

III. DIMENSIONS AND NEW MEASURES RELEVANT TO PSYCHOANALYSIS

THE CREATION OF A CODING SCHEME ASSESSING CURIOSITY EXPRESSION IN ADOLESCENT INTERVIEWS: PRELIMINARY FINDINGS

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Curiosity is conceptualized as adaptive and associated with positive psychosocial outcome (Kashdan, Rose, and Fincham 2004). Yet our knowledge of curiosity is surely limited. What are its developmental antecedents? How does curiosity function to promote cognitive, inter- and intrapersonal development? (Kashdan 2004). In constructing a new assessment of this vital capacity, our overarching aims are to elucidate (1) lines of curiosity development in low- and high-risk children and adolescents, and (2) the consequences of inhibited expression and development of curiosity.

Clinical research interview data from a 25-year longitudinal research project (Hauser, Powers, and Noam 1991; Hauser, Golden, and Allen 2006) are being used to assess and track adolescents' curiosity, a construct not yet studied in this data set. We propose three research questions: (1) Do specific facets of adolescent curiosity appear at different rates and in disparate forms? (2) Do pathways of curiosity development differ among same-age early adolescents? (3) How do various aspects of curiosity development predict academic success?

Interpersonal curiosity has been linked to positive relationship outcomes in young adults (Kashdan and Roberts 2004, 2006), as have the emergence of self-knowledge capacities (Bandura 1981; Parker 1997; Beardslee et al. 1990). However, we have discovered no studies investigating how curiosity may spark and facilitate the growth of self-knowledge and interpersonal relationships in adolescence and beyond.

Central to the historical debate on the nature of curiosity is a major question: Are humans intrinsically or extrinsically motivated by the benefits of knowledge? (Loewenstein 1994). White's seminal paper on motivation (1959) concludes that development of what he called "effectance" is facilitated by curiosity. Behaviorism understands curiosity as an organism's responding with exploratory behavior to novelty, uncertainty, complexity, ambiguity, and conflict (Beswick 1971; Berlyne 1960). Loewenstein's comprehensive review (1994) concludes that the study of "specific state curiosity" (which we intend to investigate) will best provide clarification about stimulating curiosity in the general population. Emerging cognitive capacities and the emotional, self-, and social development of adolescents, which in turn facilitate self-understanding, have complex interactions (Keating 1990). Cognitive development is related to exploratory behavior (Voss and Keller 1983), and the "self" is conceptual; thus, the appearance of more diverse cognitive capacities during adolescence (Fischer, Hand, and Russell 1984; Keating 1990) likely stimulates self-exploration.

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Attachment theory—understood here in the context of adolescent development (Allen and Land 1999)—is another lens for understanding intrapersonal curiosity development. Theoretical and empirical relations between attachment security, cognitive development, and curiosity have been studied in early childhood (Arend, Gove, and Sroufe 1979; Grossmann, Grossmann, and Zimmerman 1999). Few investigators focus on the interrelations of these dimensions within adolescent development.

Narrative and psychoanalytic implications. The creation of this assessment is based on the concept of "exemplar," a mode of narrative analysis (Mishler 1990) using the Adult Attachment Interview (AAI; Main and Goldwyn 1984; Hesse 1999) as a model. Analyses are guided by a working conceptual definition of curiosity: *a centrally organizing, developmental function that is an adaptive, socially facilitated exploration of self and environment, intrinsically motivated by the experience of knowledge deprivation* (Mayes 1991; Loewenstein 1994).

Psychoanalytic technique (including evenly hovering attention and free association) requires the capacity for heightened curiosity, but systematic consideration of this vital function is all but absent from the psychoanalytic literature (but see Nersessian 1995; Goldberg 2002). Self-understanding is considered by some (e.g., Gardner 1983) to be central to psychoanalytic therapeutics. Thus, studying the development of intrapersonal curiosity is crucial. Our current empirical explorations, which address

the development, maintenance, and linguistic expression of inter- and intrapersonal curiosity, can contribute to a greater understanding of this imperative capacity as it bears on the theory and practice of psychoanalysis.

Method

Annual semistructured interviews (Hauser 1991) provide the database for our initial explorations. These interviews were conducted with 70 psychiatrically hospitalized nonpsychotic teens, and 76 demographically matched volunteers from a local public high school. We have begun this project with interviews from two contrasting nonpatient subgroups—10 adolescents with highest and 10 with lowest ego development scores (Hy and Loevinger 1996)—since they are expected to reflect contrasting levels of curiosity (Hauser 1976). We will then apply our subsequently constructed and psychometrically tested measure to the remaining sample of low- and high-risk adolescents.

Comprehensive Process Analysis (Elliot 1989), developed to study significant psychotherapy events, will be adapted to identify pathways to curiosity expression. Interviewer speeches surrounding verbal exploration will be coded with respect to whether and how they (a) trigger curiosity and (b) facilitate or inhibit it.

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Preliminary Findings and Discussion

Our central assumption is that the structural and thematic aspects of discourse revealing instances of curiosity will be evident in the adolescent interviews. An initial review of year-one interviews of 10 nonpatient middle adolescents (average age 14) has revealed instances of curiosity linked with interview events. Our preliminary findings are sorted into three categories: Domains of Curiosity; Structural and Linguistic Aspects of Discourse Revealing Curiosity; and Content and Thematic Markers of Curiosity in Verbal Discourse. With respect to multiple domains of curiosity, we will (1) consider deriving a summary (overall) score for curiosity; (2) consider scoring separately for “structural and linguistic aspects” of curiosity and “content and thematic facets” of curiosity as distinct indices of overall curiosity; and (3) examine multiple domains of curiosity expression.

Structural and Linguistic Aspects of Discourse Exhibiting Curiosity

Questions in verbal discourse serve as behavioral markers of cognitive processes reflecting verbal exploration, or curiosity (Kearsley

1976). Evidence of language use reflecting adolescents' openness to exploring questions and their tolerance of the ambiguity, complexity, and uncertainty of open-ended questions is the sine qua non of verbal exploration. Open-ended questions (without a yes/no or otherwise dichotomous answer) are particularly ambiguous and complex (Mishler 1986), and thus are most likely to engender an adolescent's curiosity expression. Responses to "lexical ambiguity" (Simpson 1994) will be regarded as a second linguistic marker of curiosity. Curiosity will thus be operationally defined as instances of subjects' verbal exploration in response to open-ended questions and/or lexical ambiguity. In preliminary analyses we have discerned the following additional elements of verbal exploration: (1) a lexicon of curiosity (presence of words and phrases signifying curiosity); (2) language use reflecting abstract thinking; (3) responses to closed-ended, dichotomous questions with verbal exploration; (4) complex narrative elements (e.g., compound sentences) in responses.

