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Poor Metacognition in Narcissistic and Avoidant Personality Disorders: Four Psychotherapy Patients Analysed Using the Metacognition Assessment Scale

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Personality Disorders (PDs) are hypothesized to involve a decrement in the capacity to understand one's own thoughts and feelings. Patients may not, for example, recognize their own emotions or put together integrated representations of self with other. Some researchers have suggested that this deficit varies between the different PDs. However, empirical evidence that might confirm or disconfirm this hypothesis is scarce. The goal of the present research is to evaluate the metacognitive capacity in four participants, two with Narcissistic Personality Disorder and two with Avoidant Personality Disorder. Using the Metacognition Assessment Scale to analyse the transcripts of their first year of psychotherapy, we have found that three of the four participants displayed difficulties in recognizing their inner states and in linking them to the environmental and psychological causes behind them. There was, additionally, a milder deficit in the ability to integrate multiple images of self with other.

It has recently been suggested that deficits in metacognitive skills, that is, in the capacities to understand mental phenomena, to think about one's own thinking and the thinking of others, and to use that understanding to problem solve and master mental states may underlie many of the difficulties experienced by those with Personality Disorders (PDs) (Dimaggio & Semerari with Carcione, Nicolò, & Procacci, 2007; Fonagy, Gergely, Jurist, & Target, 2002; Ryle & Kerr, 2002; Semerari et al., 2003; Westen & Shedler, 2000). Some PD patients are described as egocentric, unempathetic and unable to attune to others (American Psychiatric Association, 1994; Shedler & Westen, 2004). Borderline patients are unable to build integrated self–other representations (Clarkin, Yeomans, & Kernberg, 1999), and Fonagy et al. (2002) describe the problems borderline patients have in mentalizing, i.e., accessing their inner experience and reflecting on it. According to Livesley (2003), a difficulty in constructing integrated self–other representations is a core element in PDs.

An inability to reason out one's mental states has been described in various psychiatric populations and observational contexts. Alexithymia, the inca-

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pacity to develop an articulate emotional language and to understand the inner and environmental causes of emotions, is found in patients suffering from various somatic and psychic disorders (Taylor, Bagby, & Parker, 1997). Patients in psychotherapy are unable to define their problematic experiences correctly, but as a treatment proceeds, it is possible for what were vague and diffuse forms of unease to become clear and recognizable emotions, which are later mastered if therapy is successful (Stiles, Meshot, Anderson, & Sloan, 1992).

Schizophrenic patients display impared metacognition, and this deficit is evidenced by a number of studies (Lysaker, Buck, Taylor, & Roe, 2007; Lysaker, Carcione et al., 2005; Lysaker, Davis et al., 2005; Lysaker, Dimaggio, Buck, Carcione, & Nicolò, in press) using the same instrument as the present paper, the Metacognition Assessment Scale (MAS; Semerari et al., 2003).

The recent evidence from many different studies using various methods—e.g., narrative analysis or neuroimaging—and involving various population types—e.g., normal subjects, PDs and schizophrenics—demonstrates that metacognition is a multifaceted skill based on a number of, at least partially, independent mechanisms (Harrington, Seiger, & McClure, 2005; Mitchell, Macrae, & Banaji, 2006; Saxe, 2005; Saxe, Moran, Scholz, & Gabrieli, 2006; Semerari, Carcione, Dimaggio, Nicolò, & Procacci, 2007; Semerari et al., 2003). On the basis of this literature, it is possible to hypothesize, as we do in this study, that the various PDs feature specific function impairments and that, at least in part, the functions impaired differ between one PD and another (Dimaggio & Semerari with Carcione et al., 2007; Dimaggio, Carcione, Petrilli, Procacci, & Semerari, 2005; Semerari, Dimaggio, Nicolò, Procacci, & Carcione, 2007; Semerari et al., 2003).

The question is fundamental for clinicians: on the one hand, if there is a metacognitive malfunctioning, the therapeutic task is to treat it, and on the other, if various patient categories have different types of malfunctioning, the task changes. For example, it is one thing to help patients to identify their inner states and another to help them put together integrated representations of self with other when these are instead confused.

Semerari et al. (2005) analysed transcripts of the first year of psychotherapy with four BPD patients using the MAS sub-scale 'Understanding own mind (UOM)'. There turned out to be a clear malfunctioning in all the patients, and this was restricted to the building of integrated representations of self with others and to differentiating between inner fantasies and outside reality. The patients had, on the other hand, the ability to access their emotional experience and to associate it with the events causing it; these BPD patients were not alexithymic. The study supports the idea that in BPD the malfunctioning involves only certain metacognition sub-functions (Semerari et al., 2003).

The goal of this work is to verify, through an observation of patients suffering from Narcissistic Personality Disorder (NPD) and Avoidant Personality Disorder (APD), whether the following hypotheses are valid or not: (a) PDs involve a metacognitive malfunctioning; (b) this hits specific sub-functions; and (c) it varies from one PD to the next. For this purpose, we are going to use the MAS UOM sub-scale to analyse the session transcripts of two NPD and two APD patients during the first year of therapy of each of them.

POOR METACOGNITION IN NARCISSISTIC AND AVOIDANT DISORDERS

Narcissists experience difficulty in accessing mental states, both their own and others', and in distinguishing certain forms of subjective experience. Kohut (1971) described their sensation of emptiness, devitalization and non-existence, and Modell (1984) maintained that the feeling of being detached from a relationship is typical of such patients and considers it a defence mechanism, with them living shut up inside a 'cocoon' and not communicating their affects in order to protect themselves from feeling emotional pain.

Linking attachment theory with Cognitive Analytic Therapy (Ryle & Kerr, 2002), Jellema (2000) notes that narcissists tend to devalue and exclude affects involved in the activating of attachment (see Bowlby, 1969/1982). The strategy that they use for mastering interpersonal problems is *defensive independence* (Gilbert, 1989). Krystal (1998) links alexithymia to narcissism. Narcissists would like a life based on their reasoning (think rather than feel), in which they feel superiority and indifference and pay no attention to affects and, in particular, to any sense of personal weakness. Narcissists' affectivity is switched off and any signals coming from the body get systematically ignored (Lowen, 1983). Action is guided rather by grandiose fantasies. When narcissists experience positive emotions, they get immediately exposed to intense negative

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affects that they find impossible to handle (Vaknin, 2003). Their defence is the repression of affects, which, as a result, do not have a conscious role in their lives, save when they are in a transitory overvaluation phase. A narcissist substitutes 'remembering' for 'sensing'.

Dimaggio and colleagues (Dimaggio & Semerari with Carcione et al., 2007; Dimaggio et al., 2002) maintain that narcissists: (a) are incapable of accessing desires that are not aimed at backing up their grandiose image; and (b) find it difficult to relate life episodes containing any reference to their emotions and prefer instead to expound their theory of the world. Their main metacognitive problem is considered to be: (c) their inability to associate their inner state with what has caused it, i.e., to link mental variables with each other, so that they are in fact alexithymic. They are, moreover, reluctant to display shame. To summarize, many authors have hypothesized that there is metacognitive malfunctioning in NPD, and the idea that these patients are alexithymic is widespread.

