Psychology

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In this chapter, we examine the relationship between psychoanalysis and psychology, focusing on the interaction between academic psychology and psychoanalysis. This relationship is a complicated one and can be characterized mainly as a tale of two psychology's: academic psychology (including research-oriented clinical psychology) and psychoanalytic psychotherapy (applied clinical psychology). We examine the historical development of the relationship between these disciplines as well as their contemporaneous relationship. To accomplish this task in a comprehensive fashion is a huge endeavor, well beyond the scope of a single chapter. We therefore focus on two special cases to illustrate one-point unconscious processes and interpersonal relationships (attachment). These two themes were chosen because the intrapsychic and the interpersonal are central to the psychoanalytic enterprise and because there is a great deal of data on each. We conclude this chapter with recommendations for the future of the relationship between the two disciplines.

Academic Psychology and Psychoanalysis

Academic psychology and psychoanalytic have a long and ambivalent relationship (Hornstein 1992). The pioneers of academic psychology were at odds with one another from the moment they first heard of Freud's work. This division can be illustrated through their reactions to his appearance at Clark University in 1909 (which many of them attended). Edward Bradford Titchener thought little of Freud's work. He did not even consider psychoanalysis to be psychology because of its emphasis on unconscious processes and its applied focus. Titchener insisted that psychology be a science of consciousness and that it be "pure" (i.e., have no applied focus) (Hornstein 1992). William James, in contrast, although not an unabashed admirer of Freud's psychoanalysis, had a generally positive reaction. He was even reported to have declared to Freud...
that "the future of psychology belongs to your work" (1920). (James is often portrayed as disparaging the entire notion of unconscious processes and therefore of being opposed to "inner-directed" thinking. This characterization is, however, a misunderstanding of his work; see Weinberger 2000.)

The founder of behaviorism, John Watson, was extremely ambivalent about psychoanalysis. On the one hand, he saw it as unscientific and even closely akin to superstitious superstition (Watson 1919); on the other hand, he seemed compelled to try to account for the phenomena identified by Freud in behavioristic terms, thereby acknowledging their reality. B.F. Skinner saw Freud as an explanation of behavior, favoring one of the brilliant observations of behavior, but that he believed Freud's mentalistic explanations were bogues (B.F. Skinner, personal communication, May 1988).

Views such as those of Watson and of Skinner led to efforts to reformulate psychoanalysis in behaviorist terms. This effort took the form of "translating" psychoanalytic concepts into behaviorist terminology. The best-known and most comprehensive example of such an effort at "translating" was probably the work of Dollard and Miller (1950). (This tradition of translating Freud into the current language of academic psychology was revived more recently by Erdelyi 1985) in a wonderful book that tried to translate Freud's work into more modern cognitive terms.)

Psychoanalytic thinking enjoyed a heyday in academic psychology in the 1950s through a program of research termed the "New Look" (Dixon 1971, 1981). This work employed subminimal presentation of stimuli in an effort to demonstrate unconscious phenomena termed "perceptual defense," "perceptual vigilance," and "subception." Perceptual defense referred to difficulty in recognizing threatening stimuli (high recognition threshold), whereas perceptual vigilance referred to unusual ease in recognizing such stimuli (low recognition threshold). Subception involved physiological reactions to threatening stimuli while denying phenomenal awareness of them. These phenomena seemed to corroborate psychoanalytic thinking. First, unconscious events were apparently being demonstrated, and second, they seemed to be of a psychoanalytic nature.

For example, hysteric, who according to psychoanalytic theory employ defenses, demonstrated perceptual defense (Dixon 1981), whereas paranoid, who are said to always be on the lookout for danger, demonstrate perceptual vigilance (Dixon 1981).

The New Look came to a stretching halt in 1959 as its studies came to be intensively criticized and the psychoanalytic understanding of their results was rejected (Erikson 1959; Goldiamond 1958). Later reviews of the literature indicated that these criticisms were overrated (Dixon 1981) or that those who made these criticisms bought into the soon-to-be-replaced behaviorist paradigm (Erdelyi 1974; Weinberger, in press). Nevertheless, with a few exceptions (two of which are reviewed below), psychology saw the New Look as a dead end. This ushered in a period of extreme hostility on the part of academic psychology toward psychoanalysis. Consider the following quote from a still prominent psychologist:

The latter (psychoanalytically oriented clinicians) employ symptom-underlying disease models in which the "disease" is a function of conscious or subconscious inner agents akin to the supernatural forces that once provided the explanatory concepts of philosophy, and (more recently) medicine. General medicine has progressed from the demonology that dominated it during the dark ages. As scientific knowledge has increased, magical explanations have been replaced by scientific ones. In contrast, theories of psychopathology, in which demons reappear in the guise of "psychodynamic forces," still reflect the magical thinking that once predominated in science. (Bandura and Walters 1963, pp. 30-31)

Nor has this hostility abated with time. More recently, Greenswold (1992) pronounced that unconscious phenomena are "limited to relatively minor cognitive functions," it appears to be intellectually much simpler than the sophisticated theory portrayed in psychoanalytic theory" (p. 766). He concluded that "it will be time, at last, to abandon psychoanalytic theory" (p. 775).

