Isr J Psychiatry Relat Sci Vol 44 No. 4 (2007) 292–300

The Blatt and the Cloninger Models of Personality and their Relationship with Psychopathology

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Abstract: This paper presents in brief the Blatt and the Cloninger theories of personality and their relationship to depression and to psychopathology. Each of the theories is described, the theoretical foundations of the theory are presented, the theory's view on personality stability, on the relationship between personality and psychopathology, the theory's efficacy at predicting depression from personality measures, the theory's explanation for sex differences in depression, the measures derived from the theories, and theory productivity. The paper concludes with an analysis of commonalities of, and points of disagreement between the two theories.

The choice to present and juxtapose Blatt and Cloninger arises from a deep appreciation of both theories, both new and integrative in their approaches. The two theories arose in different contexts, and in different disciplines. The Blatt theory is known mainly to psychoanalysts, clinical psychologists, and research psychologists with interests in depression and in development. The Cloninger theory is known mostly to psychiatrists, and to psychologists and researchers who are interested in the interface between biology and behavior. There is little interaction between these different theoretical approaches; and yet the theories are different enough to provide interesting contrasts and surprising commonalities. The Blatt theory originated before the Cloninger theory, but the two are currently used and studied without an opportunity for argument between the two.

Both Sidney Blatt and Robert Cloninger are prolific researchers and writers, and have given rise to a wealth of work by others, who have examined their ideas, as well as the applications and implications of their theories. Both are in the full swing of their scientific careers. This short paper does not attempt to give a complete and comprehensive presentation of their work. Rather, it should be viewed as an attempt to summarize, analyze and compare some of the current, central features of both corpuses of work, which are relevant to the issue of the relationship between personality and psychopathology. This discussion relies mostly on Blatt's book, *Experiences of Depression* (2004; 1), and on Cloninger's book, *Feeling Good* (2004; 2).

The Blatt Model of Personality and Depression

Model description

The Blatt model of personality posits that individuals develop along two dimensions: that of interpersonal relationships and that of identity and self definition. The dimension of interpersonal relationships begins with the infant's relationship with his mother and extends over the whole lifespan, though the internal representation of the mother forged in infancy wields a central and enduring influence on future relationships and their representations. The self-enhancing aspect of the interpersonal dimension is intimacy and connection, and the downside is a sense of loneliness, helplessness and extreme neediness which is difficult for others to alleviate. The second dimension is self-definition. It is very active in the second year of life, and is greatly affected by the emergence of the superego. Like the interpersonal dimension, it is also a lifespan developmental vector. The self-enhancing aspect of the self dimension is a sense of identity, of purpose and of achievement. The downside is extreme self-criticism. The ascendancy of one of the two dimensions in any individual's life at a point in time may depend on internal and on external events. The dimensions are not part

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of an individual's consciousness but have tremendous power over the individual's feelings, cognitions, actions and life.

For individuals whose development is more invested in the interpersonal dimension, well being is associated with issues of relatedness and dependency. They may be particularly vulnerable to subjective experiences of loss and separation. For individuals who are particularly invested in the self dimension, well being is associated with a sense of achievement, approval and freedom from inferiority and guilt. They are likely to be particularly vulnerable to *perceived* failure or criticism. As both dimensions are active dimensions of development for all individuals, at any point in time individuals can be characterized by the extent to which they are invested in one or the other.

Psychopathology may arise when the challenges an individual faces overwhelm his or her resources, primarily because the internal representations do not lend the individual the support necessary for adaptive response. The personality constellation (dependence and self-criticism) also shapes the individual's experience and affects his or her perception of life events.

