may not have been engendered by separate etiology (Goldfried, 2016). Symptomatology that is inherent to the self/other impairments does not respond to medication, but instead responds gradually to psychotherapy that focuses on resolving the patient's self/other problems. The best way to distinguish these two sources of symptomatology is to try medications since they should provide clear benefit for a separate, co-occurring condition, whereas symptoms imbedded within the Theory of Mind dysfunctions will likely remain "treatment resistant" to drugs. This likelihood of two separate sources for the same types of symptomatology in BPD has not been a significant topic for research (Gunderson & Phillips, 1991; Gunderson & Sabo, 1993). Unfortunately, the erroneous assumption that clinical depression cannot be inherent to BPD, along with the absence of the words "depression" or "depressive" in the DSM criteria, continues to contribute to the failure to identify BPD when diagnosing and treating depressed adolescents and young adults, with the very unfortunate result that so many of these patients can suffer incorrect treatments for several years before the correct diagnosis is finally established (Das & Sarkar, 2023; Ha et al., 2014; Stanley & Singh, 2018; Tedesco et al., 2023).

Section F: Summary

Current psychotherapy models for Borderline Personality Disorder provide symptomatic improvement to the degree that patients no longer meet the criteria requirement for the borderline diagnosis. However, they do not provide adequate resolution of the persisting Theory of Mind impairments. Three necessary modifications to these models are recommended. Confirmation that they will result in improved social adjustments requires psychotherapy research that includes them in treatments. Such research must include not only examination of the patient's verbal communications and behaviors, but also careful study of the therapist's verbal communications and behavioral involvement in the therapist/patient relationship. Close examination of interactive communications and behaviors during transference and countertransference engagements should provide particularly pertinent information (Gabbard, 2020; Wilkinson & Gabbard, 1993).

The complexity involved in the psychotherapy of BPD should alert us to the necessity to reinvigorate psychotherapy training for psychiatric residents (Lin et al., 2023; Moran, 2022; Papathanasiou & Stylianidis, 2022b; Pretsky et al., 2023; Shapiro, 2012; Tadmon & Olfson, 2022; Woodbridge et al., 2023). Residents in Psychiatry today are taught to work largely within the medical model that they had learned in medical school. The medical model provides guidelines for obtaining information from and working with patients by means of questioning, observation, examination and explanation. However, to work successfully with impairments of the mind it is also necessary to actively engage one's own invisible mind in developing a collaborative working relationship with the invisible mind of the patient in order to correctly experience, understand and help to improve how that mind is operating (Cervantes et al., 2023; Chisolm & Lyketos, 2012; Jamison, 2023; Slavney & McHugh, 2016). During this engagement each mind is influenced by the workings of the other mind. As a trusting relationship develops, patients can be encouraged to further explore thoughts and feelings about themselves and others, including about the therapist, and to explore their developmental history and its relevance to the current mental state (Bhatia, 2017; Binder, 2016; Lewis, 1991; Pincus et al., 2017). The development of this relationship requires special

expertise beyond the medical model since the mind, unlike a body organ, is not only invisible, but it can choose to control and shape the information it reveals about itself (McHugh, 1999, 2002). In the case of a borderline patient there is the additional challenge that the mind presents a mixed salad of often contradictory ideas and feelings that includes a very flawed understanding of self and others, an unusual ability to influence the minds of others, and confusing efforts to achieve intimacy combined with deep distrust of others. Over a period of time a meaningful degree of intimacy can nevertheless develop that can become largely pleasurable for both the patient and the resident, but whereas the pleasure for the patient is in the understanding, validation, support, insight, guidance, structure, caring, warmth, nurture and improvement provided, the resident must be able to limit her/his pleasure to the development of a successful working relationship and the resulting improvement, in the absence of resolving other personal issues and needs (Gabbard & Crisp, 2023; Wilkinson & Gabbard, 1993). This protective psychological/emotional boundary in an otherwise genuine relationship provides a uniquely secure self/other learning experience for the borderline patient that is not available in other relationships. The recommendations presented here are directed to the treatment of Borderline Personality Disorder, but a clinician who can engage successfully with borderline patients should be well-prepared for psychotherapy in general.

When the source of a disorder is an “external” factor such as childhood psychological adversity, prevention becomes a fundamental issue since the removal of the external factor should result in 100 percent prevention of the disorder. Research confirming that flawed caretaking can be the full source of BPD would be an extremely helpful finding because we would then know exactly where to direct prevention efforts (O’Grady & Hinshaw, 2023). A bias against examining caretaking as a likely source of BPD can, paradoxically, be a bias against researching how to parent highly sensitive pre-borderline children. Even the best-intentioned parent can feel at sea when responding to a sensitive pre-borderline child’s challenges in the absence of clear guidelines, such as those available for autistic and ADHD children. Essentially all parents wish to have a mentally healthy child, and harmful errors in parenting are largely due to ignorance rather than simply discomfort, incorrect beliefs, poor self-control, indifference or malevolence (Branas et al., 2021; Shapiro,

2020). There are likely many cases of BPD in which reasonably caring parents found their child's sensitivity and associated behaviors to be abnormal, requiring a disciplinary or other negative response, without any understanding of a likely need for a specific kind of enhanced parenting. This would include responsible parents who did their best to work with pre-borderline children and who, as the children became older, were able to figure out how they could have done better only if they had been provided with the necessary advice and knowledge. We are confident that many parents would welcome the opportunity to participate in research about how to understand and parent pre-borderline children if presented to them correctly.

There is a multitude of parenting guidance books, but they must focus much more on the influence of routine everyday parent-to-child verbal and behavioral messages, including expressions of opinions, directives, control, beliefs, biases and rules, as well as degrees of warmth, love, patience and empathy (Allen, Liebman, Park & Wimmer, 2001; Cicchetti & Toth, 1995; Franssens et al., 2021; Garner & Yogman, 2021; Kerr et al., 2021; Stepp et al., 2012). It is most important to educate parents that self/other abilities are learned, just as languages and other school subjects are learned, requiring enlightened guidance and support, along with thoughtful respect for the child's communications, and with provision of a necessary degree of mental autonomy for the developing Theory of Mind (Sharp, 2021). Prevention of disordered Theory of Mind requires improved educational opportunities not only for parents and prospective parents, but also provision of more expertise to other mental health professionals, pediatricians, (see American Academy of Pediatrics, 2012), teachers, counselors and researchers.

References

- Agrawal, H.R., Gunderson, J.G., Holmes, B.M., & Lyons-Ruth, K. (2004). Attachment studies with borderline patients: A review. *Harvard Review of Psychiatry*, 12, 94-104.
<https://doi.org/10.1080/10673220490447218>
see pages 25, 63, 78
- Akca, O.F., Wall, K., & Sharp, C. (2020). Borderline personality disorder and attention deficit/ hyperactivity disorder in adolescence: Overlap and differences in a clinical setting. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-020-00122-w>
see page 48
- Akca, O.F., Wall, K., & Sharp, C. (2021). Divergent mentalization types in adolescent borderline personality disorder and attention deficit/hyperactivity disorder. *Nordic Journal of Psychiatry*.
<https://doi.org/10.1080/08039488.2021.1887349>
see page 48
- Alexander, F., & French, T.M. (1946). *Psychoanalytic therapy: Principles and application*. New York: Ronald Press.
see pages 11, 112
- Allen, D.M. (2003). *Psychotherapy with borderline patients: An integrated approach*. New Jersey: Lawrence Erlbaum.
see pages 7, 45, 61, 97
- Allen, J.G. (2022). *Trusting in psychotherapy*. Washington DC: American Psychiatric Assn. Publishing.
see pages xv, 113, 115, 118
- Allen, J.G. (2023). Becoming trustworthy in treating patients with borderline personality disorder. *Journal of Personality Disorders*, 37, 604-619.
<http://doi.org/10.1521/pedi.2023.37.5.604>
see pages 35, 109, 112, 113, 115, 118
- Allen, J.G. Fonagy, P., & Bateman, A.W. (2011). The role of mentalizing in treating attachment trauma. In R.A. Lanius, E. Vermetten & C. Pain (Eds), *The impact of early life trauma on health and disease: The hidden epidemic*. (pp 247-256). New York: Cambridge University Press.
<https://doi.org/10.1017/CBO9780511777042.029>
see pages 59, 62, 99, 101, 110, 115, 118

Allen, T. E., Liebman, M.C., Park, L.C., & Wimmer, W.C. (2001). A primer on mental disorders: A guide for educators, families and students. Lanham, MD: Scarecrow Press.

see page [129](#)

Amad, A., Ramoz, N., Thomas, P., Jardri, R., & Gorwood, P. (2014) Genetics of borderline personality disorder: Systemic review and proposal of an integrative model. *Neuroscience and Biobehavioral Reviews*, 4, 6-19.

<https://dx.doi.org/10.1016/j.neubiorev.2014.01.003>

see pages [8](#), [47](#), [65](#), [90](#)

Ardito, R.B., & Rabellino, D. (2011). Therapeutic alliance and outcome of psychotherapy: Historical excursus, measurements, and prospects for research. *Frontiers in Psychology*, 2:270.

<https://doi.org/10.3389/fpsyg.2011.00270>

see page [73](#)

American Academy of Pediatrics. (2012). Early childhood adversity, toxic stress, and the role of the pediatrician: Translating developmental science into lifelong health. *Pediatrics*, 129, e224-e231.

<https://doi.org/10.1542/peds.2011-2662>

American Psychiatric Glossary, 8th Edition (2003). Arlington VA: American Psychiatric Publishing.

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: American Psychiatric Publishing.

Andover, M.S., Schatten, H.T., & Morris, B.W. (2018). Suicidal and non-suicidal self-injury in borderline personality disorder. In B. Stanley & A.S.

New (Eds.), *Borderline personality disorder* (pp 129-148). New York: Oxford University Press.

see page [22](#)

Antoine, S.M., Fredborg, B.K., Streiner, D., Guimond, T., Dixon-Gordon, K.L., Chapman, A.L., Kuo, J., Links, P., & McMains, S. (2023). Subgroups of Borderline Personality Disorder: A latent class analysis. *Psychiatry Research*.

<https://doi.org/10.1016/j.psychres.2023.115131>

see page [19](#)

APA Dictionary of Psychology (2007). Washington, D.C.: American Psychological Assn.

Apperly, I.A., & Butterfill, S.A. (2009). Do humans have two systems to track beliefs and belief-like states? *Psychological Review*, 116, 953-970.

<https://doi.org/10.1037/a0016923121>

see page [55](#)

- Arntz, Al., et al. (2022). Effectiveness of predominately group schema therapy and combined individual and schema therapy for borderline personality disorder: A randomized clinical trial. *JAMA Psychiatry*.
<https://doi.org/10.1001/jamapsychiatry.2022.0010>
 see page 123
- Aron, E. N. (2015). *The highly sensitive child: Helping our children thrive when the world overwhelms them*. New York: Harmony Books.
 see page 69
- Aron, E.N., & Aron, A. (1997). Sensory processing sensitivity and its relation to introversion and emotionality. *Journal of Personality and Social Psychology*, 73, 345-368.
<http://dx.doi.org/10.1037/0022-3514.73.2.345>
 see page 76
- Assary, E., Vincent, J., Machlitt-Northen, S., Keers, R., & Pluess, M. (2020). The role of gene-environment interaction in mental health and susceptibility to the development of psychiatric disorders. In R. Teperino (Ed.), *Beyond our genes: Pathophysiology of gene and environment interaction and epigenetic inheritance* (pp 117-138).
https://doi.org/10.1007/978-3-030-35213-4_7
 see page 91
- Assary, E., Zavos, H.M.S., Krapohl, E., Keers, R., & Pluess, M. (2020). Genetic architecture of environmental sensitivity reflects multiple heritable components: A twin study with adolescents. *Molecular Psychiatry*.
<https://doi.org/10.1038/s41380-020-0783-8>
 see pages 76, 77
- Astington, J.W., & Jenkins, J.M. (1999). A longitudinal study of the relation between language and theory-of-mind development. *Developmental Psychology*, 35, 1311-1320.
<https://doi.org/10.1037//0012-1649.35.5.1311>
 see page 30
- Astington, J.W., & Baird, J.A. (2005). Introduction: Why language matters. In J.W. Astington & J.A. Baird (Eds.), *Why language matters for theory of mind* (p 3-25). New York: Oxford University Press.
<https://doi.org/10.1093/acprof:oso/9780195159912.003.0001>
 see page 30
- Averill, S.C., Beale, D., Benfer, B., Collins, D.T., Kennedy, L., Myers, J., Pope, D., Rosen, I., & Zoble, E. (1989). Preventing staff-patient sexual relationships. *Bulletin of the Menninger Clinic*, 53, 384-393. PMID: 2790349
 see page 36

- Aviram, R.B., Brodsky, B.S., & Stanley, S. (2006). Borderline personality disorder, stigma & treatment implications. *Harvard Review of Psychiatry*, 14, 249-256. doi:10.1080/10673220600975121
see pages 18, 115
- Back, S.N., & Bertsch, K. (2020). Interoceptive processing in borderline personality pathology: A review on neurophysiological mechanisms. *Current Behavioral Neuroscience Reports*, 7, 232-238.
<https://doi.org/10.1007/s40473-020-00217-2>
see page 40
- Bakermans-Kranenberg, M.J., van Ijzendoorn, M.H., Pijlman, F.T.A., Mesman, J., & Juffer, F. (2008). Experimental evidence for differential susceptibility: Dopamine D4 receptor polymorphism (DRD4 VNTR) moderates intervention effects on toddler's externalizing behavior in a randomized trial. *Developmental Psychology*, 44, 293-300.
<https://doi.org/10.1037/0012-1649.44.1.293>
see page 77
- Baldwin, J.R., Wang, B., Karwatowska, L., Schoeler, T., Tsaligopoulou, A., Munafo, M. R., & Pingault, J. B. (2023). Childhood maltreatment and mental health problems: A systematic review and meta-analysis of quasi-experimental studies. *American Journal of Psychiatry*, 180, 117-126.
<https://doi.org/10.1176/appi.ajp.20220174>
see pages 7, 45
- Ballespi, S., Vives, J., Sharp, C., Tobar, A., & Barrantes-Vidal, N. (2019). Hypermentalizing in social anxiety: Evidence for a context-dependent relationship. *Frontiers in Psychology*.
<https://doi.org/10.3389/fpsyg.2019.01501>
see page 69
- Balter, M. (2017). Schizophrenia's unyielding mysteries. *Scientific American*, 316, 55-61. doi:10.1038/scientificamerican0517-54
see pages 90, 91
- Barkow, J.H., Cosmides, L., & Touby, J., Eds. (1992). *The adapted mind: Evolutionary psychology and the generation of culture*. New York: Oxford University Press.
see page 84
- Barnett, W., Hansen, C.L., Bailes, L. G., & Humphreys, K.L. (2021). Caregiver-child proximity as a dimension of early experience. *Development and Psychopathology*.
<https://doi.org/10.1017/S0954579421001644>
see pages 27, 28, 62, 66

- Barr, K.R., Townsend, M.L., & Grenyer, B.F.S. (2020). Using peer workers with lived experience to support the treatment of borderline personality disorder: A qualitative study of consumer, career and clinical perspectives. *Borderline Personality Disorder and Emotional Dysfunction*.
<https://doi.org/10.1186/s40479-020-00135-5>
see page 123
- Baryla-Matejczuk, M., Artymiak, M., Ferrer-Cascales, R., & Betancort, M. (2020). The highly sensitive child as a challenge for education: Introduction to the concept. *Problemy Wczesnej Edukacji (Issues Early Education)*.
<https://doi.org/10.26881/pwe.2020.48.05>
see pages 69, 70
- Bateman, A.W., & Fonagy, P. (2012). *Handbook of mentalizing in mental health practice*. Washington DC: American Psychiatric Assn. Publishing.
see pages 96, 109
- Baumer, A-V., Furer, L., Birkenberger, C., Wyssen, A., Steppan, M., Zimmerman, R., Gabb, J., Kaess, M., & Schmeck, K. (2022). The impact of outcome expectancy on therapy outcome in adolescents with borderline personality disorder. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-022-00200-1>
see pages 116, 125
- Beck, E., Sharp, C., Poulsen, S., Bo, S., Pederson, J., & Simonsen, E. (2017). The mediating role of mentalizing capacity between parents and peer attachment and adolescent personality disorder. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-017-0074-4>
see page 123
- Begemann, M.J.H., Heringa, S.M., & Sommer, I.E.C. (2016). Childhood trauma as a neglected factor in psychotic experiences and cognitive functioning. *JAMA Psychiatry*, 73, 875-876.
<https://doi.org/10.1001/jamapsychiatry.2016.0924>
see page 89
- Belsky, D.W., Caspi, A., Arseneault, L., Bleidorn, W., Fonagy, P., Goodman, M., Houts, R., & Moffitt, T.E. (2012). Etiological features of borderline personality related characteristics in a birth cohort of 12-year-old children. *Development and Psychopathology*: Cambridge University Press, 24, 251-265.
<https://doi.org/10.1017/S0954579411000812>
see page 6, 57
- Belsky, J., Bakermans-Kranenburg, M.J., & van IJzendoorn, M.H. (2007). For better and for worse: Differential susceptibility to environmental influences. *Current Directions in Psychological Science*, 16, 300-304.
<https://doi.org/10.1111/j.1467-8721.2007.00525.x>
see page 6, 57

- Belsky, J. (2013). Differential susceptibility to environmental influences. *International Journal of Child Care and Education Policy*, 7, 15-31.
<https://doi.org/10.1007/2288-6729-7-2-15>
see pages 48, 52
- Belsky, J., & Pluess, M. (2009). Beyond diathesis stress: Differential susceptibility to environmental influences. *Psychological Bulletin*, 135, 885-908.
<https://doi.org/10.1037/a0017376>
see pages x, 3, 4, 52
- Bender, D.S., & Skodol, A.E. (2007). Borderline personality as a self-other representational disturbance. *Journal of Personality Disorders*, 21, 500-517.
<https://doi.org/10.1521/pedi.2007.21.5.500>
see page 25
- Bendstrup, G., Simonsen, E., Kongerslev, M.T., Jorgensen, M.S., Petersen, L.S., Thomsen, M.S., & Vestergaard, M. (2021). Narrative coherence of autobiographical memories in women with borderline personality disorder and associations with childhood adversity Borderline Personality Disorder and Emotion Dysregulation.
<https://doi.org/10.1186/s40479-021-00159-5>
see page 110
- Benedict, R. (1934). *Patterns of culture*. Boston: Houghton Mifflin.
see page 75
- Bernanke, J., & McCommon, B. (2018). Training in good psychiatric management for borderline personality disorder in residency: An aide to learning supportive therapy for challenging-to-treat patients. *Psychodynamic Psychiatry*, 46, 181-200.
see page 118
- Bertele, N., Talmon, A., Gross, J.J., Schmahl, C., Schmitz M., & Niedtfeld, I. (2022). Childhood maltreatment and borderline personality disorder: The mediating role of difficulties with emotion regulation. *Journal of Personality Disorders*, 36, 264-276.
<https://doi.org/10.1521/pedi.2022.36.3.264>
see pages 9, 41
- Betz, B.J., & Whitehorn, J.C. (1956). The relationship of the therapist to the outcome of therapy in schizophrenia. *Psychiatric Research Reports*, American Psychiatric Assn, 5, 89-105. PMID: 13359562
see pages 89, 118, 119
- Bhatia, R. (2017). Providing psychotherapy? Keep these principles in mind. *Current Psychiatry*, 16, 35-36.
see pages 101, 127

- Bilalic, M., & McLeod, P. (2014). Why good thoughts block better ones, the einstellung effect. *Scientific American*, 310, 75-79.
<https://www.jstor.org/stable/26039821>
- Binder, R. (2016). Should psychotherapy remain a part of psychiatry? *Psychiatric News: American Psychiatric Assn.*, 51,4.
<https://psychiatryonline.org/doi/10.1176/appi.pn.2016.2a11>
 see page 127
- Birn, R.M., Roeber, B.J., & Pollak, S.D. (2017). Early childhood stress, exposure, reward pathways, and adult decision making. *Proceedings of National Academy of Sciences*, 114, 13549-13554.
<https://pubmed.ncbi.nlm.nih.gov/29203671/>
 see page 44
- Bo, S, Sharp, C., Beck, E., Pederson, J., Gondan, M., & Simonsen, E. (2017). First empirical evaluation of outcomes for mentalization-based group therapy for adolescents with BPD. *Personality Disorders: Theory, Research, and Treatment*, 8, 396-401.
<https://dx.doi.org/10.1037/per0000210>
 see page 123
- Bo, S., Sharp, C., Fonagy, P., & Kongerslev, M. (2017). Hypermentalizing, attachment, and epistemic trust in adolescent BPD: Clinical illustrations. *Personality Disorders: Theory, Research and Treatment*, 8, 172-182.
 see pages 40, 63, 112, 115, 118
- Bo, S., Sharp, C., Kongerslev, M., Luyton, P., & Fonagy, P. (2022). Improving treatment outcomes for adolescents with borderline personality disorder through a socioecological approach. *Research Square*.
<https://doi.org/10.21203/rs.3.rs-1436004/v1>
 see pages 73, 100, 113, 116
- Boroditsky, L. (2019). Language and the brain. *Science*, 366,13.
<https://www.science.org/doi/10.1126/science.aaz6490>
 see page 30
- Botsford, J., & Renneberg, B. (2020). Autobiographical memories of interpersonal trust in borderline personality disorder. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-020-00130-w>
 see page 45
- Boucher, M. E., Pugliese, J., Allard-Chapais, C. Lecours, S., Ahoundova, L., Chouinard, R., & Gaham, S. (2017). Parent-child relationship associated with the development of borderline personality disorder: A systematic review. *Personality and Mental Health*.11, 229-255.
<https://doi.org/10.1002/pmh.1385>
 see pages 46, 65, 71, 74

- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
see pages 62, 99
- Bowlby, J. (1998). Developmental psychiatry comes of age. *American Journal of Psychiatry*, 145, 1-10.
<https://doi.org/10.1176/ajp.145.1.1>
see pages 91, 99
- Boyce, W.T. (2019). *The orchid and the dandelion: Why some children struggle and how all can thrive*. New York: Alfred A. Knopf.
see pages xi, 67, 70, 77, 124
- Boyce, W.T., Chesney, M., Alkon, A., Tschann, J.M., Adams, S., Chesterman, B., Cohen, F., Kaiser, P., Folkman, S., & Wara, D. (1995). Psychobiologic reactivity to stress and childhood respiratory illness: Results of two prospective studies. *Psychosomatic Medicine*, 57, 411-422.
<https://doi.org/10.1097/00006842-199509000-00001>
see pages 53, 76
- Boyce, W.T., & Ellis, B.J.H. (2005). Biological sensitivity to context: An evolutionary-developmental theory of the origins and functions of stress reactivity. *Development and Psychopathology*, Cambridge University Press, 17, 271-301.
<https://doi.org/10.1017/S0954579405050145>
see pages 4, 53, 56
- Bracken, P. (2012). Psychiatry beyond the current paradigm? *British Journal of Psychiatry*, 201, 430-434. <https://doi.org/10.1192/bjp.bp.112.109447>
see page 90
- Brager - Larsen, A., Zeiner, P., & Mehlum, L. (2023). Sub-Threshold or full-syndrome borderline personality disorder in adolescents with recurrent self-harm –distinctly or dimensionally different? *Borderline Personality Disorder and Emotion Dysregulation*.
<http://doi.org/10.1186/S40479-023-00234-z>
see page 20
- Branas, M., Martinho Jr, E., & Croci, M. (2021). Overall principles. In L.W. Choi-Kain & C. Sharp (Eds.), *Handbook of good psychiatric management for adolescents with borderline personality disorder* (pp. 19-33). Washington DC: American Psychiatric Assn. Publishing.
see pages 107, 112, 118, 120, 128
- Brandchaft, B., & Stolorow, R.D. (1984). The difficult patient. In R.D. Stolorow, G.E. Atwood, & B. Branschaft, (Eds.) *The intersubjective perspective* (pp 93-112). Northwale, N.J.: Jason Aronson Inc.
see page 118

- Braslow, J.T., Brekke, J.S., & Levenson, J. (2020). Psychiatry's myopia: Reclaiming the social, cultural, and psychological in the psychiatric gaze. *JAMA Psychiatry*. <https://doi.org/10.1001/jamapsychiatry.2020.2722>
see page 90
- Brassard, M.R. Hart, S.N., Baker, A.L., & Chiel, Z. (2019). APSAC monograph on psychological maltreatment. American Professional Society on the Abuse of Children. <https://www.apsac.org>
see page 45
- Brody, L.E., & Mills, C.J. (1997). Gifted children with learning disabilities: A review of the issues. *Journal of Learning Disabilities*, 30, 282-296. <https://doi.org/10.1177/002221949703000304>
see page 8, 39, 61, 68, 69
- Brodsky, B.S. (2018). Meeting the clinical challenges of borderline personality disorder. In B. Stanley & A.S. New (Eds). *Borderline personality disorder* (pp 363-376). New York: Oxford University Press.
see pages 115, 117
- Brookwood, M. (2021). *The orphans of davenport: Eugenics, the great depression and the war over children's intelligence*. New York: W.W. Norton & Co.
see pages 81, 85
- Brothers, L. (1989). A biological perspective in empathy. *American Journal of Psychiatry*, 146, 10-19. <https://doi.org/10.1176/ajp.146.1.10>
see page 27
- Brothers, L. (1990). The social brain: A project for integrating primate behavior and neurophysiology in a new domain. *Concepts in Neuroscience*, 1, 27-51
see page 27
- Brumariu, L.E., Owen, M.T., Dyer, N., & Lyons-Ruth, K. (2020). Development pathways to BPD-related features in adolescence: Infancy to age 15. *Journal of Personality Disorders, Supplement B*, 34, 104-129. https://doi.org/10.1521/pedi_2020_34_480
see pages 62, 71, 124
- Brunet, A., Saumier, D., Liu, A., Streiner, D.L., & Tremblay, J. (2018). Reduction of PTSD symptoms with pre-activation propranolol therapy: A randomized controlled trial. *American Journal of Psychiatry*, 175, 427-433. <http://doi.org/10.1176/appi.ajp.2017.17050481>
see page 97

- Buckley, P.J. (2016). The psychiatric interview today. *Psychiatric News*, 51: American Psychiatric Assn.
<https://doi.org/10.1176/appi.pn.2016.2a18>
see page 99
- Bynum, B. (2000). Drapetomania. *The Lancet*.
[https://doi.org/10.1016/S0140-6736\(05\)744688](https://doi.org/10.1016/S0140-6736(05)744688)
see page 31
- Calvo, N., Lara, B, Serrat, L, Perez-Rodriguez, V., Andion, O., Ramos-Quiroga, J.A., & Ferrer, M. (2020). The role of environmental influences in the complex relationship between borderline personality disorder and attention-deficit/hyperactivity disorder: Review of recent findings. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-019-0118-z>
see page 48
- Campbell, S.M., Zimmer-Gembeck, M., & Duffy, A. (2021). At the junction of clinical and developmental science: Associations of borderline identity disturbance symptoms with identity formation processes in adolescence. *Journal of Personality Disorders*, 35, Supplement B, 8-28.
https://doi.org/10.1521/pedi_2020_34_484
see page 22
- Carter, L., & Rinsley, D.B. (1977). Vicissitudes of “empathy” in a borderline adolescent. *International Review of Psychoanalysis*, 4, 317-326.
see page 33
- Caspi, A., Houts, R.M., Belsky, D.W., Goldman-Mellor, S.J., Harrington, HG1., Israel, S., Meier, M.H., Ramrakha, S., Shalev, I., Poulton, R., & Moffitt, T.E. (2014). The p factor: One general psychopathology factor in the structure of psychiatric disorders? *Clinical Psychological Science*, 2, 119-137.
<https://doi.org/10.1177/2167702613497473>
see page 54
- Caspi, A., & Moffitt, T.E. (2018). All for one and one for all: Mental disorders in one dimension. *American Journal of Psychiatry*, 175, 831-844.
<https://pubmed.ncbi.nlm.nih.gov/29621902/>
see pages 4, 46, 54, 87, 91
- Caspi, A., Sugden, K., Moffitt, T.E., Taylor, A., Craig, I.W., Harrington, H., McClay, J., Mill, J., Martin, J., Braithwaite, A., & Poulton, R., (2003). Influence of life stress on depression: Moderation by a polymorphism in the 5-HTT gene. *Science*, 301, 86-389.
<https://doi.org/10.1126/science.1083968>
see page 77
- Celani, D.P. (1994). *The illusion of love*. New York: Columbia University Press.
see page 98

- Cervantes, B.R., Kerr, S., Vanwoerden, S., & Sharp, C. (2023). Operationalizing intimacy and identity aspects of personality. Functioning in relation to personality disorder in adolescents (2003). *Frontiers in Psychiatry* 14.1153274. <http://doi.org/10.3389/fpsy.2023.1153274>
see pages 57, 61, 127
- Chanen, A.M. (2021). Bigotry and borderline personality disorder. *Australasian Psychiatry*, 29, 579-580. <https://doi.org/10.1177/10398562211045151>
see pages 18, 87
- Chanen, A., Sharp, C., & Hoffman, P. (2017). Prevention and early intervention for borderline personality disorder: A novel public health priority. *World Psychiatry*, 16, 215-216. <https://doi:10.1002/wps.20429>
see pages 61, 73, 115
- Chanen, A.M., et al. (2021). Effects of 3 forms of early intervention for young people with borderline personality disorder: The MOBY randomized clinical trial. *JAMA Psychiatry*, 79,109-119. <https://doi.org/10.1001/jamapsychiatry.2021.3637>
see pages 61
- Chanen, A.M., Sharp, C., Nicol, K., & Kaess, M. (2022). Early intervention for personality disorder. *Focus: American Psychiatric Assn.*, 20, 402-408. <https://doi.org/10.1176/appi.focus.20220062>
see pages 18, 58, 61, 115, 125
- Chapman, A.L., & Ivanoff, A. (2018). Forensic issues in borderline personality disorder. In B. Stanley & A.S. New (Eds). *Borderline personality disorder* (pp 403-419). New York: Oxford University Press.
see page 82
- Charpak, N., Tessler, R., Ruiz, J.G. et al (2017). Twenty-year follow-up of kangaroo mother care versus traditional care. *Pediatrics*, 139, 2016-2063. <https://doi.org/10.1542/peds.2016-2063>
see page 66
- Cheney, D.L., & Seyfarth, R.M. (1990). *How monkeys see the world: Inside the mind of another species*. Chicago: University of Chicago Press.
see pages 3, 27
- Cheney, D.L., & Seyfarth, R.M. (2007). *Baboon metaphysics: The evolution of the social mind*. Chicago: University of Chicago Press.
see page 27
- Chisolm, M.S., & Lyketsos, C.G. (2012). *Systematic psychiatric evaluation: A step-by-step guide to applying the perspectives of psychiatry*. Baltimore: John's Hopkins University Press.
see pages 84, 127

Choate, A.M., Bornovalova, M.A. Hipwell, E.E., Chung, T., & Stepp, S.D. (2023). Mutualistic processes in the development of psychopathology: The special case of borderline personality disorder. *Journal of Psychopathology and Clinical Science*, 132, 185-197.

<https://doi.org/10.1037/abn0000800>

see pages 4, 54

Choi-Kain, L.W. (2018). Mentalization-based treatment. In B. Stanley & A.S. New (Eds). *Borderline personality disorder* (pp 247-270). New York: Oxford University Press.

see pages 96, 102, 109, 114

Choi-Kain, L.W. (2019). Conclusion: The future of good psychiatric management. In L.W. Choi-Kain & J.G. Gunderson (Eds.), *Applications of good psychiatric management for borderline personality disorder: A practical guide* (pp 355-358). Washington, DC: American Psychiatric Assn. Publishing.

see pages 8, 84, 93

Choi-Kain, L.W., & Gunderson, J.G. (2008). Mentalization: Ontogeny, assessment, and application in the treatment of borderline personality disorder. *American Journal of Psychiatry*, 165, 1127-1135.

<https://pubmed.ncbi.nlm.nih.gov/18676591/>

see page 35

Choi-Kain, L.W., & Gunderson, J.G. (2019). *Applications of good psychiatric management for borderline personality disorder*. Washington, DC: American Psychiatric Association Publishing. Clinician perspectives. *Borderline Personality Disorder and Emotion Dysregulation*.

<https://doi.org/10.1186/s40479-020-00135-5>

see page 96

Choi-Kain, L.W., & Sharp, C. (2021). *Handbook of good psychiatric management for adolescents with borderline personality disorder*. Washington DC: American Psychiatric Assn. Publishing.

see pages 58, 61, 123, 124

Cicchetti, D., & Toth, S.L. (1995) A developmental psychopathology perspective on child abuse and neglect. *Journal of American Academy of Child and Adolescent Psychiatry*, 34, 541-565.

<https://doi.org/10.1097/00004583-199505000-00008>

see pages 13, 42, 57, 59, 61, 81, 97, 110, 129

Cohen, S., Chiang, J.J., Janicki-Deverts, D., & Miller, G.E. (2020). Good relationships with parents during childhood as buffers of the association between childhood disadvantage and adult sensitivity to the common cold. *Psychosomatic Medicine*, 82, 528-547.

<https://doi:10.1097/PSY.0000000000000818>

see pages 67

- Colle, L., Gabbatore, I., Riberi, E., Borroz, E., Bosco, F.M., & Keller, R. (2018). Mindreading abilities and borderline personality disorder: A comprehensive assessment using the theory of mind assessment scale. *Psychiatry Research*, 272, 609-617.
<https://pubmed.ncbi.nlm.nih.gov/30616131/>
see page 43
- Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blaustein, M., Cloitre, M., DeRosa, R., Hubbard, R., Kagan, R., Liautaud, J., Mallah, K., Olafson, E., & van der Kolk, B. (2005). Complex trauma in children and adolescents. *Psychiatric Annals*, 35, 390-398.
<https://doi.org/10.3928/00485713-20050501-05>
see page 9
- Cooke, T. (2017). Social information processing: A useful framework for educational psychology. *Educational Psychology Research and Practice*, 3, 50-69.
<https://doi.org/10.15123/uel.8870z>
see page 43
- Cooper, E.B., Venta, A., & Sharp, C. (2018). The role of maternal care in borderline personality disorder and dependent life stress. *Borderline Personality Disorder and Emotion Dysregulation*,
<https://doi.org/10.1186/s40479-018-0083-y>
see pages 74, 124
- Christea, I.A., Gentili, C., Cotet, C.D., Palomba, D., Barbui, C., & Cuijpers, P. (2017). Efficacy of psychotherapies for borderline personality disorder: A systemic review and meta-analysis. *JAMA Psychiatry*, 74, 319-328.
<https://doi.org/10.1001/jamapsychiatry.2016.4287>
see page 94
- Crowell, S.E., Beauchaine, T.P., & Linehan, M.M. (2009). A biosocial developmental model of borderline personality: Elaborating and extending Linehan's theory. *Psychological Bulletin*, 135, 495-510.
<https://doi.org/10.1037/a0015616>
see pages 47, 67, 90
- Cytryn, L., & McNew, D (1972). Proposed classification of childhood depression. *American Journal of Psychiatry*, 129, 63-69.
<https://doi.org/10.1176/ajp.129.2.149>
see page 21
- Da Costa, S.C., Sanches, M., & Soares, J.C. (2019). Bipolar disorder or borderline personality disorder? *Current Psychiatry*, 18, 27-29, 35-39.
see page 21

- Dare, L., & Nowicki, E.A. (2015) Twice-exceptionality: Parents' perspectives on identification. *Roeper Review*, 37, 208-218.
<https://doi.org/10.1080/02783193.2015.1077911>
see pages 39, 69, 124
- Das, S., & Sarkar, S. (2023). Beyond the medical and popular gaze: Writing the wounds in Kiera Van Gelder's memoir, *The Buddha and the Borderline*. *Journal of Pharmacological Negative Results*, 14, 1664-1678.
<https://www.pnrjournal.com/index.php/home/article/view/7300>
see pages xv, 18, 61, 115, 126
- Davidson, K.M. (2018). Cognitive therapy for personality disorders. In B. Stanley & A.S. New (Eds). *Borderline personality disorder* (pp 307-323). New York: Oxford University Press.
see pages 115, 119
- del Rio Olvera, F.J., Rodriquez-Mora, A., Senin-Calderon, C., & Rodriquez-Testal, J.F. (2022). The first session is the one that counts: An exploratory study of Therapeutic Alliance. *Frontiers in Psychology*.
<https://doi.org/10.3389/fpsyg.2022.1016963>
see pages 100, 116
- Denny, B.T., Fan, J., Fels, S., Galitzer, H., Schiller, D., & Koenigsberg, H.W. (2018). Sensitization of the neural salience network to repeated emotional stimuli following habituation in patients with borderline personality order. *American Journal of Psychiatry*, 175, 657-664.
<https://doi.org/10.1176/appi.ajp.2018.17030367>
see pages 102
- de Lima Martins, H.A., & Chagas, E.M. (2022). Vincent Van Gogh, attachment theory, and borderline personality disorder. *Avancos em Medicina* 2, 46-49.
<https://jornalavancosmedicina.com/am/article/view/82>
see page 70
- de Villiers, J.G., & de Villiers, P. A. 2014). The role of language in Theory of Mind development: Topics in Language Disorders, 34, 313-328.
<https://doi.org/10.1097/TLD.0000000000000037>
see page 30
- de Waal, F.B. (2007). Putting the altruism back into altruism: The evolution of empathy. *Annual Review of Psychology*, 59, 1-22.
<https://doi.org/10.1146/annurev.psych.59.103006.093625>
see page 35
- de Waal, F. (2009). The age of empathy: Nature's lessons for a kinder society. New York: Three Rivers Press.
see page 27

- de Waal, F. (2019). *Mama's last hug: Animal emotions and what they tell us about ourselves*. New York: W.W. Norton & Co.
see page 27
- de Waal, F. & Lanting, F. (1997). *Bonobo: The forgotten ape*. Berkeley: University of California Press.
see page 27
- de Wolff, M. S., & Van Ijzendoorn, M.H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development*, 68, 571-591.
<https://doi.org/10.1111/j.1467-8624.1997.tb04218.x>
see page 63
- Dinsdale, N., & Crespi, B.J. (2013). The borderline empathy paradox: Evidence and conceptual models for empathic enhancements in borderline personality disorder. *Journal of Personality Disorder*, 27, 172-194.
<https://doi.org/10.1521/pedi.2012.26.071>
see pages 5, 14, 32, 34, 38, 41
- Distel, M.A., & de Moor, M.H.M. (2018). Genetic influences on borderline personality disorder. In B. Stanley & A.S. New (Eds.). *Borderline personality disorder* (pp 111-127). New York: Oxford University Press.
see pages 47, 90
- Ditrich, I., Philipsen, A., & Matthies, S. (2021). Borderline personality disorder (BPD) and attention deficit disorder (ADHS) revisited- A review-update on common grounds and subtle distinctions. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-021-00162-w>
- Dixon-Gordon, K.L., Marsh, N.P., Balda, K.E., & McQuade, J.D. (2020). Parent emotion socialization and child emotional vulnerability as predictors of borderline personality features. *Journal of Abnormal Child Psychology*.
<https://doi.org/10.1007/s10802-019-00579-6>
see pages 63, 67
- Dube, S.R., Li, E.T., Fiorinii, G., Lin, C., Singh, N., Khamisa, K., McGowan, J. & Fonagy, P. (2023). Childhood verbal abuse as a child maltreatment subtype: A systematic review of the current evidence. *Child abuse and Neglect*, 144.
<http://doi.org/10.1016/j.chiabu.2023.106394>
see pages 7, 45
- Dubose, A.P., & Linehan, M.M (2005). *Balanced therapy: How to avoid conflict, help borderline patients*. *Current Psychiatry*, 12-26.
see pages 57, 119

- Dumas-Mallet, E., & Gonon, F. (2020). Messaging in biological psychiatry: Misrepresentations, their causes, and potential consequences. *Harvard Review of Psychiatry*.
<https://doi.org/10.1097/HRP.0000000000000276>
see pages 47, 48, 90, 105, 117, 126
- Dyson, F. (2020). The power of morphological thinking. *New York Review of Books*, 67, 1, 42-44.
see pages 91
- Ellis, B.J. Abrams, L.S., Masten, A.S., Sternberg, R.J., Tottenham, N., & Frankenhuis, W.E. (2020). Hidden talents in harsh environments. *Development and Psychology*.
<https://pubmed.ncbi.nlm.nih.gov/32672144/>
see page 39
- Ellis, B.J., & Boyce, W.T. (2008). Biological sensitivity to context. *Current Directions in Psychological Science*, 17, 183-187.
<https://doi.org/10.1111/j.1467-8721.2008.00571.x>
see page 53
- Ellis, B.J., Boyce, W.T., Belsky, J., Bakerman-Kranenberg, M.J., & van Ijzendoorn, M.H. (2011). Differential susceptibility to the environment: An evolutionary-neurodevelopmental theory. *Development and Psychopathology*, Cambridge University Press, 23, 7-28.
see page 52
- Ellison, W.D., Rosenstein, L., Chelminski, I., Dalrymple, K., & Zimmerman, M. (2016). The clinical significance of single features of borderline personality disorder: Anger, affective instability, impulsivity, and chronic emptiness in psychiatric outpatients. *Journal of Personality Disorders*, 30, 261-270.
<https://pubmed.ncbi.nlm.nih.gov/25893552/>
see page 22
- Epstein, M. (2022). The zen of therapy: Uncovering a hidden kindness in life. New York: Penguin Press.
see page 102
- Faulkner, W. (1950). Requiem for a nun. New York: Random House.
see page 99
- Felitti, V.J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., Koss, M.P., & Marks, J.S., (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine*, 14, 245-258.
[https://doi.org/10.1016/s0749-3797\(98\)00017-8](https://doi.org/10.1016/s0749-3797(98)00017-8)
see page 46

- Fineberg, S.K., Gupta, S., & Leavitt, J. (2019). Collaborative deprescribing in borderline personality disorder: A narrative review. *Harvard Review of Psychiatry*, 27, 75-86.
<https://doi.org/10.1097/HRP.0000000000000200>
 see page 125
- Finkel, E. (2003). Researchers propose test for AI sentence: Human consciousness theories inform preliminary checklist for bots. *Science* 381, 822-823.
<http://doi.org/10.1126/science.adk4479>
 see page 84
- First, M.B., Drevets, W.C., Carter, C., Dickstein, D.P., Kasoff, L., Kim, K.L., & McConathy, et al. (2018). Clinical applications of neuroimaging in psychiatric disorders. *American Journal of Psychiatry*, 175, 915-916.
<https://doi.org/10.1176/appi.ajp.2018.1750701>
 see page 47
- Fonagy, P. (2000). Attachment and borderline personality disorder. *Journal of the American Psychoanalytic Association*, 48, 1129-1146.
<https://doi.org/10.1177/00030651000480040701>
 see pages 110, 114
- Fonagy, P., & Allison, E. (2014). The role of mentalizing and epistemic trust in the therapeutic relationship. *Psychotherapy*, 51, 372-380.
<https://doi.org/10.1037/a0036505>
 see page 118, 119
- Fonagy, P., & Bateman, A.W. (2007). Mentalizing and borderline personality disorder. *Journal of Mental Health*, 16, 83-101.
<https://doi.org/10.1080/09638230601182045>
 see pages 40, 45, 101, 110, 115, 119
- Fonagy, P., Campbell, C., & Bateman, A.W. (2016). Update on diagnostic issues for borderline personality disorder. *Psychiatric Times*, 7/20/2016.
 see pages 2, 25, 53, 67
- Fonagy, P., Campbell, C., & Luyten, P. (2022). Attachment, mentalizing and trauma: Then (1992) and now (2022). *Brain Sciences*, 13, 459.
<http://doi.org/10.3390/brainsci13030459>
 see pages 46, 62, 67
- Fonagy, P., Gergely, G., Jurist, E.L., & Target, M. (2005). *Affect regulation, mentalization, and the development of self*. New York, NY: Other Press.
- Fonagy, P., Hepworth, M., & Campbell, C. (2023). Theoretical models of psychodynamic psychotherapy. In H. Crisp & G.O. Gabbard (Eds.), *Psychotherapeutic Treatments* (pp.3-39). Washington, DC: American Psychiatric Assn. Publishing.
 see pages 20, 83, 107, 109