Content and Thematic Markers of Curiosity in Verbal Discourse

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Eight markers have been chosen based on their conceptual relevance to curiosity and on preliminary studies revealing that they are expressed in the interviews.

Narrative discourse reflecting metacognition. Metacognition (Flavell, Miller, and Miller 2002) is related to curiosity expression, since an adolescent's use of metacognitive processes is expected to affect his or her capacity to engage in verbal exploration, particularly in inter- and intrapersonal domains.

Intrinsic motivation. The impetus for curiosity is an internal state (Pittman and Heller 1987; Day, Berlyne, and Hunt 1971); thus it is intrinsically motivated, facilitating the autonomous thinking characteristic of curious individuals (Kashdan and Fincham 2004). We have found instances of intrinsic motivation reflected in adolescents' discussion of their motivational style.

Novelty-seeking. Our preliminary analyses reveal narrative accounts of novelty-seeking conceptually related to curiosity (Wentworth and Witryol 2003). These arise in an interpersonal context and are linked with the desire for new experiences.

Tolerance of ambiguity. Narrative accounts of this facet of curiosity are evident in preliminary studies.

Value judgments. Dichotomous value judgments inhibiting verbal

exploration were evident as responses to open-ended questions about various experiences.

Positive or negative affect. Positive affects linked with curiosity (Kasdan and Roberts 2004), are evident in the interviews. Boredom and depressive or anxious affects, apparent in tone of voice or explicitly expressed, are also present. As themes they are associated with absence or diminishment of curiosity.

Evidence of imagination, creativity, fantasizing, and play. Creativity (Barron and Harrington 1981; Wohlwill 1987), imagination (Wohlwill 1987), and play (Voss 1987), all linked to curiosity in the general and developmental psychology literature, are apparent as themes in the interview data.

Interpersonal and/or environmental experiences. Accounts of relationships and/or experiences, judged to be either promoting or inhibiting of curiosity, are abundant in the interviews. Consistent with attachment theory, we expect to find that experiences engendering attachment security will be associated with increased expression of curiosity.

Concluding Remarks

By presenting these preliminary findings we introduce readers to the emerging directions in new research exploring aspects of curiosity development within adolescents' longitudinal clinical research interviews. This presentation is intended to illustrate how these findings represent both the linguistic expression of curiosity and thematic aspects of discourse reflecting facets of curiosity. We have also sketched our anticipated next steps toward constructing and testing an empirical approach for assessing adolescent curiosity development in the context of annual clinical research interviews.

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**DIFFERENTIAL SELECTIVITY OF PATIENTS
ASSIGNED TO LONG-TERM PSYCHOANALYTIC TREATMENT**

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From 1945 onward, patients have found their way to long-term ambulatory psychoanalytic treatment (psychoanalytic psychotherapy and psychoanalysis) in the government-funded Netherlands mental health care system. So far it is not entirely clear what differences exist between patients assigned to either psychoanalytic psychotherapy (PP) or psychoanalysis (PA). Both clinicians and researchers indicate a clear need for systematic empirical data on differential selectivity for patients assigned to psychoanalytic treatment (Gunderson and Gabbard 1999). In the Netherlands, a monitoring system was developed to register patients' mental health status before and during treatment in order to systematically gather empirical data of this sort.

In clinical practice, the most commonly described mental health characteristics are diagnoses using DSM-IV-R classifications. A different approach is to focus on patients' symptoms and level of intrapsychic and interpersonal functioning as assessed by standardized diagnostic instruments. In general, it is recommended that clinicians combine the two approaches for a thorough assessment (Derksen and Sloore 1999). This study describes empirical data regarding psychopathology and distress in our PA and PP patient population by using the functional and diagnostic approaches. First we investigated differences in mental health characteristics between patients assigned to PA and to PP. This study was based on an "intention-to-treat" model; we did not investigate whether these patients actually received the treatment they were assigned to. We then examined which mental health aspects were clinically affected for each treatment group. Consistent with previous research, we estimated the severity of psychopathology and distress in our total patient group using the percentage of patients whose test scores were located above the cutoff score of the assessment instruments (Derogatis and Lazarus 1994; Sandell et al. 2000).

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Method

The total sample was 170 subjects who applied for psychoanalytic treatment in the period between June 2002 and November 2004 at the Netherlands Psychoanalytic Institute (NPI). Fifty-four patients were assigned to PA and 116 patients to PP. Sociodemographic data (age, gender, educational level, civil status, vocational level, source of income, cultural background, and treatment history) were collected during the first intake. Subsequently, the patients completed a battery of screening questionnaires: the SCL-90-R (Symptom Checklist 90-Revised), IIP-64 (Inventory of Interpersonal Problems-64), BDI-II (Beck Depression Inventory II), and the STAI (State-Trait Anxiety Inventory). After patients were identified as potentially suitable for a long-term psychoanalytic treatment, they participated in a more thorough personality assessment consisting of the MMPI-2 (Minnesota Multiphasic Personality Inventory-2, computerized version) and the Rorschach. The administration and scoring of the Rorschach followed the procedures developed by Exner. After these assessments, DSM-IV-R diagnoses (Axes I, II, and V) were determined based on psychoanalysts' clinical judgment. Therapists could diagnose each patient with up to four Axis I disorders.

Results

Sociodemographic data. The total group consisted of 127 women (75%) and 43 men (25%), with a mean age of 31.0 years ($SD = 6.7$; 18–51 years). Seventy-four percent of the patients had a high level of education (bachelor degree or higher). Eighty-seven percent had a Western cultural background, and 13 percent came from a range of other cultures. Sixty-six percent had received previous treatment. No significant differences regarding sociodemographic variables were found between PA and PP patients, except for cultural background. All PA patients had a Western cultural background, whereas 82% of PP patients did ($\chi^2 = 4.92, p < .05$).

Screening questionnaires and personality assessment. Results from the four screening instruments showed significant differences between PA and PP patients on the mean IIP-64 total score (PA > PP, $F = 4.91, p < .05$). More specifically, PA patients scored significantly higher on the IIP-64 subscales ‘Cold’ ($F = 5.50, p < .05$), ‘Socially avoidant’ ($F = 6.01, p < .05$) and ‘Non-assertive’ ($F = 9.30, p < .01$) in comparison to PP patients. No significant differences were found on the other three screening instruments. Results from the personality assessment showed that fewer PA patients had clinically elevated scores on the Perceptual Thinking Index of the Rorschach ($\chi^2 = 4.40, p < .05$) compared to PP patients. No significant differences were found between PA patients and PP patients on the other Special Indices of the Rorschach or on the MMPI clinical scales.