As regards APD, on the other hand, there is a controversy as regards both theory and empirical research. Millon (1981) maintained that avoidant persons are affectively flat and exert much effort in warding off unbearable cognitions and feelings. They are also deficient in their ability to experience pleasure (Millon & Davis, 1996). The parents of future APD sufferers often humiliate and reject them, and they are inflexible and interested only in building a faultless social image (Benjamin, 1996). Patients have negative recollections of the atmosphere at home, with family relationships that lacked any emotional warmth: the absence of affection from their parents makes the formation of an emotional vocabulary difficult, as the context is constrictive and humiliating and blocks any attempts at expression. Procacci and colleagues (Procacci, Dimaggio, & Semerari, 1999; Procacci, Popolo, Petrilli, & Dimaggio, 2007) explicitly assert that APD patients have a metacognitive malfunctioning, of which the main features are difficulties in acknowledging one's own thoughts and emotions and in identifying the causes behind one's emotions. In a sample of Bach, de Zwaan, Ackard, Nutzinger, and Mitchell (1994), an alexithymic trait correlated with both APD and NPD. Honkalampi, Hintikka, Antikainen, Lehtonen, and Viinamäki (2001) looked at a sample of patients suffering from Major Depression and found alexithymic features; where there was also a cluster C PD (including APD), the alexithymia continued after recovering from depression.

The most widespread opinion about APD patients is that they are capable of experiencing affects, although they make great use of avoidance strategies (Arntz, 1999; Beck & Freeman, 1990; Millon & Davis, 1996; Rettew, 2000). They cannot bear tasks or situations evoking disturbing thoughts and affects, and they use various levels of avoidance strategy against these tasks or situations: social, behavioural, cognitive and emotional. For example, they will postpone a task in order to reduce their anxiety or get distracted in order to not think unpleasant thoughts. These strategies lead them to have fragmented thoughts and disjointed verbal communication (Millon & Davis, 1996) and to seem emotionally confused. In this respect, however, APD patients are capable of feeling and describing their affects but actively keep their affects out of their consciousness. There has recently been a growing experimental proof that there is also an emotional avoidance, as regards both positive and negative affects. APD patients display a low level of novelty seeking (Wilberg, Urnes, Friis, Pedersen, & Karterud, 1999).

In a study designed to measure APD sufferers' levels of avoidance, it emerged that they avoid both positive and negative emotions and have social concerns about displaying emotions and negative beliefs about them. The main difference between patients with solely APD and those with APD plus Generalized Social Phobia is that the former show a greater tendency to avoid both positive emotions and negative beliefs about emotions. This type of mental functioning gets extended beyond social situations, and, as this is contrary to the DSM IV position, they insist on a redefinition of the diagnosis to take account of APD patients' general tendency to avoid cognitions and affects (Taylor, Laposa, & Alden, 2004).

To summarize, there are two separate positions as regards APD: some researchers maintain that patients find it difficult to read minds and others maintain that patients correctly identify their thoughts and emotions but keep their thoughts and emotions away from their consciousness for defensive reasons. The two positions are compatible on at least one point: if APD sufferers are successful at cognitive avoidance, then they are unlikely to conserve an emotion in working memory long enough to reason out what has caused it, and this leads to the difficulty in establishing links between mental variables seen in such patients. This difficulty is the core construct of alexithymia (see Taylor et al., 1997), seen in the samples of Bach et al. (1994) and Honkalampi et al. (2001).

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On the other hand, the opposite process could be true, with a primary difficulty in reading one's inner states provoking stress at any variation of arousal and encouraging the cognitive avoidance of thoughts and emotions, which are indistinct and, as such, difficult to master. This argument could be valid for NPD too, with the defensive mechanism that excludes affects provoking alexithymia, which in turn worsens the conscious coping with one's affects and encourages their repression.

However, there are no studies analysing patients during treatment for either NPD or APD. As an observational context, this is very different from that of patients' self-reports, a method that has been used to test the hypothesis of cognitive avoidance. In therapy, reflection about mental states takes shape during a prolonged relationship with a qualified and specialized person and promotes mind-reading (or reveals any difficulties the patient has in doing it). Our research, therefore, explores this new observational field.

Our hypothesis is that in both disorders there is a malfunctioning in the ability to identify inner states, in particular as regards linking experience to the variables causing it. The ability to integrate different aspects of self is probably impaired to only a moderate degree, considering that in both disorders, especially NPD, patients are nevertheless able to put together intellectualized descriptions of self providing a coherent self-image. On the other hand, a non-integration between different states of mind has been observed in NPD and APD (Dimaggio & Semerari with Carcione et al., 2007); for example, following a failure, a narcissist may have a moment of intense despair and lack of confidence in him/herself but then, immediately afterwards, sincerely deny having ever had any doubt. A moderate degree of difficulty in integrating is therefore to be expected in both disorders.

The ability to differentiate fantasy from reality is probably healthy or, at most, only moderately impaired in NPD and APD. Even if narcissists spend time dwelling over grandiose fantasies (Akthar & Thomson, 1982), they do not accept them undiscriminatingly as true. For APD, we are not putting forward any hypotheses about an impairment of differentiation, but the presence of an anxiety disorder, with patients having metacognitive beliefs in which they accept their fantasies about catastrophe as being true (Wells, 2000), could be associated with problems in this area.

We would expect that the malfunctioning is different from that in BPD: in a study of the latter by Semerari et al. (2005) using MAS, the functions for identifying inner states were in good order, but there was serious malfunctioning in the integration of the different aspects of self and the differentiation of fantasy/reality.

MATERIALS AND METHODS

Participants and Treatment

The participants were two women diagnosed with NPD (referred to as ANA and CAR) and two men diagnosed primarily with APD (AND and MAT). AND also had Dependent Personality Disorder traits (three criteria met) and MAT had Schizoid Personality Disorder traits (three criteria). All patients were receiving individual weekly Metacognitive Interpersonal Therapy (MIT) for PDs (Dimaggio & Semerari with Carcione et al., 2007) in a private centre from three different psychotherapists who had a minimum of 8 years of experience each.

All the participants were aged between 25 and 40 (average 30.25) and had at least a high school diploma. The diagnosis on axis II was done using SCID II for DSM IV (First, Gibbon, Spitzer, Williams, & Benjamin, 1997). The diagnosis on axis I was done by the therapists using DSM IV criteria and was confirmed by two expert clinicians, who were given the texts of the first four sessions. CAR suffered from Mild Recurrent Major Depressive Disorder, ANA suffered from dysthymia and AND suffered from Generalized Anxiety Disorder (GAD), while MAT received no diagnosis. All four patients had difficulty building or maintaining interpersonal relationships. MAT had the most serious problems: he had never had a partner, except for a long platonic relationship, had only one male friend and in his work as a clerk had found a role with no public contact. AND, after being held back at his high school by his strong feeling of shame and his sense of being excluded from the group, had enrolled at a university but had taken no exams; he had long been in love with a girl he idealized, but this was not reciprocated and he had not had any real relationships. The two female narcissists had good social and professional relationships, but both tended to break off any romantic ties, CAR because of her limited involvement and ANA in a state of anger. However, the overall romantic and relational life of the two narcissists was better than that of the two avoidants.