Psychotherapy and Psychoanalysis

As Shkow and Rrapport (1969) pointed out 40 years ago, parts of clinical psychology have achieved much integration with psychoanalysis. However, a gap still exists within applied clinical psychology because of the somewhat unique path that clinical psychologists have followed toward professionalism and the (until recently) exclusive training practices of the American Psychoanalytic Association. Because of these historical factors, the relationship between psychoanalysis and psychology is a strange one.

Although psychoanalysis relies on empirical evidence to support many of its basic tenets, particularly in cases of evidence-based medicine, thereby demonstrating its connection to academic psychology's pro-research stance
for example, that "the proliferation of clinical theories currently in use, is the best evidence that clinical data are more suitable for generating hypotheses than for evaluating them" (p. 228).

It is true that psychoanalysis needs more empirical investigations as some clinical researchers assert. It is not true, however, that psychoanalytic theories are totally devoid of such support, as those working in the Eysenck tradition contend. In fact, one could argue that much of the movement in psychoanalysis has been sparked by empirical findings from developmental attachment research, psychotherapy research, and social and cognitive psychology in areas such as implicit processes. Some of this work has been conducted by psychoanalytically oriented researchers (e.g., attachment), but a significant portion of this research was conducted by nonpsychoanalytic psychologists (e.g., the study of social cognition).

Despite the difficulties and conflicts outlined above, there has been much that scientific/academic psychology and psychoanalysis have provided to each other. It would be impossible to review all of these contributions in one chapter. We therefore offer brief reviews of two areas—unconscious processes and interpersonal relationships (attachment)—to illuminate the cross-fertilization between academic psychology and psychoanalysis. We chose these two areas because, as stated earlier, they are examples of intrapsychic and interpersonal functioning. In our review, we focus on relatively recent research. The reader interested in studying a wider corpus is referred to a compendium edited by Barron and colleagues (1992). Especially rewarding is a series edited by Bernstein and Masling (2002a, 2002b) devoted to psychoanalytically oriented research.

**Unconscious Processes**

Central to psychoanalytic thinking is the concept that much, if not most, human mental functioning can be attributed to unconscious processing. Freud (1926/1959) went so far as to say that psychoanalysis might be characterized as the study of unconscious processes. Subsequent psychoanalytic theorists have retained this emphasis (cf. Westen 1998). Until relatively recently, academic psychology disagreed, abjuring the very existence, and therefore the study of, unconscious processes (Weinberger, in press). Over the past 25 years, this stance has changed, and academic psychology's study of unconscious processes has burgeoned. Psychologists now routinely study such topics as implicit memory, implicit learning, and automaticity. There is also some empirical research on unconscious processes more directly tied to psychoanalytic thinking,
including what has been termed "subliminal psychodynamic activation" and a research program that integrates psychoanalysis with subliminal stimulation and measurement of brain waves spearheaded by Howard Shevin (Shevin et al. 1996).

Implicit Memory

Implicit memory is inferred when a person does something indicating that he or she was affected by a prior experience but has no conscious recollection of that experience (Schacter 1987). The memory of the experience is implicit in the person's behavior, hence the term. Academic psychologists tend to study this phenomenon through testing brain-damaged individuals evidencing the amnestic syndrome, much as Porrat (1917) studied unconscious recall through investigating brain-damaged war-wounded soldiers back in the time of Freud. It can also be investigated in brain-intact individuals through subliminal priming. Subliminal priming involves presenting a stimulus too quickly or faintly to be consciously noticed (subliminally).

The stimulation nonetheless can affect subsequent judgments, evaluations, and behaviors; it therefore "primes" these reactions (cf. Weinberger, in press).

Implicit memory can be implicated in both fears and preferences. Moreover, it begins much earlier in life than does explicit (conscious) memory. It is at virtually full strength from early childhood (by age 4) and perhaps before language acquisition (Naito and Komatsu 1993; Schacter 1996), whereas explicit memory develops throughout childhood and into adolescence (Kail 1996; Naito and Komatsu 1993). Although it weakens with age, implicit memory does not deteriorate to nearly the same degree as does explicit memory and is powerful even into old age. The effects of implicit memory are also long-lasting. Simple and affectively neutral experiences like word-stem completion and skills learning show evidence of retention for weeks and even months without the need for intervening practice or reminders. (Implicit learning can be analogized to learning to ride a bicycle, in that you never forget.)

