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Defensive Projection, Superimposed on Simplistic Object Relations, Erodes Patient-Provider Relationships in High-Risk Pregnancy: An Empirical Investigation

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Abstract

In an attempt to illustrate the relevance of psychoanalytic theory and research to behavior medicine, an empirical investigation was conducted of females treated at a high-risk pregnancy specialty clinic ($N = 58$). Drawing from psychoanalytic object relations theory, it was hypothesized and confirmed that use of projection as a defense mechanism during pregnancy, superimposed on simplistic object relations, predicted an erosion of patient-provider relationships during the pregnancy/postdelivery period. Findings are interpreted through the perspective of mentalization, pertaining to individuals' ability to understand the mental states of self and others, specifically under significant stress. Implications for psychoanalytically oriented assessment and treatment, and for the rift between psychoanalysis and research, are discussed.

This paper describes an empirical investigation of the role of two psychodynamic processes, defensive projection and object relations, in patient-provider relationships during high-risk pregnancy. Pregnant women who are at high risk for adverse pregnancy outcome (secondary to complications in current or previous pregnancies, or to a previous pregnancy loss) are

likely to experience considerable emotional distress (Franché and Mikail 1999; Phillips, Dennerstein, and Farish 1996; Yali and Lobel 1999). Pregnancy loss often leads to unresolved grief, guilt, self-doubt, and marital discord, as well as symptoms of depression, anxiety, and posttraumatic stress disorder (PTSD; for a review, see Frost and Condon 1996; Forray et al. 2009). When a patient with a history of miscarriage becomes pregnant again, and as hope and dread are activated with respect to this renewed attempt to give birth, these difficulties are likely to resurface. Also stressful is the strict medical regime often required in the management of a high-risk pregnancy (e.g., frequent visits to the clinic for ultrasound and fetal monitoring, surgical interventions such as circlage, multiple daily blood tests), as well as the strict constraints on lifestyle and daily activities (as when bed rest is ordered), which may result in a high level of physical, emotional, familial, and economic hardship (Schroeder 1996). The situation may involve feelings of loss of control and of being a burden, which are additional stressors (Richter, Parkes, and Chaw-Kant 2007).

It is in this context that the relationships between the high-risk patient and her obstetric practitioners (physician, nurse, and midwife) assume a heightened meaning and function. Under the stress of a high-risk pregnancy, patients experience and express a range of often intensely felt attributions toward, and expectations of, their obstetric practitioners. In other words, from an object-relational perspective, the stress and distress involved in pregnancy in general, and high-risk pregnancy in particular, renders the practitioner a likely object to be projected onto (Pines 1972, 1982, 1990a,b). Mental representations of self and others, already highly activated during pregnancy (Balsam 1996, 2000, 2003; Priel and Besser 1999, 2000a,b, 2001a,b, 2002; Besser, Priel, and Wiznitzer 2002), might propel the patient to “form a paternal transference-like relationship to her obstetrician” (Frost and Condon 1996, p. 55; see also Pines 1990a,b). This transference-like relationship might take various forms, including grief-related anger emanating from previous miscarriages that is projected onto practitioners through a mistrust of their competency (Condon 1992; Frost and Condon 1996), but also hope and strong dependency needs, resulting in a tendency to idealize the obstetric practitioner. Arguably, a positive, transference-like patient-practitioner relationship might serve as an important instrument in the practitioner's effort to help the patient manage her distress. At the same time, however, malevolent object-related projections might derail constructive patient-provider communication, and ultimately affect the medical outcome.

We hypothesized that patients' use of projection as a defense mechanism might have particularly pernicious effects on patient-provider relationships during high-risk pregnancy, stretching to the postdelivery period. Our rationale was as follows: According to psychoanalytic theory (Brenner 1973), projection is an involuntary (i.e., unconscious) mental mechanism that allows an individual to expel unacceptable thoughts, feelings, or impulses (e.g., an impulse to harm another) and falsely attribute them to others, thereby ridding the individual of anxiety or guilt. For example, a woman with a childhood history of neglectful parents, through projection, may experience her physician as uncaring and neglectful.