Fonagy, P., & Luyton, P. (2009). A developmental, mentalizing-based approach to the understanding and treatment of borderline personality disorder. *Development and Psychopathology*, 21, 1355-1381.
<https://10.1186/s017/S0954579409990198>

Fonagy, P., Luyton, P., & Allison, E. (2015). Epistemic petrification and the restoration of epistemic trust: A new conceptualization of borderline personality disorder and its psychosocial treatment. *Journal of Personality Disorders*, 29, 575-609.
<https://doi.org/10.1521/pedi.2015.29.5.575>

see pages 9, 45, 46, 53, 54, 62, 117, 119

Fonagy, P., Luyton, P., Allison, A., & Campbell, C. (2017a). What we have changed our minds about: Part 1. Borderline personality disorder as a limitation of resilience. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-017-0061-9>

see page 54

Fonagy, P., Luyton, P., Allison, A., & Campbell, C. (2017b). What we have changed our minds about: Part 2. Borderline personality disorder, epistemic trust and the developmental significance of social communication. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-017-0061-9>

see page 97

Fonagy, P., Luyten, P., & Bateman, A.W. (2017). Treating borderline personality disorder with psychotherapy: Where do we go from here? *JAMA Psychiatry*, 74, 316-317.
<https://doi.org/10.1001/jamapsychiatry.2016.4302>

see pages 2, 4, 25, 49, 53

Fonagy, P., Luyton, P., Campbell, C., & Allison, L. (2014, December). Epistemic trust, psychopathology and the great psychotherapy debate. [web article]. Retrieved from <https://societyforpsychotherapy.org/epistemic-trust-psychopathology-and-the-great-psychotherapy-debate/>

see pages 53, 112, 115

Fonagy, P., Target, M., Gergely, G., Allen, J.G., & Bateman, A.W. (2003). The developmental roots of borderline personality disorder in early attachment relationships: A theory and some evidence. *Psychoanalytic Inquiry*, 23, 412-459.
<http://doi.org/10.1080/07351692309349042>

see pages x, 35, 44, 57, 61-63, 78, 89

Fonzo, G.A. (2019). Childhood maltreatment and amygdala threat reactivity—timing is everything. *JAMA Psychiatry*, 76, 781-782.
<https://doi.org/10.1001/jamapsychiatry.2019.0432>

see pages 53, 71, 91

- Ford, J.D., & Courtois, C.A. (2021). Complex PTSD and borderline personality disorder. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://pubmed.ncbi.nlm.nih.gov/33958001/>
 see page 80
- Ford, J.D., Grasso, D., Greene, C., Levine, J., Spinazzola, J., & van der Kolk, B. (2013). Clinical significance of a proposed developmental trauma disorder diagnosis: Results of an international survey of clinicians. *Journal of Clinical Psychiatry*, 74, 841-849.
<https://doi.org/10.4088/jcp.12m08030>
 see page 80
- Fossati, A., Gratz, K.L., Somma, A., Maffei, C., & Borroni, S. (2016). The mediating role of emotion dysregulation in the relations between childhood trauma history and adult attachment and borderline personality disorder features: A study of Italian nonclinical participants. *Journal of Personality Disorders*, 30, 653-676.
<https://doi.org/10.1521/pedi.2015.29.222>
 see page 54
- Frances, A. (1990). Forward. In M.H. Stone, *The Fate of borderline patients: Successful outcome and psychiatric practice* (pp. vii-ix). New York: Guilford.
 see page 116
- Frances, A. (2013). *Saving normal: An insider's revolt against our-of-control psychiatric diagnosis, DSM-5, big pharma, and the medicalization of ordinary life*. New York: Harper Collins.
 see page 119
- Frances, A. (2013a). *Essentials of psychiatric diagnosis: Responding to the challenge of DSM-5, Revised*. New York: Guilford Press.
 see pages 8, 100, 102, 116
- Frances, A. (2013b). Giftedness should not be confused with mental disorder. PsychologyToday.com/blog/saving-normal/201303/giftedness-should-not-be-confused-mental-disorder
 see page 68
- Frances, A. (2016). What you need to know about the genetics of mental disorders. *Psychology Today*, 04/30/2016.
 see page 47
- Francis, A. (2017). *Twilight of American Sanity*. New York: Harper Collins.
 see page 100
- Francis, G. (2021). Changing psychiatry's mind. *New York Review of Books*, 68, 1, 16-29.
 see pages 84, 90

Frank, J.D., & Frank, J.B. (1991). *Persuasion and healing: A comparative study of psychotherapy*. Baltimore: Johns Hopkins University Press.

see pages 107, 119

Frank, J.D., Gliedman, L.H., Imber, S.D., Stone, A.R. & Nash, E.H. (1959). Patients' expectations and relearning as factors determining improvement in psychotherapy. *American Journal of Psychiatry*, 115, 961-968.

<https://doi.org/10.1176/ajp.115.11.961>

see page 116

Frank, H. & Hoffman, N. (1986). Borderline empathy: An empirical investigation. *Comprehensive Psychiatry*, 2, 387-395.

see page 33

Frankenhuis, W.E., Young, E.S., & Ellis, B.J. (2020). The hidden talents approach: Theoretical and methodological challenges. *Trends in Cognitive Sciences*.

<https://doi.org/10.1016/j.tics.2020.03.007>

see page 39

Frankl, V.E. (2004). *Man's search for meaning: 138The classic tribute to hope from the holocaust*. London: Rider Books.

see page 99

Franssens, R., Abrahams, L., Brenning, K., Van Leeuwen, K., & De Clercq, B. (2021). Unraveling prospective reciprocal effects between parental invalidation and pre-adolescents' borderline traits: Between-and-within family associations and differences with common psychopathology-parenting transactions. *Research on Child and Adolescent Psychopathology*, 49, 1387-1401.

<https://doi.org/10.1007/s10802-021-00825-w>

see pages 6, 7, 45, 46, 58, 61-63, 67, 129

Franzen, N., Hagenhoff, M., Baer, N., Schmidt, A., Mier, D., Sammer, G., Gallhofer, B., Kirsch, P., & Lis, S. (2011). Superior 'theory of mind' in borderline personality disorder: An analysis of interaction behavior in a virtual trust game. *Psychiatry Research*, 187, 224-233.

<https://pubmed.ncbi.nlm.nih.gov/21129781/>

see page 33

Fresco, N. (1984). Remembering the unknown. *International Review of Psychoanalysis*, 11, 417-427.

www.anti-rev.org/textes/Fresco84a

see pages 46, 99

Friedman, R.A. (2015). Psychiatry's identity crisis. *The New York Times*, July 17.

see page 90

Fromm-Reichman, F. (1950). *Principles of intensive psychotherapy*. Chicago: University of Chicago Press.

see page 108

- Fromm-Reichmann, F. (1959). Psychoanalysis and psychotherapy. In D.M. Bullard (Ed.). *Selected papers of Frieda Fromm-Reichman*. Chicago: University of Chicago Press.
see pages 108, 109
- Furnham, A., Lee, V., & Kolzeev, V. (2015). Mental health literacy and borderline personality disorder (BPD): What do the public “make” of those with BPD? *Social Psychiatry and Psychiatric Epidemiology*, 50, 317-324.
<https://doi.org/10.1007/s00127-014-0936-7>
see page 124
- Gabbard, G.O. (1993). An overview of countertransference with borderline patients. *Journal of psychotherapy practice and research*, 2, 7-18.
PMID:22700123
see pages xv, 17, 18, 33, 36, 56, 105, 118
- Gabbard, G.O. (2017). Psychodynamic psychotherapy today. *Psychiatric News*, 52, 14.
<https://doi.org/10.1176/appi.pn.2017.7a14>
see page 98
- Gabbard, G.O. (2018). Something and nothing, aliveness and deadness: Discussion of “three dimensional field theory.” *Psychoanalytic Dialogues*, 28, 403-410.
<https://doi.org/10.1080/10481885.2018.1482135>
see pages 73, 109
- Gabbard, G.O. (2020) The role of countertransference in contemporary psychiatric treatment. *World Psychiatry*. <https://doi.org/10.1002/wps.20746>
see pages 115, 119, 127
- Gabbard, G.O., & Crisp, H. (2023). Professional boundaries and ethics in psychotherapy. In H. Crisp & G.O. Gabbard (Eds.), *Gabbard’s Textbook of Psychotherapeutic Treatments* (pp. 683-702). Washington, D.C.: American Psychiatric Assn. Publishing.
see pages 113, 128
- Gabbard, G.O., & Crisp, H. (2018). *Narcissism and its discontents*. Washington, D.C.: American Psychiatric Publishing.
see pages 73, 107, 114, 118
- Gabbard, G.O., & Horowitz, M.J. (2009). Insight, transference interpretation, and therapeutic change in the dynamic psychotherapy of borderline personality disorder. *American Journal of Psychiatry*, 166, 517-521.
<https://doi.org/10.1176/appi.ajp.2008.08050631>
see page 109

Gabbard, G.O., & Wilkinson, S.M. (1994). *Management of countertransference with borderline patients*. Washington, DC: American Psychiatric Press.

see page 35

Gambin, M., Wozniak-Prus, Konecka, A., & Sharp, C. (2020). Relations between attachment to mother and father, mentalizing abilities and emotion regulation in adolescents. *European Journal of Developmental Psychology*. <https://doi.org/10.1080/17405629.2020.1736030>

see page 63

Gannon, L., Banks, J., Shelton, D., & Luchetta, T. (1989). The mediating effects of psychophysiological reactivity and recovery in the relationship between environmental stress and illness. *Journal of Psychosomatic Research*, 33, 167-175. [https://doi.org/10.1016/0022-3999\(89\)90044-5](https://doi.org/10.1016/0022-3999(89)90044-5)

see page 77

Gardner, C., & Kleinman, A. (2019). *Medicine and the mind: The consequences of psychiatry's identity crisis*. *New England Journal of Medicine*, 381, 1697-1699. <https://www.nejm.org/doi/full/10.1056/NEJMp1910603>

see page 90

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.

see page 53

Gardner, H. (1993a). Introduction to the tenth anniversary edition. In H. Gardner, *Frames of Mind* (pp. IX-XXVI). New York: Basic Books.

see page 3

Gardner, H. (1993b). *Multiple intelligences theory: The theory in practice*. New York: Basic Books.

see page 3

Gardner, K.J., Wright, K.M., Elliott, A., Lamph, G., Graham, S., Parker, L. & Fonagy, P. (2021). Learning the subtle dance: The experience of therapists who deliver mentalization-based therapy for borderline personality disorder. *Journal of Clinical Psychology*. <https://doi.org/10.1002/jclp.23208>

see pages xv, 118

Garner, A., & Yogman, M. (2021). Preventing childhood toxic stress: Partnering with families and communities to promote relational health. *Pediatrics*, 148 (2). <https://doi.org/10.1542/peds.2021-052582>

see pages 44, 66, 67, 129

- Gartlehner, G., Crotty, K., Kennedy, S., Edlund, M.J., Ali, R., Siddiqui, M., Fortman, R., Wines, R., Persad, E., & Viswanathan, M. (2021). Pharmacological treatments for borderline personality disorder: A systematic review and meta-analysis. *CNS Drugs*, 35, 1053-1067.
<https://doi.org/10.1007/s40263-021-00855-4>
 see page 125
- Gazzaley, A., & Rosen, L.D. (2016). *The distracted mind: Ancient brains in a high-tech world*. Cambridge, MA: MIT Press.
- Gilman, S.E., Kawachi, I., Fitzmaurice, G.M., & Buka, S.L (2003). Socio-economic status, family disruption and residential stability in childhood: Relation to onset, recurrence and remission of major depression. *Psychological Medicine*, 33, 1341-1355.
<https://doi.org/10.1017/S00332917030008377>
 see page 89
- Glucksman, M.L. (2018). On being a psychiatrist and psychoanalyst. In M.L. Glucksman, *Evolution of a medical psychoanalyst: Reflections and selected papers* (pp 379-394). North Charleston, SC: CreateSpace Publishing Platform. ISBN 1983515140
 see pages xv, 90
- Glucksman, M.L. (2023). The therapeutic relationship: Intrapsychic and behavioral changes in both patient and analyst. *Psychodynamic Psychiatry*, 51, 63-75. <https://pubmed.ncbi.nlm.nih.gov/36867189/>
 see pages xv, 99, 114, 115, 118, 119
- Goldfried, M.R. (2016). On possible consequences of National Institute of Mental Health funding for psychotherapy research and training. *Professional Psychology: Research and Practice*, 47, 77-83.
<https://doi.org/10.1037/pro0000034>
 see pages 90, 106, 126
- Goldman, J., Salus, M.K., Wolcott, D., & Kennedy, K.Y. (2003). *A coordinated response to child abuse and neglect: The Foundation for Practice*. Washington, D.C.: U.S. Department of Health and Human Services, Children's Bureau.
 see pages 42, 44, 47
- Goodall, J. (1986). *The chimpanzees of Gombe: Patterns of behavior*. Cambridge, MA: Harvard University.
 see page 27
- Goodman, M., Hazlett, E.A., New, A.S., Koenigsberg, H.W., & Siever, L. (2009). Quieting the affective storm of borderline personality disorder. *American Journal of Psychiatry*, 166, 522-528.
<https://doi.org/10.1176/appi.ajp.2009.08121836>
 see pages 5, 56

- Goodman, M., Patel, U., Oakes, A., Matho, A., & Triebwasser, J. (2013). Developmental trajectories to male borderline personality disorder. *Journal of personality disorders*, 27, 1-19.
<https://pubmed.ncbi.nlm.nih.gov/23795759/>
see pages 5, 50, 57
- Goodman, M., Patil, U., Triebwasser, J., Diamond, E., Hiller, A., Hoffman, P., Goldberg, S., Koenigsberg, H., Siever, L., & New, A. (2010). Parental viewpoints of trajectories to borderline personality disorder in female offspring. *Journal of Personality Disorders*, 24, 204-216.
<https://doi.org/10.1521/pedi.2010.24.2.204>
see pages 5, 50, 57
- Gould, S.J. (1993). The gift of new questions. *Natural History*, 102, 4-13.
see page 105
- Gould, S.J. (2008). A biological homage to micky mouse. *Ecotone*, 4, 333-340,
<https://doi.org/10.1353/ect.2008.0045>
see page 28
- Grant, A. (2021). Think again: The power of knowing what you don't know. New York: Viking Press.
see page 85
- Graybar, S.R., & Boutilier, L.R. (2002). Nontraumatic pathways to borderline personality disorder. *Psychotherapy: Theory, Research, Practice, Training*, 39, 152-162.
<https://doi.org/10.1037/0033-3204.39.2.152>
see pages 66, 73
- Greenberg, J. (1992). I never promised you a rose garden. New York: St. Martin's Press.
see pages 108
- Grenyer, B.F.S., Townsend, M.L., Lewis, K., & Day, N. (2022). To love and work: A longitudinal study of everyday life factors in recovery from borderline personality disorder. *Personality and Mental Health*.
<https://doi.org/10.1002/pmh.1547>
see pages xiii, 11, 94, 120
- Grillo, C.M., & Udo, T. (2021). Association of borderline personality disorder criteria with suicide attempts among US adults. *JAMA Network Open*. 2021; (4) 5: e219389.
<https://doi.org/10.1001/jamanetworkopen.2021.9389>
see page 22

- Grimm, D. (2023). What are farm animals thinking? New research is a revealing surprising complexity in the minds of goats, pigs, and other livestock. *Science*, 382, 1103-1107.
<https://www.science.org/content/article/not-dumb-creatures-livestock-surprise-scientists-their-complex-emotional-minds>
<https://doi.org/10.1126/science.adn3270>
 see page 26
- Groopman, J. (2017). Food fights: Does fat make you fat, or is sugar the real culprit? *New Yorker*, April 3, 92-97.
 see page 84
- Groopman, J. (2019). Medicine in mind: Psychiatry's fraught history. *New Yorker*, 66-69, May 27.
 see pages 82, 105
- Grose, J. (2022). I'll say it again: There's more than one right way to raise kids who thrive. *New York Times Opinion*, March 9, 2022.
- Gunderson, J.G. (1984). *Borderline personality disorder*. Washington, DC: American Psychiatric Publishing.
 see page 17
- Gunderson, J.G. (1989). *Borderline personality disorder*. In T.B. Karasu (Ed.), *Treatments of psychiatric disorders: A task force report of the American Psychiatric Association* (pp. 2749-2759). Washington, D.C.: American Psychiatric Association.
 see pages 17, 35, 36
- Gunderson, J.G. (2009). *Borderline personality disorder: Ontogeny of a diagnosis*. *American Journal of Psychiatry*, 166, 530-539.
<https://doi.org/10.1176/appi.ajp.2009.08121825>
 see pages 16, 48
- Gunderson, J.G. (2011). *Borderline personality disorder*. *New England Journal of Medicine*, 364, 2037-2042.
 see page 94
- Gunderson, J.G. (2014). *Handbook of good psychiatric management for borderline personality disorder*. Washington DC: American Psychiatric Publishing.
 see pages 96, 105, 116, 118, 123, 124
- Gunderson, J. G., & Choi-Kain, L.W. (2018). Medication management for patients with borderline personality disorder. *American Journal of Psychiatry*, 175, 709-711.
<https://doi.org/10.1176/appi.ajp.2018.18050576>
 see page 125

Gunderson, J.G., & Choi-Kain, L.W. (2019). Working with patients who self-injure. *American Journal of Psychiatry*.

<https://doi.org/10.1001/jamapsychiatry.2019.1241>

see page 115

Gunderson, J.G., & Chu, J.A. (1993). Treatment implications of past trauma in borderline personality disorder. *Harvard Review of Psychiatry*, 1, 75-81.

<https://doi.org/10.3109/10673229309017062>

see pages 45, 97, 101, 115, 122, 124, 126

Gunderson, J.G., Fruzzetti, A., Unruh, B., & Choi-Kain, L. (2018). Competing theories of borderline personality disorder. *Journal of Personality Disorders*, 32, 148-167.

<https://doi.org/10.1521/pedi.2018.32.2.148>

see page 97

Gunderson, J.G., & Lyons-Ruth, K. (2008). BPD's interpersonal hypersensitivity phenotype: A gene-environment-developmental model. *Journal of Personality Disorders*, 22, 22-41.

<https://doi.org/10.1521/pedi.2008.22.1.22>

see pages 41, 48, 56

Gunderson, J.G., & Palmer, B.A. (2019). Inpatient psychiatric units. In L.W. Choi-Kain & J. G. Gunderson (Eds.), *Applications of good psychiatric management for borderline personality disorder: A practical guide* (pp 11-35). Washington, DC: American Psychiatric Assn. Publishing.

see pages 5, 56, 124

Gunderson, J.G., & Phillips, K.A. (1991). A current view of the interface between borderline personality disorder and depression. *American Journal of Psychiatry*, 148, 967-975.

<https://doi.org/10.1176/ajp.148.8.967>

see page 126

Gunderson, J.G., Stout, R.L., & Skodol, A.E. (2011). Ten-year course of borderline personality disorder: Psychopathology and function from the collaborative longitudinal personality disorders study. *Archives of General Psychiatry*, 68, 827-837.

<https://doi.org/10.1001/archgenpsychiatry.2011.37>

see pages 11, 12

Gunderson, J.G., Weinberg, I., & Choi-Kain, L. (2014). *Borderline Personality Disorder*. In G.O. Gabbard (Ed.), *Gabbard's treatments of psychiatric disorders*. Washington, DC: American Psychiatric Publishing.

see pages 11, 12, 94

- Gur, R.E., Moore, T.M., Rosen, A.F.G., et al. (2019). Burden of environmental adversity associated with psychopathology, maturation and brain behavior parameters in youths. *JAMA Psychiatry*.
<https://doi.org/10.1001/jamapsychiatry.2019.0943>
see page 44
- Gutheil, T.G. (1985). Medicolegal pitfalls in the treatment of borderline patients. *American Journal of Psychiatry*, 1432, 9-14.
<https://doi.org/10.1176/ajp.142.1.9>
see page 117
- Gutheil, T.G. (1989). Borderline personality disorder, boundary violations, and patient-therapist sex: Medicolegal pitfalls. *American Journal of Psychiatry*, 146, 597-602.
<https://doi.org/10.1176/ajp.146.5.597>
see pages 35, 36
- Guyatt, N. (2016). *Bind us apart: How enlightened Americans invented racial segregation*. New York: Basic Books.
see page 31
- Ha, C., Balderas, J.C., Zanarini, M.C., Oldham, J., & Sharp, C. (2014). Psychiatric comorbidity in hospitalized adolescents with borderline personality disorder. *Journal of Clinical Psychiatry*, 75, e457-e464.
<http://doi.org/10.4088/JCP.13m08696>
see pages 46, 126
- Hanh, T.H. (1999). *Call me by my true names*. Berkeley: Parallax Press.
see page 29
- Hanh, T.N. (2005). *Being Peace*. Berkeley: Parallax Press.
see page 85
- Harari, Y.N. (2018). *21 lessons for the 21st century*. New York: Spiegel & Grau.
see page 85
- Harlow, H.F. (1964). Early social deprivation and later behavior in the monkey. In A. Abrams, H.H. Garner, & J.E.P. Toman (Eds). *Unfinished tasks in the behavioral sciences* (Chapter 15). Baltimore: Williams and Wilkins.
see page 28
- Harlow, H.F, Dodsworth, R.O., & Harlow, M.K. (1965). Total social isolation in monkeys. *Proceedings National Academy of Sciences*, 54, 90-97.
<https://doi.org/10.1073/pnas.54.1.90>
see page 28

Harlow, H.F. & Suomi, S.J. (1971). Social recovery by isolation-reared monkeys. *Proceedings National Academy of Sciences*, 68, 1534-1538.