No one has systematically investigated implicit memory for emotionally meaningful and charged experiences. It is fair to expect that, if anything, such experiences would be even more strongly retained than would affectively colorless events. Implicit memory may therefore underlie some of the lasting effects of unretasted childhood experiences. Defenses would not be implicated in such instances; it is merely the way the mind operates. Experiences would be coded implicitly before explicit memory is well developed. The person would continue to respond to them and to similar events in a way that suggested some memory of them but would legitimately have no recollection of them. Phobias, fears, preferences, and fetishes might be produced in this way.

A clinical vignette, almost a century old, may illustrate this point. In 1911, the great French neurologist Edouard Claparède (1995) had a pin between his fingers and picked an amnesic patient (who had Korsakoff's syndrome) when he took her hand. She became upset but quickly forgot the incident. Later, she was fearful of seeing Claparède's hand but could not say why. An example more familiar to psychologists and one that illustrates the differential development of implicit and explicit memory is that of "Little Albert." John Watson, the founder of behaviorism, succeeded in causing a proverbial child (Little Albert) to become phobic of white furry objects (and not so incidentally of Watson himself) by banging a loud gong whenever a rat presented to him. It would not be surprising if Little Albert retained his fears but could not consciously explain them. This is exactly what Watson expected, and he used this case to poke fun at psychoanalysis. Albert would have an implicit memory of being terrified, but his explicit memory was not sufficiently developed for him to be able to consciously recollect Watson's abuse of him.

Implicit Learning

Implicit learning involves registering relationships among experiences without any awareness of having done so (Reber 1973). Reber (1995) created artificial grammars to investigate implicit learning. He presented people with strings of letters connected by arbitrary rules. After seeing several such sets of letter strings, his participants were presented with another series of letter strings and asked to determine which of them were consistent with the first set. People were capable of making such determinations even though they had no awareness of the rules generating the associations between the letters. In fact, their performance at this task worsened when they were told that such rules existed and that they should try to determine what they were.

Of more obvious relevance to psychoanalysis were studies conducted by Lewicki and his colleagues, who demonstrated that implicit learning applied to meaningful local stimuli (Lewicki 1986). For example, Lewicki presented participants with a series of behavioral descriptions of people that implied but never explicitly referred to certain personality traits. No participant was able to verbalize these connections. Nonetheless, they affected subsequent ratings of the traits of people they knew. Lewicki further showed that people learned these covariations even when they made no logical sense. For example, he presented threatening words auditorially in combination with stories...
people sporting something innocuous like a hat. Particip-
ates judged subsequently presented hat-wearing people
as threatening. The conclusion to draw from these studies
is that the unconscious is very good at forming connec-
tions her very poor at critically evaluating them. It picks
up correlations in the environment regardless of whether
dey are sensible or coincidentally related. In other words,
unconscious processes are powerful but are uncritical and
do not test reality. A real-world example of such processes
is what has come to be called implicit prejudice (Fiske
1998).

For example, Caucasians seem to have come to associate
African American faces and names with negativity, even
when this does not reflect their actual experiences or con-
scious beliefs (Greenwald et al. 1998). They are quicker to
push a button labeled as negative when presented with
a black face or a stereotypical African American name than
they are a button labeled as positive.

Like implicit memory, implicit learning capabilities are
apparent very early in life. Lewicki found that preschool
children could easily pick up complex and simultaneous
relations of color, object, and spatial location of experi-
ments. These abilities are equivalent to those of an adult
and are beyond an adult's (let alone a child's) ability to
consciously recognize. Implicit learning is also quick and
robust. Hill and Lewicki (1997) showed that once a con-
nection between two events has been unconsciously made,
people would behave as though that relationship contin-
ues to exist long after the two events no longer occur.
One trial can be enough to pick up a covariance and be-
gin this process. This learning can then bias the process-
ing of subsequent experiences such that the covariances
learned are maintained even in the face of subsequent dis-
confirming experiences.

Implicit learning, like implicit memory, is normative. It
is not the result of conflict, defense, or even effective
rational, although all of these may be expected to affect
what is learned and therefore learned unconsciously. Implicit
learning simply picks up whatever covariates are present in
the environment, whether it makes sense to or not. The fruits of this
learning will persist, even if the environment changes. That
is, people will continue to act as if something is so even
when it is not. And people are unable to report on any of it
because it is unconscious. Implicit learning can explain
some of the unrealistic and maladaptive connections people
are to evince but have no awareness of and may even deny.