DSM-IV-R classifications. Overall results showed that mood disorders were by far the most frequently diagnosed disorders (41%), with anxiety disorders (13%) and adjustment disorders (11%) also commonly diagnosed. PA patients were significantly more likely than PP patients to be diagnosed with dysthymia ($\chi^2 = 7.77, p < .01$). With respect to V codes, significantly more PP patients were diagnosed with relational problems ($\chi^2 = 3.89, p < .05$) compared to PA patients. Data on Axis II were available only for a small number of patients ($n = 46$). Two-thirds of these patients were diagnosed with a personality disorder (mainly PDNOS or PD in the B or C cluster), while one-third had no disorder on Axis II. No statistically significant difference was found between the two patient groups (PA and PP) regarding the GAF score. The mean GAF score for the total group was 62.1 ($SD = 8.0$).

Comparison of NPI patient group with (international) nonclinical reference groups. The PA and PP groups were examined together for the

Table 1. Means and standard deviations on the screening instruments and percentage of clinical scores compared to norm groups

	Total PA & PP		% within clinical range	χ^2
	M	SD		
Symptom Checklist-90-R Global Severity Index	0.91	0.52	55	267.3 ***
Beck Depression Inventory-II Total score	16.6	9.1	57	163.0 ***
Inventory of Interpersonal Problems-64 Total score	87.2	30.4	42	107.6 ***
State-Trait Anxiety Inventory Trait score	50.8	10.7	44	81.1 ***

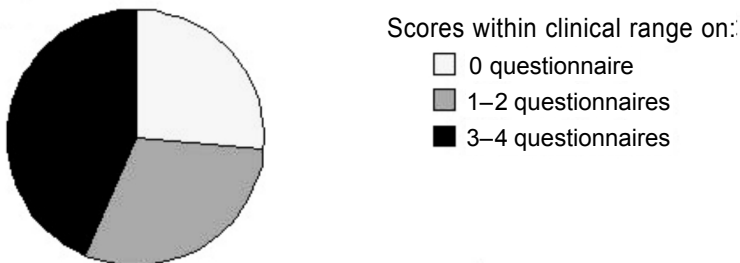
*** significant difference between psychanalytic patients and normal population ($p < .001$) using Pearson Chi-square tests with a 10% cutoff.

remaining statistical analyses. Table 1 shows the means and standard deviations of the test scores on the screening questionnaires, as well as the percentage of patients who scored within the clinical range. The percentage of patients scoring within the clinical range on the four mean scores of the screening instruments (and also on all the subscales) differed significantly from that of the nonclinical population.

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Establishing “caseness” of patients across screening instruments and personality assessment. To summarize findings on the four screening questionnaires, we examined what percentage of patients would score within the clinical range on more than one of the test scores. We found that 74% of the patients were identified as “cases” on at least one screening instrument, with 18% scoring within the clinical range on one questionnaire, 12% on two, 22% on three, and 22% on all four (see Figure 1).

Figure 1. Proportion of patients with scores within the clinical range on the screening questionnaires



We also established clinical caseness as measured by the personality assessment and screening instruments combined. We defined a clinical case as someone scoring within the lowest ten percentiles of the norm group on at least two mean scores of the screening questionnaires and/or at least two of the clinical scales of the MMPI-2 and/or at least two of the six mean Rorschach Special Indices. On these criteria, 91% of our patients were identified as clinical cases.

Conclusions

In the present study a detailed description was given of the psychological and psychopathological characteristics of patients receiving long-term ambulatory psychoanalytic treatment in the Netherlands in terms of sociodemographic, clinical, and research variables. The sociodemographic description of the Netherlands Psychoanalytic Institute's patient population is consistent with psychoanalytic patients in other countries (Doidge et al. 2002; Leichsenring et al. 2005; Sandell et al. 2000). In our sample, about two-thirds of patients had previously received psychotherapeutic treatment of some kind. This finding is important, because it contradicts the idea that patients in psychoanalytic treatment could do fine with less intensive treatments (see Doidge et al. 2002). For the majority of our patients, apparently, previous treatments (all short-term) had not helped sufficiently.

We have found that a large proportion of our patients were diagnosed with mood disorders, especially dysthymia, relational problems, and identity problems. These findings are consistent with the results from Leichsenring et al. (2005). The extent of interpersonal problems before therapy corresponds to the values reported for patients with personality disorders (Horowitz, Strauss, and Kordy 1994; Horowitz et al. 2000). A distinction between Axis I and Axis II is complicated and often results in the finding that an accurate diagnosis of a personality disorder is rather difficult in clinical practice (Derksen and Sloore 1999). This might explain why higher frequencies of personality problems and disorders were often found using questionnaires than were found using clinical opinion alone (Oldham 1991).

The current study confirms several widely held beliefs about psychoanalytic patients, while it challenges others. The stereotype of psychoanalytic patients is that they are "YAVIS" patients (Young, Attractive, Verbal, Intelligent, and Social). Psychoanalytic treatment indeed appears to be for a small proportion of the entire population: mostly

young, female, and well-educated patients. However, we have found that the majority of patients who are assigned to psychoanalytic treatment can be described as “clinical cases.” According to our research findings, these patients appear to be more distressed than is commonly assumed.

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PSYCHOMETRIC PROPERTIES OF A CHINESE VERSION OF THE PSYCHOLOGICAL MINDEDNESS SCALE

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Psychological Mindedness (PM) is a construct originally conceptualized by psychodynamically oriented psychotherapists to describe the psychological quality of perceiving relationships among thoughts, feelings, and actions, and thus appreciating their influence on human behavior (Appelbaum 1973; Beitel et al. 2005). In addition, high PM has been thought to predict a better response to treatment in psychotherapy patients (Conte, Ratto, and Karasu 1996; Farber 1985, 1989), with increased retention and engagement in the therapeutic process (McCallum and Piper 1990).

Recent studies have examined relationships among PM and hypothetically related concepts, such as personality and attachment security (Beitel and Cecero 2003). Openness to Experience ($\beta = 0.33, t = 5.22, p < .01$) and Extraversion ($\beta = 0.21, t = 2.96, p < .01$), on the NEO-Five Factor Inventory (NEO-FFI) were positively associated with PM, while an inverse association was found with Neuroticism ($\beta = -0.19, t = -2.70, p < .01$). Attachment to Peers ($\beta = 0.15, t = 2.14, p < .05$), on the Inventory of Parent and Peer Attachment (IPPA) was significantly associated with PM: Attachment to Mother and Attachment to Father were not significantly related to PM.

Psychological Mindedness and Ethnic Differences

Ethnic differences have not emerged in recent studies of PM (Beitel and Cecero 2003; Beitel, Ferrer, and Cecero 2004, 2005). However, the number of Asian Americans in any given sample has been low. We have recently begun to develop norms for the PM Scale and have developed a database of 750 college students. Our recent analysis (Beitel et al. 2007) of this large data set revealed that Asian Americans ($n = 61, M = 131.78, SD = 14.01$) reported statistically significantly lower PM Scale scores (ANOVA, $F = 4.00, p = .008$) than blacks ($n = 61, M = 133.67, SD = 11.75$), Hispanics ($n = 88, M = 134.69, SD = 11.87$), and whites ($n = 458, M = 136.80, SD = 12.27$).