Cramer (1991) developed the Defense Mechanisms Manual, which assesses three developmentally anchored defenses: denial, projection, and identification. Although there is evidence that the immature defenses of denial and projection are associated with

pathological personality traits and impaired relationships (Cramer 1999, 2000), projection is the only defense mechanism that significantly correlates with image-distorting processes, both major (devaluation, idealization, omnipotence) and minor (autistic fantasy, projective identification, splitting). Cramer (1999, 2000) has reported correlations between immature defenses (e.g., denial and projection) and pathological personality traits associated with problematic interpersonal relationships. Porcerelli et al. (2000) found significant correlations between projection and both major and minor image-distorting defense levels (i.e., clusters of similar defenses) from the Defensive Functioning Scale of DSM-IV. These findings suggest that attributing disavowed aspects of the self to others can impede the ability to accurately view those others, and thus can negatively affect relationships.

The effect of projection on patient-provider relationships might be particularly adverse in the absence of adaptive object relations. Adaptive object relations, as assessed in this study, involve the capacity to experience others with some degree of complexity, and to interact in a positive, empathic, and mutually responsive way (Westen 1995). Without this capacity, others are more likely to be experienced in unidimensional (good vs. bad), malevolent, and need-gratifying ways, thereby making them easier targets for negative projections.

The Social Cognition and Object Relations Scale (SCORS; Westen et al. 1989; Westen 1995), a scoring system based on TAT stories, assesses four dimensions of object relations: complexity of representations of people (CR, unidimensional vs. complex representations), affect-tone of relationships (AT, malevolent vs. benevolent expectancies), capacity for emotional investment in relationships (EI, narcissistic vs. mutual relatedness), and understanding of social causality (SC, illogical vs. logical attributions of social behavior).

Arguably, each of these four indices might interact with defensive projection to erode—or buffer against an erosion of—patient-provider relationships. Thus, a lower CR level might augment the adverse effect of defensive projection on patient-provider relationships because it might restrict the patients' ability to experience the provider in complex ways, paving the way to a one-dimensional, arguably negative, perception of the provider. Conversely, an elevated CR level might diffuse the adverse effect of defensive projection by letting the patient go beyond projection to experience the provider as benevolent. Lower SC levels, which are arguably associated with lack of an appreciation of social norms and etiquette, might increase the likelihood of defensive projection being manifested in action, thereby actively sabotaging the medical alliance. Conversely, an astute appreciation of social norms and codes, expressed through elevated SC levels, might neutralize defensive projection by subjugating it to “proper” behavior. The importance of AT is quite straightforward: a combination of defensive projection and malevolent object relations should color providers as “bad objects,” thereby impeding the relationships. Instead, benevolent object relationships, expressed by elevated AT scores, should increase the likelihood of viewing providers as good objects, thereby directing defensive projection elsewhere. Finally, lower levels of EI are indicative of deficits in the ability to engage in intersubjective processes and make a libidinal investment in others, leading to the dominance of projective processes in perceiving, experiencing, and relating to others. Conversely, a capacity for intersubjectivity and caring for others should encourage trust and warmth experienced by patients toward their providers, consequently restricting the adverse effects of defensive projection.

This conceptualization in terms of object relations is highly compatible with mentalization theory and research (Fonagy et al. 2002). Mentalization pertains to an individual's ability to understand the mental states of self and others and the impact of those states on overt behavior. In the context of patient-provider relationships in high-risk pregnancy, patients' mentalization might facilitate understanding, as well as communication with providers, thereby improving the relationship with them. It makes sense that this capacity for mentalization is associated with both complex mental representations (assessed by the CR subscale) and an enhanced understanding of social causality (assessed by the SC subscale; see Blatt, Auerbach, and Behrends 2008); hence there is some reason to expect stronger effects with one of these SCORS subscales, or both.