Automaticity

Automaticity is a sophisticated model of habit formation
originally investigated by Schneider and Shiffrin (1977),
Shiffrin and Schneider (1977). Notions of automaticity

practically dominate social psychological writings on uncon-
scious processes. In simple language, automatic processing
involves the activation of well-learned behaviors. Once
such behaviors have been activated, they proceed
mechanically, almost reflexively. There is no need to attend
to or monitor them. In fact, once begun, these behaviors
are almost impossible to control or stop. They have virtu-
ally no flexibility, and in this way resemble an obsessive
thought, a compulsion, or a ritual. Changing an automatic
process is extremely difficult. Attempts to do so feel unpleas-
ant and even frightening, like trying to resist a compulsion.

Virtually anything can become automatic; all that is
required is sufficient practice. Many of our everyday be-
haviors are automatic (e.g., driving a car, tying our shoe-
laces). Automaticity makes fast-thinking more efficient and
easy until one tries to change. Imagine trying to drive on
the left side of the road in England if you are used to driv-
ing on the right side in the United States (or vice versa).
Even though failure to do so could be life-threatening, it
is very difficult to make the change. It is also very unpleas-
ant to try. Automatic processes need not come from con-
scious practice. They can develop through implicit learn-
ing that occurs repeatedly. The result is automatic but the
origin of the behavior is unconscious. The person may
not even realize that he or she engages in that behavior, but
it is just as automatic and hard to change as more mundane
automaticity.

Maladaptive behaviors seen in psychotherapy may fall
into the category of automated implicit learning. Such
behaviors can include enactments and ways of relating as
well \\nmanners of speech and carriage. They would be
very hard to change simply because they have become au-
tomatic, and patients would resist such change. This
helped to explain some of the conflict and resistance as-
sociated with the working-through process. The patient
knows what he or she has to do but finds it difficult, frustrat-
ing, and unpleasant to do so. It takes a very long time
and constant repetition to make such changes permanent.

More Directly Psychoanalytic Research Into the Unconscious

Two research programs employ subliminal priming to in-
vestigate specifically psychoanalytic propositions concern-
ing unconscious processes. One approach was conceived by
Lloyd Silverman (1976) and is termed subliminal psycho-
dynamic activation. The other is a combination of psycho-
dynamic, cognitive, and neurophysiological methods that
was spearheaded by Howard Shevrin (Shevrin et al. 1996).

Subliminal Psychodynamic Activation

Subliminal psychodynamic activation involves presenting
a person with a subliminal stimulus that is designed to
capture an important psychoanalytic proposition. The person's subsequent responses are assessed to see if he or she is affected by the stimulus in a way that psychoanalytic theory would predict. Most recent work has involved the stimulus MOMMY AND I ARE ONE, or MIO, which was designed to foster a fantasy of merger (Silverman et al. 1982). Studies have demonstrated that this subliminal stimulus was able to improve mood (Weinberger et al. 1998) and, more impressively, led to better outcomes when it preceded psychotherapeutic and educational interventions (Silverman and Weinberger 1985). Several meta-analyses (a statistical way to combine the results of many studies in order to determine whether an effect is genuine and reliable) revealed that the MIO effects were genuine and reliable (Hardaway 1990, Weinberger and Hardaway 1990). They also revealed that the MIO message was more effective than alternative positive messages, even when the latter included references to mother. Another meta-analysis (Bormstein 1990) revealed that the effects were stronger when the stimulation was subliminal (out of awareness) than when it was supraliminal (in awareness). More recent research (Solberg et al. 1998) indicates that the message is effective only when the recipient has a relatively positive internal representation of mother. This work shows that the psychoanalytic unconscious can be investigated experimentally using the tools of academic psychology. In such studies, the results support certain psychoanalytic conceptions of unconscious processes.

Activation of Event-Related Potential by Stimuli

The Sheerin group's work, which is more individualized and clinical than is subliminal psychodynamic activation, is comprehensively detailed in a volume by Sheerin and colleagues (1996). Through extensive testing and clinical interviewing, the research team chooses words that seem to best capture a person's conscious conflicts, as well as words that seem to best capture a person's unconscious conflicts. Pleasant and unpleasant words are also chosen for control purposes. These words are then presented both subliminally and supraliminally to the person. Brain responses in the form of event-related potentials (ERPs) are recorded to determine the effects of these stimuli. Findings generally indicate that the unconscious conflict words most easily activated ERPs when presented subliminally, whereas the conscious conflict words produced the most easily discriminable ERP patterns when presented supraliminally. Ordinary pleasant and unpleasant words evoked no particular pattern of ERP response. The results support the psychoanalytic concept of unconscious conflict as well as the analyst's ability to identify important features of it. As Sheerin and colleagues (1996) put it: "The subjective clinical judgments of the psychoanalytic concerning the nature of unconscious conflict in each subject is supported by the objective measurement of unconscious processes and their correlated brain responses" (p. 114).