<https://doi.org/10.1073/pnas.68.7.1534>

see page 28

Harrington, A. (2019). *Mind fixers: Psychiatry's troubled search for the biology of mental illness*. New York: W. W. Norton & Co.

see page 105

Hartmann, E. (1991). *Boundaries in the mind: A new psychology of personality*. New York, 322482 Books.

see pages 70, 114

Hawking, S. (2018). *Brief answers to big questions*. New York: Bantam Books.

see page 85

Hayes, S.C., Strosahl, K.10236.2017.1D., & Wilson, K.G. (2016). *Acceptance and commitment therapy, second edition: The process and practice of mindful change*. New York: Guilford.

see page 111

He, X., Sun, Q., & Stetler, C. (2018). Warm communication style strengthens expectations and increases perceived improvement. *Health Communication*, 33, 939-945.

<https://doi.org/10.1080/10410236.2017.1322482>

see page 125

Hellerstein, D.J., & Aviram, R.B. (2018). Supportive therapy and case management. In B. Stanley & A.S. New (Eds). *Borderline personality disorder* (pp 325-348). New York: Oxford University Press.

Hengartner, M.P., Cohen, L.J., Rodgers, S., Muller, M., Rossler, W., & Ajdacic-Gross, V. (2015). Association between childhood maltreatment and normal adult personality traits: Exploration of an understudied field. *Journal of Personality Disorders*, 29, 1-14.

<https://doi.org/10.1521/pedi.2014.28.143>

see page 44

Hepp, J., Storkel, L., Kieslich, P.J., Schmal, C., & Niedfeldt, I. (2018). Negative evaluation of individuals with borderline personality disorder at zero acquaintance. *Behavior Research and Therapy*, 111, 84-91.

<https://doi.org/10.1016/j.brat.2018.09.009>

see pages 59, 119

Herman, J.L. (1992). *Trauma and recovery: The aftermath of violence-from domestic abuse to political terror*. New York: Basic Books.

see pages 78, 79, 110

- Herman, J.L., Perry, J.C., & van der Kolk, B. (1989). Childhood trauma in borderline personality disorder. *American Journal of Psychiatry*, 146, 490-495.
<https://doi.org/10.1176/ajp.146.4.490>
 see pages 71, 78, 97, 110
- Hermes, J., Behne, T., & Rakoczy, H. (2018). The development of selective trust: Prospects for a dual-process account. *Child Development Perspectives*, 2, 134-138.
<https://doi.org/10.1111/cdep.12274>
 see page 55
- Hill, L.B. (1955). *Psychotherapeutic intervention in schizophrenia*. Chicago: University of Chicago Press.
 see page 108
- Hooper, L.M. (2007). The application of attachment theory and family systems theory to the phenomena of parentification. *The Family Journal: Counseling and Therapy for Couples and Families*.
<https://doi.org/10.1177/1066480707301290>
 see page 119
- Hooper, L.M. (2011). Parentification. In B.B. Brawn & M.J. Prinstein (Eds), *Encyclopedia of Adolescence*.
https://doi.org/10.1007/978-1-4419-1695-2_169
 see page 119
- Houben, M., Claes, L., Sleuwaegen, E., Berens, A., & Vansteelandt, K. (2018). Emotional reactivity to appraisals in patients with a borderline personality disorder: A daily life study. *Borderline Personality Disorder and Emotional Dysregulation*.
<https://repository.uantwerpen.be/docman/irua/d65c1a/156303.pdf>
 see page 116
- Hughes, A.E., Crowell, S.E., Uyeji, L & Coan, J.A. (2012). A developmental neuroscience of borderline pathology: Emotion dysregulation and social baseline theory. *Journal of Abnormal Child Psychology*, 40, 21-33.
<https://doi.org/10.1007/s10802-011-9555-x>
 see pages xi, 9, 61
- Humphrey, N.K. (1976). The social function of intellect. In P.P.G. Bateson & R.A. Hinde (Eds.), *Growing points in ethology* (pp.303-317). Cambridge: Cambridge University Press.
 see page 26
- Humphrey, N. (2023). *Sentience: The invention of consciousness*. Cambridge, MA: The MIT Press.
 see pages 26, 27

Hunter, V. (1991). John Bowlby: An Interview. *The Psychoanalytic Review*, 78, 159-175. PMID: 1909799.

see pages 42, 110

Hutsebaut, J., Debanné, M., & Sharp, C. (2020). Designing a range of mentalizing interventions for young people using a clinical staging approach to borderline pathology. *Borderline Personality Disorder and Emotion Dysregulation*.

<https://doi.org/10.1186/s40479-020-0121-4>

see pages 12, 94, 112, 124

Ibbotson, P., & Tomasello, M. (2016). Language in a new key. *Scientific American*, 315, 71-75.

<https://doi.org/10.1038/scientificamerican1116-70>

see page 30

Insel, T. (2022). *Healing: Our path from mental illness to mental health*. New York: Penguin Press. ISBN 9780593298046

see page 90

Integrated Network for Bipolar Disorder - Breakthrough Discoveries (2023). A collaborative model that will improve care, interventions, and outcomes for people with bipolar disorder.

<http://www.bipolardiscoveries.org/our-work/integrated-network/>

Jacobsen, R. (2023). Minds everywhere: Tiny clumps of cells can learn, form memories and make big decisions - key parts of thinking ("basal cognition"). Yet they don't have brains. *Scientific American*, 330, 44-51

see page 84

James, K.M., Owens, M., Woody, M.L. Hall, N.T., & Gibb, B.E. (2018). Parental expressed emotion- criticism and neural markers of sustained attention to emotional faces in children. *Journal of Clinical Child and Adolescent Psychiatry*.

<https://doi.org/10.1080/15374416.2018.1453365>

see pages 42, 46

Jamison, K.R. (2023). *Fives in the dark: Healing the unquiet mind*. New York: Alfred A. Knopf. ISBN: 9780525657170

see pages xv, 12, 73, 99, 112, 119, 125, 127

Jamison, K.R. (2017). *Robert Lowell, setting the river on fire: A study of genius, mania, and character*. New York: Alfred A. Knopf.

see page 70

Jankowsky, K., Zimmerman, J., Jaeger, U., Mestel, R., & Schroeders, U. (Preprint 2023). First impressions count: Therapists' impression on patients' motivation and helping alliance predicts psychotherapy dropout.

<http://doi.org/10.31234/osf.io/nhs6c>

see page 116

- Jardmo, C., Eriksson, P.L., Malm, I., McLean, K.C., & Frisen, A. (2023). Creating something new from past experiences: The meaning of change in repeated narratives. *Journal of Personality*.
<https://doi.org/10.1111/jopy.12807>
 see page 97
- Jasanoff, A. (2018). Sick in the head: Eric Kandel looks at why certain brains are hard-wired for mental illness. *New York Times Book Review*, September, 21
 see pages 47, 90
- Jennissen, S., Huber, J., Ehrenthal, J.C., Schauenburg, H., & Dinger, U. (2018). Association between insight and outcome of psychotherapy: Systemic review and meta-analysis. *American Journal of Psychiatry*.
<https://doi.org/10.1176/appi.ajp.2018.17080847>
 see page 99
- Jeong H., Jin, M.J., & Hyun, M.H. (2022). Understanding a mutually destructive relationship between individuals with borderline personality disorder and their favorite person. *Psychiatry Investig.*: Korean Neuropsychiatric Assn.
<https://doi.org/10.30773/pi.2022.0079>
 see pages 2, 12, 56, 113, 119
- Jeung, H., Vollman, M., Herpetz, S.C., & Schwioren, C (2020). Consider others better than yourself: Social decision-making and partner preference in borderline personality disorder. *Journal of Behavior Therapy and Experimental Psychiatry*.
<https://doi.org/10.1016/j.jbtep.2018.11.004>
 see pages 40, 59, 98
- Johnson, D.E., Miller, L.C, Iverson, S., Thomas, W., et al. (1992). The health of children adopted from Romania. *JAMA*, 268, 3446-3451. PMID:1281241
 see page 72
- Johnson, F., Jr. (2019). *Zwicky: The outcast genius who unmasked the universe*. Cambridge: Harvard University Press.
 see page 91
- Johnston, J. (2013). The ghost of the schizophrenogenic mother. *AMA Journal of Ethics*, 15, 801-805.
<https://doi.org/10.1001/virtualmentor.2013.15.9.oped1-1309>
 see page 73
- Jones, J., Penner, F., Schramm, A.T., & Sharp, C. (2019). Experiential avoidance in adolescents with borderline personality disorder: Comparison with a non-BPD psychiatric group and healthy controls. *Cognitive Behavior Therapy*.
<https://doi.org/10.1080/16506073.2019.1623303>
 see page 111

Jowett, S., Karatzias, T., Shevlin, M., & Albert, T. (2020). Differentiating symptom profiles of ICD-11 PTSD, complex PTSD, and borderline personality disorder: A latent class analysis in a multiply traumatized sample. *Personality Disorders: Theory, Research, and Treatment*, 11, 36-45.

<https://doi.org/10.1037/per0000346>

see page 80

Joyner, M.J., Paneth, N., & Ionnidis, J.P.A. (2016). What happens when underperforming big ideas in research become entrenched? *JAMA*, 316, 1355-1356.

<https://doi.org/10.1001/jama.2016.11076>

see pages 90, 105

Kalin, N.H. (2020). Early-life environmental factors impacting the development of psychopathology. *American Journal of Psychiatry*, 177, 1-3.

<https://psychiatryonline.org/doi/10.1176/appi.ajp.2019.19111181>

see page 72

Kalpakci, A., Vanwoerden, S., Elhai, J.D., & Sharp, C. (2016). The independent contributions of emotion dysregulation and hypermentalization to the “double dissociation” of affective and cognitive empathy in female adolescent inpatients with BPD. *Journal of Personality Disorders*, 30, 242-260.

<https://doi.org/10.1521/pedi.2015.29.192>

see pages 34, 35

Kanj, G., Hallit, S., & Obeid, S. (2023). The relationship between childhood emotional abuse and borderline personality disorder: The mediating role of difficulties in emotion regulation among Lebanese adults. *Borderline Personality Disorder and Emotion Dysregulation*, 10, 34.

<https://doi.org/10.1186/s40479-023-00241-0>

see pages 44, 45, 60, 98

Karatzias, T., Bohus, M., Sherlin, M., Hyland, P., Bisson, J.I. Roberts, N., & Cloitre, M. (2023). Distinguishing between ICD-11 complex post-traumatic stress disorder and borderline personality disorder: Clinical guide and recommendations for future research. *British Journal of Psychiatry*.

<https://doi.org/10.1192/bjp.2023.80>

see pages 80

Kendler, K.S. (2020). A prehistory of the diathesis-stress model: Predisposing and exciting causes of insanity in the 19th century. *American Journal of Psychiatry*.

<https://doi.org/10.1176/appi.ajp.2020.19111213>

see page 90

- Kendler, K.S., Ohlsson, H., Sundquist, J., & Sundquist, K. (2020). The rearing environment and risk for major depression: A Swedish national high-risk home-reared and adopted-away co-sibling control study. *American Journal of Psychiatry*, 177, 447-453.
<https://doi.org/10.1176/appi.ajp.2019.19090911>
 see page 89
- Keng, S-L., & Soh, C.Y. (2018). Association between childhood invalidation and borderline personality symptoms: Self-construal and conformity as moderating factors. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-018-0096-6>
 see pages 74, 75
- Kennedy, E. (2013). Editorial, Orchids and dandelions: How some children are more susceptible to environmental influences for better or worse and the implications for child development. *Clinical Child Psychology and Psychiatry*, 18, 319-321.
<https://doi.org/10.1177/1359104513490338>
 see pages x, xi, 65
- Kernberg, O.F. (1975). *Borderline conditions and pathological narcissism*. New York: Jason Aronson, Inc.
 see pages 68, 100, 111, 114
- Kernberg, O.F. (1984). *Severe personality disorders: Psychotherapeutic strategies*. New Haven, CT: Yale University Press.
 see page 25
- Kernberg, O.F., & Michels, R. (2009). *Borderline personality disorder*. *American Journal of Psychiatry*, 166, 505-508.
<https://doi.org/10.1176/appi.ajp.2009.09020263>
 see page 94
- Kernberg, O.F., Selzer, M.A., Koenigsberg, H.W., Carr, A.C., & Applebaum, A.H. (1989). *Psychodynamic psychotherapy of borderline patients*. New York: Basic Books.
 see page 36
- Kernot, J., Baker, A., Oster, C., Petrakis, M., & Dawson, S. (2023). Employment interventions to assist people who experience borderline personality disorder: A scoping review. *International Journal of Social Psychiatry*.
<http://doi.org/10.1177/00207640231189424>
 see page 120

Kerr, S., Hudenko, W.J., Godfrey, D.A. Lundgren, S.N., O'Malley, A.J., & Sharp, C. (2020). Validation of the emotional tone index for families (ETIF): A multi-informant measure of emotional closeness. *Family Process*.
<https://doi.org/10.1111/famp.12608>

see pages 46, 62

Kerr, S., Penner, F., Ilagan, G., Choi-Kain, L., & Sharp, C. (2022). Maternal interpersonal problems and attachment security in adolescent offspring. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-022-00188-8>

see page 74

Kerr, S., Penner, F., & Sharp, C. (2021). Interpersonal problems in parents and adolescent borderline personality features. *Journal of Personality Disorders*.
<https://doi.org/10.1521/pedi.2021.35.518>

see pages 7, 45, 73, 74, 129

Khoury, J.E., Rajamani, M., Bureau, J., Easterbrooks, M.A., & Lyons-Ruth, K. (2020). Aspects of parent-child interaction from infancy to late adolescence are associated with severity of childhood maltreatment through age 18. *International Journal of Environmental Research and Public Health*.
<https://doi.org/10.3390/ijerph17113749>

see page 63

Kim, S., Sharp, C. & Carbone, C. (2013). The protective role of attachment security for adolescent borderline personality features via enhanced positive emotion regulation strategies. *Personality Disorders: Theory, Research and Practice*, 5, 125-136.
<https://doi.org/10.1037/per0000038>

see pages 74, 78, 112

King, L.S., Hill, K.E., Rangel, E., Gotlieb, I.H., & Humphreys, K.L. (2023). Teaching or learning from baby: Inducing explicit parenting goals influences caregiver intrusiveness. *Developmental Psychology*. Advance online publication.
<http://doi.org/10.1037/dev0001592>

see pages 46, 61, 72

Kirsch, I. (2017). Response expectancy and the response to antidepressant medication. *The Lancet*.
[https://www.thelancet.com/article/S2352-3964\(17\)30392-4/fulltext](https://www.thelancet.com/article/S2352-3964(17)30392-4/fulltext)

see page 125

Kleindienst, N., Jungkunz, M., & Bohus, M. (2020). A proposed severity classification of borderline symptoms using the borderline symptom list (BSL-23). *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-020-00126-6>

see page 19

- Kockler, T.D., Santangelo, P.S., Eid, M., Kuehner, C., Bohus, M., Schmaedeke, S., & Ebner-Priemer, U.W. (2022). Self-esteem might be more characteristic of borderline personality disorder than affective instability: Findings from an e-diary study with clinical and healthy controls. *Journal of Psychopathology and Clinical Science*.
<https://dx.doi.org/10.1037/abn0000731>
 see page 22
- Kohut, H. (1977). *The restoration of the self*. New York: International Universities Press.
 see page 78
- Kohut, H. (1979). The two analyses of Mr. Z. *International Journal of Psychoanalysis*, 60, 3-27.
https://www.sas.upenn.edu/~cavitch/pdf-library/Kohut_MrZ.pdf
 see pages 62, 66, 102
- Kohut, H., & Wolf, E.S. (1978). The disorders of the self and their treatment: An outline. *International Journal of Psychoanalysis*, 59, 413-425.
<https://www.sakkyndig.com/psykologi/artvit/kohut1978.pdf>
 see page 78
- Kolthof, K.A., Voorendonk, E.M., Van Minnen, A., & De Jongh, A. (2022). Effects of intensive trauma-focused treatment of individuals with both post-traumatic stress disorder and borderline personality disorder. *European Journal of Psychotraumatology*, 13, 2143076.
<https://doi.org/10.1080/20008066.2022.2143076>
 see pages xiii, 80, 93
- Krause-Utz, A. (2021). Stimulating research on childhood adversities, border-line personality disorder, and complex post-traumatic stress disorder. *Borderline Personality and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-021-00152-y>
 see page 80
- Krause-Utz, A., Niedtfeld, I., Knauber, J., & Schmahl, C. (2018). Neurobiology of borderline personality disorder. In B. Stanley & A.S. New (Eds.), *Borderline personality disorder* (pp. 83-109). New York: Oxford University Press.
 see page 47
- Krohn, A. (1974). Borderline “empathy” and differentiation of object representations. *International Journal of Psychiatry*, 3, 142-165.
 see page 32
- Krupenye, C., & Call, J. (2019). Theory of Mind in animals: Current and future directions. *WIREs Cognitive Science*, Vol. 10 Issue 6.
<https://doi.org/10.1002/wcs.1503>
 see pages 26, 27

- Krupenye, C., Kano, F., Hirata, S., Call, J., & Tomasello, M. (2016). Great apes anticipate that other individuals will act according to false beliefs. *Science*, 354: 110-114.
<https://doi.org/10.1126/science.aaf8110>
 see page 27
- Kuhl, P.K. (2015). Baby talk. *Scientific American*, 313, 65-69.
 see page 30
- Kurtz, M.M. (2023). A talking cure for psychosis: Cognitive-behavioral therapy helps to treat symptoms for which drugs are ineffective. *Scientific American*, 328, 62-67.
 see pages 89, 90
- Kwon, D. (2022). Borderline personality disorder may be rooted in trauma. A focus on the traumatic origins of an often stigmatized psychiatric diagnosis is inspiring new treatments. *Scientific American*, 326, 48-55.
<https://doi.org/10.1038/scientificamerican0122-48>
 see page 78
- Lacan, J. (1968). *The language of the self: The function of language in psychoanalysis*. Baltimore: Johns Hopkins University Press.
- Ladisich, W., & Feil, W.B. (1988). Empathy in psychiatric patients. *British Journal of Medical Psychology*, 61, 155-162.
<https://doi.org/10.1111/j.2044-8341.1988.tb02774.x>
 see page 33
- Laland, K. (2018). How we became a different kind of animal: An evolved uniqueness. *Scientific American*, 319, 33-39.
<https://www.scientificamerican.com/article/what-made-us-unique/>
 see pages 27, 30
- Layard, R., & Clark, D.M. (2014). *Thrive: How better mental health care transforms lives and saves money*. Princeton & Oxford: Princeton University Press.
- Lazarus, S.A., Choukas-Bradley, S., Beeney, J.E., Byrd, A.L., Vine, V., & Stepp, S.D. (2019). Too much too soon? Borderline personality disorder symptoms and romantic relationships in adolescent girls. *Journal of Abnormal Child Psychology*.
<https://doi.org/10.1007/s10802-019-00570-1>
 see pages 58, 59
- Lear, J. (1990). *Love and its place in nature*. New York: Farrar, Straus & Giroux.
 see page 125

- Lebowitz, M.S., Dolev-Amit, T., & Zilcha-Mano, S. (2021). Relationships of biomedical beliefs about depression to treatment-related expectancies in a treatment-seeking sample. *Psychotherapy (Chic.)*.
<https://doi.org/10.1037/pst0000320.supp>
see page 126
- Leighton, C., Botto, A., Silva, J.R., Jiminez, J.P., & Luyten, P. (2017). Vulnerability or sensitivity to the environment? Methodological issues, trends and recommendations in gene-environment interactions research in human behavior. *Frontiers in Psychiatry*.
<https://doi.org/10.3389/fpsy.2017.00106>
see pages 30, 52
- Lepore, J. (2018). *These truths: A history of the United States*. New York: W.W. Norton.
see pages 31, 99
- Lepore, J. (2023). Data-driven: Machines have given us a powerful way of knowing things. There are others. *New Yorker*, 99, 7, 16-20.
www.newyorker.com/magazine/2023/04/03/the-data-delusion
see page 47
- Levin, A. (2019). Early life trauma changes biology of the brain. *Psychiatric News*, 54, 17.
<https://doi.org/10.1176/appi.pn.2019.6b19>
see pages 44, 47
- Levin, M. (2019) The computational boundary “of a self”: Developmental bioelectricity drives multicellularity and scale-free cognition. *Frontiers in Psychology*, 10.
<https://doi.org/10.3389/fpsyg.2019.02688>
see page 84
- Levy, K.N., Johnson, B.N., Clouthier, T.L., Scala, J.W., & Temes, C.M. (2015). An attachment theoretical framework for personality disorders. *Canadian Psychology*, 56, 197-207.
<https://doi.org/10.1037/cap0000025>
see page 72
- Levy, K.N. (2005). The implications of attachment theory and research for understanding borderline personality disorder. *Development and Psychopathology*, 17, 959-986.
<https://doi.org/10.1017/S0954579405050455>
see pages 62, 72, 115
- Lewis, J.M. (1991). *Swimming upstream: Teaching and learning psychotherapy in a biological era*. New York: Brunner Mazel.
see page 127

- Lewis, K. L., & Grenyer, B.F.S. (2009). Borderline personality or complex posttraumatic stress disorder? An update on the controversy. *Harvard Review of Psychiatry*, 17, 322-328.
<https://doi.org/10.3109/10673220903271848>
see pages 19, 44, 79, 80
- Lewis- Fernandez, R., Rotheram-Borus, M.J., Betts, V.T., & Greenman, L. (2016). Rethinking funding priorities in mental health research. *British Journal of Psychiatry*, 208, 507-509.
<https://doi.org/10.1192/bjp.bp.115.179895>
see page 90
- Lewontin, R. (2000). *It ain't necessarily so: The dream of the human genome and other illusions*. New York: New York Review of Books.
see page 48
- Lieslehto, J., Tiihonen, J., Lähteenvuo, M., Mittendorfer-Rutz, E., Tanskanen, A., & Taipale, H. (2023). Association of pharmacological treatments and real-world outcomes in borderline personality disorder. *Aeta Psychiatrica Scandinavica*, 147, 603-613.
<https://doi.org/10.1111/acps.13564>
see page 125
- Lin, D., Zona, L., & Seery, E. (2023). Navigating countertransference in inpatient settings: Optimizing interventions for patients with borderline personality disorder and repeated acute hospitalizations. *Psychodynamic Psychiatry*, 51, 330-349
<http://doi.org/10.1521/pdps.2023.51.3.330>
see pages 12, 35, 100, 112, 115, 127
- Lind, M., Vanwoerden, S., Penner, F., & Sharp, C. (2019, April 29). Inpatient adolescents with borderline personality disorder features: Identify diffusion and narrative incoherence. *Personality Disorders: Theory, Research, and Treatment*, 10,389-393.
<https://doi.org/10.1037/per0000338>
see pages 25, 99, 110
- Lind, M., Sharp, C., & Dunlop, W.L. (2022). Why how and when to integrate narrative identity within dimensional approaches to personality disorders. *Journal of Personality Disorders*, 36, 377-398.
https://doi.org/10.1521/pedi_2012_35_541
see page 110
- Lindsay, A.D. (1910). *Socratic discourses: Plato & Xenophon*. London: J.M. Dent & Sons Ltd. Linehan, M.M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York: Guilford Press.
see page 99