Under situations of high stress, individuals tend to show less flexible mentalization abilities; instead they may be vigilant only to affect cues without reflecting on possible meanings (Fonagy and Luyten 2009; Luyten et al. 2009). Thus, stress might accentuate the use of defenses such as projection and less complex understanding of social relationships. Additionally, more chronic impairment in mentalization, predicated on insecure attachment during childhood, might lead to severe psychopathology, accounting in turn for interpersonal problems. That is, patients with impaired mentalization capacities may be limited in their ability to make sense of the vicissitudes of patient-provider relationships, particularly because they have difficulties figuring out their own mental states (e.g., anxiety, depression, and anger), as well as those of their providers (e.g., fatigue, concern, a benevolent effort to assist), thereby resorting to defensive projection (e.g., attributing their own anger to providers), as well as to a narrow view of the providers as insensitive, unempathic, or downright hostile. When the two—defensive projection and a narrow view of the providers—conflate, the road to eroded patient-provider relationships is short.

It should be noted that the fundamental premise of psychoanalytic theories is that latent constellations of defenses and object relations underlie manifest behavior and psychopathology. Our investigation is explicitly based on this premise in hypothesizing that a latent, and largely unconscious, personality organization involving defensive projection superimposed on maladaptive object relationships might underlie patients' problems with their OB-GYN practitioner.

The time frame we focused on encompassed pregnancy (T1) to postdelivery (T2). The rationale for focusing on this period is twofold. First, from a clinical point of view, because fears and anxieties during pregnancy are common and do not necessarily indicate psychopathology, in pregnant women with the capacity for relatively good interpersonal relationships (i.e., good-enough object relations), the postpartum period brings relief from their worries and fears. However, for women with less than adequate levels of object relations, anxieties and fears (and perhaps ambivalence) about the pregnancy will persist in the postpartum period, leaving patient-provider relationships in jeopardy of being disrupted. Second, from a methodological point of view, this focus provides a statistically conservative (i.e., strong) test for our hypothesis. That is, because defensive projection and object relations are arrayed chronologically prior to the pregnancy-to-postdelivery period, an effect of these variables on patient-provider relationships would be consistent with the causal nature of our hypothesis (Davis 1985).

Method

This research was conducted at Yale Maternal-Fetal Medicine (MFM) outpatient sites and approved by the Yale University School of Medicine Human Investigation Committee (see Lerman et al. 2007). The Yale MFM program provides high-risk maternity services to women with a history of pregnancy risks and complications, or current medical complications during pregnancy. In addition to these services, the program offers optional prenatal classes in the second trimester, which are not covered by insurance.

The participants in this study were women presenting with a history of recurrent losses, second- or third-trimester pregnancy loss, fetal demise, previous or present fetal genetic abnormality, advanced maternal age, and/ or other obstetric or medical complications of pregnancy. One hundred eight patients were enrolled out of the approximately two hundred women approached during the two-year recruitment period. Of these, 64 were assessed postdelivery, 58 of whom had complete data available for the putative analyses. Thus, our analysis sample includes 58 high-risk female patients, all with successful deliveries.

Participants' mean age was 34 ($SD = 5.33$; Range: 19–45). Eighty-eight percent were Caucasian, 3.5% African American, and 7% Asian; the remainder were of mixed or unknown ethnicity. Independent-sample t tests were conducted to examine possible differences between participants who remained in the study and those who did not, in terms of Time-1 levels of the study variables or of participants' age. No statistically significant differences were found.

Time-1 assessment took place during pregnancy, between 8 and 22 weeks of gestation. Time-2 assessment took place after delivery. Women were approached while waiting for their clinician and asked whether they would be interested in participating in a study focusing on their feelings about their patient-provider relationships. Those who agreed to participate provided written informed consent. They were then given a series of questionnaires and paid twenty-five dollars at each of the two assessment waves.