Interpersonal Relationships (Attachment)

Attachment Theory

Not all contributions relevant to psychoanalysis and psychology have come from the role of non-psychoanalytically oriented researchers. Psychoanalysis has also inspired research that has had a major impact on psychology. "The world of human functioning" John Bowlby's attachment theory is a major case in point.

Although Bowlby was a psychoanalyst, he clashed with his supervisor Melanie Klein over the issue of whether to involve the mother in the psychoanalytic treatment of a child. This difference in focus was the beginning of Bowlby's eventual estrangement from the psychoanalytic community. In contrast to object relations theorists, such as Winnicott, who retained much of Freud's emphasis on sexual and aggressive drives and fantasies, Bowlby, in his attachment theory, focused on the affective bond in close interpersonal relationships. Bowlby believed that Klein and other psychoanalysts generalized the role of infantile fantasy, neglecting the role of actual experiences. Additionally, in contrast to most psychoanalysts of the time, Bowlby was also empirically minded. Rather than draw inferences about childhood from the free associations, dreams, transfers, and other mental productions of adults primarily seen in psychoanalytic treatment, Bowlby wanted to study and work directly with children. His focus was on the observable behavior of infants and their interactions with their caregivers, especially their mothers, and he encouraged prospective studies of the effects of early attachment relationships on personality development. In this sense he was quite different from many of his object relations colleagues, who were focused instead on adults' mental representations of self and others in close relationships, often revisited during psychoanalysis and psychotherapy, although these colleagues also believed that these representations were the result of early relationships with parents. Nevertheless, although Bowlby was critical of certain aspects of classic psychoanalytic formulations, he always considered himself a psychoanalyst, and his work clearly falls within the framework of psychoanalysis because he retained and extended many of Freud's clinical and developmental insights.
All four categories of infants are attached to their mothers, yet there are significant individual differences in the quality of these attachment relationships, and these differences can be reliably measured. The avoidance dyad is characterized by quiet distance in the mother’s presence, often acting unaware of the mother’s departure and avoiding the mother upon reunion. The anxious-ambivalent dyad (sometimes called anxious-resistant) is characterized by much emotional protest and anger on the part of the infant, who becomes extremely distressed on the mothers’ departure, and often continues crying long after her or his mothers return. These two categories are also characterized by the infant’s seeking attention, yet being unable to experience the mother’s ministrations as soothing and comforting. The disorganized/disoriented dyad is characterized by disorganized or disoriented behaviors in the parent’s presence, suggesting a temporary collapse of behavioral strategies. For example, the infant may freeze with a trance-like expression and hands in the air or may approach the parent but then fall prone and huddle on the floor. The secure dyad is characterized by the confident use of the mother as a “secure base” to explore the playroom with considerable ease and comfort in the mother’s presence. Although a secure infant may experience distress on the mother’s departure, on her return, the secure baby approaches her for comfort and is soothed more readily. The secure baby responds to the mother and then resumes his or her exploration of the environment. The Ainsworth (1978) study has been replicated and extended by many subsequent investigators (see, e.g., Van Ijzendoorn and Bakermans-Kranenburg 1996 for a review) and replicated with samples of children from other nations (van Ijzendoorn 1995).

In addition, consistent with Bowlby’s theory, the attachment pattern identified by Ainsworth are closely associated with differences in caregiver warmth and responsiveness (Ainsworth et al. 1978; see Main 1995 for a review). Ainsworth and colleagues (1978), and Grossman and colleagues (1983) in a German sample (see also Grossmann and Grossmann 1991), found that maternal sensitivity during infancy is predictive of the quality of infants’ attachments to their mothers. For example, Ainsworth and colleagues (1978) observed child-mother interactions at home and found that children’s behaviors in the Strange Situation were related to mothers’ general responsiveness. Mothers of children who displayed secure behaviors in the laboratory setting were found to be more responsive to infant signals at home. Mothers of anxious-ambivalent children were found to respond to their children inconsistently, belatedly, or inappropriately, so that the children could never be certain of their mother’s availability. Mothers of avoidant children disliked physical contact.
with their babies and were selectively unresponsive to their infants’ distress signals. Ainsworth and colleagues (1978) drew the conclusion that a child’s expectations about mother’s responsiveness were influenced not only by actual physical separation from the mother but also by the child’s everyday relationship with her. Other studies have also provided strong support for the link between maternal sensitivity and attachment security. For example, mothers of securely attached infants, in contrast to mothers of insecurely attached infants, tend to hold their babies more carefully, tenderly, and for longer periods of time during early infancy (Main et al. 1985). Additionally, mothers of securely attached infants respond more frequently to crying; show more affection when holding the baby, and are more likely to acknowledge the baby with a smile or conversation when entering the baby’s room compared with mothers of babies who are later independently deemed insecurely attached.