Theoretical underpinnings

There are several different sources of inspiration for Blatt's theory. First and foremost there is psychoanalytic theory, beginning with the work of Freud, and encompassing many of the psychoanalysts who followed him. It is implicit in the psychoanalytic point of view that depressive symptoms as described in the DSM are of no clinical or theoretical interest. Behavioral symptoms are viewed as epiphenomena that are neither specific to depression, nor universal to all patients with depression, and are thus an idiosyncratic expression of deeper structures. These deeper structures are considered to be of theoretical and clinical importance since they can be traced to early experience, bared in the process of analysis, and changed, to produce a more adaptive, developmentally appropriate inner structure that will afford resilience in the face of adversity. In this context it is important to point out that while Blatt does not accept the validity of the medical model, patients who experience deep experiences of depression according to Blatt would probably qualify by symptom count as meeting criteria for major depressive disorder (MDD) and, vice versa, patients diagnosed according to the medical model with MDD would probably be experiencing profound depressive experiences of either dependence or self criticism.

A second source of inspiration is developmental psychopathology. Thus in Blatt's personality model early development and early representations are of great import, but development is viewed as an ongoing process, which does not stop in early childhood, and can be seen and influenced in adulthood. It is the meeting of the person at his particular developmental stage with the demands reality imposes that will determine the emotional outcome.

The Blatt theory is enriched by the wealth of developmental research, and integrates the cognitive stages described by Piaget and his students into the scoring of the internal representations of parental figures.

Last but not least, there is a strong positivist scientific approach, so that any proposition in or arising from the Blatt theory is expected to be examined and supported empirically. Because of this strong scientific component, the Blatt theory of personality is constantly being tested, revised and refined. This feature distinguishes Blatt's work from that of many psychoanalytic theorists, whose theory is mainly held up to standards of internal consistency and therefore is unlikely be challenged, refuted, or substantially changed.

Stability of personality

Personality according to Blatt's view is always being influenced and formed by the individual's life experiences and according to his internal representations, which are mostly stable though potentially transformable. Thus in adolescence there might be an ascendance of the Self-criticism dimension around issues of identity and values, and ascendancy of the Dependency dimension around peers and romantic relationships. These might change form and emphasis in adulthood depending on the choices an individual makes and the events of his life. Stability is enhanced by the internal representations which are formed early and are slow to change.

Prediction of depression

Blatt was not intent on prediction, rather on describ-

ing, explaining and laying down the guidelines for effective analysis or psychotherapy. Repeatedly, the dimensions of dependency and self-criticism have been found to be correlated with depressive symptomotology. There is little evidence that they directly predispose individuals to contract depression. The prospective studies available suggest complex interactions between self-criticism and dependency, with other personality dimensions, with psychosocial events, with age, development and gender (3, 4).

However, high scores on self-criticism and dependency are not specific to depression, and have been found to be associated with other disorders. Social phobia but not panic disorder is associated with high levels of self-criticism (5, 6). Speranza and colleagues (7) found self-criticism and dependency to be elevated in young women with eating disorders over the levels found in controls. In addition the women diagnosed with bulimia were more self-critical than those diagnosed with anorexia. Speranza and colleagues conclude that adverse early experiences shaped the self-criticism and dependence of these women and that these structures were not explained by current levels of depression. A study of a clinical sample of adolescents showed that intrapersonal psychosocial events were associated with introjective, self-critical depression in adolescent schizophrenics, and interpersonal events with anaclitic dependent, needy depression in adolescents with personality disorders (8). Self-criticism was associated with more lethal suicide attempts and these were more likely to be precipitated by an intrapsychic event, while dependence was associated with less lethal suicide attempts, which were more likely to be precipitated by interpersonal events and to have a function of communicating unhappiness to others (9).

Blatt (1, chapter 7) points out that relating to dependence and self-criticism as diathesis and to relevant life events as stressors is not completely supported by empirical research. While individuals high in dependence are more vulnerable than others to interpersonal events of loss and separation, there is much less support specifically for events of failure or criticism triggering depression in individuals high in self-criticism. Blatt concludes that dependence and self-criticism are best seen as part of a transactional process with the environment in which those high in dependence seek social-emotional support and are vulnerable to rejection engendered by neediness and clinging, while those high in self-criticism evoke emotional distance, suspicion, criticism and rejection which in turn amplifies self-criticism. This approach is similar to the behavior-genetic description of how genotypes construct their own environments (10) but in Blatt's description is free of any genetic or biological undertones.