- Linehan, M.M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York: Guilford Press.
see pages 7, 25, 44-46, 63, 67, 96
- Lionetti, F., Aron, E.N., Aron, A., Klein, D.N., & Pluess, M. (2019). Observer-rated environmental sensitivity moderates children's response to parenting quality in early childhood. *Developmental Psychology*, 55, 2389-2402.
<https://doi.org/10.1037/dev0000795>
see pages 70, 76
- Liotti, G., & Farina, B. (2016). Painful incoherence: The self in borderline personality disorder. In M. Kyrios et al. (Eds.), *The self in understanding and treating psychological disorders* (pp 169-178). Cambridge: Cambridge University Press.
<https://doi.org/10.1017/CBO9781139941297.018>
see pages xii, xiii, 29, 79, 112, 113, 117, 119
- Lippard, E.T.C., & Nemeroff, C.B. (2019). The devastating clinical consequences of child abuse and neglect: Increased disease vulnerability and poor treatment response in mood disorders. *American Journal of Psychiatry*.
<https://doi.org/10.1176/appi.ajp.2019.19010020>
see pages 44, 45, 71
- Liu, R.T., Scopelliti, K.M., Pittman, S.K., & Zamora, A.S. (2018). Childhood maltreatment and non-suicidal self-injury: A systematic review and meta-analysis. *Lancet Psychiatry*, 5, 51-54.
[https://doi.org/10.1016/S2215-0366\(17\)30469-8](https://doi.org/10.1016/S2215-0366(17)30469-8)
see page 45
- Lo, I. (2018). *Emotional Sensitivity and Intensity: How to manage emotions as a sensitive person*. Great Britain: Hodder & Stoughton.
see page 70
- Locke, J. (1689) *An essay concerning human understanding*. K.P. Winkler, (Ed.), 1996. Indianapolis: Hackett Publishing Co. ISBN-13: 978-0872202160.
see page 27
- Lofgren, D.P., Bemporad, J., King, J., Lindem, K., & O'Driscoll, (1991). A prospective follow-up study of so-called borderline children. *American Journal of Psychiatry*, 148, 1541-1547.
<https://doi.org/10.1176/ajp.148.11.1541>
see page 48
- Lorenz, K. (1950). *Studies in animal and human behavior*, vol. 2. Cambridge, MA: Harvard Univ. Press.
see page 28

Losoya, S.H., & Eisenberg, N. (2001). Affective empathy. In J.A. Hall & F.J. Bernieri (Eds), *Interpersonal sensitivity: Theory and measurement* (pp. 21-43). Mahwah, NJ: Lawrence Erlbaum Associates.

see page 34

Lovejoy, C.O. (1981). The origin of man. *Science*, 211, 341-350.

<https://doi.org/10.1126/science.211.4480.341>

see page 27

Lowenthal, D. (2016). Forget and forgive? *New York Review of Books*, 63,77.

see page 99

Luby, J. (2020). Early childhood nurturance and the sculpting of neurodevelopment (2020). *American Journal of Psychiatry*, 177, 795-796.

<https://doi.org/10.1176/appi.ajp.2020.20070964>

see pages 30, 72, 91

Luhrmann, T.M. (2000). *Of two minds: The growing disorder in American psychiatry*. New York: Alfred A. Knopf.

see page 105

Luyten, P., Fonagy, P., & Campbell, C. (2023). Borderline personality disorder. In M-E, Lynall, P.B. Jones, & S.M. Stahl (Eds.), *Cambridge textbook of neuroscience for psychiatrists* (pp. 477-483).

Published online by Cambridge University Press.

<https://doi.org/10.1017/9781911623137.066>

see page 47

Lyons-Ruth, K., Ahtam, B., Li, F.H., Dickerman, S., Khoury, J.E., Sisitsky, M., Ou, Y., Enlow, M.B., Teicher, M.H., & Grant, P.E. (2023). Negative versus withdrawn maternal behavior: Differential associations with infant gray and white matter during the first 2 years of life. *Human Brain Mapping*.

<https://doi.org/10.1002/hbm.26401>

see pages xii, 44

Lyons-Ruth, K., & Brumariu, L.E. (2020). Emerging child competencies and personality pathology: Toward a developmental cascade model of BPD. *Current Opinion in Psychology*. Journal pre-proof in press.

<https://pubmed.ncbi.nlm.nih.gov/32818836/>

see page 61

Lyons-Ruth, K., Brumariu, L.E., Bureau, J.-F., Hennighausen, K., & Holmes, B. (2015). Role confusion and disorientation in young adult-parent interaction among individuals with borderline symptomatology. *Journal of Personality Disorders*, 29, 641-662.

<https://doi.org/10.1521/pedi.2014.28.165>

see pages 62, 67

- Lyons-Ruth, K., Bureau, J. F., Holmes, B.J., Easterbrooks, M. A., & Brooks, N.H. (2013). Borderline symptoms and suicidality/self-injury in late adolescence: Prospectively observed relationship correlates in infancy and childhood. *Psychiatry Research*, 206, 273-281.
<http://doi.org/10.1016/j.psychres.2012.09.030>
 see pages 6, 7, 21, 45, 57, 62, 71, 72
- Maercker, A. (2021). Development of the new CPTSD diagnosis for ICD-11. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-021-00148-8>
 see pages 80, 81
- Maercker, A., Cloitre, M., Bachem, R., Schlumpf, Y.R., Khoury, B., Hitchcock, C., & Bohus, M. (2022). Complex post-traumatic stress disorder. *Lancet*, 400, 60-72.
<https://pubmed.ncbi.nlm.nih.gov/35780794/>
 see page 80
- Marshall, D.F., , A.M., Ryan, K.A., Kamali M., Sanders, E.F.H., Pester, B., McInnis, M.G., & Langnecker, S.A. (2015). Deficit inhibitory control as an outcome of childhood trauma. *Psychiatric Research*, 235, 7-12.
<https://pubmed.ncbi.nlm.nih.gov/26707783/>
 see page 44
- Masland, S.R., Cummings, M.H., Null, K.E., Woynowskie, K.M., & Choi- Kain, L.W. (2019). Changes in post-traumatic stress disorder symptoms during residential treatment for borderline personality disorder: A longitudinal cross-lagged study. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-019-0113-4>
 see page 78
- Masland, S.R., & Hooley, J.M. (2020). When trust does not come easily: Negative emotional information unduly influences trustworthiness appraisals for individuals with borderline personality features. *Journal of Personality Disorders*, 34, 394-409.
<https://doi.org/10.1521/pedi.2019.33.404>
 see pages 61, 115
- Masterson, J.F. (1976). *Psychotherapy of the borderline adult: A developmental approach*. New York: Brunner/Mazel.
 see page 32
- McAdams, D.P. (2018). Narrative identity: What is it? What does it do? How do you measure it? *Imagination, Cognition and Personality*, 37, 259-372.
<https://doi.org/10.1177/0276236618756704>
 see pages xv, 73, 97

- McAdams, D.P. (2001). The psychology of life stories. Review of General Psychiatry, 5, 100-122.
<https://psycnet.apa.org/record/2018-70018-002>
see pages xv, 99
- McCabe, G.A., Oltmanns, J.R., & Widiger, T.A. (2021). The general factors of personality disorder, psychopathology, and personality. Journal of Personality Disorders.
https://doi.org/10.1521/pedi_2021_35_530
see page 54
- McGlashan, T.H. (1986). The Chestnut Lodge follow-up study: Long-term outcome of borderline personalities. Archives of General Psychiatry, 43, 20-30.
<https://doi.org/10.1001/archpsyc.1986.01800010022003>
see page 108
- McGlashan, T.H. (1989). Schizophrenic: Treatment and outcome. Washington DC: American Psychiatric Publishing.
see page 108
- McHugh, P. R., & Slavney, P. R. (1998). The perspectives of psychiatry. Baltimore: Johns Hopkins University Press.
see pages 43, 84
- McHugh, P. R. (1999). How psychiatry lost its way. Science, Nature and Technology.
<https://www.commentary.org/articles/paul-mchugh/how-psychiatry-lost-its-way/>
see page 128
- McHugh, P. R. (2002). Treating the mind as well as the brain. The Chronicle of Higher Education.
<https://www.chronicle.com/article/treating-the-mind-as-well-as-the-brain/>
see pages xiv, 85, 128
- McKenzie, K., Gregory J., & Hogg, L. (2021). Mental health workers' attitudes toward individuals with a diagnosis of borderline personality disorder. Journal of Personality Disorders.
https://doi.org/10.1521/pedi_2021_35_528
see page 18
- McLaren, V., Vanwoerden, S., & Sharp, C. (2019). The basic empathy scale: Factor structure and validity in a sample of inpatient adolescents. Psychological Assessment.
<https://pubmed.ncbi.nlm.nih.gov/31219279/>
see page 35

- Mead, M. (1959). A new preface. In R. Benedict, *Patterns of culture*. Boston, Houghton Mifflin.
see page 75
- Meehan, K.B., Clarkin, J.F., & Lenzenweger, M.F. (2018a). Conceptual models of borderline personality disorder, Part 1: Overview of prevailing and emergent models. *Psychiatr Clin N Am*, 41, 535-548.
<https://doi.org/10.1016/j.PSC.2018.08.001>
see pages 16, 19
- Meehan, K.B., Clarkin, J.F., & Lenzenweger, M.F. (2018b). Conceptual models of borderline personality disorder, Part 2: A process approach and its implications. *Psychiatr Clin N Am*, 41, 549-559.
<https://doi.org/10.1016/j.PSC.2018.08.002>
see pages 22, 40, 47, 122
- Mehran, R., Baber, U., & Dangas, G. (2018). Guidelines for patient-reported outcomes in clinical trial protocols. *Journal of the American Medical Association*, 319, 450-451.
<https://doi.org/10.1001/jama.2017.21903>
see page 73
- Menand, L. (2019). The looking glass: Are we at the end of the nature-nurture debate? *New Yorker*, 95, 81-86.
see pages 27, 28, 75
- Mercer, D., & Links, P.S. (2019). Psychopharmacologists. In L.W. Choi-Kain & J.G. Gunderson (Eds.), *Applications of good psychiatric management for borderline personality disorder: A practical guide* (pp 187-214). Washington, DC: American Psychiatric Assn. Publishing.
see page 125
- Messman-Moore, T.L., & Bhuptani, P.H. (2020). Self-compassion and fear of self-compassion: Mechanisms underlying the link between child maltreatment severity and psychological distress in college women. *Mindfulness*.
<https://link.springer.com/article/10.1007/s12671-020-01361-2>
see pages 45, 98
- Meyer, A. (1957). *Psychobiology: A science of man*. Springfield, IL: Charles C. Thomas Publisher.
see page 43
- Meyer, H.C., & Lee, F.S. (2019). Translating developmental neuroscience to understand risk for psychiatric disorders. *American Journal of Psychiatry*, 176, 179-186.
<https://doi.org/10.1176/appi.ajp.2019.19010091>
see page 52

- Miljkovitch, R., Deborde, A., Bernier, A., Corcos, M., Speranza, M., & Pham-Scottez, A. (2018). Borderline personality disorder in adolescence as a generalization of disorganized attachment. *Frontiers in Psychology*.
<https://doi.org/10.3389/fpsyg.2018.01962>
see pages 45, 74, 112
- Miller, A. (1983). *For your own good: Hidden cruelty in child-rearing and the roots of violence*. New York: Farrar, Straus & Giroux.
see page 70
- Miller, C.E., Townsend, M.L., Day, N.J.S., & Grenyer, G.F.S. (2020). Measuring the shadows; A systematic review of chronic emptiness in borderline personality disorder. *PLOS ONE*.
<https://doi.org/10.1371/journal.pone.0233970>
see pages 12, 21-23, 94
- Minnis, H. (2023). Science into policy for the benefit of children: The Bucharest early intervention project. *American Journal of Psychiatry*, 180, 528-529.
<https://doi.org/10.1176/appi.ajp.20230455>
see page 81
- Mintz, D. (2019). Recovery from Childhood Psychiatric Treatment: Addressing the Meaning of Medications. *Psychodynamic Psychiatry*, 47, 235-256.
<https://doi.org/10.1521/pdps.2019.47.3.235>
see page 125
- Moczek, A.P., Sultan, S., Foster, S., Lédon-Rettig, C., Dworkin, I., Nijhout, H.F. Abouheif, E., & Pfennig, D.W. (2011). The role of developmental plasticity in evolutionary innovation. *Proceedings of the Royal Society B*, 2011, 1-9.
<https://doi.org/10.1098/rspb.2011.0971>
see page 53
- Montagu, A. (1989). *Growing young*. New York: Bergin & Garvey.
see page 28
- Moody, K.J. Pomerantz, A.M., Ro, E., & Segrist, D.J. (2021). “Me too, a long time ago”: Therapist self-disclosure of past or present psychological problems similar to those of the client. *Practice Innovations: American Psychological Assn*.
<https://doi.org/10.1037/pri0000151>
see page 119
- Moran, M. (2007). Psychosocial interventions in schizophrenia. *Psychiatric News: American Psychiatric Assn*. <https://doi.org/10.1176/pn.42.23.0022>
see page 89

- Moran, M. (2011). Impaired social functioning lingers after BPD symptoms remit. *Psychiatric News: American Psychiatric Assn.*
https://psychiatryonline.org/doi/10.1176/pn.46.19.psychnews_46_19_19_1
 see pages 12, 94
- Moran, M. (2022). Study shows declining trend in psychotherapy by psychiatrists. *Psychiatric News.*
<https://doi.org/10.1176/appi.pn.2022.2.15>
 see page 127
- Morey, L.C., & Bender, D.S. (2021). Articulating a core dimension of personality pathology. In A.E. Skodol & J.M. Oldham. (Eds.), *Textbook of Personality Disorders, Third Edition* (pp 47-64) Washington DC: American Psychiatric Assn. Publishing.
 see page 19
- Mulder, R. & Tyrer, P. (2023). Borderline personality disorder: A spurious condition unsupported by science that should be abandoned. *Journal of The Royal Society of Medicine.*
<http://doi.org/10.1177/01410768231164780>
 see pages 18, 19, 115
- Nasrallah, H.A. (2014). Borderline personality disorder is a heritable brain disease. *Current Psychiatry*, 13, 19-20.
 see page 47
- National Scientific Council on the Developing Child. (2012). The science of neglect: The persistent absence of responsive care disrupts the developing brain: Working Paper 12.
www.developingchild.harvard.edu
 see pages 44, 46
- National Scientific Council on the Developing Child. (2014). Excessive stress disrupts the architecture of the developing brain: Working Paper 3, updated Edition.
www.developingchild.harvard.edu
 see pages 44, 46
- Nemeth, N., Matrai, P., Hegyi, P., Czeh, B., Czopf, L., Hussain, A., Pammer, J., Szabo, I., Solymar, M., Kiss, L., Hartmann, P., Szilagyi, A.L., Kiss, Z., & Simon, M. (2018). Theory of mind disturbances in borderline personality disorder: A meta-analysis. *Psychiatry research*, 270, 143-153.
<https://doi.org/10.1016/j.psychres.2018.08.049>
 see page 35

New, A.S., & Triebwasser, J. (2018). A history of borderline personality disorder. In B. Stanley & A.S. New (Eds.), *Borderline personality disorder* (pp. 1-16). New York: Oxford University Press.

see pages 16, 25, 78

NIMH Strategic Plan for Research. (2020). National Institute of Mental Health.

<https://www.nimh.nih.gov/strategicplan>

see page 90

Nolte, T., Hutsebaut, J., Sharp, C., Campbell, C., Fonagy, P., & Bateman, A. (2023). The role of epistemic trust in mentalization-based treatment of borderline psychopathology. *Journal of Personality Disorders*, 37, 633-659.

<http://doi.org/10.1521/pedi.2023.37.5.633>

see pages x, 9, 12, 40, 46, 54, 62, 100, 118, 119

Normann-Eide, E., Antonsen, T., Kvarstein, E.H., Pedersen, G., Vaskinn, A., & Wilberg, T. (2020). Are impairments in theory of mind specific to borderline personality disorder? *Journal of Personality Disorders*, 34, 827-841.

<https://doi.org/10.1521/pedi.2019.33.417>

see pages 40, 89

Ociskova, M., Prasco, J., Vanek, J., Nesnidal, V., Sollar, T., & Slepecky, M. (2023). Stigma and self-stigma in borderline personality disorder: A narrative review. *Neuroendocrinology Letters*, 44, 206-215.

PMID: 37466060

see pages 12, 18, 98, 114, 115, 117

O'Connell, M.J., Sledge, W.H., Staeheli, M., Sells, D., Costa, M., Wieland, M., & Davidson, L. (2016). Outcomes of a peer mentor intervention for persons with recurrent psychiatric hospitalization. *Psychiatric Services*,

<https://doi.org/10.1176/appi.ps.201600478>

see page 123

Ogden, T.H. (1994). The analytic third: Working with intersubjective clinical facts. *International Journal of Psychoanalysis*, 75, 3-19.

<https://doi.org/10.4324/9780429481031-9>

O'Grady, S.M., & Hinshaw, S.P. (2023). Developmental predictors of young adult borderline personality disorder: A prospective longitudinal study of females with and without childhood ADHD. *BMC Psychiatry*

<https://doi.org/10.1186/s12888-023-04515-3>

see pages 48, 71, 128

Oldham, J.M. (2009). Borderline personality disorder comes of age. *American Journal of Psychiatry*, 166, 509-511.

<https://doi.org/10.1176/appi.ajp.2009.09020262>

see pages 48, 52

- Orme, W., Bowersox, L., Vanwoerden, S., Fonagy, P., & Sharp, C. (2019). The relation between epistemic trust and borderline pathology in an inpatient sample. *Borderline Personality Disorder and Emotion Regulation*.
<https://doi.org/10.1186/s40479-019-0110-7>
 see page 45
- Ono, Y., & Berger, D. (1995). Zen and the art of psychotherapy. *Journal of Practical Psychiatry and Behavioral Health*, 1, 203-214.
 see pages 11, 100, 102, 112, 115, 118, 125
- Orwell, G. (1949). *Nineteen eighty-four*. New York: Harcourt, Brace & Co.
 see page 30
- Osler, W. (1958). *Aequanimitas*, 1889: Philadelphia: The Blakison Co.
 26414317.1126
<https://archive.org/details/aequanimitaswit04oslegoog>
 see page 12, 119
- Otani, K., Suzuki, A., Matsumoto, Y., Enokido, M., & Shirata, T. (2016). Effects of perceived affectionless control parenting on working models of the self and others. *Psychiatry Research*, 242, 315-318.
<https://doi.org/10.1016/j.psychres.2016.05.018>
 see pages 46, 110
- Overbye, D. (2016) *Escape from oblivion*. New York Times, 06/07/2016.
- Papathanasiou, C., & Stylianidis, S. (2022a) Experiences of futility among nurses providing care to patients with borderline personality disorder in the Greek mental health system. *Journal of Psychosocial Nursing*.
<http://doi.org/10.3928/02793695-20211119-02>
 see pages 18, 115, 117
- Papathanasiou, C., & Stylianidis, S. (2022b) Mental health professionals' attitudes towards patients with borderline personality disorder: The role of disgust. *International Journal of Psychiatry Research*, 5, 1-13.
<https://doi.org/10.33425/2641-4317.1126>
 see pages 12, 18, 115, 117, 127
- Paris, J. (1998). Does childhood trauma cause personality disorder in adults? *Canadian Journal of Psychiatry*, 43, 148-153.
<https://doi.org/10.1177/070674379804300203>
 see pages 44, 76
- Paris, J.P. (2005). *The fall of an icon: Psychoanalysis and academic psychiatry*. Toronto: University of Toronto Press.
 see page 108

Paris, J. (2015). Why patients with severe personality disorders are overmedicated. *Journal of Clinical Psychiatry*, 76,4.

<https://doi.org/10.4088/JCP.14com09441>

see page 125

Paris, J. (2018). The relationship between childhood adversity and borderline personality disorder. In B. Stanley & A.S. New (Eds.), *Borderline personality disorder* (pp 71-81). New York: Oxford University Press.

see pages 46, 96, 102

Paris, J. (2021). *Nature and nurture in mental disorders: A gene-environment model*. Washington DC: American Psychiatric Association.

see page 52

Park, L.C., & Covi, L. (1965). Nonblind placebo trial: An exploration of neurotic patients' responses to placebo when its inert content is disclosed. *Archives of General Psychiatry*, 12, 336-345.

<https://pubmed.ncbi.nlm.nih.gov/14258363/>

see pages 23, 73, 116, 125

Park, L.C., Covi, L., & Uhlenhuth, E.H. (1967). Effects of informed consent on research patients and study results. *Journal of Nervous and Mental Disease*, 145, 349-357.

<https://doi.org/10.1097/00005053-196711000-00001>

see page 73

Park, L.C., & Imboden, J.B. (1970). Clinical and heuristic value of clinical drug research. *Journal of Nervous and Mental Disease*, 151, 322-340.

<https://leecrandallparkmd.net/wp-content/uploads/2025/04/clinical-heuristic-1970.pdf>

see page 125

Park, L.C., Imboden, J.B., Park, T.J., Hulse, S.H., & Unger H.T. (1992). Giftedness and psychological abuse in borderline personality disorder: Their relevance to genesis and treatment. *Journal of Personality Disorders*, 6, 226-240.