Several longitudinal studies have investigated the influence of these infant attachment styles on subsequent functioning and adaptive potential (Hamilton 2000; Waters et al. 2000). In terms of stability, Hamilton (2000) found a 75% correspondence for secure- insecure attachment status between infancy and late adolescence, with the strongest stability in the prototypical group. Waters and colleagues (2000) followed 50 individuals for 20 years, finding 64% stability in attachment classification. There was greater than 70% stability for individuals with no major negative life events, and less than 50% stability for those who, for example, lost a parent or endured parental divorce. Thus, longitudinal research, although preliminary, indicates that attachment patterns remain relatively stable over time, even into early adulthood (age 20). When attachment styles do change, they appear to change in ways that are predictable and consistent with attachment theory (Fraley and Spieker 2003; Lewis 2000).

Employing Ainsworth’s typology of attachment patterns, Main and colleagues (1985) developed the Adult Attachment Interview to assess aspects of adults’ internal working models of attachment with regard to their parents. The AAI is a semistructured interview designed to elicit thoughts, feelings, and memories about early attachment experiences, and to assess the individual’s state of mind with regard to early attachment relationships (C. George, N. Kaplan, M. Main, “The Berkeley-Adol Attachment Interview,” unpublished manuscript, Department of Psychology, University of California, Berkeley, 1985). Main and her co-workers found that parents’ narrative reports of interactions with their own parents could predict their children’s attachment security classification in a laboratory procedure with about 80% accuracy and thus demonstrated a link between their infants. These laboratory associations extended to observations in the home. Similar levels of association also have been found in 21 of 24 studies that have assessed both mother and child attachment patterns (van Ijzendoorn and Bakermans-Kranenburg 1999).

Over the last several years, Peter Fonagy and colleagues (1998) have been developing a complex and subtle scale to assess individuals’ ability to comprehend feelings, beliefs, intentions, conflicts, and other psychological states in their accounts of current attachment experiences. This capacity, termed reflective functioning (RF) by Fonagy, refers to awareness of mental processes in the self and in the other—that is, the ability to take account of one’s own and others’ mental states in understanding why people behave in specific ways. Briefly, the Reflective Function Scale is a clinical scale that ranges from −2 (negative RF, in which interviews are overly concrete, totally barren of materialization, or grossly distorting of the mental states of others) to 9 (exceptional RF, in which interviews show unusually complex, elaborate, or original reasoning about mental states). The midpoint of the scale is 5 (or ordinary RF, in which interviews indicate fairly coherent, if somewhat one-dimensional or simplistic, reasoning about mental states).

RF can be reliably coded and has been found to be independent of social class, socioeconomic status, ethnic background, education, or verbal intelligence (Fonagy et al. 1991, 1996; Levy 2003). Fonagy and colleagues (1991) found that parental RF mediated the relationship between parental attachment organization and the child’s attachment security assessed in Ainsworth’s Strange Situation. When both father and mother were rated as having ordinary or high RF, they were three to four times more likely to have secure children than were parents whose RF was rated as low. Fonagy and colleagues (1996) found that BD patients were rated significantly lower on RF than other psychiatric patients. In addition, in abused psychiatric patients, high RF was a protective factor against the diagnosis of borderline personality disorder.

Attachment and Psychopathology

A number of studies have linked insecure attachment and disorganized attachment status to a range of clinical disorders and conditions, including emotional distress and substance abuse (Riggs and Jacobvitz 2002), BPD (e.g., Fonagy et al. 1996), psychiatric hospitalization (e.g., Allen et al. 1996), and suicidal ideation (e.g., Adam et al. 1996). Attachment constructs have increasingly been used to understand the etiology, treatment, and prognosis of borderline pathology (e.g., Fonagy et al. 1995). For example...
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Mental aspects of borderline conditions, such as unstable, intense interpersonal relationships, feelings of emptiness, storms of rage, chronic fears of abandonment, and intolerance for aloneness, as stemming from insecure attachment organization (e.g., Gunderson 1996; Levy and Blatt 1999). These theories have noted that attachment con-

Attachment and Psychotherapy Outcome

The clinical application of attachment theory has re-
cently begun to be explored through theory development (Blatt and Levy 2003; Diamant et al. 1999; Eagle 2003; Holmes 1996, 1996; Slade 1999) and empirical methods (Opler et al. 1994; Fonagy et al. 1990). This research has suggested that patient attachment patterns are both a prognostic indicator of outcome and a vehicle for understanding aspects of the psychotherapeutic process.