Accounting for sex differences in depression

The Blatt theory is not committed to account for the results of epidemiological studies estimating the prevalence of disorders according to the medical model, be it the DSM-IV or the ICD-10, since it is the depressive experience and not the behavior or symptom count that need to be addressed. However, there are suggestions that since women tend to be more dependent and interrelated than men, they will be more vulnerable to psychosocial events of loss, while men who tend to be more oriented toward the self, achievement and recognition will be more vulnerable to events of perceived failure, criticism or humiliation. This is explained in psychodynamic-developmental terms: little girls must shift their affection from mother to father, thus making them vulnerable to the sensation of dependence and loss; little boys must shift their identity from mother to father, thus making them vulnerable to threats on their sense of identity and self (1, pp. 226–227). So while the Blatt theory does suggest a qualitative difference in the experience of depression for men and women, it does not explain the sex-ratio of prevalence. It should be stressed that the Blatt theory allows for women to experience self-critical depression and for men to experience dependent depression; the dimensions are sex typical rather than sex restricted.

Measuring personality and psychopathology

The Blatt personality theory has yielded a wealth of measures, all self-reports, which have been shown to have excellent psychometric properties and interesting applications First there is the depressive experience questionnaire (DEQ), which was generated by collecting descriptions given by patients with depression, and reducing them to scales via factor anal-

ysis. After replication and pruning out low-loading items, 66 items remained which reduced to three scales: dependence (later sub-divided into relatedness and neediness) self-criticism and efficacy (11). A version for adolescents was also developed, the DEQ-A (12). Both measures have excellent psychometric properties and have been repeatedly used in studies of personality, depression and other disorders.

In addition, a scoring system was developed by Blatt and his colleagues (1, chapter 3) for a short free-form parental description called the Object Relations Inventory (ORI). This short written description is scored on three dimensions. The first, *Conceptual Level*, is scored on a 9-point scale, from sensorimotor-preoperational in which the description relies mainly on the gratification or frustration the other provides, to the highest conceptual level in which the description integrates appearance, behavior and internal dimensions of the other. The second, *Differentiation-Relatedness* dimension, is scored on a 10-point scale from the lowest level where the basic sense of integration of the representation is lacking, to the highest in which the self and the other are described in reciprocal and integrated relation with an appreciation of the complexity of the relationship. The third, *Qualitative-Thematic* dimension, evaluates 12 potential attributes of the parental representation: affectionate, ambitious, malevolent-benevolent, cold-warm, constructively involved, intellectual, judgemental, negative-positive, nurturant, punitive, successful, strong-weak, each on a 7-point scale, as well as the length of the description. This part of the ORI has been reduced via factor analysis to four major scales: benevolence, punitiveness, ambition, and length of description. The ORI has excellent psychometric qualities, has been validated in a variety of clinical and non-clinical samples, and has been extended for use for respondents who are preschool.

Clinical implications

Blatt, like Cloninger, is a practicing clinician, seeing patients and training professionals. His research and clinical practice are profoundly connected. His understanding of the major dimension (dependence or self-criticism) around which the patients concerns are clustered and the level of his internal parental representations informs his description of best practice. A good example is the re-analysis of the NIMH study data of the relative efficacy of various short treatment approaches to depression (13). In the study (14), 239 patients meeting criteria for MDD were treated at one of three sites, and randomly allocated to one of four 16-week-long treatments: brief cognitive behavioral therapy (CBT), brief interpersonal therapy, imipramine and clinical management, and placebo and clinical management. Zuroff and Blatt (13) showed that for patients tending more to dependency, the quality of therapist-patient alliance formed in the beginning of the therapeutic relationship was a good predictor of outcome. The self-critical depressed patients tended not to form trusting relationships with their therapists and tended not to profit as much from any form of treatment. However, over successful therapy, an important measure of improvement was the level of the internal representations that evolved in parallel to the development of the therapeutic relationship and allowed not only recovery but successful termination of therapy and maintaining the therapeutic gain over time. These conclusions from the re-analysis of the NIMH data are a good example of the open and mutual relationship between Blatt's research and clinical practice. For successful therapy with self critical depressed patients, it would be necessary for the therapist to identify the special transaction of the self critical individual with others, and to address this mode of relating.