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MIT

MIT (Dimaggio & Semerari, 2003; Dimaggio & Semerari with Carcione et al., 2007) has been developed from constructivist roots (Kelly, 1955; Neimeyer & Mahoney, 1995; Perris, 1999) and is based on the assumption that PDs involve poor metacognition and that improving this should be one of the goals of treatment. The idea is that because of their difficulty in identifying their own thoughts, constructing an integrated representation of self with other and understanding the motivations that lead others in their actions, PD patients are unable to identify clear treatment goals or to create a valid therapeutic alliance for the solving of their problems. In fact, they have difficulty constructing therapists as persons who are helping them and working with them in a secure attachment context. At the same time, MIT is based on the assumption that PD patients are guided by a set of dysfunctional self–other relationship models and thus enter relationships with negative expectations and induce similarly problematic responses in others, e.g., competition or detachment in the case of narcissists and embarrassment or criticism in the case of avoidants. MIT aims primarily at improving metacognition, initially in the therapeutic relationship, during treatment sessions and then with a transfer of this newly acquired level of mind-reading skills to the social arena. The therapeutic relationship is also where patients on the one hand gain awareness of their dysfunctional relationship patterns and on the other start to construct new ones. The ideal sequence involves a patient starting by construing the therapist in accordance with his/her dysfunctional schemas. The therapist perceives the negative nature of the relationship—e.g., in the case of a narcissist, by noticing that he/she is competing with the patient—and takes action during sessions to improve the affective atmosphere. Once he/she has achieved this objective, he/she should help the patient to become aware of his/her problems and the interpersonal causes of them, and to develop new relational strategies in a cooperative atmosphere to solve them. At the same time, the patient and therapist should reflect together on the quality of the therapeutic relationship and the affects it involves, and work on modulating them.

Assessment and Rating

We collected the transcripts of all four patients' sessions during the first year of psychotherapy (total = 132). By the year end all the therapies were proving at least partly effective, as indicated by the improvements obtained on the BPRS (Nicolaou et al., 1995) and GAS (Endicott, Spitzer, Fleiss, & Cohen, 1976) scales (see Table 1). All the therapies continued after the period in question. Informed consent was obtained and patient anonymity has been protected by altering all relevant information in the transcripts.

Table 1. BPRS and GAS scores at the onset of treatment and after 1 year

Patient	BPRS assessment	BPRS first year	GAS assessment	GAS first year
ANA	31	20	65	81
CAR	44	35	75	81
AND	46	32	52	71
MAT	54	47	41	55

MAS is a rating scale that assesses metacognitive skills as manifested in an individual's verbalizations. MAS conceptualizes metacognition as the set of abilities allowing us to understand mental phenomena and work them out in order to tackle tasks and master states of mind that are a source of distress. It focuses on metacognitive functions, not on contents (i.e., beliefs about beliefs). This construct is based on the literature on mentalization and attachment theory (Fonagy et al., 2002; Main, 1991), Theory of Mind (Baron-Cohen, Leslie, & Frith, 1985), metacognition (Flavell, 1979) and metarepresentation (Sperber, 2000). MAS requires a rater to identify whether a participant has used or failed to use a function. In this study, as in that of Semerari et al. (2005), we use only the UOM sub-scale, which measures how much an individual is capable of recognizing, distinguishing between, integrating and reasoning out his/her own mental states.[1]

The sub-scale is composed of the following items: (1) *Identification*: the ability to distinguish, recognise and define inner states (emotions and cognitions, for example, 'I felt sad'; 'I imagined I was on my own in a tumbledown house'); (2) *Relating variables*, the ability to grasp the relationships among the separate components in a state of mind (for example, 'I was sad because I was thinking

[1]The other two sub-scales are 'UOM', which refers to the ability to reason out other's mind, and 'Mastery', which evaluates the ability to master problems of increasing levels of psychological complexity. Both these sub-scales therefore measure metacognitive skills not discussed in this study.

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about how I'd failed') and among the state of mind and its environmental and relational causes (for example, 'Linda's coldness made me think that she didn't care about me'); Identification and Relating Variables together make up the *monitoring* function; (3) *Integration*: the ability to reflect on different mental states and/or contents and put them in order of hierarchical importance; this is the function we use to describe and discuss our inner landscape, a dialogue within our narratives that gives a sense of self-continuity; and (4) *Differentiation*: the ability to recognize that the contents of representations are subjective and hypothetical events of a mental nature, different from reality and without a direct influence on it.

A scoring unit is a piece of speech by a patient between two interruptions by a therapist. A rater has to identify any attempt to exercise metacognition and, if this is the case, whether it has been used correctly and congruously or not: in the first instance we can talk of *success* (marked with a *yes*) and in the second of *failure* (marked with a *no*). If there is no clear attempt at using metacognition, then the marking is left blank. For instance, if a patient demonstrates an ability to report his/her own thoughts, a rater has to mark Identiticaction as a *yes*, and if the patient fails to relate two variables, the judge has to mark RelVar as a *no*. Consequently, successes and failures are evaluated separately for each function, and the scale does not evaluate the presence or absence of a skill, but only the presence of a success or failure in the ability to engage and use that function.

For the assessment, raters have to consider the following criteria: First, the patient's general representation of his/her state of mind. Raters have to ask themselves questions like: 'Do I have a clear idea of the thoughts and emotions constituting his/her mental state?' or 'Are his/her motivations and the immediate reasons for his/her behaviour clear to me?' A purely factual or behavioural description evoking an opaque representation suggests a monitoring failure; a representation that has emotional and cognitive elements but is chaotic and incoherent suggests an integration failure. Second, the use of verbal expressions suggesting the presence of metacognitive activity (I thought, I felt etc.). In this case, colloquial expressions or stereotyped phrases are not taken into account. Third, the evaluation of the kind of function stimulated by the therapist's questions.