Although there is a relative dearth of studies examining psychological mindedness among Chinese and other Asian groups, some studies have investigated related psychological factors, such as self-disclosure and willingness to seek psychological treatments. Self-disclosure involves revealing personal information about oneself to others (Jourard 1971; Pennebaker and Seagal 1999). Studies suggest that Asian and American cultures have different norms concerning the appropriate amount, content, and type of self-disclosure. For example, one study (Chen 1995) found that Americans are significantly more likely than Chinese individuals to reveal personal information to strangers, acquaintances, parents, or intimate friends. In comparison to European Americans, Asian Americans reveal less information about themselves to romantic partners (Gratch, Bassett, and Attra 1995) and are less willing to reveal information about their internal experiences when regulating interpersonal conflict (Ting-Toomey et al. 2000). Variations in self-construal may influence emotional expression and willingness to reveal personal information, such as concealing feelings from others and a reluctance to share private information with others (Barry 2003; Suh et al. 1998). Whereas Americans of European descent tend to exhibit a strong independent self-construal (i.e., the self is experienced as a separate, autonomous, bounded entity), those of Asian descent tend to exhibit a strong interdependent self-construal (i.e., the self is experienced as flexible, variable, and guided by external factors, such as roles, status, and relationships) (Chung 1992). Barry (2003) demonstrated that Chinese, Japanese, and Korean immigrants in the U.S. who had an interdependent self-construal were less likely to disclose personal and generic information to others. Moreover, while strong emotions in collectivist cultures (e.g., China) may be associated with self-other relationships, those in individualist cultures (e.g., the U.S.) may be associated with the individual's inner world (Mesquita 2001). Similarly, in an experimental study involving tracking the movement of cartoon fish, Chinese participants were more likely to explain the movement of the individual fish as a function of external factors, whereas American participants were more likely to explain such movement as a function of internal ones (Morris and Peng 1994).

Culture-specific expression of psychological distress, including a proclivity to experience psychological problems somatically rather than emotionally, may complicate accurate psychiatric diagnosis and influence

Asian Americans' pathways to health care (Dinges and Cherry 1995). Unlike Western medicine, Chinese and other Asian cultures have not traditionally dichotomized body and mind, and this—coupled with a reticence concerning emotional expression—may result in the exclusive reporting of somatic symptoms (Lin and Cheung 1999). In a study of Chinese, Japanese, and Korean immigrants in the United States, Barry and Grilo (2002) found that approximately half the participants indicated that if they felt depressed for a long period of time they would be unwilling to seek psychological treatment. Further, willingness to seek psychological treatment was negatively associated with interdependent self-construal.

Goals and Hypotheses

In order to extend the construct validity of the PM Scale, it should have similar associations in cross-cultural context. The major goal of this study was to conduct an analysis of the associations of PM with personality and attachment variables using a Mandarin Chinese translation of the PM Scale. In addition, we hoped to establish the factor structure of the translated scale. An additional long-term goal of this research program is to evaluate the effects of PM on willingness to seek treatment in East Asian populations.

We hypothesized that the Mandarin PM Scale would not differ from the English PM Scale with respect to attachment and personality variables. We anticipated similar reliability and factor structure for at least the three strongest factors of PM. We expected that several items would be difficult to translate in a cross-cultural context. Finally, we expected our Mainland Chinese study population to have PM scores similar to those of Asian Americans, but lower than those of English-speaking non-Asian U.S. residents.

Method

The sample consisted of 342 Mandarin-speaking university students in Mainland China (211 men and 131 women), ranging in age from 17 to 23 ($M = 20.22$, $SD = 1.39$). Participants attended an urban ($n = 180$) or a rural ($n = 162$) university. Two-thirds of the participants had a sibling.

The following measures (translated into Mandarin) were completed in exchange for course credit: Psychological Mindedness Scale (Conte et al. 1990), NEO-Five Factor Inventory (Costa and McCrae 2002),

and the Inventory of Parent and Peer Attachment (Armsden and Greenberg 1987). The scales were presented in counterbalanced order to reduce order effects. The PM Scale was translated specifically for this study.

Results

The Chinese PM Scale produced a significantly lower mean score (2.85, $SD = .23$) than is typically found in U.S. university samples. The internal consistency of the instrument was adequate ($\alpha = .73$), though a bit lower than usual in U.S. samples ($\alpha > .80$). Subscales were not reliable in this sample, which is not surprising, as they have not been consistently reliable in U.S. samples (α has ranged from .52 to .79). The pattern of association among the PM total score and personality/attachment variables was similar to the pattern observed in the U.S., suggesting that PM may be an important mental health construct in China.

Discussion

This study represents a first step toward examining PM in a cross-cultural context. It suggests that cross-cultural research on PM is feasible and provides some interesting preliminary results. Our findings suggest that in Chinese late adolescent and young adult college students PM relates to healthy personal and interpersonal constructs, much as it does in the U.S. Several limitations to the study must be noted; chief among them is that there is no direct equivalent of the PM construct in Mandarin. The items that were most difficult to translate might need to be revised or dropped in future studies. Future studies might also examine PM in other age groups and social classes, as well as in bilingual English/Mandarin speakers and/or in students living in Taiwan, which has a different history and community structure.

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**PSYCHOANALYTIC ANALYSIS OF TEXTS
 BY ADAM SMITH (1723–1790)**

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Since the “death of economic methodology” was declared by McCloskey in 1986, the field of methodology in economics has been freed from the pretense that rules can be set for sound economic inquiry. In the ensuing years, the discussion has opened up to address a broader set of questions aimed at an understanding of how economists in fact make decisions in economic research and how, more generally, they think about scientific knowledge (Hands 2001, pp. 6–7).

McCloskey's claim that the free market of economic ideas will decide which theory, concept, or argument is most convincing and therefore best has been important, but it was also criticized for ignoring the role of power, institutional arrangements, and economic support (Strassmann 1993; Garnett 1999; Mirowsky and Sent 2002). Acknowledging social and economic influences on the development of economic science, we argue for a better understanding of how economic theories are formed by addressing the psychological notions embedded, consciously or unconsciously, in the economic theory.

Under the influence of mainstream notions in philosophy of science, many economists continue to believe that "scientific method" helps them overcome their personal values and inhibitions, and to obtain if not the truth, then, as a second-best, value-neutrality, or, as a third-best, scientific status. The claim to value-neutrality seems based more on denial of influences and of the contextual character of economic theorizing than on insight into the contextuality of their research. As Harding (1995) explains, the invocation of value-neutrality means mostly that we are dealing with the underlying assumptions and shared values of economists, rather than with a heightened awareness of how values play a role in economic research.