Theory productivity

Blatt has collaborated widely, with colleagues in the United States, Canada, Israel, and elsewhere. This collaborative approach, together with a long career in the Yale Department of Psychiatry, teaching and supervising professionals, has established generations of researchers and practitioners well immersed in the Blatt approach and measures that have produced a large corpus of work. It is an influential theory, and has been a central contribution to the discussion of personality development and psychopathology in the latter half of the 20th century and the first decade of the 21st.

The Cloninger Biopsychosocial Model of Personality

Model description

The Cloninger biopsychosocial model of personality is two-tiered. The first tier of the model is temperament and the second character. Both temperament and character traits are considered to be by nature continuous and are partitioned into high and low only for descriptive purposes. Temperament traits are the genetically influenced, un- or pre-conscious automatic response biases that characterize the individual and are related to individual differences in brain organization and function. Four temperament traits are posited. Harm Avoidance (HA) which includes anxiety, pessimism, and shyness versus risk-taking, optimism and outgoingness, and is related to serotonin inhibitory activity in the brain. Novelty Seeking (NS) includes impulsivity, irritability and disorderliness versus rigidity, stoicism and orderliness and is related to dopaminergic excitatory brain activity. Reward Dependence (RD) is sociability, approval seeking and warmth, versus aloofness, detachment and coldness. Persistence (P) is stability and dedication to achievement versus instability and lack of ambition. RD and P are posited to relate to norepinephrine brain activity. The four temperament traits are independent and all combinations of the four are theoretically possible.

In contrast to temperament, character is more mature and conscious, and relates to the way in which individuals self-govern. Character guides the individual in resolving emotional conflicts. It evolves as the individual with his particular temperament profile develops in his familial, non-familial, social and cultural environment. Three character traits are posited. Self Directedness (SD) is the executive function and includes responsibility, purpose, resourcefulness, self acceptance and discipline at one pole and blame, aimlessness, ineptitude, vanity and lack of discipline at the other. Cooperativeness (CO) is the legislative function and includes helpfulness and empathy versus hostility and aggression. Self-Transcendence (ST) is the judicial function and includes imagination and originality versus control and materialism. The three character traits, like the four temperament traits are orthogonal and can thus describe a three-dimensional space, the personality cube. This cube has as its eight corners all binary combinations of high and low character traits, but can also be considered together with the four temperament scales to produce a complex and unique description of each individual, a Temperament and Character Inventory (TCI) profile (15).

Theoretical bases

The descriptive medical tradition as exemplified by Kraepelin (16) suggests that disordered personality is the basis for the development of schizophrenia. This connection between personality, personality disorder, and axis I disorders is a basic tenet of the Cloninger model.

For the first tier of the model, temperament, behavioral genetic research showing that there is a genetic influence on personality traits as well as on psychopathology is central. In its turn, the genetic implications of the Cloninger model have been subjected to extensive empirical research and have received robust validation.

A third influence is the Washington University psychiatric tradition that demands that every patient have a primary diagnosis that explains all or most of presenting symptoms, rather than an array of comorbid conditions. This requires a profound understanding of course and cause and effect in the development of the various presenting complaints.

The fourth theoretical emphasis is on quantitative rather than on qualitative measurement. Thus rather than making dichotomous judgements, diagnostic decisions are based on continuous quantitative data.

Stability of personality

The biopsychosocial model of personality maintains that there is overriding stability of personality throughout life, with changes in temperament or character traits contributing to buildup of psychopathology under certain circumstances. It also contends that the first tier, temperament, is less changeable than the second tier, character. Temperament is predicated on genetic and biological substrates, and reflects individual differences in brain function and structure; character is the result of the transaction between the individual and his environment, and thus temperament is more stable than character.