Agreement was calculated with submission of two sample sessions from two Italian patients to three independent judges, who repeated the scoring about 6 months later. Initially, Kendall's W = 0.935 for the first patient and 0.931 for the second patient. In the second scoring it was W = 0.929 and W = 0.898, respectively ($p < 0.01$). Similar good levels of reliability were found in two samples of North-American male schizophrenics (Lysaker et al., in press, 2005). 22

MAS has been correlated with session transcript analysis tools measuring theoretically kin constructs, such as the Assimilation of Problematic Experience (APES; Stiles et al., 1992) and the Therapeutic Cycle Model (TCM; Mergenthaler & Bucheim, 2000). APES measures the capacity to identify and comprehend those mental experiences that are a source of suffering and the ability to cope with them. TCM measures a patient's ability to access his/her emotional experience and to reflect on it. Theoretically, there should be a high level of concordance between results using these tools and those using MAS. Glick, Salvi, Stiles, and Greenberg (2004), Carcione et al. (2004) and Mergenthaler (2004) analysed 12 psychotherapy sessions with a patient suffering from Major Depression (the case was drawn from the York Depression Project) using APES, MAS and TCM. The concordance between the three methods was significant: low scores on APES and limited levels of emotionality (signalled by a low score for the 'connecting' variable) on TCM coincided with a greater difficulty in self-reflecting, as measured by MAS. APES, TCM and MAS signalled that an increase in the patient's access to experience occurred in the same sessions. The concordance between MAS and TCM was similar in an analysis of the session transcripts of two other Italian patients from their first year of therapy (Mergenthaler, Nicolò, Carcione, Dimaggio, & Semerari, 2005). 23

As regards concurrent validity, MAS was correlated with the Scale to Assess Unawareness of Mental Illness (SUMD; Amador & Strauss, 1990). SUMD measures the insight of people with regard to their awareness of their disease. To be aware of their own mental disorder they need to have access to their inner states; we therefore assumed that the level of awareness of a disorder varied in line with the MAS UOM sub-scale. A significant correlation has been found between the two scales ($r = 0.27$, $p < 0.05$) in a sample of 61 adult men with DSM-IV diagnoses of schizophrenia ($n = 40$) or schizoaffective disorder ($n = 21$); MAS has also been linked to an impoverished psychosocial function, to deficits in neurocognitive abilities associated with other measures of metacognition (Lysaker et al., 2005) 24 and, most recently, to performance in affect recog-

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nition tests (Lysaker et al., in press) by persons with schizophrenia. MAS scores have been found to be correlated with performance on the Scale to Assess Narrative Development, a scale that measures personal narrative depth. As regards divergent validity, MAS appears not to be correlated with theoretically unrelated aspects of self-experience such as internalized stigma (Lysaker et al., 2007).

RESULTS

Identification

Identification was severely impaired in three of the four patients, the two NPD ones and the avoidant one with schizoid traits (MAT), as indicated by the fact that the raw scores for failures are higher than those for successes in numerous sessions with CAR and MAT and high for ANA (in session 3, they are higher than successes and she fails 15 times to identify her inner state) (Figure 1). In AND, the APD with dependent traits, the function is in good order: even in the session in which failures exceed successes (no. 8), the total of the former is nevertheless low (no. = 7).

With the three patients with this problem there is, however, a downward trend in failures; at the year end the two NPD patients almost always manage to identify their inner states, while MAT still has some difficulties. CAR and MAT have greater problems at the start and, whereas ANA after 6 months already has more successes than failures, they instead still have sessions in the second half of the year in which failures exceed successes (CAR: sessions 18, 23; MAT: sessions 16, 24, 28).

Relating Variables

The ability to link an inner state to the variables causing it is the one most severely impaired, in line with our hypothesis (Figure 2). In the first half of the year the two narcissists have many more failures than successes: CAR has numerous sessions (2, 3, 6, 11, 15, 16, 17 and 23) in which she is unable to associate a mental state with its causes, whereas with ANA, there is this same complete failure in session nos. 1, 3 and 10. In the second half of the year, as shown by the trend lines, both patients start to have more successes than failures. This change occurs first in ANA and then in CAR. But even at the end of the year this ability is still partially impaired.

Of the two APD patients, MAT displays an impairment that is even more serious than that in the NPD ones: for the whole year, he is almost always incapable of Relating Variables, and the treatment does not lead to him developing this ability. In AND, this function is in good order and he fails only occasionally (at most three times, in sessions 3 and 17). The Relating Variables function is therefore seriously impaired in three patients out of four.

Differentiation

Differentiation does not need to be exercised frequently, but during sessions when the patients do need to decide if their thoughts are true descriptions of reality or fantasies, they manage to do this effectively (Figure 3). In one session, (9) ANA fails four times out of four, but otherwise she is able to differentiate satisfactorily.

MAT also hardly ever exercises this skill, while AND's results can be considered almost excellent, as he fails only rarely throughout the year. In general, the ability to distinguish fantasy from reality is in good order in this group of patients, even if the function is not often called for.

Integration

Integration is impaired in CAR (see Figure 4), with numerous sessions in which she fails systematically during the first half of the year. As the therapy proceeds, the trend line indicates an improvement. The other NPD patient, ANA, displays only a minimal degree of impairment, with successes substantially exceeding failures. As with *Differentiation*, ANA makes little use of the *Integration* function.

As regards the APD patients, MAT's failures exceed his successes, but the number of occurrences is generally low (highest score = 4 in session 6). The trend line indicates an improvement, with a resolution at year end. The exception is the period between sessions 25 and 30, in which he almost always fails. AND uses this function very little, but when he does there is a certain degree of malfunctioning (sessions 1 and 17). He tends to have the same level of failures and successes throughout the year. Although this function gets exercised rarely, nevertheless, at the year end all the patients are successfully integrating various representations of self with other.

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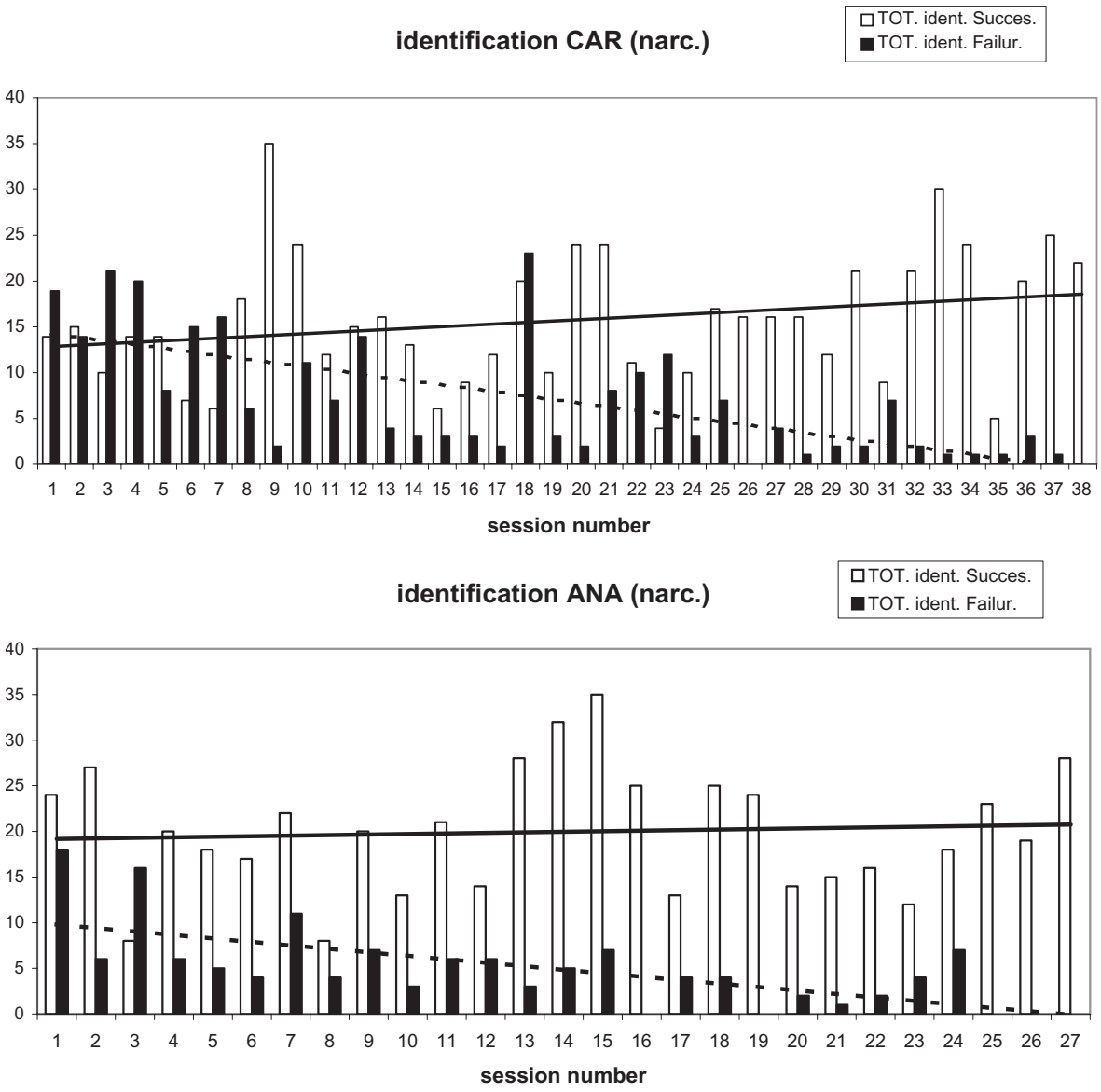