Measures

Defensive projection and object relations—The Defense Mechanisms Manual (DMM; Cramer 1991) was developed to assess three defenses— denial, projection, and identification—from TAT narratives. Each defense is scored as frequently as it occurs within a narrative, and a total score is calculated for each defense. Cramer (1991) states that these defenses occur on a developmental hierarchy, with denial being the most immature (most prominent in children), projection being intermediate (most prominent in adolescence), and identification being the most mature (most prominent in adolescence and young adulthood). Interrater reliability has ranged from .56 to .80 for denial, .71 to .91 for projection, and .59 to .89 for identification. Experimental and quasi-experimental studies support the DMM's validity (Porcerelli and Hibbard 2004). This hierarchy has been supported through both cross-sectional research (Cramer 1987; Porcerelli et al. 1998) and longitudinal studies (Cramer 1997). Cramer and Blatt (1990) reported a decrease in overall defense use from Time-1 to Time-2 in their study of inpatient psychiatric patients, and reported a significant relationship between levels of DMM defenses and measures of object

relations (Cramer, Blatt, and Ford 1988). In patients with anaclitic pathology, level of DMM defense was significantly related to clinical symptoms and interpersonal relatedness.

The Social Cognition and Object Relations Scale (SCORS; Westen et al. 1990) is a manual for scoring narratives provided in response to the Thematic Apperception Test (TAT). Narratives are scored with respect to four overlapping dimensions of representations of interpersonal interactions. Each dimension is scored on a 7-point Likert scale with scores in adult populations of 5, 6, and 7 being the most developmentally mature/healthy (i.e., highly complex, richly textured, and essentially positive representations of self and others) and scores of 1, 2, and 3 being developmentally immature/pathological (i.e., unidimensional, narcissistic, and malevolent representations of self and others). The first dimension, Complexity of Representations of People (CR), assesses the degree to which representations are differentiated, integrated, and complex. Affect-tone of Relationship Paradigms (AT) is a measure of the degree of malevolence (vs. benevolence) of interpersonal expectancies. Capacity for Emotional Investment in Relationships and Moral Standards (EI) assesses the degree to which representations reflect a need-gratifying, narcissistic orientation vs. an orientation of mutuality and reciprocity. Finally, Understanding Social Causality (SC) assesses the degree to which attribution of the causes of peoples' thoughts, feelings, and behavior are logical, accurate, and psychologically minded.

These dimensions of object relations have good convergent and discriminant validity (Huprich and Greenberg 2003) and can differentiate between borderline, psychotic, and neurotic personality organization (Eurelings-Bontekoe, Luyten, and Sneller 2009). Additionally, these dimensions have predicted psychosocial adjustment two years after the death of a spouse (Field et al. 2001), psychotherapy attendance (Ackerman et al. 2000), response to inpatient treatment for PTSD (Ford, Fisher, and Larson 1997), and a host of treatment refractory psychiatric conditions (Porcerelli et al. 2006).

Four multi-character TAT cards were chosen in this study to elicit representations of interpersonal interactions (i.e., object representations): Cards 2, 4, 7gf, and 9gf. All TAT narratives were coded for object relations with the SCORS by one of the authors (JP). Half the narratives were coded by graduate students in clinical psychology who received extensive training in coding SCORS dimensions. The coders were blind to all participant information. Coders used the manual developed by Hilsenroth, Stein, and Pinsker (2004), an elaboration of the scoring system by Westen (1995). Interrater reliability for the SCORS dimensions using the intraclass correlation coefficient (ICC, two-way random effects) were as follows: CR = .70; AT = .81; EI = .74; SC = .76. The DMM was coded by one of the authors (RK), a doctoral-level psychologist with extensive training and experience in coding the instrument. Half the narratives were also coded with the DMM by another of the authors (JP). Interrater reliability (ICC) for the three defenses were: Denial = .62; Projection = .81; and Identification = -.77. For this study, only the projection defense was used. Reliability coefficient standards from Cicchetti (1994; Cicchetti and Sparrow 1981) were used for this study: poor (.40), fair (.41–.59), good (.60–.74), and excellent (.75). Thus, all SCORS and DMM ratings ranged from good to excellent.