Personality and psychopathology

The Cloninger biopsychosocial model of personality does not focus on psychopathology, and in fact the Cloninger book on which this paper is based is titled "Feeling Good" (2). However, the Cloninger theory suggests that there are at least three possibilities for explaining the systematic relationship between personality and psychopathology. If a personality configuration is strongly associated with a certain disorder and predates it, the personality configuration may be a risk factor, predisposing an individual to respond to the stress and challenges he faces by developing the disorder. On the other hand, the personality configuration may be presyndromal, a manifestation of the disorder predating the appearance of the aggregation of symptoms that meet criteria for Axis I or Axis II diagnosis. A third possibility that the biopsychosocial model allows for is that both the personality configuration and the disorder are manifestations of a common underlying cause or morbidity. There are potential personality configurations that are systemically related to most Axis I and Axis II disorders, so the description of personality is very comprehensive and can potentially predict any psychopathology, including depression.

Prediction of depression

The Cloninger biopsychosocial model of personality is a powerful predictor of depression. In a large community study (15) high HA and low SD contributed to the initial level of depression in predicting the onset of major depression a year later. Change in HA, SD and RD over a 12 month timeframe added significantly to the prediction of depression. Altogether, initial level of depression, initial HA and SD and changes in HA and SD accounted for over 50% of the variance in depression in that period. In addition, in a treatment of depression study, changes in TCI profiles from pretreatment measurement to a month into therapy predicted favorable outcome of therapy, while no changes in TCI profiles were detected in the patients with poor treatment outcome (17).

However, high HA and low RD and NS contribute also to the prediction of many other disorders, including anorexia nervosa (18), obsessive-compulsive disorder (19), schizophrenia (20), and Cluster A Axis II disorders (21). Therefore, the Tridimensional Personality Questionnaire (TPQ) seems to provide a general vulnerability profile which is common to many disorders; though powerful and universal it is not highly specific.

In addition, the model as operationalized by the TCI has been found to predict non-psychiatric medical outcomes. For example, the temperament dimension of Persistence powerfully predicts reduction in body mass index (BMI) following laparoscopic gastric banding a year after surgery in morbidly obese patients (22).

Accounting for sex differences in depression

There are repeated findings that women are more harm avoidant than men, and less likely to seek novelty (23). These sex differences in temperament may place women at greater risk for depression and for other disorders than men. It is also consistent with the biopsychosocial model that genetic and hormonal factors influence the sex-ratio in depression.

Measuring personality and psychopathology

The biopsychosocial model has given rise to two self-report measures, the Tri Dimensional Personality Questionnaire (TPQ) and the Temperament and Character Inventory (TCI) which includes the TPQ and extends it. The TPQ is made up of 100 items, all self-descriptions which are answered either yes or no. The items are designed to measure the three originally conceived scales of harm avoidance, novelty seeking and reward dependence each of which is subdivided into subscales measuring related constructs. The TPQ has been translated into many languages, and has been shown to have high internal consistency and test-retest reliability in a wide range of cultures, languages, in clinical and non-clinical samples. The validity of the TPQ has been shown against clinical diagnosis, and by the positive associations found between high and low activity alleles of target genes whose products are important in the synthesis of neurotransmitters, or in the receptors, transporters or degraders of neurotransmitters. In many studies, personality tests that were designed to measure similar constructs to those measured by the TPQ did not yield positive associations in behavior genetic studies, while the TPQ did. For example, Harm Avoidance (HA) temperament scale, hypothesized to be associated with the inhibitory action of

serotonergic synapses, has been associated with alleles of the serotonin transporter gene, and a recent meta-analytic review of 24 studies found this association to be robust when HA was measured by the TCI, but not when using other personality measures (24). The TCI includes the 100 items of the TPQ, but also measures the second tier of the theory, character. In all it includes 250 items that are self descriptions answered with a yes or a no. The TCI has been translated into many languages, and found to have excellent internal consistency and test-retest reliability in many different languages, cultures and contexts. It has been validated against other personality measures such as the Rorschach (25), the MMPI (26), the NEO-PI, and against clinical diagnoses of personality disorders (27). It is the most widely used measure of personality in biological psychiatry, in behavior genetic studies, and is also used in many studies of treatment efficacy.