39 Figure 1. Failures and successes in Identification during the first year of psychotherapy
Note: *Axis x* indicates the session number, and *axis y* indicates the raw scores for successes (yes) and failures (no) in monitoring inner states noted in each session. The solid and the dotted linear regression lines indicate the trend in successes and failures, respectively.

DISCUSSION AND CONCLUSION

Let us discuss our initial hypotheses one by one. The first was that there is metacognitive malfunctioning in NPD and APD, and this is supported by the data: three of the four patients display a metacognitive malfunctioning, as indicated by the high level of failures in the various functions. They find it difficult to reflect upon their own mental states, even when pressed by a therapist to do so. The fourth patient has only a minor degree of malfunctioning, restricted to the ability to integrate various representations of self with other.

The second hypothesis was that the impairment is not uniform but restricted to specific subfunctions. We expected an impairment of monitoring, and especially of the ability to find links

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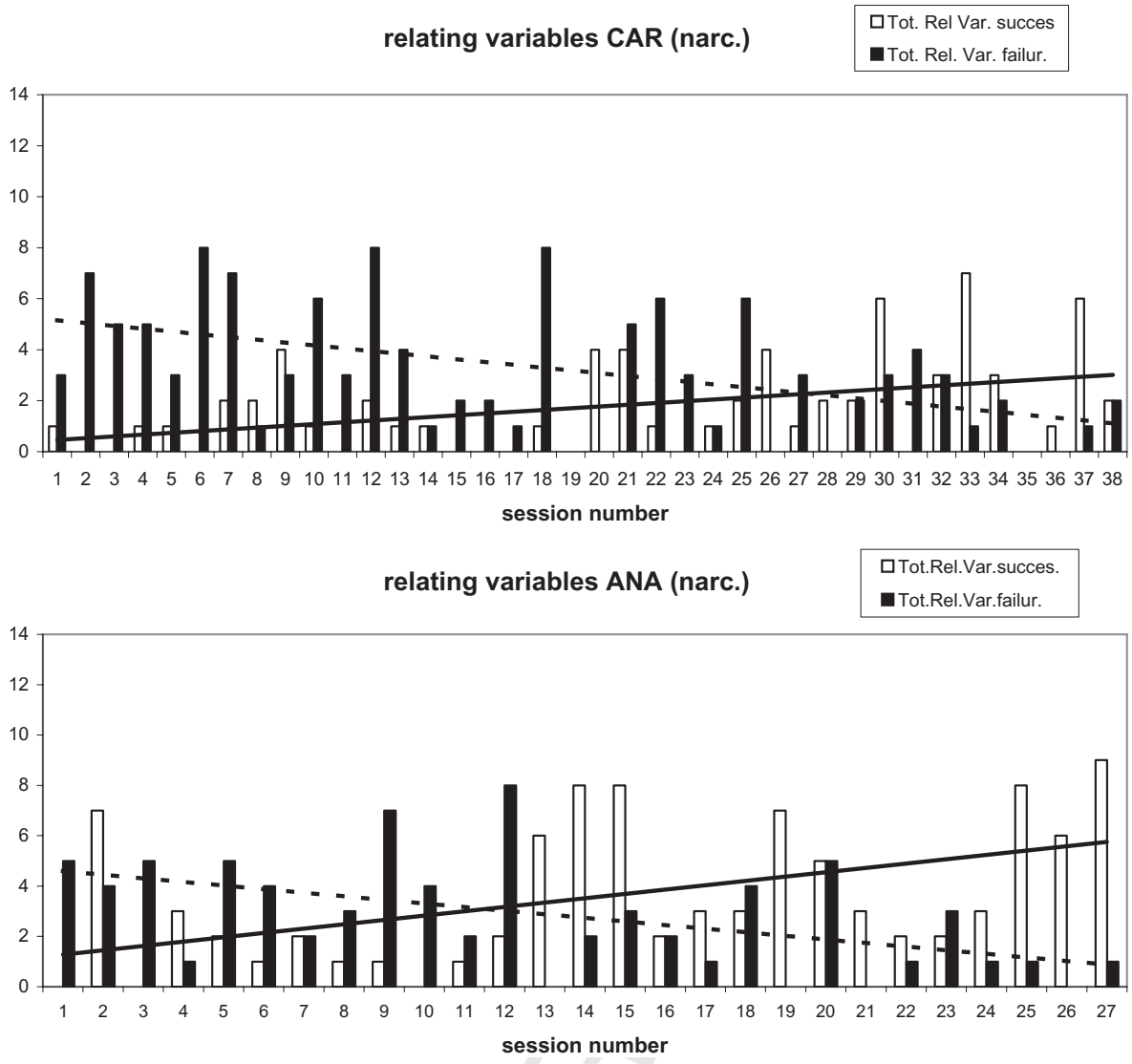

Figure 2. Failures and successes in Relating Variables during the first year of psychotherapy
Note: The *axis x* indicates the sessions' number, and the *axis y* indicates the raw scores for successes (yes) and failures (no) in relating inner experience to casual events noted in each session. The solid and the dotted linear regression lines indicate the trend of success and failure, respectively.