Patient-practitioner relationships—This was measured by the Patient Reactions Assessment (PRA; Galassi, Schanberg, and Ware 1992), a 15-item self-report measure that assesses three dimensions of patient-practitioner relationships: information, communication, and relationships. Participants were asked to rate on a 7-point Likert scale the extent to which they agreed or disagreed with the listed statements (1 = very strongly disagree, 7 = very strongly agree). Following are sample items for the dimensions: information (e.g., “Providers in this clinic explained my medical plan” Cronbach's α for T1 = .88, T2 = .90), quality of communication (e.g., “It is hard for me to ask how my treatment is going” Cronbach's α for T1 = .83, T2 = .74), and affective quality of the relationship (e.g., “Providers in this clinic really respect me” Cronbach's α for T1 = .86, T2 = .82).

For the purpose of reducing the number of analyses conducted in the present study, we computed a composite satisfaction score by standardizing, and then averaging, the information, communication, and relationships subscales. This composite score was computed for both T1 and T2.

In order to examine the possibility of changes in the PRA subscales from pregnancy to postdelivery, three dependent sample *t* tests were conducted comparing PRA information, communication, and relationships across time. No statistically significant differences were found, suggesting that levels of satisfaction with patient-provider relationships were stable. Specifically, for PRA information, Means: 5.90 vs. 5.78, $t = .70$, $p = .48$; for PRA communication: Means: 6.16 vs. 6.23, $t = -.57$, $p = .56$; for PRA relationships: Means: 5.90 vs. 6.00, $t = -.54$, $p = .58$.

Hypotheses

The principal hypothesis in this study was that an elevated use of defensive projection would predict impaired patient-practitioner relationships under immature/maladaptive levels of object relations, particularly the aspects of object relations that are associated with a diminished capacity for mentalization (i.e., simplicity of representations and poor understanding of social causality).

Results

Intercorrelations among the study variables are presented in Table 1. As shown in the table, strong correlations among the four object relations scales were evinced (r s ranging from .45 to .85, $p < .001$). As well, and as would be expected, patients' satisfaction with their relationships with their provider during pregnancy was associated with satisfaction, measured postdelivery ($r = .60$, $p < .001$). All the other correlations were nonsignificant.

Our hypothesis was examined using hierarchical multiple regression analysis, in which the outcome was the postdelivery composite patient-provider relationships score. In hierarchical multiple regression, the investigator enters variables into the equation for the purpose of predicting the outcome in an order determined by theory. The variables embedding the most theoretical importance are entered last, to allow assessment of their ability to predict the outcome over and above variables that are less theoretically important (or that are already known to predict the outcome). In our case, it is relatively trivial that the composite patient-

provider relationships during pregnancy will predict the same composite scores after delivery; hence this variable was entered first into the regression equation. This is labeled Step 1 in hierarchical multiple regression analysis.

Of greater theoretical importance are the main effects of defensive projection and the four object relations dimensions (CR, SC, AT, EI) on the outcome. These variables were entered in Step 2. Note that by entering, at Step 1, patient-provider relationships as assessed during pregnancy, we are essentially taking into account, or controlling for, baseline levels of patient-provider relationships while examining postdelivery levels of these relationships. Consequently, any effect of defensive projection and/or object relations on the outcome would constitute a prospective effect on changes in patient-provider relationships from pregnancy to postdelivery.

Of the greatest theoretical importance is the interaction between defensive projection and object relationships. These interactions were tested in Step 3 by means of entering four multiplicative terms involving DMM defensive projection and each of the SCORS object relationships variables. Each of these multiplicative terms stand, mathematically, for the conceptual interaction between projection and object relationships. In accordance with the recommendations of Aiken and West (1991), variables were centered prior to computation of multiplicative terms, and centered variables were used in the analyses.

In Table 2 we present the results of our hierarchical multiple regression analysis. Step 1 accounted for 36% of the variance of the outcome ($R^2 = .36$, $F_{[1,56]} = 32.63$, $p < .001$). As expected, patients' satisfaction with their relationships with their providers, assessed during pregnancy, was prospectively associated with the same satisfaction, assessed postdelivery (*standardized coefficient* = .60, $t = 5.71$, $p < .001$).