<https://10.1521/pedi.1992.6.3.226>

see pages 12, 74

Park, L.C., & Park, T.J. (1997). Personal intelligence. In M. McCallum & W.E. Piper (Eds.), *Psychological mindedness: A contemporary understanding* (pp. 133-167). Mahwah, NJ: Lawrence Erlbaum Associates.

<http://leecrandallparkmd.net/wp-content/uploads/2020/07/personaliq.pdf>

see page 110

- Park, L.C., Slaughter, R., Covi, L., & Kniffin, H.G. (1966). The subjective experience of the research patient: An investigation of psychiatric outpatients' reactions to the research treatment situation. *Journal of Nervous and Mental Disease*, 142: 199-206.
<https://doi.org/10.1097/00005053-196609000-00001>
see page 73
- Park, Y., & MacDonald, G. (2019). Consistency between individuals' past and current romantic partners' own reports of their personalities. *Proceedings of the National Academy of Sciences*, 116, 12793-12797.
<https://doi.org/10.1073/pnas.1902937116>
see page 98
- Parker, G. (1979). Parental characteristics in relation to depressive disorders. *British Journal of Psychiatry*, 134, 138-147.
<https://doi.org/10.1192/bjp.134.2.138>
see page 46
- Penner, F., Gambin, M., & Sharp, C. (2019). Childhood maltreatment and identity diffusion among inpatient adolescents: The role of reflective function. *Journal of Adolescence*.
<https://doi.org/10.1016/j.adolescence.2019.08.002>
see pages 46, 63, 79, 97, 98, 112
- Penner, F., McLaren, V., Leavitt, J., Akca, O.F., & Sharp, C. (2020). Implicit and explicit mentalizing deficits in adolescent inpatients: Specificity and incremental value of borderline pathology. *Journal of Personality Disorders*, 334, Supplement B. 64-83.
<https://doi.org/10.1521/pedi.2019.33.463>
see page 40
- Penner, F., Vanwoerden, S., Borelli, J.L., & Sharp, C. (2019). Discrepancies in mother-adolescent reports of parenting practices in a psychiatric sample: Associations with age, psychopathology, and attachment. *Journal of Abnormal Child Psychology*.
<https://doi.org/10.1007/s10802-019-00589-4>
see page 124
- Penner, F., Wall, K., Jardin, C., Brown, J.L., Sales, J.M., & Sharp, C. (2019). A study of risky sexual behavior, beliefs about sexual behavior, and sexual self-efficacy in adolescent inpatients with and without borderline personality disorder. *Personality Disorders: Theory, Research, and Treatment*. Advance online publication.
<http://dx.doi.org/10.1037/per0000348>
see page 59

Pennisi, E. (2018). Buying time: In a fast-changing environment, evolution can be too slow. "Plasticity" can give it a chance to catch up. *Science*, 362, 988-991.

<https://doi.org/10.1126/science.362.6418.988>

see page 53

Perricone, A., & Woo-kyoung, A. (2023). Reasons for the belief that psychotherapy is less effective for biologically attributed mental disorders. *Cognitive Therapy and Research*.

<https://doi.org/10.1007/s10608-023-10392-7>

see page 126

Perry, J.C., Bond, M., & Bekjes, V. (2017). The rate of improvement in long-term dynamic psychotherapy for borderline personality disorder. *Journal of Nervous and Mental Disease*, 205, 517-524.

<https://doi.org/10.1097/NMD.0000000000000697>

see page 108

Perry J.C., Herman, J.L., van der Kolk, B., & Hoke, L.A. (1990). Psychotherapy and psychological trauma in borderline personality disorder. *Psychiatric Annals*, 20, 33-43.

<https://doi.org/10.3928/0048-5713-19900101-08>

see page 97

Perry, J.C., Presniak, M.D., & Olson, T.R. (2013). Defense mechanisms in schizotypal, borderline, antisocial, and narcissistic personality disorders. *Psychiatry*, 76, 32-52.

<https://doi.org/10.1521/psyc.2013.76.1.32>

see page 111

Phillips, J., Buckwalter, W., Cushman, F., Friedman, O., Martin, A. Turri, J., Santos, L., & Knobe, J. (2020). Knowledge before belief. *Behavioral and Brain Sciences*.

<http://doi.org/10.1017/S0140525X20000618>

see pages 3, 27

Pickard, H. (2009). Mental Illness is indeed a myth. In M. Broome & L. Bortolotti (Eds.), *Psychiatry as cognitive neuroscience: Philosophical Perspectives*. New York: Oxford University Press.

<https://doi.org/10.1093/med/9780199238033.001.0001>

see pages 27, 99, 105, 123

Pickard, H. (2013). Irrational blame. *Analysis*. doi:10.1093/analys/ant075

see pages xiv, 73

Pickard, H. (2014). Responsibility without blame: Therapy, philosophy, law. *Prison Service Journal*, 213, 10-16. PMID: 25983375

see pages xiv, 73, 99

- Pickard, H. (2015). Stories of recovery: The role of narrative and hope in overcoming PTSD and PD. In J.Z. Sadler, K.W.M. Fulford, and W.C.W. van Staden (Eds.), *Oxford Handbook of Psychiatric Ethics*. New York: Oxford University Press.
<https://doi.org/10.1093/oxfordhb/9780198732372.013.45>
 see pages 59, 97, 99, 120
- Pickard, H. (2019). Stop telling me what to feel! A clinical theory of emotions and what's wrong with the moralization of feelings. *Philosophical Topics*, 47.
<https://doi.org/10.5840/philtopics201947213>
 see pages 99, 101
- Pier, K.S., Marin, L.K., Wilsnack, J., & Goodman, M. (2016). The neurobiology of borderline personality disorder. *Psychiatric Times*, 3/31/2016.
www.psychiatrictimes.com/view/neurobiology-borderline-personality-disorder
 see page 47
- Pietrzak, G., Downey, G., & Ayduk, O. (2005). Rejection sensitivity as an interpersonal vulnerability. In M.W. Baldwin (Ed.), *Interpersonal cognition* (pp 63-84). New York: Guilford Press.
 see pages 56, 61, 98
- Pincus, A. L., Cain N.M., & Halberstadt, A.L. (2020). Importance of self and other in defining personality pathology. *Psychopathology*.
<https://doi.org/10.1159/000506313>
 see page 2
- Pincus, A.L., Hopwood, C.J., & Wright, A.G.C. (2017). The interpersonal situation: An integrative framework for the study of personality, psychopathology, and psychotherapy. In J.F. Rauthmann, D.C. Funder, & R. Sherman (Eds.), *The Oxford handbook of psychological situations*. New York: Oxford University Press.
<https://doi.org/10.1093/oxfordhb/9780190263348.013.4>
 see page 127
- Pittinsky, T.L., & Montoya, R.M. (2016). Empathic joy in positive intergroup relations. *Journal of Social Issues*, 72, 511-523.
<https://doi.org/10.1111/josi.12179>
- Plakun, E.M. (2006). Finding psychodynamic psychiatry's lost generation. *Journal of the American Academy of Psychoanalysis and dynamic Psychiatry*, 34, 135-150.
<https://doi.org/10.1521/jaap.2006.34.1.135>
 see page 90
- Plakun, E.M. (2016). Gene-environment interaction in youth depression: Differential susceptibility? *American Journal of Psychiatry*, 173, 299.
<https://doi.org/10.1176/appi.ajp.2015.15111391>
 see page 76

- Plakun, E.M. (2022). Finding psychodynamic psychiatry's lost generation: Annotation by Eric M. Plakun. *Psychodynamic Psychiatry*, 50, 210-225.
<https://doi.org/10.1521/pdps.2022.50.2.212>
 see page 90
- Planck, M.K. (1950). *Scientific autobiography and other papers*. New York: Philosophical Library.
 see page 82
- Pluess, M., Assary, E., Lionetti, F., Lester, K.J., Krapohl, E., Avon, E.N., & Aron, A. (2018). Environmental sensitivity in children: Development of the highly sensitive child scale and identification of sensitivity groups. *Developmental Psychology*.
<https://pubmed.ncbi.nlm.nih.gov/28933890/>
 see page 76
- Pluess, M., & Belsky, J. (2009). Differential susceptibility to rearing experience: The case of childcare. *Journal of Child Psychology and Psychiatry*, 50, 396-404.
<https://doi.org/10.1111/j.1469-7610.2008.01992.x>
 see page 77
- Pluess, M., & Belsky, J. (2012). Vantage sensitivity: Individual differences in response to positive experiences. *Psychological Bulletin*, 139, 901-916
<http://doi.org/10.1037/a0030196>
 see pages 53, 76
- Pluess, M., Lionetti, F., Aron, E.N., & Aron, A. (2023). People differ in their sensitivity to the environment: An integrated theory, measurement and empirical evidence. *Journal of Research in Personality*.
<https://doi.org/10.1016/j.jrp.2023.104377>
 see pages 70, 76
- Pope, K.S. (1996). Memory, abuse, and science: Questioning claims about the false memory syndrome epidemic. *American Psychologist*, 51, 957-974.
<https://doi.org/10.1037/0003-066x.51.9.957>
 see page 106
- Porter, C., Palmier-Claus, J., Branitsky, A., Mansell, W., Warwick, H., & Varese, F. (2020). Childhood adversity and borderline personality disorder: A meta-analysis. *Acta Psychiatrica Scandinavica*, 141, 6-20
<https://doi.org/10.1111/acps.13118>
 see pages 45, 97
- Powers, T. (2017). *William Faulkner: The big thing on his mind*. New York: Review of Books, 64, 41-43.
 see page 98

- Premack, D., & Premack, A.J. (1995). Origins of human social competence. In M.S. Gazzaniga (Ed.), *The cognitive neurosciences* (pp 205-218). Cambridge, MA: MIT Press.
see pages [3](#), [27](#)
- Premack, D., & Woodruff, G. (1978). Does the chimpanzee have a theory of mind? *Behavioral and brain sciences*, 4, 515-526.
<https://doi.org/10.1017/S0140525X00076512>
see page [27](#)
- Pretsky et al. (2023). Introduction to psychotherapy and the treatment relationship from an integrative perspective. American Psychiatric Assn., Psychotherapy Caucus. 10/29/2023.
see page [127](#)
- Price, D.G. (2019). Generalist adult outpatient psychiatry practice. In L.W. Choi-Kain & J.G. Gunderson (Eds.), *Applications of good psychiatric management for borderline personality disorder: A practical guide* (pp. 85-115). Washington DC: American Psychiatric Assn. Publishing.
see page [123](#)
- Priselac, M. (2015). Locke: Knowledge of the external world. Internet Encyclopedia of Philosophy.
<http://iep.utm.edu/locke-kn/>
see page [27](#)
- Quas, J.A., Bauer, A., & Boyce, W.T. (2004). Physiological reactivity, social support, and memory in early childhood. *Child Development*, 75, 797-814.
<https://pmc.ncbi.nlm.nih.gov/articles/PMC2913687/>
see pages [53](#), [77](#)
- Quek, J., Bennett, C., Melvin, G.A., Saeedi, N., Gordon, M.S., & Newman, L.K. (2018). An investigation of the mentalization-based model of borderline pathology in adolescents. *Comprehensive Psychiatry*. 84, 87-94.
<https://doi.org/10.1016/j.comppsy.2018.04.005>
see pages [40](#), [47](#), [62](#), [72](#), [73](#), [89](#), [97](#)
- Reite, M., Kaufman, C., Pauley, J.D., & Stynes, A.J. (1974). Depression in infant monkeys: Psychological correlates. *Psychosomatic Medicine*, 36, 363-367.
<https://doi.org/10.1097/00006842-197407000-00010>
see page [27](#)
- Richtel, M. (2022). *Inspired: Understanding creativity*. New York: Harper Collins.
see page [82](#)

Rickels, K., Lipman, R. S., Park, L.C., Covi, L., Uhlenhuth, E.H., & Mock, J.E. (1971). Drug, doctor warmth, and clinic setting in the symptomatic response to minor tranquilizers. *Psychopharmacologia*, 20, 128-152.

<https://doi.org/10.1007/BF00404367>

see page 125

Ridolfi, M.E., Temes, C.M. Fraser, E.K., Frankenburg, F.R., & Zanarini, M.D. (2020). Perceived caretaker malevolence during childhood reported by borderline patients and personality-disordered comparison subjects: Description and prediction. *Journal of Personality Disorders*, 34, 699-707.

https://doi.org/10.1521/pedi_2019_33_446

see pages 47, 62

Riggs, S.A. (2010). Childhood emotional abuse and the attachment system across the life cycle: What theory and research tell us.

Journal of Aggression, Maltreatment and Trauma, 19, 5-51.

<https://doi.org/10.1080/10926770903475968>

see pages 45, 46, 57, 59, 61, 71, 72, 112

Ring, D., & Lawn, S. (2019). Stigma perpetuation at the interface of mental health care: A review to compare patient and clinician perspectives of stigma and borderline personality disorder. *Journal of Mental Health*.

<https://pubmed.ncbi.nlm.nih.gov/30862201/>

see page 18

Rioux, C., Sequin, J.R., & Paris, J. (2018). Differential Susceptibility to the environment and borderline personality disorder. *Harvard Review of Psychiatry*, 26, 374-382.

<https://doi.org/10.1097/HRP.0000000000000182>

see pages 52, 65, 74, 76

Ristau, C.A. (1991). *Cognitive ethology: The minds of other animals*. Hillsdale, NJ: Lawrence Erlbaum Associates.

see page 27

Rizvi, S.L., & Roman, K.M. (2018). Dialectical behavior therapy. In B. Stanley & A.S. New (Eds.), *Borderline personality disorder* (pp. 289-306). New York: Oxford University Press.

see pages 114, 120

Roberts, A. (2023). Bipolar disorder is little researched, but doctors at Hopkins aim to change that. *Baltimore Sun*, 10/23/2013.

<https://www.baltimoresun.com/2023/10/13/bipolar-disorder-is-little-researched-but-doctors-at-johns-hopkins-aim-to-change-that/>

see page xiv

- Robin, M., Belbeze, J., Pham-Scottez, A., Speranza, M., Shadill, G., Silva, J., & Corcos, M. (2022). Adversity, attachment and emotion recognition in BPD adolescents: The distinct roles of disengaged and controlling environment. *BMC Psychology*.
<https://doi.org/10.1186/s40359-022-00788-7>
 see pages 56, 61, 71
- Robin, M., Duoniol, M., Pham-Scottez, A., Gicquel, L., Delvenne, V., Nezelof, S., Speranza, M., Falissard, B., Silva, J., & Corcos, M. (2021). Specific pathways from adverse experiences to BPD in adolescence: A criteria-based approach. (2021). *Journal of Personality Disorders*, 35, Supplement B, 94-110.
<https://pubmed.ncbi.nlm.nih.gov/33999657/>
 see pages 44-46, 74, 78, 97
- Robinson, C.D., Kimbrel, N.A., & Nelson-Gray, R.O. (2013). The invalidating childhood environment scale (ICES): Psychometric properties and relationship to borderline personality symptomatology. *Journal of Personality Disorders*, 27, 402-410.
https://doi.org/10.1521/Pedi_2012_26_062
 see pages 46, 74
- Rocha, T.B., Hutz, M.H., Salatino-Oliveira, A., Genro, J.P., Polanczyk, G.V., Sato, J.R., Wehrmeister, F.C., Barros, F.C., Menezes, A.M.B., Rhode, L.A., Anselmi, L., & Kieling, C. (2015). Gene environment interaction in youth depression: Replication of the 5-HTTLPR moderation in a diverse setting. *American Journal of Psychiatry*, 172, 978-895.
<https://doi.org/10.1176/appi.ajp.2015.14070896>
 see page 77
- Rocha, T.B., Rohde, L.A., & Kieling, C. (2016). Response to Plakun: Addressing differential susceptibility with regard to gene-environment interaction in youth depression. *American Journal of Psychiatry*, 173, 299-300.
<https://doi.org/10.1176/appi.ajp.2015.15111391r>
 see page 76
- Roepke, S., Vater, A., Preissler, S., Heekeren, H.R., & Dziobek, I. (2013). Social cognition in borderline disorder. *Frontiers in Neuroscience*, 6, 1-12.
<https://doi.org/10.3389/fnins.2012.00195>
 see pages 2, 5, 32, 34, 35, 45
- Rogers, C. (1956). *Client-centered therapy* (3rd ed.). Boston: Houghton-Mifflin.
 see page 116
- Rosenberg, D.R., Pajer, K., & Rancurello, M. (1992). Neuropsychiatric assessment of orphans in one Romanian orphanage for 'unsalvageables'. *JAMA*, 268, 3489-3490. PMID: 1460743
 see page 72

- Ross, C. A., & Margolis, R.L. (2019). Research domain criteria: Strengths, weaknesses, and potential alternatives for future psychiatric research. *Molecular Neuropsychiatry*, 5, 218-235.
<https://doi.org/10.1159/000501797>
see page 90
- Rothman, J. (2017). A science of the soul: A philosopher's quest to understand the making of the mind. *New Yorker*, 3/27, 46-55.
see page 30
- Ruell, P. (2016). Hawking at Harvard. *Harvard Gazette*, 04/18/2016.
see page 99
- Ruffman, T., Slade, L., & Crowe, E. (2002). The relation between children's and mothers' mental state language and theory-of-mind understanding. *Child development*, 73, 734-751.
<https://www.jstor.org/stable/3696247>
see page 30
- Rutter, M. (1986). Meyerian psychobiology, personality development, and the role of life experiences. *American Journal of Psychiatry* 143, 1077-1087.
<https://doi.org/10.1176/ajp.143.9.1077>
see page 45
- Ryan, R.M. (2005). The developmental line of autonomy in the etiology, dynamics, and treatment of boarderline personality disorder. *Development and Psychopathology* (Cambridge University Press), 17, 987-1006.
<https://doi.org/10.1017/s0954579405050467>
see pages 43, 45, 46, 61, 62, 67, 89, 97, 99, 112, 118
- Rymer, R. (1993). *Genie: A scientific tragedy*. New York: Harper Collins.
see page 28
- Sachs, O. (1985). *The man who mistook his wife for a hat and other clinical tales*. New York: Simon & Schuster.
see page xv
- Sadowski, S.K., & Szpitalak, M. (2022). Sensory processing sensitivity and its relation to susceptibility to information. *Polish Psychological Bulletin*, 53, 79-87.
<https://doi.org/10.24425/ppb.2022.141135>
see page 76
- Santangelo, P.S., Kockler, T.D., Zeitler, M-L., Knies, R., Kleindienst, N., Bohus, M., & Ebner-Priemer, U.W. (2020). Self-esteem instability and affective instability in everyday life after remission from borderline personality disorder. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-020-00140-8>
see pages 22, 94, 98

- Santayana, G. (1998). *The life of reason: The phases of human progress*. New York: Prometheus Books.
see page 99
- Satpute, A.B., Nook, E.C., & Cakar, M.E (2020). The role of language in the construction of emotion and memory. In R.D. Lane & L. Nadel (Eds.), *Neuroscience of enduring change: Implications for psychotherapy*. New York: Oxford University Press.
<https://doi.org/10.1093/oso/9780190881511.003.0004>
see page 30
- Savage-Rumbaugh, S., Shanker, S.G., & Taylor, T.J. (1998). *Apes, language and the human mind*. New York: Oxford University Press.
see page 27
- Schenk, N., Zimmerman, R., Fürer, L., Krause, M., Weise, S., Schlüter-Müller, S., & Schmeck, K. (2019). Trajectories of alliance ruptures in the psychotherapy of adolescents with borderline personality pathology: Timing, typology and significance. *Research in Psychotherapy: Psychopathology, Process and Outcome*, 22, 199-211.
<https://doi.org/10.4081/ripppo.2019.348>
see page 115
- Schlenz-Schuster, F., Keil, J., Klitzing, K.von, Gniewosz, G. Schulz, C.C., Schlesier-Michel, A., Mayer, S. et al. (2022). From maltreatment to psychiatric disorders in childhood and adolescence: The relevance of emotional maltreatment. *Child Maltreatment*.
<https://doi.org/10.1177/10775595221134248>
see pages 7, 45, 61, 75, 89
- Schmeck, K., Kumperscak, H.G., Birkholzer, M., & Goth, K. (2022). Editorial: Dimensional assessment of personality disorders in young people: A closer look on personality functioning in younger ages, different cultures and various settings. *Frontiers in Psychiatry*.
<https://doi.org/10.3389/fpsy.2022.1082189>
see page 61
- Schneider, I., Fuchs, A., Herpertz, S.C., & Labo, F.M. (2023). Microsocial analysis of dyadic interactions with toddlers and mothers with borderline personality disorder. *Archives of Women's Mental Health*.
<https://doi.org/10.1007/s00737-023-01346-9>
see pages 7, 45, 74
- Schroder, H.S., Duda, J.M., Christensen, K., Beard, C., & Björgvinsson, T. (2020). Stressors and chemical imbalances: Beliefs about the causes of depression in an acute psychiatric treatment sample. *Journal of Affective Disorders*, 276, 537-545.
<https://doi.org/10.1016/j.jad.2020.07.061>
see pages 105, 126

Schulze, A., Cloose, L., Zdravkovic, M., Lis, L., & Kraus-Utz, A. (2022). On the interplay of borderline personality features, childhood trauma severity, attachment types, and social support. *Borderline Personality Disorder and Emotion Dysregulation*.

<https://doi.org/10.1186/s40479-022-00206-9>

see pages 7, 45, 46

Scott, S.K. (2019). From speech and talkers to the social world: The neural processing of human spoken language. *Science*, 366, 58-62.

<https://doi.org/10.1126/science.aax0288>

see page 30

Scull, A. (2022). *Desperate remedies: Psychiatry's turbulent quest to cure mental illness*. Cambridge, MA: Harvard University Press.

see page 90

Sekowski, M., Gambin, M., Cudo, A., Wozniak-Prus, M., Penner, F., Fonagy, P., & Sharp, C. (2020). The relations between child maltreatment, shame, guilt, depression and suicidal ideation in inpatient adolescents. *Journal of Affective Disorders*.

<https://doi.org/10.1016/j.jad.2020.07.056>

see pages 42, 97, 104, 112, 115

Shai, D., Black, A. L., Spencer, R., Sleet, M., Baradon, T., Nolte, T., & Fonagy, P. (2022). Trust me! Parental embodied mentalizing predicts infant cognitive and language development in longitudinal follow-up, *Frontiers in Psychology*.