We suggest that in assessing how economists develop the concept of the economic agent as central to their theories and models, we need to include in our considerations the psychological processes involved in the production of scientific knowledge. We need to know more about the economist, who constructs the rational, economic agent (in various ways bounded) as the basis for economic reasoning.

Our aim is to present a reading of economic texts by focusing on their conscious and unconscious meanings. To this end, we analyze short passages from two important texts by Adam Smith (1723–1790), considered by many economists the "father" of economic science. These passages are from the chapter "Of Sympathy" (Part I, Section I, Chapter I, pp. 9–16) in *The Theory of Moral Sentiments* (Smith 1759) and from the chapter "Of the Principle which Gives Occasion to the Division of Labor" in *An Inquiry into the Nature and Causes of the Wealth of Nations* (Smith 1776, Book I, Chapter II).

Analysis and Results

The primary theme that emerges from both these texts is dependence between human beings, or rather the lack of interdependence

and problems around human connections. A careful reading of the texts reveals that they are written on the supposition that emotional connectedness and human interdependence are weak, if not altogether lacking. For example, in *Theory of Moral Sentiments* Smith addresses interdependence in the context of a discussion of “sympathy”: “Though our brother is upon the rack, as long as we ourselves are at our ease, our senses will never inform us of what he suffers. They never did, and never can, carry us beyond our own person, and it is by imagination only that we can form any conception of what are his sensations” (Smith 1759, p. 9).

In an earlier analysis of that work, Kuiper (2003) has shown that in it Smith constructs a masculine identity, an isolated individual who identifies with the imagined father within in order to obtain a justified and moral line of conduct and who, in order to do so, suppresses emotions such as pain, anger, and fear by means of self-control. Relations with other human beings are conceptualized in moral terms and never become mutual. Relations with women are dealt with rudimentarily and mainly in instrumental terms.

Other themes that emerge in the reading of these texts are the relation of the individual to the environment, the emotions, and the body. In *Wealth of Nations* Smith addresses interdependence in the context of exchange. In both texts the author primarily intellectualizes—identifies with “the imagination”—and discusses emotions as if they were atoms under observation. The body and the feelings it gives rise to are subjects of analysis and control, and are positioned and conceptualized in opposition to the imagination or to the agent who identifies with the impartial spectator, “the imagined father within.” In *Wealth of Nations* the author states: “In almost every other race of animals each individual, when it is grown up to maturity, is entirely independent, and in its natural state has occasion for the assistance of no other living creature. But man has almost constant occasion for the help of his brethren, and it is in vain for him to expect it from their benevolence only. He will be more likely to prevail if he can interest their self-love in his favour, and shew them that it is for their own advantage to do for him what he requires of them. . . . We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages” (Smith 1776, p. 14). The question we ask here concerns the psychological patterns involved that make a person perceive a statement like this as obviously true.

When we relate Smith's perception of the individual and relations to other human beings and the wider environment, certain facts in Smith's life may be considered relevant. Smith's father, also named Adam, had died three months before his birth, leaving his upbringing entirely in the hands of his mother, Margaret Douglas Smith. A very religious woman who brought him up from an illness-ridden childhood, she encouraged him to become a scholar of distinction. His mother is known to have ingrained Stoic morals involving "self-command" in her son, who studied to attain a discipline over his feelings that, if fully attained, is a cardinal virtue lending luster to all others. Smith had a hypochondriacal nature and was extremely absent-minded; he never married and lived with his mother most of his life, until her death in 1784. His daily care was attended to by his mother and his niece Janet Douglas, who lived in the household and took care of his mother as she became older. After his niece's death in 1788, Smith stated, "She will leave me one of the most destitute and helpless men in Scotland" (Ross 1995, p. 401).

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We present our method of analysis of these short texts (against the background of knowledge of the complete texts) and the results that can be obtained from bringing to bear a set of psychoanalytic concepts and tools in the understanding of the conceptualization of the individual agent as part of a specific emotional setup/organization/constellation.

Specific themes to be addressed are how Smith's conceptualization of the agent can be understood as a narcissistic posturing as a defense against dependence, difficulties around individuation, anxieties around bodily processes, dissociation, and lack of a substantial relation with a father figure during his early youth.

Finally, we explore how these insights add to the understanding of Smith's works and his economics, and discuss the problems and limits of such an approach.

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RELIABILITY OF A MULTIDIMENSIONAL MEASURE FOR SCORING REFLECTIVE FUNCTION

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How people understand their own minds and those of others has long been of interest to philosophers, psychoanalysts, neuroscientists, and theologians. Drawing on philosophy of mind and object relations and attachment theory, Peter Fonagy and colleagues (1998) coined the term *reflective function* (RF) to denote an individual's capacity to mentalize (or reflect upon) the thoughts, feelings, intentions, and desires of self and others. This capacity is developed in childhood and is dependent on the quality of interpersonal interactions with caregivers.

Fonagy proposed that RF relates to a range of outcomes, from parenting to relationship functioning to resilience during stressful

situations. To test his theory, he developed a scale to assess various aspects of reflective function (e.g., understanding a developmental perspective, understanding the opaqueness of mental states, and the possible defensive nature of mental states). Consistent with his theory, Fonagy and colleagues (1995) found that caregiver RF predicted babies' functioning in a laboratory procedure. That is, insecurely attached parents with high RF were more likely to have securely attached babies than insecurely attached parents with low RF.

In a later study, Fonagy and colleagues (1996) found that among psychiatric patients reporting abuse, those who scored low on RF were more likely to be diagnosed with Borderline Personality Disorder (BPD) compared to those who were abused but scored high on RF. This research opened the door for the possibility of high RF acting as a buffer against the development of BPD in persons with a history of abuse.

Subsequent clinical research using this scale has found that RF can improve during the course of psychotherapy even for severely disturbed outpatients with personality disorders (Levy et al. 2006). Levy and colleagues (2005) have presented findings indicating that RF is related to a number of neurocognitive mechanisms, including attentional capacities, executive functioning, and impulsivity. These neurocognitive capacities are central to the difficulties experienced by people with personality disorders.

As important and beneficial as the RF concept has been for understanding a wide range of significant outcomes, research in this area has been hampered by limitations in the current scale. These problems include both scientific and economic issues. Fonagy's RF scale was designed to be used in conjunction with the Adult Attachment Interview (George, Kaplan, and Main 1996), which must be audio-recorded and transcribed verbatim in order to use this coding system. These transcriptions typically take from six to eight hours per interview to complete; as a result, it may take up to several weeks for feedback on the subject's reflective capacities. Dependence on this interview thus prevents the coding system from being applied to a wider range of observations. Psychotherapists and process researchers alike could benefit from an RF measure that can be used within sessions.