Step 2, which included the main effects of projection and the four object relations dimensions, added 7% to the proportion of the variance of the outcome explained by the regression model. Namely, this proportion was now 43% ($R^2 = .43$, $F_{[6,51]} = 6.46$, $p < .001$). Although none of the predictors in Step 2 reached a statistically significant effect, the prospective association between projection and the outcome approached statistical significance (*standardized coefficient* = $-.16$, $t = -1.89$, $p = .06$). The direction of this association was such that elevated levels of projection, assessed during pregnancy, predicted a decrease in patients' satisfaction with their relationships with their providers during the pregnancy-postdelivery period.

Step 3, which included four multiplicative terms involving projections and each of the object relations scales, added 8% to the proportion of the variance of the outcome explained by the regression model ($R^2 = .51$, $F_{[10,47]} = 4.97$, $p < .001$). Of the four multiplicative terms, only one, involving DMM projection and SCORS CR, emerged as statistically significant (*standardized coefficient* = .44, $t = 2.24$, $p < .05$).

The latter interaction was probed based on the procedure stipulated by Aiken and West (1991). The procedure entails calculating simple (conditional) slopes of the association between the putative independent variable, in our case defensive projection, and the outcome, in our case postdelivery satisfaction with patient-provider relationships, under high

vs. low levels of the variable attenuating this association (the “moderator”), in our case SCORS CR). High vs. low levels of the moderator are defined, conventionally, as 1 standard deviation above vs. below the moderator's mean.

The pattern of this interaction, including the simple slopes of the projection-outcome association under high vs. low levels of SCORS CR, is presented in Figure 1. As clearly shown in this figure, and consistent with our hypothesis, defensive projection, assessed during pregnancy, predicted a decrease in satisfaction with patient-provider relationships during the pregnancy-postdelivery period when SCORS CR was low (indicating simplistic object relations, simple slope $-.48$, $t = -2.94$, $p < .01$), but not when SCORS CR was high (indicating complex object relationships, simple slope $= .13$, $t = .76$, $p = .44$).

Discussion

In this investigation of 58 pregnant women treated at a high-risk specialty clinic, all of whom experienced a successful delivery, we found that defensive projection, assessed during the second trimester, interacted with the simplicity (or complexity) of participants' object relations, also assessed during the second trimester, to predict changes in patient-provider relationships, as experienced by patients in the pregnancy-postdelivery period. Specifically, elevated levels of defensive projection during pregnancy predicted a decrease in the satisfaction patients reported regarding their relationships with providers when this projection was superimposed on patients' simplistic (vs. complex) object relations.

In this discussion we gauge our findings in the context of the study's strengths and limitations. Next, we interpret the findings using mentalization theory and research (Fonagy et al. 2002). We then note implications of these findings for psychoanalytically informed assessment, and for intervention in medical settings. We conclude with a discussion of the relevance of our findings to the ongoing debate concerning psychoanalytic research.

Gauging Our Findings in the Context of the Study's Limitations and Strengths

Before making substantive interpretations of the study findings, it is important to locate them in the context of the study's limitations. These include (a) its relatively modest sample size, which might have restricted statistical power, in turn preventing other interactive effects of importance from reaching statistical significance, (b) its assessment of patient-provider relationships from the point of view of the patient, rather than the provider, and (c) its focus on a single high-risk clinic with unique characteristics, including elevated levels of satisfaction with patient-provider relationships overall (see Lerman et al. 2007). Taken together, these limitations encourage caution in interpreting our findings, particularly with regard to generalizing these findings to other clinics and populations, and to providers' experience of their relationships with patients.

At the same time, several strengths of this study are noteworthy. First, our findings were obtained in the context of a prospective-longitudinal design, whereby the putative independent variables (“causal factors”) were assessed before the putative outcome, thereby allowing causal inference, however tentative. Second, in this study we were able to capture a significant period in participants' lives, namely, the period from the second trimester to

postdelivery. Third, in this study defensive projection and object relations were assessed using state-of-the-science measures. Last, but not least, is the fact that our predictions, which have been supported, were based on object relations theory. Thus, we believe that the strengths-limitations ratio renders our findings intriguing, with implications for psychoanalytic theory, assessment, and treatment.