explaining inner experience (relating variables). The data support this hypothesis: three out of four patients have problems with Identification, which are even more serious as regards Relating Variables. The fourth patient, AND, does not have any significant impairment. This is contrary to our hypothesis, but it is possible that this can be explained by his dependent trait. Dependent patients are, in fact, fully capable of identifying their inner states, for example, the need for attention, protection or help, and a feeling of fragility and incapability. In fact, on the one hand, AND has difficulty identifying some thoughts or affects. For example, only after several months of treatment does he realize that he has no real desire to go on with his university studies but is just doing it to fit in with his family's wishes. At this point, he leaves the university and finds a job. However, these impairments to self-reflectivity are covered up by his dependent aspect—a strong ability to identify

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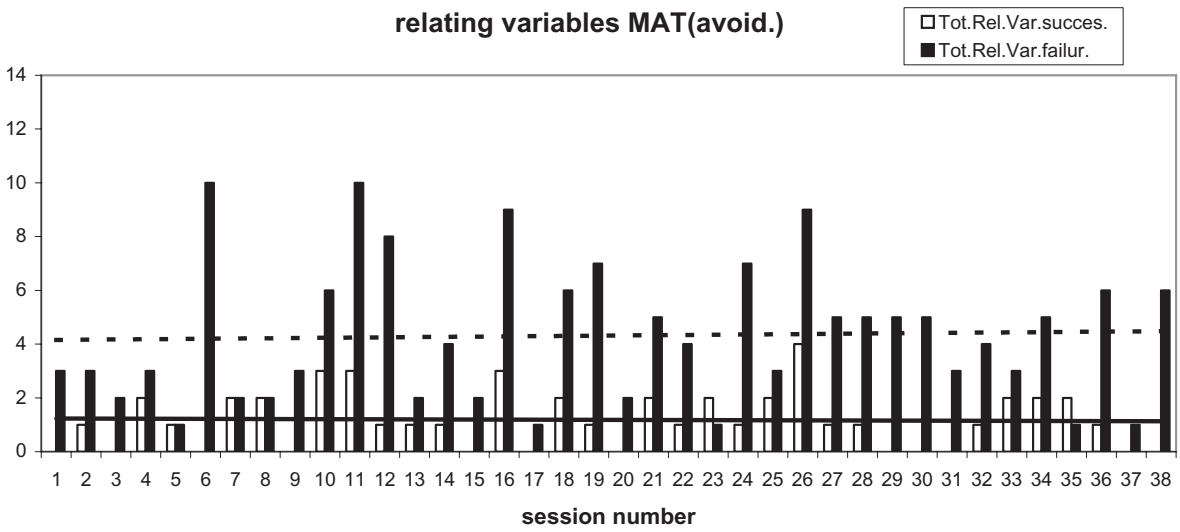

41 Figure 3. Failures and successes in Differentiation during the first year of psychotherapy
Note: The *axis x* indicates the sessions' number, and the *axis y* indicates the raw scores for successes (yes) and failures (no) in discriminating between one's own representation of reality on one hand and the external world on the other. The solid and the dotted linear regression lines indicate the trend of success and failure, respectively.

his need for help and support—which he expresses very clearly. MAT, on the other hand, with his schizoid trait, which is hypothesized to involve an even lower level of affects than APD (Millon, 1981), is the most serious of the four patients: he is the only one who still has Identification problems (Figure 1) and does not get better at Relating Variables (Figure 2) by the year end.

The ability to differentiate gets exercised more rarely in the four patients (Figure 3): during the year, the four patients had little need to distinguish between fantasy and reality, indicating probably that there was no impairment of this function or perhaps that they had no reason to exercise it. This is in any case consistent with the idea that NPD and APD sufferers do not find it particularly difficult to distinguish between fantasy and reality. Even the presence of a GAD in AND is not associated with an impairment of this function.

The data on Integration require some extra explanations before being discussed. By its very nature, this function gets marked less frequently because there need to be session extracts of a certain length, giving patients the opportunity to put together several representations of self with other (whether successfully or not) for it to be observed. As a result, even if the raw scores are low, it is correct to assert that there is a certain degree of impairment in all four patients. This is consistent with the idea that the impairment of the integration of different representations of self with other is similar in all the PDs (Livesley, 2003). Moreover, Dimaggio and colleagues (Dimaggio et al., 2002; Dimaggio & Semerari with Carcione et al., 2007) and Procacci et al. (2007) note that there is a certain degree of dissociation between states of mind in NPD and APD, respectively. In line with our hypothesis, however, the impairment of Integration is less serious than that of Monitoring and, especially, of Relating Variables: all four patients have more successes than failures, even in the initial stages of their therapy.

The other hypothesis is that the metacognitive malfunctioning is different for each PD. If we make a comparison with the data obtained by Semerari et al. (2005) in their sample of four BPD patients analysed with MAS, there is a clear difference. None of these had either Identification or Relating Variables impairments, unlike the NPD and APD patients analysed by us. On the contrary, all four BPD sufferers had a serious difficulty in Differentiating—a function utilized less often and almost always successfully by our sample—and this difficulty continued into the second half of the first year with all of them. Lastly, the four BPD patients had very serious Integration problems, which were more pervasive than those in the patients considered here: only one of them showed any improvement in this skill after 1 year, unlike the four patients in our study, who were all integrating successfully by the year end.