Besides being cumbersome, the rating scale is designed to provide only a single score, which limits our understanding of the complexity of RF and our capacity to examine the psychometrics of the measure

(e.g., the factor structure). To increase the validity of this important construct, a more differentiated measure of RF is needed.

Development of a New Rating System

To meet this need, we developed a multi-item rating scale for assessing reflective function. Particularly, we wanted to develop a measure that could be applied to multiple data sources (e.g., interviews, including those other than the AAI, by informants such as therapists, and by observers rating interactions).

The Reflective Function Questionnaire (RFQ; Levy, Meehan, and Hill 2005) is a multi-item measure developed through an iterative construct validity approach designed to cover a wide range of domains encompassed by the RF theory. Fonagy's RF manual and various research in the area of mental representations allowed us to identify several domains and subcategories of reflective function. Items pertaining to each domain or subcategory were generated and then reviewed for wording, clarity, relevance, and readability. Examples or explanations were added to items whose intelligibility was perceived as problematic.

The present study is an outline of our ongoing attempt to establish criterion validity and inter-rater reliability for this measure. New items will be applied by two raters in order to establish the latter. Item ratings will be compared with existing interview codes (Levy et al. 2005, 2006) to establish criterion validity.

Participants in the Study

Participants were patients in a randomized control trial comparing three different psychotherapies for BPD. Of the 90 participants, 84 (92.2%) were female. Subject age ranged from 18 to 51 years ($M = 30.75$). Racial/ethnic distribution of the sample was as follows: Caucasian, 62 (68%); African American, 9 (10%); Hispanic, 8 (9%); Asian, 5 (6%); Other, 7 (8%).

Measures

Adult Attachment Interview. The AAI is a semistructured interview of early attachment relationships developed by Mary Main (Gardner, Kaplan, and Main 1996). Interviews were administered, audio-recorded, and transcribed in accordance with the procedure developed by Main and Goldwyn (1998).

Reflective Functioning Scale (Fonagy et al. 1998). The RF scale evaluates the capacity to perceive, understand, and reflect upon the

mental states of self and others. Passages in the AAI are rated on a scale of 1 to 9, and scores are then aggregated to provide an overall score for the transcript.

Reflective Function Questionnaire (Levy, Meehan, and Hill 2005). The RFQ is a 53-item scale based on Fonagy's manual. The items pertain to various ways in which an individual can demonstrate high or low RF. For example: "The patient acknowledges that one can be internally experiencing emotions different from what is being overtly displayed (i.e., I felt sad but didn't want to show that to her)"; "The patient often acknowledges how his/her perception of an event might have been distorted by what he/she was feeling or thinking at the time"; "The patient makes spontaneous efforts to clarify confusing aspects of his/her narrative in session."

Each item on the scale is rated from 1 to 5. Each rater is instructed as follows: "The statements below describe a number of ways in which patients may perceive, understand, and reflect upon the mental states of the self and others. Please rate the following items on the extent to which they are true of you in your work with your patient, where 1 = not true at all, 3 = somewhat true, and 5 = very true."

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Data Analysis

In an earlier study, Levy et al. (2005, 2006) administered and scored 90 AAIs for attachment classification and RF. Raters will score audiotapes of these interviews using the RFQ. Intraclass correlation coefficients (ICCs) will be calculated to determine the reliability across raters on ratings of the RFQ on the AAI audiotapes. In addition, a correlational analysis will be used to assess the relationship between the RFQ items and the existing RF scores. We hypothesize that there will be a strong and significant correlation.

Future Directions

The development and validation of this measure promise to expand our understanding of this complex construct. The measure allows for psychometrically sophisticated and timely assessments of RF. Researchers and therapists will have the opportunity to examine the dimensional components of RF, as well as to apply this measure in rating changes in psychotherapy patients.

Future studies will be able to examine the factor structure of the RF construct using the RFQ items, thus allowing us to determine the validity of the construct. Moreover, cluster analytic procedures applied to

the factor scales can determine if subgroups of individuals exist with regard to reflective function. Recognizing variations in the level and areas of RF in different psychopathologies may enhance our understanding and treatment of these conditions.

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HELPLESSNESS IN DEPRESSION: THE UNBEARABLE RIDDLE OF THE OTHER

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From early on in his thinking, Sigmund Freud was attentive to the issue of helplessness in psychic functioning. Whereas Freud linked helplessness primarily to the affect of anxiety, later theoreticians like Edward Bibring conceptualized it as linked to depressive affects. The idea that helplessness is connected to depression is now well established in both psychiatry and psychology. Within a contemporary clinical psychoanalytic perspective, too, helplessness continues to be an important topic.

The framework in psychiatry and psychology within which helplessness is most often studied is the learned helplessness paradigm. Based on laboratory experiments with animals in the 1960s and 1970s, Seligman (1972) observed that animals experiencing inescapable events such as electric shocks, which no actions can control, develop dramatic symptoms of helplessness (e.g., passivity and despair). This phenomenon of "learned helplessness" has since then served as a paradigmatic model for studying human depression. Psychologists have elaborated the original learned helplessness model, which explicitly referred to psychoanalytic thinking, in a cognitive direction. The focus shifted toward the explanatory or attributional style a person uses in dealing with negative life events. A depressogenic cognitive style, in which negative events are interpreted internally in stable global terms, was considered an essential mediating variable for the development of depression. Recently, critical voices have pointed out the limitations of this dominant paradigm.

We studied helplessness using a different approach, that of narrative inquiry. We start, then, from a most interesting branch of research in current psychology, one unknown to many psychiatrists and clinical psychologists.

Narrative inquiry addresses the particular ways in which people use language and narratives in creating and elaborating their mental realities. A basic assumption is that people construct representations of the world by using speech. More specifically, narrative research assumes that language is the tool we use in building mental constructions of what is going on in the "real." By incorporating language,

and by using it the way we do, we organize reality and build a body of knowledge of how things are. In this respect, narrating is a most important human activity. By means of discourse, humans structure their subjective world and build frameworks organizing and expressing their understanding of aspects of reality. In this way, we attempt to *make sense* of our experiences and attribute meaning to what we call reality. Narrative inquiry considers the inner logic of how people narrate on this reality, or on aspects of it. Narrative inquiry maps aspects of reality as they are perceived and interpreted from the perspective of the narrating subject. Noteworthy is the implication that narrative analyses do not examine the extent to which narratives *adequately represent* an outside “objective reality,” or their consequent degree of correctness. People’s subjective use of narratives is what this research focuses on.