Theoretical Implications: The Central Role of Mentalization and the Structural Aspects of Object Relations

That defensive projection, assessed during pregnancy, predicted a decrease in the satisfaction with patient-provider relationships during the pregnancy-postdelivery period in the context of simplistic, rather than complex, object relations, is of major importance to psychoanalytic theory. This finding provides focal support for the theoretical and empirical work done by Blatt, Kernberg, and their colleagues, which attests (1) the importance of structural, or formal, aspects of personality organization, over and above the importance of content aspects (Blatt 1974; Blatt, Auerbach, and Levy 1997; Kernberg 1980, 1981) and (2) the notion that personality organization is built on intricate interconnection between defenses and object relations.

Our findings are also readily interpreted through the notion of mentalization (Fonagy et al. 2002). Under situations of high stress, individuals tend to show less flexible mentalization abilities; instead they may be vigilant only to affect cues, without reflecting on possible meanings (Fonagy and Luyten 2009; Luyten et al. 2009). Thus, stress might accentuate the use of defenses such as projection and a less complex understanding of social relationships. Additionally, more chronic impairment in mentalization, predicated on insecure attachment during childhood, might lead to severe psychopathology, accounting in turn for interpersonal problems. That is, patients with impaired mentalization capacities may be limited in their ability to make sense of the vicissitudes of patient-provider relationships, particularly because they have difficulties figuring out their own mental states (e.g., anxiety, depression, and anger), as well as those of their providers (e.g., fatigue, concern, a benevolent effort to assist), thereby resorting to defensive projection (e.g., attributing their own anger to their providers), as well as to a narrow view of their providers as insensitive, unempathic, or downright hostile. When the two—defensive projection and a narrow view of providers—conflate, the road to an eroded patient-provider relationship is short.

From the point of view of mentalization theory, it is interesting that it was SCORS CR, not SCORS SC, that proved the expected interaction with defensive projection. Theory (e.g., Blatt et al. 2008) suggests that the capacity for mentalization is particularly associated with the capacity for understanding social relationships. However, it can be argued that the capacity for understanding social relationships is itself predicated on the capacity to understand people as complex and multifaceted. Indeed, numerous studies report correlations between CR and SC, suggesting that they are parts of a single factor, capturing a structural, or cognitive, aspect of object relations (Hibbard et al. 1995; Huprich and Greenberg 1990). One possible explanation for our pattern of results is that impaired social causality is a characteristic of severe personality pathology, such as borderline personality disorders, whereas our sample was made up of women who were relatively healthy

psychologically (Westen et al. 1990) and for whom there was much more variability in levels of SCORS CR. This supposition calls for a systematic examination of the effects of all SCORS subscales in a wide variety of clinical and community samples.

Implications for Psychoanalytically Informed Assessment and Intervention

The extensively cited criticism leveled against projective tests (e.g., Garb 1999) is usually directed toward their atheoretical use. However, critics overlook theoretically based uses of projective tests (see, e.g., Shahar and Blatt 2005), which portray a more favorable picture of their psychometric properties and clinical utility. Consistent with this more theoretically based approach, findings from the present study demonstrate the utility of rating scales for assessing important psychodynamic constructs—object relations and defensive functioning—from narratives told to TAT stimulus cards (Cramer 2006; Huprich and Greenberg 2003). Specifically, our findings suggest that use of these assessment instruments and procedures might assist OB-GYN teams in identifying patients likely to view their relationships with providers as problematic (e.g., patients with simplistic object relations, who tend to use defensive projection).