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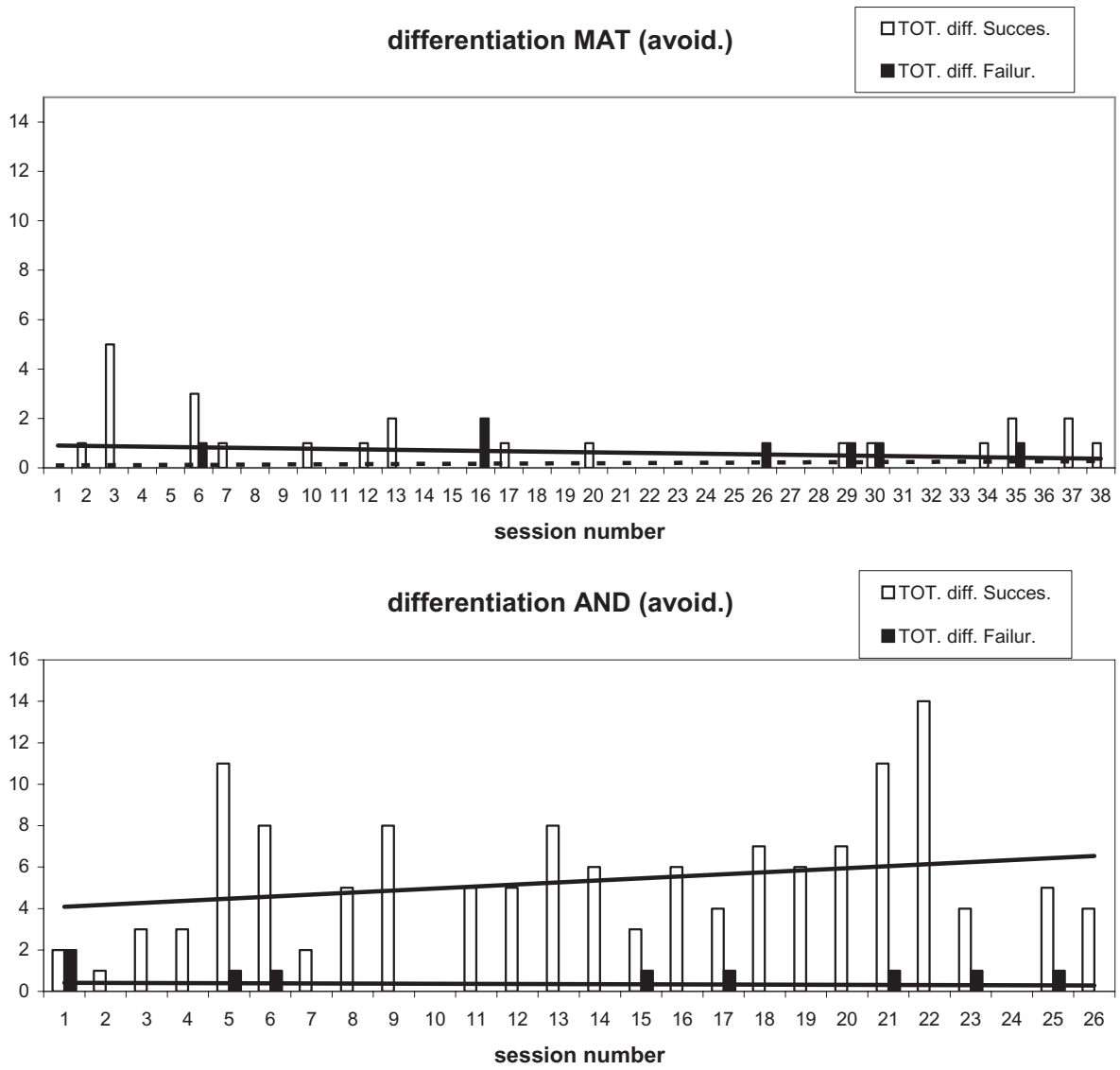

Figure 4. Failures and successes in Integration during the first year of psychotherapy
Note: The *axis x* indicates the sessions' number, and the *axis y* indicates the raw scores for successes (yes) and failures (no) in constructing an integrated representation of different images of the self with the others, or in building up a clear and consistent narrative of one's own autobiography. The solid and the dotted linear regression lines indicate the trend of success and failure, respectively.

To summarize: the impairment in the two NPD patients and in one APD sufferer (with schizoid traits) concerned Identification and Relating Variables. All four patients had only a modest Integration disorder. In the four BPD sufferers, on the other hand, the impairment involved the Differentiation and Integration functions, the latter being disturbed much more seriously than in the sample analysed here. The different (more limited) level of impairment found in AND can be explained by his dependent trait, which may have been mitigating his metacognitive malfunctioning (Carcione & Conti, 2006).

The hypothesis that NPD patients are alexithymic (Dimaggio et al., 2002; Jellema, 2000; Krystal, 1998) is backed up by our data: the

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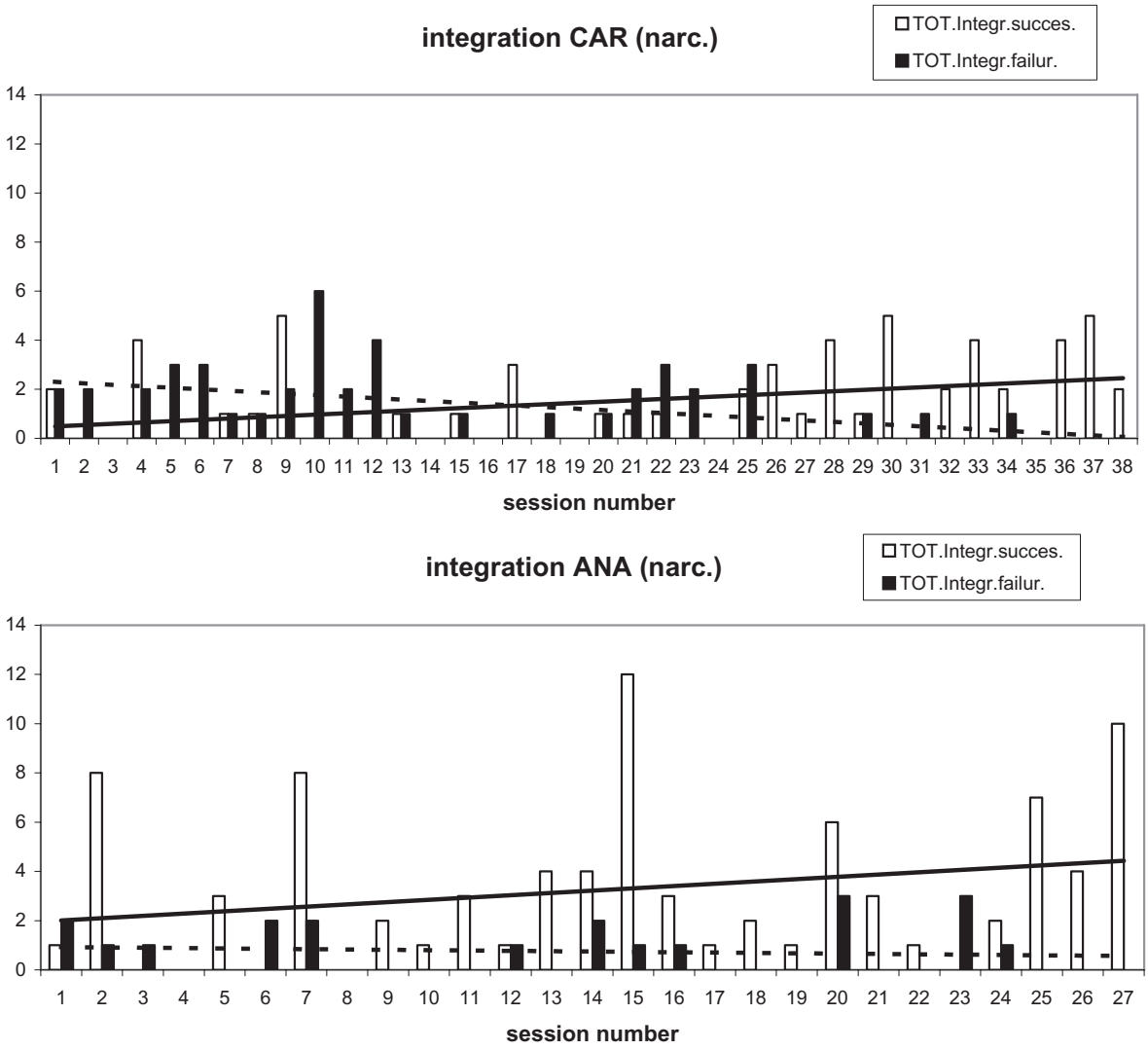

Figure 4. (*Continued*)

patients had a significant difficulty in reflecting on their inner states. As regards APD, the malfunctioning hypothesized by Procacci et al. (1999) was found on a large scale in only one of the two patients. Overall, the data appear promising, and we are considering the need to extend the study to patients coming from other cultures and treated by therapists from other schools to see if the malfunctioning we found is repeated in these cases too. Another important reason, moreover, for widening the sample is to find out whether or not the results we have so far are not attributable to idiosyncrasies of the patients studied.