Theory productivity

The biopsychosocial model has produced a large corpus of work and inspired many clinicians and researchers. While for years twin and adoption studies showed that considerable variance in personality could be attributed to additive genetic influence and to genetic epitasis, the first molecular genetic findings date from the use of the TPQ and the genetic hypotheses derived from the biopsychosocial theory (28). Cloninger has traveled and collaborated widely and generously and there are teams of clinicians and researchers worldwide that have been inspired by his work and have used the biopsychosocial theory and its measures to resolve clinical or research questions. There is no doubt that the biopsychosocial theory is one of the most productive and influential in the last decade of the 20th century and in the first decade of the 21st century.

Commonalities of the Blatt and Cloninger Theories

Both approaches see a continuum of human experience between normal and pathological, between normal personality and psychopathology. This makes their theories applicable to all, high functioning individuals and extremely compromised individuals can be described either in terms of their dependency, self-criticism and internal representations, or in terms of a TCI profile.

Both approaches favor self-reports as a means of assessing personality. Beyond the obvious expedience of self-reports, the implication of relying on self-reports is placing trust in human self-knowledge and honesty. People must know a great deal about themselves, about their response biases, preferences and behavior, to be reliable sources.

Both approaches include a strong scientific positivist approach, and are thus potentially refutable. Rather than weaken the standing and influence of these theories their empirical positivist approach has made them the subject of clinical and research interest and given them salience over other less refutable theories.

Both approaches favor a quantifying approach to description over typing or dichotomizing. The idea of classifying individuals into types is ancient, arising in India about 5,000 years ago in Ayurvedic medicine (29), and in Greece about 4,000 years ago (30), and has always been part of the scientific discourse. It is essentially different from the trait psychology used by Blatt and Cloninger. Both Blatt and Cloninger can describe a potentially unique profile for each individual; typology reduces all individuals into dichotomous classes, e.g., "MDD" or "not MDD."

Last but not least, both approaches lend themselves to clinical and research needs. Both approaches could only have been articulated by individuals who themselves are immersed in clinical practice as well as in research, and can easily move back and forth between clinical and research discourses.

Points of Disagreement

Blatt and Cloninger can be seen as representing two opposing sides in the important argument over the DSM and the validity of the medical model. This argument has been going on for at least 100 years, since the days of Kraepelin (16) and possibly longer. The medical model treats psychiatric illness as a medical illness. It is thus essential to describe the symptoms that make up the syndrome, the natural course of the syndrome, its prevalence and known risk factors. It could be argued that without such an objective measurable description no knowledge can be accumu-

lated about best practice. The Blatt counterargument would be against the validity of the medical model: it may be precise and provide excellent inter-judge reliability, but there is no ontological basis for the phenomena described. Depression is an experience rather than a behavior or set of behaviors. It is true that in many cases there are parallels between experience and behavior, but not in all. Therefore, the most crucial information for best practice is the subjective experience of the patient current and past, and the internal representations that shape his experiences.

A central disagreement between Cloninger and Blatt concerns Nature vs. Nurture. Cloninger believes that there is considerable genetic influence on personality and psychopathology, Blatt rejects the evidence as inconsistent and weak, and posits mainly a transactional process between the individual and his environment with extra potency to early experience.

The conscious choices that build character and are crucial to the values and behavior of the adult are much more important in the Cloninger theory than in the Blatt theory. According to the Blatt theory, unconscious internal structures and representations are the potent motivators of adult behavior.

Choosing between the theories?

The Blatt and Cloninger theories are different enough in their goals, premises, and scope to make the choice between them unfruitful. Under these conditions, it is probably more constructive to suggest using them for different purposes and circumstances. The two theories, like many in psychology, exist side by side and have not to date been studied together. It would be interesting and informative to examine a large population sample on the DEQ, ORI and TCI and to follow them over time as some of them develop major depression, so as to assess the descriptive, predictive and clinical usefulness of both. In the absence of such empirical data, there is a Jewish saying that argument among scholars is a promoter of wisdom. This seems to be just such a case.

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