The study we report here addresses how a specific group of adolescents narrated their experiences of helplessness. By studying transcripts of semistructured clinical interviews of an hour or two with psychiatrically hospitalized youngsters, we map the logic of youngsters’ explanations as they talk about experiences of helplessness, and examine how they embed their helplessness in broader story lines. We studied interview data from forty youngsters, all hospitalized in a psychiatric inpatient unit at the time of the interviews. These youngsters were admitted to the hospital for serious (and often multiple) suicide attempts, school failure, and/or chronic escalating difficulties within their families. The research question we explored is, Can repetitive patterns or types of narrative construction be found in patients’ accounts of experienced helplessness?

In analyzing the data we first read the transcripts, systematically identifying specific accounts of helplessness. In identifying helplessness accounts we took into account two criteria: (1) the protagonist (the “I” referred to by the narrator) presents him- or herself as being or having been in a situation in which he or she does not grasp what is going on, or does not know how to manage the situation; (2) the protagonist gives accounts of overwhelming and upsetting affects offering evidence of mild to severe despair or embarrassment. Applying this definition we located all episodes in the interviews in which helplessness is expressed. Following is an illustrative example of an interview segment that we consider indicative of helplessness.

I couldn't concentrate on anything; I couldn't read anything. . . . I would end up getting so bored (component 2) that when I tried to do anything I couldn't force myself to do anything I'd just be really bored. . . . I was just really, really unhappy (component 2). . . . I sort of wondered why things weren't going right but I couldn't come up with any answers (component 1). . . . the logic gets sort of pushed aside and your emotions take over.

In the second stage of our analyses we located and highlighted the broader narrative contexts or episodes in which the helplessness accounts are embedded. In a third and last stage, we systematically studied all broader episodes, guided by the goal of gaining insight about the ways in which each particular account was represented.

In the 40 interviews, we detected 26 accounts of helplessness located in the stories given by 12 adolescents. As we studied the narrative lines that adolescents built around their accounts of helplessness, we discerned three types of narrative composition, which we characterize as three different story lines.

In our poster we discuss only the most dominant of these constructions. In this story line the protagonist links an experience of helplessness to disturbing encounters with others. Four sequences have been discerned in this narrative composition (see Table 1).

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Table 1. Sequential steps implied in Type 1 narrative construction around accounts of helplessness

Step 1:	Interaction with a significant other.
Step 2:	Significant other engages in an unexpected action.
Step 3:	Effort of understanding the other's action. Conclusion: an unspoken law has been transgressed / no stable law can be attributed to the other.
Step 4:	Confrontation with a riddle at the level of the other's intentions: he/she appears to be threatening.

First of all, an interaction takes place with someone the protagonist considers a significant figure—someone who is trusted and in whom one believes. Second, the significant other engages in an unexpected action. It is as if there is a short circuit in the relationship between the other and the protagonist, which causes tension in the latter. In a third step, an effort of understanding the other's action takes place. However, the action does not at all fit with the protagonist's ideas on how the other should be, and thus leads to outrage. The protagonist either concludes that an unspoken law has been transgressed, or that no stable law can be attributed to the other's behavior. In the fourth and last step, the

protagonist expresses ideas about the nature of the other. The protagonist feels confronted by a riddle or enigma at the level of the other's intentions. It is no longer obvious to the protagonist that the other has good intentions. He or she now appears to be threatening.

An example of this type of narrative construction around experiences of helplessness can be found in the interview with Billy (fictitious name), a youngster troubled by the divorce of his parents (step1): "My mother and father got divorced and I, like it was, I was in the middle." What he defines as disrupting is not the divorce as such, but the particular way in which his parents involved him in their troubles. "My mother or father they'd tell me something, about what was going on and everything" (step 2). The way in which they shared details of their conflict is painful and intolerable to him (step 3): "It was hard on me. . . . I don't want to have them telling me what's going on and on, I know it's, being divorced they don't get along, but they don't, like say, if my mother calls up I don't want my father to say, well, she was complaining about this or that, or my mother, if my father calls or something like that." Billy narrates that he was particularly disgusted by the idea that he ought to decide issues his parents couldn't decide, but that were in fact their responsibility (step 3). "I was supposed to make a choice between living between my mother or my father. I couldn't." After narrating the intolerable responsibility he says he is burdened with, Billy describes his father as intrusive (step 4): "It just seemed like he was getting on my back. I thought it was like picking on me."

This fourfold structure of narrative explanation could be discerned in the accounts of eleven participants. In total we observed it fourteen times in its complete version, and six times in a shortened version.

We conclude that in this dominant narrative construction a disturbing confrontation with another is pivotal: the other's intentions are obscure; the protagonist is frightened; but he or she does not know what to do. The protagonist's helplessness arises as a direct effect of not knowing how to manage the "unbearable riddle" in the midst of the other's intentions.

This result implies that therapeutic interventions with respect to helplessness should not focus solely on mental states, cognitive or affective. The function and the role of helplessness in the relationship with the other should especially be explored. An implication for future research is that types of narrative construction should be explored,

refined, and validated with different populations, psychiatric and other (e.g., school dropouts, delinquents).

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DEVELOPMENT OF THE DYADIC REFLECTIVE FUNCTIONING QUESTIONNAIRE (DRFQ)

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The principal aim of this project is to create a measure to assess dyadic reflective function in couple relationships—the ability to put oneself into one’s partner’s shoes—and to explore whether different degrees of theory of mind are related to, and are predictive of, attachment style security and relationship satisfaction.

Background

Reflective function, according to Fonagy and Target (1997), is a product of development whereby the child not only learns to respond to other people’s actions, but to how he or she conceives of them. The notion of reflective function has its foundation in Freud’s concept of *bindung*, or linking, and in Dennett’s thesis (1978, 1987) on predicting behavior. Reflective function is an inherently interpersonal process whereby an individual organizes his or her internal world according to the behavior and assumed mental states of others.

It has been demonstrated that the attachment system (Bowlby 1969, 1973, 1980) is directly connected to the capacity for reflective function and development of the self. Secure attachment allows for the freedom and security to develop the ability to think about what the other is going to do. Disorganized attachment, possibly as a result of trauma, directly affects the development of reflective function.

A wealth of studies have considered adult romantic attachment, beginning with the pioneering work of Hazan and Shaver (1987), who developed a categorical measure of romantic attachment based on the attachment categories of the Adult Attachment Interview (George, Kaplan, and Main 1985), but the role of reflective functioning in adult romantic relationships has yet to be explored. Following a brief review of why it is important to improve reflective function and how it is possible to do so, an abbreviated methodology concerning the development and piloting of the measure will be followed by some findings and a brief discussion.

Why Improve Reflective Function?

It is theorized that psychotherapy has the potential to correct impaired reflective function in patients, and that this can lead to improvements in their behavior and symptoms, and increase their resilience vis-à-vis future stressors. Fonagy and Target (1997) believe that a mentalization-focused therapy could enrich the practice of psychoanalysis.