<https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2022.867134/full>

see page 66

Shamay-Tsoory, S.G., Aharon-Perets, J., & Perry, D. (2009). Two systems for empathy: a double dissociation between emotional and cognitive empathy in anterior frontal gyrus versus ventromedial prefrontal lesions.

Brain, 132, 617-627.

<https://doi.org/10.1093/brain/awn279>

see page 35

Shapiro, E.R. (1978). The psychodynamics and developmental psychology of the borderline patient: A review of the literature.

American Journal of Psychiatry, 135, 1305-1315.

<https://doi.org/10.1176/ajp.135.11.1305>

see pages 7, 18, 33, 35, 36, 72, 119

Shapiro, E.R. (1992). Family dynamics and borderline personality disorder. In D. Silver & M. Rosenbluth (Eds.), *Handbook of borderline disorders* (pp. 471-493). Madison, CT: International Universities Press. Published online by Cambridge University Press 2018.

see pages 6, 7, 35, 36, 59, 123

- Shapiro, E.R. (2009) A view from Riggs: Treatment resistance and patient authority - XII. Examined living: A Psychodynamic treatment system. *Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry*, 37, 683-698.
<https://pubmed.ncbi.nlm.nih.gov/20001200/>
see pages 43, 45, 59, 107
- Shapiro, E.R. (2012) Management and interpretation: Teaching residents to listen. *Journal of Nervous and Mental Disease*, 200, 204-207.
<https://pubmed.ncbi.nlm.nih.gov/22373756/>
see pages 12, 101, 102, 118, 127
- Shapiro, E.R. (2020). Finding a place to stand: Developing self-reflective institutions, leaders and citizens. Oxfordshire: Phoenix Publishing Ltd.
see pages 35, 36, 43, 54, 59, 89, 99, 112, 117, 118, 128, 129
- Shapiro, E.R., & Plakun, E.M. (1998). Treatment of borderline personality disorder. *American Journal of Psychiatry*, 155, 1645-1646.
<https://doi.org/10.1176/ajp.155.11.1626ai>
see pages 43, 45, 46, 59
- Shapiro, M. (2018). The stigma toward BPD, with response to Mark Zimmerman. *Current Psychiatry*, 17, 19-21.
see pages 18, 115
- Shapiro-Thompson, R., & Fineberg, S.K. (2022). The state of overmedication in borderline personality disorder: Interpersonal and structural factors. *Current Treatment Options in Psychiatry*, 9, 1-13.
<https://doi.org/10.1007/s40501-021-00255-x>
see pages 125, 126
- Sharp, C. (2014). The social-cognitive basis of BPD: A theory of hypermentalizing. In C. Sharp, & J.L. Tackett (Eds.), *Handbook of borderline personality disorder in children and adolescents* (pp 211-225). New York: Springer Science & Business Media.
<https://psycnet.apa.org/record/2014-16829-016>
see pages ix, 2, 25, 35
- Sharp, C. (2020). Adolescent personality pathology and the alternative model for personality disorders: Self-development as nexus. *Psychopathology*, 53, 198-204.
<https://doi.org/10.1159/000507588>
see page 58

- Sharp, C. (2021). Enhancing the capacity for optimal social and personality function through the mediational intervention for sensitizing caregivers: A case illustration. *Journal of Clinical Psychology*, 77, 1162-1175.
<https://doi.org/10.1002/jclp.23169>
see pages xv, 124, 129
- Sharp, C., & Fonagy, P. (2008a). The parent's capacity to treat the child as a psychological agent: Constructs, measures and implications for developmental psychopathology. *Social Development*, 17, 737-754.
<https://doi.org/10.1111/j.1467-9507.2007.00457.x>
see page 114
- Sharp, C., & Fonagy, P. (2008b). Social cognition and attachment-related disorders. In C. Sharp, P. Fonagy, & I. Goodyer (Eds.), *Social cognition and developmental psychopathology* (pp 271-302). New York: Oxford University Press.
<https://doi.org/10.1093/med/9780198569183.003.0010>
see pages 43, 67
- Sharp, C., Fonagy, P., & Goodyer, I. (2008). *Social cognition and developmental psychopathology*. New York: Oxford University Press.
see page 43
- Sharp, C., Ha, C., Carbone, C., Kim, S, Perry, K., Williams, L., & Fonagy, P. (2013). Hypermentalizing in adolescent inpatients: Treatment effects and association with borderline traits. *Journal of Personality Disorders*, 27, 3-18.
<https://doi.org/10.1521/pedi.2013.27.1.3>
see pages 112, 117
- Sharp, C., Kerr, S., & Chanen, A.M. (2021). Early identification and prevention of personality pathology: An AMPD-informed model of clinical staging. In A.E. Skodol, & J.M. Oldham (Eds.), *Textbook of personality disorders: Third edition* (pp.259-306). Washington DC: American Psychiatric Assn. Publishing
see pages 58, 61
- Sharp, C., & Kim, S. (2015). Recent advances in the developmental aspects of borderline personality disorder. *Current Psychiatry Reports*.
<https://doi.org/10.1007/s11920-015-0556-2>
see pages ix, 2, 62, 65, 91, 114
- Sharp, C., Pane, H., Ha, C., Venta, A., Patel, A. B., Sturck, J., & Fonagy, P. (2011). Theory of mind and emotion regulation difficulties in adolescents with borderline traits. *Journal of the American Academy of Child & Adolescent Psychiatry*, 50, 563-5.
<https://doi.org/10.1016/j.jaac.2011.01.017>
see pages 40, 41

- Sharp, C., & Vanwoerden, S. (2015). Hypermentalizing in borderline personality disorder: A model and data. *Journal of Infant, Child, and Adolescent Psychotherapy*, 14, 33-45.
<http://dx.doi.org/10.1080/15289168.2015.1004890>
see pages 34, 41, 57
- Sharp, C., Vanwoerden S., Gallagher, M.W., Williams, L., & Newlin, E. (2021b). The course of borderline psychopathology in adolescents with complex mental health problems: An 18 month longitudinal follow-up study. *Research on Child and Adolescent Psychopathology*
<https://doi.org/10.1007/s10802-020-00756-y>
see page 58
- Sharp, C., Vanwoerden, S., Jouriles, E.N., Godfrey, D.A., Babcock, J., McLaren, V., McFarlane, J., Brashear, B., Walton, Q., & Temple, J.R. (2020). Exposure to interparental intimate partner violence and the development of borderline features in adolescents. *Child Abuse & Neglect*.
<https://doi.org/10.1016/j.chiabu.2020.104448>
see pages 2, 58, 62, 74, 124
- Sharp, C., Vanwoerden, S., Schmeck, K., Birkholzer, M., & Goth, K. (2021a). An evaluation of age-group latent mean differences in maladaptive identity in adolescence. *Frontiers in Psychiatry*.
<https://doi.org/10.3389/fpsy.2021.730415>
see page 61
- Sharp, C., Vanwoerden, S., & Wall, K. (2018). Adolescence as a sensitive period for the development of personality disorder. *Psychiatr Clin N Am*, 41, 669-683.
<https://doi.org/10.1016/j.psc.2018.07.004>
see page 99
- Sharp, C., & Wall, K. (2018). Personality pathology grows up: Adolescence as a sensitive period. *Current Opinion in Psychology*, 21, 111-116.
<https://pubmed.ncbi.nlm.nih.gov/29227834/>
see page 58
- Sharp, C., & Wall, K. (2021). DSM-5 Level of Personality Functioning: Refocusing personality disorder on what it means to be human. *Annual Review of Clinical Psychology*, 17, 313-337.
<https://doi.org/10.1146/annurev-clinpsy-081219-105402>
see pages 23, 58, 81
- Sharp, C., Wright, A.G.C., Fowler, J.C., Frueh, B.C., Allen, J.G., Oldham, J. M., & Clark, L.A. (2015). The structure of personality pathology: Both general ('g') and specific ('s') factors. *Journal of Abnormal Psychology*, 124, 387-398.
<https://doi.org/10.1037/abn0000033>
see page 25

Shengold, L. (1995). *Delusions of everyday life*. New Haven: Yale University Press.

see page 98

Shonkoff, J.P., Garner, A.S., Siegel, B.S., Dobbins, M.I., Earls, M.F., McGuinn, L., Pascoe, J., & Wood, D.L. (2012). The lifelong effects of early child adversity and toxic stress. *Pediatrics*, 129, e232-e246.

<https://doi.org/10.1542/peds.2011-2663>

see page 46

Silk, K.R. (2018). Pharmacological interventions for borderline personality disorder. In B. Stanley & A.S. New (Eds). *Borderline personality disorder* (pp 225-246). New York: Oxford University Press.

see pages 125, 126

Silver, A.S. (2000). The 2000 Frieda Fromm-Reichmann lecture: The current relevance of Fromm-Reichmann's works. *Psychiatry*, 63, 308-322.

<https://doi.org/10.1080/00332747.2000.11024923>

see page 108

Siu, T.S.C., & Cheung, H. (2022). A longitudinal reciprocal relation between theory of mind and language. *Cognitive Development*.

<https://doi.org/10.1016/j.cogdev.2022.101176>

see page 30

Skabeikyte, G., & Barkauskiene, R. (2021). A systematic review of the factors associated with the course of borderline personality disorder symptoms in adolescence. *Borderline Personality Disorder and Emotion Dysregulation*.

<https://doi.org/10.1186/s40479-021-00151-z>

see page 74

Skodol, A.E., Bender, D.S., & Oldham, J.M. (2019). Personality pathology and personality disorders. In L.W. Roberts (Ed.), *Textbook of psychiatry*, seventh edition (pp 711-747). Washington DC: American Psychiatric Publishing.

see pages 2, 19, 46, 112

Skodol, A.E., Gunderson, J.G., Pfohl, B., Widiger, T.A., Livesley W.J., & Siever L. J. (2002). The borderline diagnosis I: Psychopathology, comorbidity, and personality structure, 51, *Biological Psychiatry* 936-950.

<https://pubmed.ncbi.nlm.nih.gov/12062877/>

see page 19

Slagt, M., Dubas, J.S., van Aken, M.A.G., Dekovic, M., & Ellis, B.J. (2018). Sensory processing sensitivity as a marker of differential susceptibility to parenting. *Developmental Psychology*, 54, 543-558.

<http://dx.doi.org/10.1037/dev0000431>

see page 76

- Slavney, P.R., & McHugh, P.R. (2016). *Psychiatric polarities: Methodology and practice*. Baltimore: Johns Hopkins University Press.
see pages [43](#), [84](#), [127](#)
- Small, M. F. (1990), Political animal: Social intelligence and growth of the primate brain. *The Sciences*, March, 36-42.
see pages [3](#), [27](#)
- Smith, A. (2006). Cognitive empathy and emotional empathy in human behavior and evolution. *The Psychological Record*, 57, 3-21.
<https://doi.org/10.1007/BF03395534>
see pages [34](#), [35](#)
- Smith, G. (2023). *Distrust: Big data, data torturing, and the assault on science*. New York: Oxford University Press.
see page [47](#)
- Smoller, J.W. (2019). Psychiatric genetics begins to find its footing. *American Journal of Psychiatry*, 168, 609-614.
<https://doi.org/10.1176/appi.ajp.2019.19060643>
see page [90](#)
- Solomon, A. (2012). *Far from the tree: Parents, children, and the search for identity*. New York: Scribner.
see pages [68](#), [123](#)
- Solomon, A. (2017). *Descending into darkness*. *New York Times International Edition*, 22, 2/4/2017.
see page [22](#)
- Staebler, K., Helbing, E., Rosenbach, C., & Renneberg, B. (2011). Rejection sensitivity and borderline personality disorder. *Clinical Psychology and Psychotherapy*, 18, 275-283.
<https://doi.org/10.1002/cpp.705>
see pages [56](#)
- Stanley, B., & Singh, T. (2018). *Diagnosis of borderline personality disorder*. In B. Stanley & A.S. New (Eds.), *borderline personality disorder* (pp 17-34). New York: Oxford University Press.
see pages [22](#), [126](#)
- Steele, K.R., Townsend, M.L., & Grenyer, B.F.S. (2019). Parenting and personality disorder: An overview and meta-synthesis of systemic reviews. *Plos 65One*.
<https://doi.org/10.1371/journal.pone.0223038>
see pages [44](#), [46](#), [89](#), [97](#)

Steele, M., Bate, J., Nikitiades, & Buhl-Nielson. (2015) Attachment in adolescence and borderline personality disorder. *Journal of Infant, Child and Adolescent Psychotherapy*, 14, 16-32.

<https://doi.org/10.1080/15289168.2015.1004882>

see pages 23, 44, 57, 61, 63, 67, 71

Stefanatou, P. (2022). Group psychotherapy for parents of patients with borderline personality disorder: Basic assumptions and group's containing function. *Psychiatriki*.

<https://doi.org/10.22365/jpsych.2022.080>

see page 124

Stein, J. Y., Wilmont, D.V., & Solomon, Z. (2016). Does one size fit all? Nosological, clinical, and scientific implications of variations in ptsd criteria A. *Journal of Anxiety Disorders*, 43: 106-117.

<https://doi.org/10.1016/j.janxdis.2016.07.001>

see pages 79, 81, 99

Stepp, S.D., Burke, J.D., Hipwell, A.E., & Loeber, R. (2012). Trajectories of attention deficit hyperactivity disorder and oppositional defiant disorder symptoms as precursors of borderline personality disorder symptoms in adolescent girls. *Journal of Abnormal Child Psychology*, 40, 7-20.

<https://pubmed.ncbi.nlm.nih.gov/21671009/>

see page 48

Stepp, S.D., Keenan, K., Hipwell, A.E., & Krueger, R.F. (2014a). The impact of childhood temperament on the development of borderline personality disorder symptoms over the course of adolescence.

Borderline Personality Disorder and Emotion Dysregulation,

<https://doi.org/10.1186/2051-6673-1-18>

see page 46

Stepp, S.D., Lazarus, S.A., & Byrd, A.L. (2016). A systematic review of risk factors prospectively associated with borderline personality disorder: Taking stock and moving forward. *Personality Disorders: Theory, Research, and Treatment*, 7, 316-323.

<https://doi.org/10.1037/per0000186>

see pages 30, 57, 63, 74

Stepp, S.D., Whalen, D.J., Pilkonis, P.A., Hipwell, A.E., & Levine, M.D., (2012). Children of mothers with borderline personality disorder: Identifying parental behaviors as potential targets for intervention.

Personality Disorders: Theory, Research, and Treatment, 3, 76-91.

<https://doi.org/10.1037/a0023081>

see pages 46, 113, 129

Stepp, S.D., Whalen, D.J., Scott, L.N., Zalewski, M., Loeber R., & Hipwell, A.E. (2014b). Reciprocal effects of parenting and borderline personality disorder symptoms in adolescent girls. *Development and Psychopathology* 26, 361-378.

<https://doi.org/10.1017/S0954579413001041>

see page 72

Stiles, C., Batchelor, R., Gumley, A., & Gajwani, R. (2023). Experiences of stigma and discrimination in borderline personality disorder: A systematic review and qualitative meta-synthesis. *Journal of Personality Disorders*, 37, 177-194.

<https://doi.org/10.1521/pedi.2023.37.2.177>

see pages 18, 115

Stoffers-Winterling, J., Storebo, O.J., & Lieb, K. (2020). Pharmacotherapy for borderline personality disorder: An update of published, unpublished and ongoing studies. *Current Psychiatry Reports*.

<https://doi.org/10.1007/s11920-020-01164-1>

see pages 125, 126

Stoffers-Winterling, J.M., Storebo, O.J., Ribiero, J.P., Kongerslev, M.T., Vollm, B.A., Mattiri, J.T. et al., 2022. Pharmacological interventions for people with borderline personality disorder. *Cochrane Database of Systematic Reviews*.

<https://doi.org/10.1002/14651858.CD012956.pub2>

see page 125

Stolorow, R.D., Brandchaft, B., & Atwood, G.E. (1983). Intersubjectivity in psychoanalytic treatment: With special reference to archaic states. *Bulletin of the Menninger Clinic*, 47, 117-128.

PMID:6839054

see page 49

Stone, M.H. (1985). Disturbances in sex and love in borderline patients.

In Z. Defries, R.C. Friedman, & R. Corn (Eds), *Sexuality:*

New perspectives (pp 159-186). Westport, CT: Greenwood Press.

see page 33

Stone, M.H. (1990). *The fate of borderline patients: Successful outcome and psychiatric practice*. New York: Guilford Press.

see page 17

Stone, M.H. (2016). Long-term course of borderline personality disorder. *Dynamic Psychiatry*, 44, 449-474.

<https://doi.org/10.1521/pdps.2016.44.3.449>

see page 94

- Stone, M.H. (2017a). Borderline patients 25 to 50 years later: With commentary on outcome factors. *Psychodynamic Psychiatry*, 45, 259-296.
<https://doi.org/10.1521/pdps.2017.45.2.259>
 see page 94
- Stone, M.H. (2017b). Borderline personality disorder: Treatment from the contextual perspective. *Psychodynamic Psychiatry*, 45, 1-21
<https://doi.org/10.1521/pdps.2017.45.1.1>
 see page 113
- Stone, M.H. (2019). Borderline personality disorder: Clinical guidelines for treatment. *Psychodynamic Psychiatry*, 47, 5-26.
<https://doi.org/10.1521/pdps.2019.47.1.5>
 see pages 44, 63, 74
- Storr, A. (1988). *Churchill's black dog, Kafka's mice, and other phenomena of the human mind*. New York: Ballantine Books.
 see page 70
- Straus, M.B. (2017). *Treating trauma in adolescents: Development, attachment, and the therapeutic relationship*. New York: Guilford Press.
 see page 113
- Sturrock, B., & Mellor, D. (2014). Perceived emotional invalidation and borderline personality disorder features: A test of theory. *Personality and Mental Health*, 8, 128-142.
<https://doi.org/10.1002/pmh.1249>
 see page 61
- Suomi, S.J. (1991a). Early stress and adult emotional reactivity in rhesus monkeys. In *Ciba Foundation Symposium 156, The childhood environment and adult disease* (pp. 171-188). Chichester: Wiley.
<https://doi.org/10.1002/9780470514047.ch11>
 see pages 6, 30
- Suomi, S.J. (1991b). Adolescent depression and depressive symptoms: Insights from longitudinal studies with rhesus monkeys. *Journal of Youth and Adolescence*, 20, 271-285.
<https://doi.org/10.1007/BF01537612>
 see page 72
- Suomi, S.J. (2000). Nature vs. Nurture: Uptight, laid-back and jumpy monkeys (pp 1-3). In *NYU Child Study Center Grand Rounds Summary December 15*.
 see page 64
- Tadmon, D., & Olfson, M. (2022). Trends in outpatient psychotherapy provision by U.S. psychiatrists: 1996-2016. *American Journal of Psychiatry*, 179, 110-121.
<https://doi.org/10.1176/appi.ajp.2021.21040338>
 see pages 12, 127

- Talia, A., Mazzarella, D., Duschinsky, R., Miller-Bottomo, M., Taubner, S., Holmes, J., & Fonagy, P. (2021). Reconceptualizing attachment-related differences: From proximity-seeking to epistemic trust. *PsyArXiv*.
<https://doi.org/10.31234/osf.io/3grxf>
see pages 4, 55, 59, 61
- Tanzilli, A., & Lingardi, V. (2022). The diagnostic use of countertransference in psychodynamic practice. In M. Biondi et al. (Eds.). *The clinician in the psychiatric diagnostic practice* (pp 151-163). Switzerland: Springer Nature.
https://doi.org/10.1007/978-3-030-90431-9_10
- Taylor, H., & Vestergaard, M.D. (2022). Developmental dyslexia: Disorder or specialization in exploration? *Frontiers in Psychology*.
<https://doi.org/10.3389/fpsyg.2022.889245>
see pages 39, 56, 69
- Tedesco, V., Day, N.J.S., Lucas, S., & Grenyer, B.F.S. (2023). Diagnosing borderline personality disorder: Reports and recommendations from people with lived experience. *Personality and Mental Health*.
<https://doi.org/10.1002/pmh.1599>
see pages xv, 57, 58, 73, 79, 126
- Thomson, P., & Jaque, S.V. (2018). Childhood adversity and the creative experience in adult professional performing artists. *Frontiers in Psychology*.
<https://doi.org/10.3389/fpsyg.2018.00111>
see page 70
- Tienari, P., Wynne, L.C., Sorri, A., Lahti, I., Laksy, K., Moring, J., Naarala, M., Nieminen, P., & Wahlberg, K. (2004). Genotype-environment interaction in schizophrenia-spectrum disorder: Long-term follow-up study of Finnish adoptees. *British Journal of Psychiatry*, 194, 216-222.
<https://doi.org/10.1192/bjp.184.3.216>
see page 89
- Tiger, A., Ohlis, A., Bjureberg, J., Ludstrom, S., Lichtenstein, P., Larsson, H., Hellner, C., Kuja-Halko, R., Jayaram-Lindstrom, N. (2022). Childhood symptoms of attention-deficit/hyperactivity disorder and borderline personality disorder. *Acta Psychiatrica Scandinavica* 146, 370-380.
<https://doi.org/10.1111/acps.13476>
see page 48
- Tolpin, M., & Kohut, H. (1980). The disorders of the self: The psychopathology of the first years of life. In S.I. Greenspan & G.H. Pollack (Eds.), *The course of life* (pp. 425-442). Bethesda: NIMH.
see page 46
- Tomasello, M., & Call, J. (1997). *Primate cognition*. New York: Oxford University Press.
see page 27