Psychotherapy Outcome as a Function of Attachment Status

In the discussion that follows, we should keep in mind the different terms used in the child and adult attach-

Psychotherapy Process as a Function of Attachment Status

With regard to the impact of attachment on psychotherapy process, Mardy and colleagues (1998) examined responses to patient attachment patterns and found that therapists tended to adopt more effective and relationship-oriented interventions in response to clients with preoccupied interpersonal styles and more cognitive interventions with patients characterized by dismissing styles. Hardy and col-

ment patterns. Meyer et al. found that a secure attachment style, in contrast to insecure attachments, was associated with fewer symptoms prior to treatment and with greater therapeutic improvement. Likewise, Mosheim and col-

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Patients who yearn for intimacy and fear abandonment might strive with particular persistence to establish a close alliance, given their concerns about a possible rejection. In contrast, patients with dismissive styles might defensively deny the possibility of a meaningful relationship as an indication of their need to protect their self-esteem.

Consistent with this interpretation, preoccupied attachment was associated with more rupture, and dismissing attachment was associated with fewer ruptures.

D moms (1990) found that dismissing patients are often resistant to treatment, have difficulty asking for help, and resist help when it is offered. Dismissing individuals often become more distressed and confused when confronted with emotional issues in therapy (D moms et al. 2001). This observation led D moms and colleagues to study, using the AAI, patterns of relationship between patient and therapist attachment styles. Patients in treatment with therapists who were dissimilar to them on the preoccupied to dismissing dimension of attachment on the AAI had less positive therapeutic outcomes and stronger therapeutic alliances than their counterparts (D moms et al. 1994; Tyrell et al. 1999). Clinicians classified as secure/autonomous on the AAI tended to challenge the patient's interpersonal style, whereas clinicians classified as insecure on the AAI were more likely to complement the patient's interpersonal style (D moms et al. 1994; Tyrell et al. 1999). Patients who had the best outcome if treated by securely attached clinicians (defined on the AAI) or by clinicians at the opposite side of the secure/autonomous continua from the patient (based on AAI classification) (e.g., patient rated preoccupied on AAI and therapist rated as the dismissing end of the autonomous category) (D moms et al. 1994).

In a second study, Tyrell and colleagues (1999) conducted adult interviews with 54 severely disturbed patients and 21 of their case managers. Patients were usually classified as insecurely attached, whereas most case managers were classified as securely attached. Interactions were found between the attachment styles of patients and case managers on measures of the quality of the alliance, life satisfaction, and psychosocial functioning. Those interactions involved a preoccupied versus dismissive attachment style, indicating that complementary combinations regarding case managers and patients’ attachment styles worked best. Preoccupied patients fared best when they worked with dismissing case managers, and dismissing patients fared best with preoccupied managers.

Finally, Rubin and colleagues (2000) had 77 therapists in-training view video vignettes of simulated ruptures in the therapeutic alliance and then asked them how they would respond when interacting with actual patients. Generally, therapists with anxious-attachment styles tended to respond with less empathy, especially to patients with serious and dismissive attachment. Rubin and colleagues (2000) have speculated that “more anxious therapists may interpret ruptures as an indication of their patients’ intentions to leave therapy, and their own sensitivity towards abandonment might diminish their ability to be empathetic” (p. 416).

Consistent with prior research on client-client match (e.g., Beider et al. 1991), the dissimilarities between patients and therapists interpersonal style appear to be advantageous, indicating that patients benefit from interventions that counteract their problematic style of relating to others. Overly emotional patients may require emotional containment interventions, whereas emotionally detached patients may need interventions that facilitate their affective expression and connection (cf. Hardy et al. 1998; Sams et al. 1998). Different interpersonal or attachment styles of patients pull for different types of interventions from the therapist (Hardy et al. 1998, 1999). Although preoccupied patients pull for emotional-experiential interventions, they appear to benefit from a more cognitive-behavioral strategy that helps them modulate overwhelming feelings. Likewise, avoidant patients pull for rational-cognitive interventions but appear to benefit from strategies that facilitate emotional engagement (Hardy et al. 1999). Therapists need to recognize how a patient’s attachment style influences their response to the patient and their ability to establish a therapeutic alliance.

Attachment Status as a Psychotherapy Outcome Measure

These studies have employed attachment constructs in psychotherapy outcome measures. Levy and colleagues (Levy 2001; Levy and Clarkin 2002; Levy et al. 2002) used the AAI to assess change in attachment status and reflective function in 45 patients over the course of a long-term, randomized clinical trial or in patients diagnosed with BPD. Levy et al. found that all but two patients were initially rated as insecure, with the majority having a primary AAI classification of “unresolved” for trauma and/or loss. The majority of patients showed a change in attachment status after 1 year of treatment—some patients shifted from “unresolved” and “insecure” to “secure,” others to “cannot classify” or to a mixed attachment. In addition, they found a significant increase in patients’ reflective function.