With increased reflective function, impaired self- and object relations can begin to be transformed through new experiences with significant others, beginning with the therapist. This process is theorized to assist patients over time in developing intimate relations less infused with aggression; a greater capacity for intimacy; a more coherent sense of identity; a reduction in self-defeating and destructive behaviors; and general improvements in symptoms and functioning (Fonagy et al. 1998).

Mentalizing can help an individual achieve deeper experiences with others, and ultimately a life experienced as more meaningful. This is based on an enhanced ability to bridge the gap between one's internal and external worlds, allowing for a much more authentic existence (Fonagy et al. 1998).

How Is Reflective Function Improved?

Improving reflective function involves exploring, naming, and understanding one's emotional states, including the relationship between somatic experience and affect. This process can be facilitated by the analyst, by introducing other perspectives and reflecting on the mind of the patient, as well as on others who are close to him or her.

People unable to reflect on their own mental states will probably not be able to reflect on others'. The work of improving reflective function can be approached in various ways. For example, an analyst can work with transference interpretations to help the patient see and reflect on thoughts, feelings, and emotions with respect to the analyst.

Method

Following the construction and refinement of the Dyadic Reflective Functioning Questionnaire (DRFQ), a system of analysis was developed whereby groups of intersubject correlations and differences were used as scores. The following is a matrix of the five intersubject correlations and differences that the dyadic reflective functioning scores are based on, followed by a brief explanation:

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P1 v. P2 (P1)	["Feeling" adjectives]
P1 (P2) v. P2 (P1 [P2])	["Feeling" adjectives]
P1 (P2 [P1]) v. P2 (P1 [P2 (P1)])	["Feeling" adjectives]
P1 v. P2 (P1)	[How the subjects were]
P1 v. P2 (P1)	[How the subjects acted]

These five scores would represent the scores for Partner 2 (P2), because for each level he or she is being measured according to his or her ability to understand how his or her partner *felt*, *was*, and *acted* during a disagreement. The same scores would be calculated for Partner 1 (P1). The first three sets of correlations/differences pertain to four identical sets of "feeling" adjectives. Each correlation/difference measures the ability of one partner to put him- or herself into the other partner's shoes; to think about and reflect on how he or she felt in the disagreement, how the partner felt, and so on, measuring three orders of theory of mind.

The level of the first correlation/difference tells us the degree to which Partner 2 was able to accurately convey how Partner 1 felt during the disagreement, based on Partner 1's responses. The second and third correlations/differences become increasingly more complicated, in that a level of metacognition is added to each one: how your partner thinks you felt and how your partner thinks you think he or she felt.

The fourth and fifth sets of correlations/differences pertain to sections of the DRFQ designed to elicit information from the subject about how the dyad *were* during the disagreement and how they *acted*

during the disagreement. The crucial factor here is that individuals were not simply asked how *they* feel their partner *was* and *acted* during the disagreement; rather, they were asked to say how they think *their partners* would have responded as to how they *were* and *acted*.

The measure was piloted with a sample of 20 heterosexual couples alongside the revised Experiences in Close Relationships Questionnaire (ECR-R; Fraley, Brennan, and Waller 2000), which measures attachment style anxiety and avoidance. As predicted, there were strong negative correlations between performance on the DRFQ and attachment style anxiety and avoidance.

Following the pilot study, a larger study was conducted ($N = 96$ couples) in which participants completed the DRFQ alongside a battery of other self-report measures.

Results

Following are two examples of findings from subjects' DRFQ scores with questionnaires such as the Revised ECR-R, Brief Symptom Inventory (BSI; Derogatis 1975), and the Inventory of Interpersonal Problems – Circumplex (IIP-C; Alden, Wiggins, and Pincus 1990).

Female ECR-R Anxiety and Avoidant Scores with DRFQ Scores for how women thought men felt compared to how men said they felt. Women who rated higher in anxiety and avoidance were less positive in their appraisals of how men felt during the disagreement on the DRFQ: $Rho = -.423, p = .000$ (anxious); $Rho = -.389, p = .000$ (avoidant). It also appears that the more anxious women were, the bigger the difference in predicting how men felt on the DRFQ at the .05 level ($Rho = .216, p < .035$)

Table 1. Spearman's Rho correlation coefficient for female ECR-R anxiety and avoidance scores and DRFQ scores for how women thought men felt during the disagreement

Variable	Female Anxiety (N =96)	Significance (2-tailed)	Female Avoidance (N =96)	Significance (2-tailed)
Mean female on male	-.423**	.000	-.389**	.000
Fisher male on self / female on male	-.071	.490	.057	.579
Difference male on self / female on male	.216*	.035	.182	.075

*Correlation is significant at the .05 level (two-tailed)

**Correlation is significant at the .01 level (two-tailed)

Male and female IIP scores with DRFQ Scores for what men said women thought men felt and what women said men thought women felt. It appears that the higher men scored on interpersonal problems on the IIP, the lower the correlation between how they thought women said men compared to vs. how women said men felt on the DRFQ (Rho = $-.259$, $p = .011$).

Table 2. Spearman's Rho correlation coefficient for male IIP scores and DRFQ scores for what men thought women said men felt during the disagreement

Variable	Male interpersonal problems	Significance (2-tailed)
Fisher male on female on male / female on male	$-.259^{**}$.011
Difference male on female on male / female on male	.019	.851

*Correlation is significant at the .05 level (two-tailed)

**Correlation is significant at the .01 level

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Discussion

As predicted, findings from the main study demonstrate that participants with higher interpersonal problem scores on the Inventory of Interpersonal Problems–Circumplex (IIP-C) and higher general severity index (GSI) scores on the Brief Symptom Inventory (BSI) had weaker dyadic reflective functioning scores on the Dyadic Reflective Functioning Questionnaire (DRFQ). These findings corroborate similar findings by Fonagy et al. (1998), who assessed reflective function in adults using the Adult Attachment Interview and the Reflective Functioning Coding System.

Findings have also demonstrated that on the whole there is a relative absence of correlations between dyadic reflective functioning and demographic variables. This corroborates previous findings using the RF coding manual (Fonagy et al. 1998).

The DRFQ was assessed alongside a number of questionnaires to demonstrate its discriminant validity. These included the revised Eysenck Personality Questionnaire Short Scale (EPQ-RS; Eysenck and Eysenck 1991) and the Psychological Mindedness Scale (Conte et al. 1990). A relative absence of significant correlations was found.

A number of studies are currently under way, including a predictive validity study of the DRFQ assessing its ability to predict relationship satisfaction in couples a year after completing the questionnaire, and a

qualitative study with couples ($N = 4$ couples) who were in therapy, with a more in-depth look at the relationship between findings from the DRFQ and couple fit and couple functioning.

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