These findings also suggest implications for training health care providers working with high-risk patients. There are a number of implementations of mentalization-based therapeutic approaches for patients with more limited defenses and capacities for object relations. These approaches emphasize attending to the here and now and to what is directly observable, without attributions of meaning or intention. For example, in a mentalization-based approach, instead of commenting on a patient's angry or hostile state of mind, a clinician might more directly comment that the patient is having trouble keeping appointments or has many questions about her pregnancy or her infant. The clinician might then say that he or she wonders if the mother is concerned that her concerns are not being heard or if there are other concerns she might have that might be more difficult to put into words.

Conclusion: Research May Facilitate Psychoanalysis as A Health Care Approach

A heated debate is currently taking place within psychoanalysis over the importance and pertinence of empirical research (see, e.g., Bornstein 2001; Kernberg 2006; cf. Blass and Carmeli 2007; Hoffman 2009; Luyten, Blatt, and Corveleyn 2006). This debate is extremely important, with interesting and poignant arguments made both for and against the “scientification” of psychoanalytic theory and treatment. Rather than adding our voice to the argument, however, we take a somewhat different approach. That is, instead of examining the impact of research on psychoanalysis, we have attempted to *illustrate* the importance of psychoanalytic thinking to empirical research, and to the practice and policy that might flow from it, in behavioral medicine.

Behavioral medicine is a vibrant, interdisciplinary field of inquiry, whose mission is the examination of psychosocial factors implicated in health and illness (OBSSR 2006). Unfortunately, with very few exceptions, psychoanalysis and its intellectual and clinical

assets are left out of this field, leaving the ground to other schools of clinical thought, primarily the cognitive-behavioral approach (for an excellent exception in theory and research, see Luyten et al. 2008; and in clinical practice, Basler, Grzesiak, and Dworkin 2002; Blechner 1999). This state of affairs is unfortunate not only for psychoanalysis, but also for behavioral medicine, because psychoanalytic insights can make a major contribution to many problems in the field. In particular, psychoanalysis's unique attention to unconscious, intra-and interpersonal processes, defensive operations, and mental representations of self and others has the potential to shed light on (a) the role of stress in immunological deficiencies, (b) coping with the social and functional consequences of chronic illness, (c) managing pain, (d) recovering from injuries and physical accidents, (e) engaging in productive health behaviors and reducing deleterious ones, and (f) improving doctor-patient relationships and health care utilization. The present study is an initial attempt to bridge the two worlds, of psychoanalysis and behavioral medicine, by espousing an object relations perspective (see Schattner, Shahar, and Abu-Shakra 2008). We hope that our findings will encourage future studies, thereby forming bridges not only between theory, science, and practice, but also between patients and providers.

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Figure 1. Patient-provider relationship postdelivery, adjusted for its level during pregnancy, as a function of the interaction between defensive projection and simplistic object relations (SCORS CR)

Table 1

Intercorrelations among the study variables ($N = 58$)

Variables	CR	SC	AT	EI	Projection	Pregnancy PRA	Post-Delivery PRA
CR	1.00	—	—	—	—	—	—
SC	.85***	1.00	—	—	—	—	—
AT	.45***	.53***	1.00	—	—	—	—
EI	.72***	.70***	.61***	1.00	—	—	—
Projection	-.04	-.05	-.	.01	1.00	—	—
Pregnancy PRA	-.00	-.04	.04	.10	-.02	1.00	—
Postdelivery PRA	.09	.05	-.01	.07	-.21	.60***	1.00

 $p < .001$.

Table 2
Results of the hierarchical multiple regression (HMR) analysis

Variable	β	t
Block 1 ($R^2 = .36$)		
Pregnancy PRA	.60	5.71***
Block 2 ($R^2 = .43$)		
DMM Projection	-.20	-1.89
SCORS CR	.15	.68
SCORS SC	.02	.13
SCORS AT	-.13	-.93
SCORS EI	-.03	-.17
Block 2 ($R^2 = .51$)		
Projection $\times$ CR	.44	2.24*
Projection $\times$ SC	-.31	-1.55
Projection $\times$ AT	.14	1.14
Projection $\times$ EI	-.01	-.06

*
 $p < .05$.

 $p < .001$.