Forey and colleagues (1995) reported on changes in attachment status on the AAI among 35 nonpsychiatric inpatients following 1 year of intensive psychodynamic psychotherapy. Although all 35 inpatients were classified as having insecure attachment during their initial Adult Attachment Interview, 44 (40%) of them showed a shift in attachment. The American Psychiatric Publishing Textbook of Psychodynamic Psychotherapy, 2007.
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secure classification on discharge. Travis and colleagues (2001) examined change in attachment patterns over the course of time-limited dynamic psychotherapy in 84 clients and found that a significant number of clients changed from an insecure to a secure attachment pattern. Also, significant relationships were also found among changes in attachment, Global Assessment of Functioning scores, and symptom levels.

In summary, the attachment literature suggests that attachment patterns of both patients and therapists influence the process and outcome of psychotherapy. The attachment organization of the patient is expressed in his/her response to the therapist, and these in turn influence the therapist's response to the patient. In addition, the study of attachment organization and the underlying cognitive-affective interpersonal representations of self and other, and evaluation of their change in the therapeutic process, could facilitate further understanding of the mechanisms of therapeutic change (see, e.g., Blatt et al. 1996).

Conclusion and Recommendations

Notwithstanding an often-conflicted relationship between psychology and psychoanalysis and the many obstacles to integration, significant pockets within academic psychology have evolved to contribute both directly and indirectly to psychoanalysis. We have briefly reviewed two areas: unconscious processes and interpersonal relationships (attachment). In addition, as we have seen, psychoanalysis has also contributed much to the richness of psychology. Nevertheless, the relationship between psychoanalysis and psychology is in serious need of repair. Medical psychoanalysis either ignored or was indifferent to academic psychology for many decades. Although there has been a sea change in recent years, with increased interest in the implications of cognitive psychology and neuroscience for psychoanalysis (Wesen and Gabbard 2002a, 2002b), and as a result more clinically relevant diagnostic (Wesen and Shader 1999) and psychotherapy research (Clarkin and Levy 2001, Foa et al. 1996, Mirold et al. 2000), the neglect has taken a toll on the presence of psychoanalytic viewpoints in academic psychology.

In the 1960s and 70s many psychology departments included psychoanalytically oriented faculty members. A review of the editorial board of the journal Psychoanalytic Psychology in the mid-1980s revealed that more than two-thirds of the members were faculty in academic psychology departments and many others held positions in medical schools. Today, less than a handful of the editorial board members have an academic position. Bornstein and Mading (2002a) note that increasingly fewer psychology departments have psychodynamic clinical faculty members and fewer programs list themselves as psychodynamic. Of related interest, in 2001 the American Psychoanalytic Association sponsored a symposium on the relationship between psychoanalysis and academic psychology. Many distinguished psychoanalyst-psychologists participated. When asked about the future of academic psychology, one distinguished participant suggested it might be too late to save psychoanalysis within academic psychology. Another prominent psychologist, an institute director, suggested it might be time for psychoanalysts to abandon psychology departments in favor of humanities departments. Although we appreciate the important perspectives our colleagues from the humanities bring to psychoanalysis, we also believe that psychology brings an important perspective to psychoanalysis and contributes immeasurably to its richness.

In light of the contributions of psychology to psychoanalysis, we believe it is important for psychoanalytic institutions not only to tolerate, accept, and embrace psychological research but to encourage training in cutting-edge research designs and methods. In addition, psychoanalysis has to be more open to findings from scientific disciplines such as psychology. Given the current state of psychoanalytic psychology in academic psychology, we believe it is important to increase the number of psychoanalytically oriented faculty in psychology departments, which can now (with only a few exceptions) be counted on two hands. These faculty will need to become highly sophisticated in basic research methods and constructs, and this may require highly sophisticated nonclinical training. Seed money from psychoanalytic associations will need to be available so that pilot data for larger federally funded grants can be obtained. These psychoanalytic funding sources need to expand the kinds of questions they fund so that instead of individual studies, the infrastructure for research programs can be developed. In addition, we recommend that institutes develop more flexible training programs so that those with both clinical and research-oriented career goals can obtain analytic training. The steps outlined will allow for more direct mentoring of psychol- ogy students into both psychoanalytic research and clinical training, and will greatly enrich psychoanalysis.

We end with a quote from Noble laureate Eric Kandel (1998) that we think is relevant:

The future of psychoanalysis, if it is to have a future, is in the context of an empirical psychology, abetted by imaging techniques, neuro-anatomical methods, and human genetics. Embedded in the sciences of human cognition, the ideas of psychoanalysis can be tested, and it is here that these ideas can have their greatest impact. (p. 468)