Although the results of our study are encouraging, the limitations are many and significant. The main limit to this research is the lack, as regards MAS, of an evaluation of a sample of normal subjects so that failures are identified exclusively by pinpointing dysfunctions during sessions and by a higher percentage of failures than successes. However, when MAS was used with two patients diagnosed only for depression on Axis I—a woman treated by a therapist from a similar school to the one of our study, and a North American woman treated by a therapist with a humanistic orientation (Greenberg & Watson, 1998), no permanent

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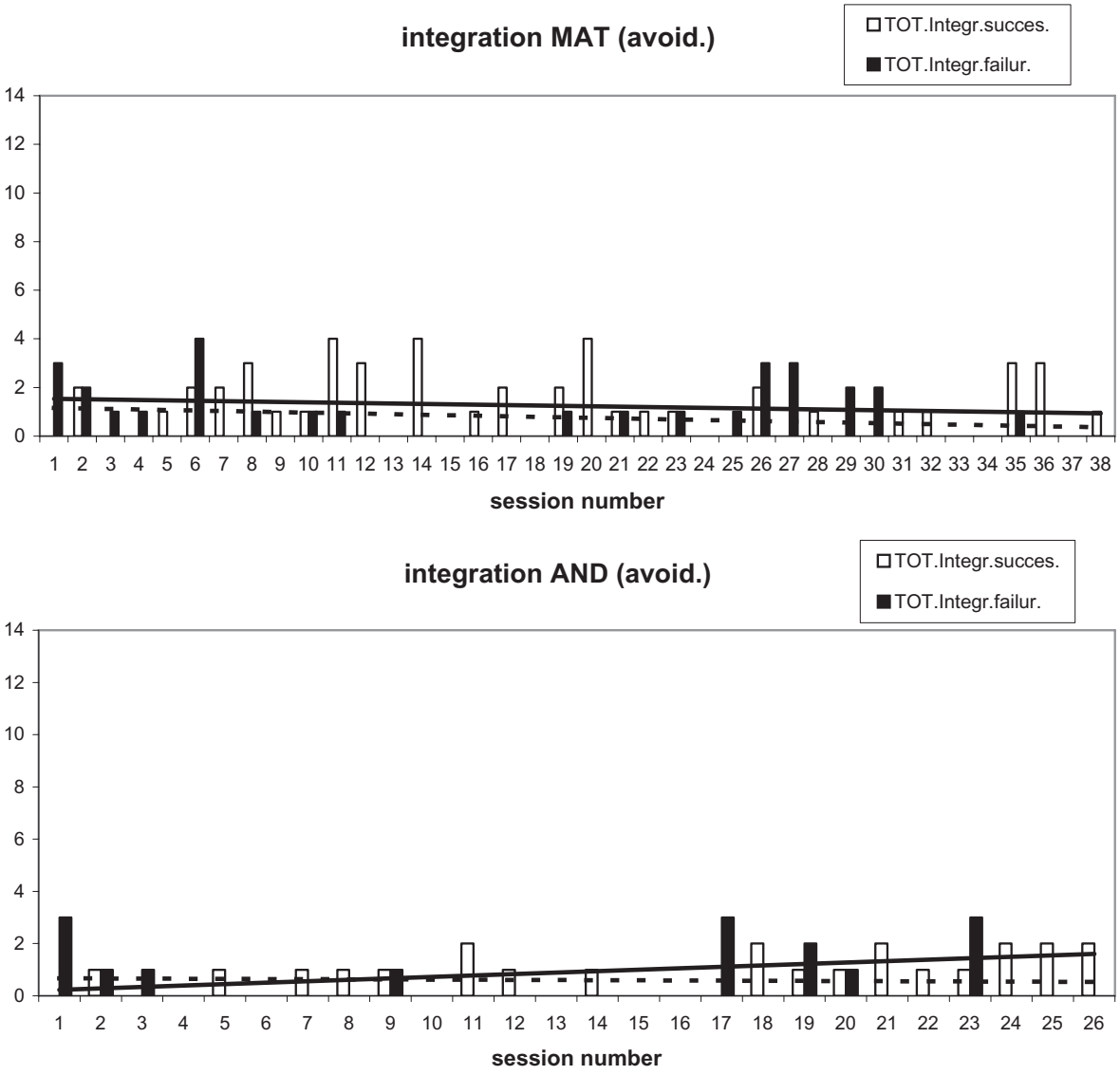

Figure 4. (*Continued*)

malfunctioning was found. Both patients had excellent monitoring and relating variables skills and had only modest integration and differentiation impairments (in the latter case probably attributable to pessimistic fantasies taken as true), which diminished significantly between the 6th and 10th sessions and were close to disappearing by the end of the first year of treatment (Carcione et al., 2004; Mergenthaler et al., 2005).

Another limitation is the size of the sample, composed of only four individuals, all treated, moreover, using the same therapy model. It is impossible both to tell whether or not patients treated with other therapies display the same metacognition impairment and to generalize the data obtained to other narcissistic or avoidant patients. Moreover, in one avoidant patient out of two, the results did not confirm the hypothesis.

Single case studies are prone to this limitation, but on the other hand, they have the merit of producing intensive descriptions of patients, with which it is possible to formulate observations that

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can be verified on a wider scale. Rather than furnishing conclusive data, therefore, our study provides the foundations for analysing whether or not NPD and APD really do involve poor self-reflection and whether or not improving it is a significant therapeutic factor.

As to the question of whether or not APD patients' monitoring difficulties are ascribable to a metacognitive dysfunction (Procacci et al., 2007) or an avoidance strategy (Beck & Freeman, 1990; Millon, 1981; Taylor et al., 2004), our study does not contain any decisive evidence. In MAT's and CAR's extracts, they appear unable to describe their inner states rather than tending to exclude them defensively, but this is not enough to settle the question. If other psychotherapy patients were to display a similar metacognitive malfunctioning to MAT's (and to the NPDs'), it would become necessary to go into the theoretical problem in detail and evaluate if the emotional flatness typical of NPD and APD derives from a metacognitive incapacity, a defence mechanism or a vicious circle between the two.

Lastly, the dysfunctional skills improved in all the patients during their treatment, except for Relating Variables in MAT (who was also the most seriously ill patient and the one who made less progress during the first year of treatment). This finding is in line with that of the study by Semerari et al. (2005) involving BPD patients and reinforces the hypothesis (Fonagy et al., 2002; Semerari et al., 2003) that when a psychotherapy is effective, it fosters patients' metacognitive skills. There is, in particular, support for the hypothesis of a development of selectively impaired skills (Dimaggio et al., 2007; Semerari et al., 2005), and this is worthy of further investigation.

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