- Trull, T.J., & Widiger, T.A. (1991). The relationship between borderline personality disorder criteria and dysthymia symptoms. *Journal of Psychopathology and Behavioral Assessment*, 13, 91-105.
<https://doi.org/10.1007/BF00961425>
 see page 21
- Tschoeke, S., Bichescu-Burian, D., Steinert, T., & Flammer, E. (2020). History of childhood trauma and association with borderline and dissociative features. *Journal of Nervous and Mental Disease*. Online ahead of print.
<https://doi.org/10.1097/NMD.0000000000001270>
 see page 45-47
- Tusiani-Eng, P., & Tusiani, B. (2018). Borderline personality disorder and advocacy: Individuals and family members speaking out for changes. In B. Stanley & A.S. New (Eds). *Borderline personality disorder* (pp 421-436). New York: Oxford University Press.
 see pages 73, 124
- Uomini, N., Fairlie, J., Gray, R.D., & Griesser, M. (2020). Extended parenting and the evolution of cognition. *Philosophical Transactions of the Royal Society of London, Series B*.
<https://doi.org/10.6084/m9.figshare.c.4971152>
 see pages 31, 43
- Vachon, D.D., Krueger, R.F., Rogosch, F.A., & Cicchetti, D. (2015). Assessment of the harmful psychiatric and behavioral effects of different forms of child maltreatment. *JAMA Psychiatry*, 72, 1135-1142.
<https://doi.org/10.1001/jamapsychiatry.2015.1792>
 see page 46
- Valadez, E.A., Tottenham, N., Tabachnick, A.R., & Dozier, M. (2020). Early parenting intervention effects on brain responses to maternal cues among high-risk children. *American Journal of Psychiatry*, 177, 818-826.
<https://doi.org/10.1176/appi.ajp.2020.20010011>
 see pages 30, 44, 63, 65, 67, 72, 89, 91
- Vandenbos, G.R. (Ed.) (2007). *APA Dictionary of Psychology*. Washington, D.C.: American Psychological Association.
 see page 105
- Vanwoerden, S., Byrd, A.L., Vine, V., Beeney, J.E., Scott, L.N., & Stepp, S.D. (2021a). Momentary borderline personality disorder symptoms in youth as a function of parental invalidation and youth-perceived support. *Journal of Child Psychology and Psychiatry*.
<https://doi.org/10.1111/jcpp.13443>
 see pages 7, 45-47

- Vanwoerden, S., Greiner, I., Ensink, K., & Sharp, C. (2019) The relations between self- and caregiver-focused reflective function and theory of mind in the context of borderline pathology in adolescence. *Psychiatry Research*.
<https://doi.org/10.1016/j.psychres.2019.01.042>
see pages 7, 47, 114
- Vanwoerden, S., Kalpakci, A., & Sharp, C. (2017). The relations between inadequate parent-child boundaries and borderline personality disorder in adolescence. *Psychiatry Research*, 257, 462-471.
<https://dx.doi.org/10.1016/j.psychres.2017.08.015>
see pages 46, 74
- Vanwoerden, S., Penner, F., Pearson, C., Bick, J., Yoshida, H., & Sharp, C. (2021b). Testing the link between mothers' general reflective function capacity and adolescent borderline personality features: Perceived parenting behaviors as a potential mechanism. *Journal of Personality Disorders*.
<https://doi.org/10.1521/pedi.2021.35.505>
see pages 46, 62, 66, 71, 89, 124
- Vernouillet, A. (2018). Social intelligence hypothesis. In J. Vonk & T.K. Shackelford (Eds.), *Encyclopedia of animal cognition and behavior*. Springer Nature.
https://doi.org/10.1007/978-3-319-47829-6_1498-1
see page 26
- Vestergaard, M., Kongerslev, M.T., Thomsen, M.S., Mathiesen, B.B., Harmer, C. J., Simonsen, E., Miskowiak, K.W. (2020). Women with borderline personality disorder show reduced identification of emotional facial expressions and a heightened negativity bias. *Journal of Personality Disorders*, 34, 677-698.
<https://doi.org/10.1521/pedi.2019.33.409>
see page 59
- Wall, K., Kalpakci, A., Hall, K., Crist, N., & Sharp, C., (2018). An evaluation of the construct of emotional sensitivity from the perspective of emotionally sensitive people. *Borderline Personality Disorder and Emotion Dysregulation*.
<https://pubmed.ncbi.nlm.nih.gov/30155259/>
see pages 58, 70, 73, 123
- Wall, K., Kerr, S., Nguyen, M., & Sharp, C. (2021a). The relation between measures of explicit shame and borderline personality features in adolescent inpatients. *Journal of Affective Disorders*, 282, 458-464.
<https://doi.org/10.1016/j.jad.2020.12.152>
see page 98

Wall, K., Kerr, S., & Sharp, C. (2021). Barriers to care for adolescents with borderline personality disorder. *Current Opinion in Psychiatry*, 37, 1-7.

<https://doi.org/10.1016/j.copsyc.2020.07.028>

see page 18

Watt-McMahon, K., Mildred, H., King, R., Craigle, G., Hyder, S. & Hall, K. (2023). Understanding chronic suicidality in borderline personality disorder through comparison with depressive disorder: A systematic review. *Clinical Psychologist*.

<https://doi.org/10.1080/13284207.2023.2190879>

see pages 21, 22

Weinberger, D., & Radulescu, E. (2016). The inconvenient truth about MRI in psychiatric research. *Psychiatric News: American Psychiatric Assn.*, 51,19.

<https://psychiatryonline.org/doi/10.1176/appi.pn.2016.2a6>

see page 47

Weinbrecht, A., Roepke, S., & Renneberg, B. (2020). Fear of positive evaluation in borderline personality disorder. *PLOS ONE*,

<https://doi.org/10.1371/journal.pone.0237944>

see page 69

Weiner, L., Perroud, N., & Weibel, S. (2019). Attention deficit hyperactivity disorder and borderline personality disorder in adults: A review of their links and risks. *Neuropsychiatric Disease and Treatment*, 15, 3115-3129.

<https://doi.org/10.1016/j.pnpbp.2005.04.033>

see page 48

Wenzel, A., Jeglic, E.L., Levy-Mack, H.J., Beck, A.T., & Brown, G. K. (2008). Treatment attitude and therapy outcome in patients with borderline personality disorder. *Journal of Cognitive Psychotherapy*, 22, 250-257.

<https://doi.org/10.1891/0889-8391.22.3.250>

see page 116

Werner, E.E. (1989). High-risk children in young adulthood: A longitudinal study from birth to 32 years. *American Journal of Orthopsychiatry*, 59, 72-81.

PMID:2467566

see page 67

Wertz, J., Caspi, A., Ambler, A., Arseneault, L., Belsky, D.W., Danese, A., Fisher, H.L., Matthews, T., Richmond-Rakerd, L., & Moffitt, T.E. (2020). Borderline symptoms at age 12 signal risk for poor outcomes during the transition to adulthood: Findings from a genetically sensitive longitudinal cohort study. *Journal of the American Academy of Child and Adolescent Psychiatry*.

<https://doi.org/10.1016/j.jaac.2019.07.005>

see page 58

- Whitehorn, J.C. (1955). Understanding psychotherapy. *American Journal of Psychiatry*, 112, 328-333.
<https://doi.org/10.1176/ajp.112.5.328>
see pages 114, 119
- Whitehorn, J.C. (1963). Education for uncertainty. Perspectives in biology and medicine, Volume 7. Baltimore: Johns Hopkins University Press.
10.1353/pbm.1963.0019
see pages 105, 119
- Whitehorn, J.C., & Betz, B.J. (1954). A study of psychotherapeutic relationships between physicians and schizophrenic patients. *American Journal of Psychiatry*, 111, 321-331.
<http://doi.org/10.1176/ajp.111.5.321>
see page 89
- Wiesel, E. (1958). *Night: A memoir*. New York: Farrar, Straus and Giroux.
see page 99
- Wiesel-Barth, J. (2018). Critical clinical moments in the treatment process with commentaries. *Psychoanalysis, Self and Context*, 13, 1-5.
<https://doi.org/10.1080/24720038.2018.1388054>
see page 119
- Wilkerson, I. (2020). *Caste: The origins of our discontents*. New York: Random House.
see page 31
- Wilkinson, S.M., & Gabbard, G.O. (1993). Therapeutic self-disclosure with borderline patients. *Journal of Psychotherapy Practice and Research*, 2, 282-295. PMID:22700154
see pages xv, 36, 59, 113, 115, 118, 119, 127, 128
- Wingenfeld, K., Duesenberg, M., Fleischer, J., Roepke, S., Dziobek, I., Otte, C., & Wolf, O.T. (2018). Psychosocial stress differentially affects emotional empathy in women with borderline personality disorder and healthy controls. *Acta Psychiatrica Scandinavica*.
<http://doi.org/10.1111/acps.12856>
see page 35
- Winsper, C. (2018). The etiology of borderline personality disorder (BPD): Contemporary theories and putative mechanisms. *Current Opinion in Psychology*, 21, 105-110.
<https://pubmed.ncbi.nlm.nih.gov/29182951/>
see page 8

- Wolf, K., Scharoba, J. Noack, R., Keller, A., & Weider, K. (2023). Subtypes of borderline personality disorder in a day-clinic setting—Clinical and Therapeutic differences. *Personality Disorders: Theory, Research, and Treatment*. Advance online publication.
<https://dx.doi.org/10.1037/per0000624>
 see pages 19, 81
- Wolpaw, J.R., Schmidt, J.T., & Vaughan, T.M. (Eds.) (1991). *Activity-driven CNS changes in learning and development*. New York: New York Academy of Sciences.
 see page 53
- Woodbridge, J., Townsend, M.L., Reis, S.L., & Grenyer, B.F.S. (2023). Patient perspectives on non-response to psychotherapy for borderline personality disorder: A qualitative study (2023). *Borderline Personality Disorder and Emotion Dysregulation*.
<https://doi.org/10.1186/s40479-023-00219-y>
 see pages xv, 12, 73, 94, 99–101, 111, 115, 116, 119, 120, 123, 127
- Yaden, D.B., Johnson, M.W., Griffiths, R.R., Doss, M.K., Garcia-Romeu, A., Nayak, S., Gukasyan, N., Mathur, B.N., & Barrett, F.S. (2021). *Psychedelics and consciousness: Distinctions, demarcations, and opportunities*. *International Journal of Neuropsychopharmacology*, xx, 1–9. Published by Oxford University Press.
<https://doi.org/10.1093/ijnp/pyab026>
 see pages 27, 84
- Yen, S., Peters, J.R., Nishar, S., Grilo, C.M., Sansilow, C.A., Shea, M.T., Zanarini, M.C., McGlashan, T.H., & Morey, L.C. (2020). Association of borderline personality disorder criteria with suicide attempts: Findings from the collaborative longitudinal study of personality disorders over 10 years of follow-up. *JAMA Psychiatry*, 78, 187–194.
<https://doi.org/10.1001/jamapsychiatry.2020.3598>
 see pages 21, 22, 24
- Yen, S., Shea, M.T., Sanislow, C.A., Grilo, C.M., Skodol, A.E., Gunderson, J.G., McGlashan, T.H., Zanarini, M.C., & Morey, L.C. (2004). Borderline personality disorder criteria associated with prospectively observed suicidal behavior. *American Journal of Psychiatry*, 161, 1296–1298.
<https://pubmed.ncbi.nlm.nih.gov/15229066/>
 see page 22
- Yeomans, F.E., Clarkin, J.F., & Kernberg, O.F. (2015). *Transference-focused psychotherapy for borderline personality disorder*. Washington, DC: American Psychiatric Publishing.
 see pages 25, 56, 96, 107, 109, 116

- Yeomans, F.E., & Delancy, J.C. (2018). Transference-focused psychotherapy: A psychodynamic treatment of personality disorder. In B. Stanley & A.S. New (Eds). *Borderline personality disorder* (pp 271-288). New York: Oxford University Press.
see pages [96](#), [109](#)
- Yiu, J., Kealy, D., & Cox, D.W. (2022). Borderline personality features and presence of meaning in life: Mediating role of interpersonal problems. *Cogent Psychology*.
<https://doi.org/10.1080/23311908.2022.2032913>
see pages [99](#), [122](#)
- Yong, E. (2022). *An immense world: How animal senses reveal the hidden realms around us*. New York: Random House.
see page [84](#)
- Young, J.E., Klosko, J.S., & Weishaar, M.E. (2003). *Schema Therapy: A practitioner's guide*. New York: Guilford Press.
see page [96](#)
- Young, R., Lennie, S., & Minnis, H. (2011). Children's perceptions of parental emotional neglect and control and psychopathology. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 52, 889-897.
<https://doi.org/10.1111/j.1469-7610.2011.02390.x>
see pages [46](#), [73](#), [110](#)
- Yuan, Y., Lee, H., Newhill, C. E., Eack, S.M., Fusco, R., & Scott, L.N. (2023). Differential associations between childhood maltreatment types and borderline personality disorder from the perspective of emotion dysregulation. *Borderline Personality Disorder and Emotion Dysregulation*
<https://doi.org/10.1186/s40479-023-00210-7>
see pages [7](#), [45](#), [46](#)
- Yudofsky, S.C. (2015). *Fatal pauses: Getting unstuck through the power of no and the power of go*. Washington, DC: American Psychiatric Publishing.
see pages [67](#), [68](#)
- Zafon, C.R. (2001). *The shadow of the wind*. New York: Penguin Books.
see page [111](#)
- Zanarini, M.C., & Conkey, L.C. (2018). Onset, course, and prognosis of borderline personality disorder. In B. Stanley & A.S. New (Eds.), *Borderline personality disorder* (pp. 35-53). New York, NY: Oxford University Press.
see pages [44](#), [94](#)

Zanarini, M.C. & Frankenburg, F.R. (1994). Emotional hypochondriasis, hyperbole, and the borderline patient. *Journal of Psychotherapy Practice and Research*, 3, 25-36. PMID:22700171

see pages 9, 115

Zanarini, M.C., Frankenburg, F.R., DeLuca, C.J., Hennen, J., Khera, G.S., & Gunderson, J.G. (1998). The pain of being borderline: Dysphoric states specific to borderline personality disorder. *Harvard Review of Psychiatry*, 6, 201-207.

<https://doi.org/10.3109/10673229809000330>

see pages 21, 22, 115

Zanarini, M.C., Frankenburg, E.R., Dubo, E.D., Sickel, A.E., Trikha, A., Levin, A., & Reynolds, V. (1998). Axis 1 comorbidity of borderline personality disorder. *American Journal of Psychiatry*, 155, 1733-1739.

<https://doi.org/10.1176/ajp.155.12.1733>

see page 79

Zanarini, M.C., Frankenburg, F.R., Reich, D.B., & Fitzmaurice, G. (2012). Attainment and stability of sustained symptomatic remission and recovery among patients with borderline personality disorder and axis II comparison subjects: A 16-year prospective follow-up study. *American Journal of Psychiatry*, 169, 476-483.

<https://doi.org/10.1176/appi.ajp.2011.11101550>

see page 94

Zanarini, M.C., Frankenburg, F.R., Reich, D.B., & Fitzmaurice G.M. (2016). Fluidity of the subsyndromal phenomenology of borderline personality disorder over 16 years of prospective follow-up. *American Journal of Psychiatry*, 173, 688-694.

<https://doi.org/10.1176/appi.ajp.2015.15081045>

see pages 11, 61, 94

Zanarini, M.C., Frankenburg, F.R., Reich, D.B., Marino, M.F., Lewis, R.E., Williams, A.A., & Khera, G.S. (2000). Biparental failure in the childhood experiences of borderline patients. *Journal of Personality Disorders*, 14, 264-273.

<https://doi.org/10.1521/pedi.2000.14.3.264>

see page 44

Zanarini, M.C., Gunderson, J.G., Frankenburg, F.R., & Chauncey, D.L. (1990). Discriminating borderline personality disorder from other Axis II disorders. *American Journal of Psychiatry*, 147, 161-167.

<https://doi.org/10.1176/ajp.147.2.161>

see page 35

- Zanarini, M.C., Temes, C. M., Magni, L.R., Aquirre, B.A., Hein, K.E., & Goodman, M. (2019). Risk factors for borderline personality disorder in adolescents. *Journal of Personality Disorders*.
<https://doi.org/10.1521/pedi.2019.33.425>
see page 46
- Zanarini, M.C., Williams, A.A., Lewis, R.E., Reich, R.B., Vera, S.C., Marino, M.F., Levin, A., Young, L., & Frankenburg, F.R. (1997). Reported pathological childhood experiences associated with the development of borderline personality disorder. *American Journal of Psychiatry*, 154, 1101-1106.
<https://doi.org/10.1176/ajp.154.8.1101>
see page 44
- Zeitler, M-L., Bohus, M., Kleindienst, N., Knies, R., Ostermann, M., Schmahl, C., & Lyssenko, L (2020). How to access recovery in borderline personality disorder: Psychosocial functioning and satisfaction with life in a sample of former DBT study patients. *Journal of Personality Disorders*, 34, 289-307.
<https://doi.org/10.1521/pedi.2018.32.394>
see page 120
- Zimmerman, M. (2015). Borderline personality disorder: A disorder in search of advocacy. *Journal of Nervous and Mental Disease*, 203, 8-12.
<https://doi.org/10.1097/NMD.0000000000000226>
see page 90
- Zimmerman, M. (2017). Improving the recognition of borderline personality disorder. *Current Psychiatry*, 16, 13-19.
<https://doi.org/10.1521/pedi.2015.29.195>
see page 21
- Zimmerman, M., Morgan, T., & Stanton, K. (2018). The severity of psychiatric disorders. *World Psychiatry*, 17, 258-275.
<https://doi.org/10.1002/wps.20569>
see page 19
- Zuckerman, M. (1999). *Vulnerability to psychopathology: A biosocial model*. Washington DC: American Psychological Association.
see pages 8, 52
- Zweig-Frank, H., & Paris, J (1991). Parents' emotional neglect and overprotection according to the recollections of patients with borderline personality disorder. *American Journal of Psychiatry*, 148, 648-651.
<https://doi.org/10.1176/ajp.148.5.648>
see pages 44, 62, 89

About the Authors

Lee Crandall Park, M.D.

I am Associate Professor of Psychiatry Emeritus at Johns Hopkins University School of Medicine. I am a Distinguished Life Fellow of the American Psychiatric Assn. and Fellow AAAS. I was active in psychiatric practice and research for over 55 years, and since retiring from practice in 2015 I have had more time to read the research literature as well as to organize years of notes that are relevant to this monograph. I graduated from the Putney School in 1944, from Yale University in 1948 with a B.S. in Zoology, and from Johns Hopkins School of Medicine in 1952. I was an Osler intern in internal medicine at Johns Hopkins Hospital 1952-53, at a time when antipsychotic and other drugs for mental illness were soon to become generally available. Following internship, I was called into the Navy for two years, and after a brief training in psychiatry I was assigned as Division Psychiatrist for the First Marine Division in Korea just as the Korean War was coming to a close, during which time I received a commendation for outstanding performance of duty. This very positive experience in the field of mental illness and its treatment led to my completing a residency at Johns Hopkins Department of Psychiatry and Behavioral Sciences after leaving the Navy. Despite involvement in evaluating and treating marines in acute life situations I felt very much a neophyte when I began my residency, largely because I was intimidated by the somewhat esoteric teachings of psychoanalysis. I began a psychoanalysis with Sarah Tower, which was beneficial, but some of the practical learning experiences in Korea temporarily faded away. Following residency I became a full-time faculty member at Johns Hopkins School of Medicine. I was active in the psychiatry outpatient program at Johns Hopkins Hospital, and I was also in charge of the mental health counseling

program for both students and faculty at the George Wilson Shaffer Mental Health Clinic at the Johns Hopkins University Homewood Campus. Beginning in 1959 I became involved in researching psychiatric drugs at the hospital. This progressed to collaborative work with the NIMH Psychopharmacology Service Center headed by Jonathan Cole, who subsequently became Professor of Psychiatry at Harvard. Our research had to do largely with examining the influence of the doctor's verbal communications in addition to the drug effects. I also carried out jointly with Lino Covi the "Nonblind Placebo Study", published in Archives of General Psychiatry in 1965, in which 15 new patients were clearly informed during a supportive initial interview that capsules prescribed for them contained no medicine at all. They were advised that these pills should be taken regularly, three times a day at meals, and that many people with their kind of condition had been helped by such pills. Fourteen of these new outpatients with neuroses willingly entered and completed this brief trial, and all improved, demonstrating that disclosing the empty content of a pill is not a necessary requirement for either accepting placebo treatment or for improvement. All of the patients had experienced a positive personal experience with the prescribing doctor. This result is in alignment with our belief that the development of a genuine caring relationship is an essential characteristic of successful psychotherapies, and is generally more essential than the specifics of the diverse concepts and theories themselves.

My thinking about the sources, nature and treatments of mental illness has evolved over the course of the many years I have been a psychiatrist, during which I have been influenced by differing schools of thought, including particularly Meyerian (Adolf Meyer), psychoanalysis, DBT, and the current medical model. This varied history has helped in thinking outside of the box. For a time I was Director of Psychiatric Outpatient and Community Services at Johns Hopkins Hospital, but by then I was becoming disappointed with the increasingly narrow theoretical and research focus on finding the inborn neurobiology of mental illness, and the decreasing interest in examining the childhood social experience as it influences development of the mind. As I gradually moved into part-time and later full-time private practice I continued a strong research interest in personality disorders, particularly borderline and narcissistic disorders. I have had the opportunity

to treat and follow a number of borderline patients for over 40 years, providing a rather special experience. In 1992 we reported a study of BPD that focused on the histories of childhood abuse and the evidence of enhanced social perceptivity. Co-authors included John B. Imboden, past Director of the Psychiatric Inpatient Service at Johns Hopkins Hospital, Thomas J. Park, and Stewart H. Hulse, Chair of the Psychology Department at Johns Hopkins University. In 1997 Thomas Park and I co-authored a book chapter on “Personal Intelligence” and its likely involvement in BPD.

I wish to extend appreciation to the clinicians, researchers and patients who have contributed comments, recommendations, concepts, insights and a learning experience during the past many years, making possible the gradual development of this monograph. I am particularly indebted to my wife, Mary Woodfill Park, for her suggestions, recommendations and technical help, and to Kate Boyer, at Heron Creek Press, for her excellent assistance in bringing this monograph to publication. In completing this “memoir” of my professional life at the age of 97, I am thinking of the words of Horace Mann: “Be ashamed to die until you have won some victory for humanity.”

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Dr. Park is Professor and Associate Department Head of Biological Sciences, and Professor of Neuroscience, at the University of Illinois Chicago. He is an AAAS Fellow. He received his B.A. from Johns Hopkins University, his Ph.D. in Psychology from the University of Maryland, and his post-doctoral training at the University of Texas. His research is focused on the neurobiology of sensory information processing of mammals and birds, including examination of social communications and behaviors.

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