Coping Style in Schizophrenia: Associations With Neurocognitive Deficits and Personality

by Paul H. Lysaker, Gary J. Bryson, Kriscinda Marks, Tamasine C. Greig, and Morris D. Bell

Abstract

It is widely recognized that persons with schizophrenia tend to cope with stress in a relatively avoidant and ineffectual manner. Less is understood, however, about the factors that affect coping style in schizophrenia. To determine the extent to which various neurocognitive deficits and personality dimensions are related to coping style in schizophrenia, measures of visual memory, verbal memory, executive function, neuroticism, and extroversion were correlated with concurrent self-reports of preference for a range of active and avoidant coping strategies. Participants were 71 persons with schizophrenia spectrum disorders enrolled in outpatient psychiatric care. Stepwise multiple regressions indicated that neurocognition and personality were independently related to coping style. Specifically, higher levels of various forms of neurocognitive impairment and neuroticism predicted greater reliance on passive avoidant strategies and reduced reliance on active problem solving. Higher levels of extroversion were related to greater social support seeking. Implications for understanding the genesis of psychosocial dysfunction and for the development of rehabilitative interventions are discussed.

Keywords: Schizophrenia, neurocognition, personality, coping, psychosocial function.


Neurocognition and Coping

Neurocognitive deficits have been theorized to be a major cause of psychosocial dysfunction in schizophrenia (Green 1996; Green and Nuechterlein 1999). They have been reported to predict deficits in work behavior (Lysaker et al. 1995b; Bryson et al. 1998), affect recognition (Bryson et al. 1997), community tenure (Lysaker et al. 1996), activities of daily living (Velligan et al. 1997), rehabilitation outcome (Lysaker et al. 1995a), and interpersonal relationships (Brekke et al. 1997; Addington and Addington 1999).

We hypothesize that cognitive impairments may, in addition to compromising the ability to respond to indi-
individual problems, affect coping at the level of style. We reason that cognitive deficits, by virtue of their negative impact upon the ability to effectively appraise and think about stressors (Penn et al. 1993; Corrigan and Toomey 1995), may lead to a coping style characterized by resignation and avoidance. In other words, a passive, ineffectual coping style may represent a learned response to chronic failures that are themselves the natural consequence of cognitive deficits. To date, research supporting this view includes a limited number of studies linking indexes of attention and related functions to coping responses. Pallanti et al. (1997) have found that persons with schizophrenia who relapsed in the absence of external stressors had more subjective complaints about cognition, lower P300 amplitude (a measure thought to be indicative of fewer cognitive resources), and more dysfunctional non-problem-focused coping strategies. Van den Bosch and Rombouts (1997) performed a factor analysis of a combined depression and schizophrenia group and found that subjective and objective measures of impairments in attention were related to poorer problem solving, heightened avoidance, and fewer help-seeking coping strategies. Finally, Ventura et al. (1999) have reported that poorer performance on a measure of sustained attention predicted less cognitively oriented problem-solving strategies.

We know of no studies, however, that have addressed the effects on coping of impairments in higher order cognitive functions such as visual memory, verbal memory, or executive function. Additionally, previous studies have tended to unidimensionally assess coping, thus giving little information about how various domains of coping may be differentially related to cognition.

### Personality and Coping

Personality dimensions represent temporally stable (Von Dras and Siegler 1997) genetically influenced (Jang et al. 1996) covariation among a pattern of interrelated traits (McCrae and Costa 1997). To date, two personality dimensions have been closely linked with coping style in the general population: extroversion, which is composed of traits such as gregariousness, assertiveness, warmth, and outgoingness; and neuroticism, which is composed of traits such as emotional instability, self-consciousness, and vulnerability (McCrae and Costa 1997). Extroversion has been predictive of increased social support seeking (Rim 1987; Amerikhan et al. 1995), while neuroticism has predicted a greater reliance on passive and avoidant coping strategies (McCrae and Costa 1986).

Based upon this literature, it seems reasonable to hypothesize that a similar relationship exists between coping and personality style in schizophrenia. Personality differences have been detectable among persons with schizophrenia (Donat et al. 1992; Tien et al. 1992), appear to predate illness (Hogg et al. 1990), and are relatively stable after illness onset (Kentros et al. 1997). A large and older literature further indicates that people with schizophrenia tend to have higher levels of neuroticism and lower levels of extroversion than either members of the general population or others with less severe forms of mental illness (Berenbaum and Fujita 1994; Gurrea et al. 2000). The personality traits of extroversion and neuroticism have also been linked to symptoms (Lysaker et al. 1999a, 1999b) and to impairments in function (Lysaker et al. 1998b) in schizophrenia. To date, however, there have been no formal studies examining whether a similar relationship exists between personality and coping in persons with schizophrenia, as has been found to exist between personality and coping does in nonpsychiatric populations. Do people with schizophrenia have a passive and avoidant coping style because of their generally lower levels of extroversion and higher levels of neuroticism? If so, is personality related to coping style independent of neurocognition?

### Hypotheses

To explore the relationships of coping to neurocognition and personality, the current study examined the correlations between various domains of coping; three forms of higher order neurocognition previously predictive of level of function in schizophrenia, visual memory, verbal memory, and executive function; and two personality dimensions, extroversion and neuroticism.

To measure coping, we employed the Ways of Coping Questionnaire (WCQ, Folkman and Lazarus 1988), a widely used instrument that assesses the relative degree of preference for multiple coping strategies. We made three sets of general predictions. First, we predicted that poorer performance on neurocognitive testing and neuroticism would predict greater preference for two WCQ coping dimensions, (1) escape avoidance and (2) distancing, measures of the tendency to actively and passively avoid stressors, respectively. Here we reasoned that a preference for avoidant strategies might have naturally developed in the wake of frequent failures to problem-solve secondary to any of a number of neurocognitive impairments. In other words, perhaps specific forms of cognitive impairments decrease the frequency of success when problem-solving, leading persons to invest less energy in active problem solving. We hypothesized that neuroticism would be linked to avoidant strategies because of the research (McCrae and Costa 1986) sug-
gesting that the emotional instability that defines neuroticism tends to make persons in the general public withdraw in the face of an overwhelming emotional response to stressors.

Second, we predicted that higher levels of deficits on neurocognitive testing would be associated with a reduced preference for the WCQ coping dimensions (1) planful problem solving and (2) positive reappraisal. Both of these dimensions represent active responses to stressors. Planful problem solving reflects the tendency to formulate a behavioral solution, and positive reappraisal assesses the tendency to reformulate stressors previously seen as negative, as positive events. Thus, again we reasoned that more severe cognitive impairments on the various tests administered may decrease rates of success of problem solving, leading people with schizophrenia to rely on those strategies less often. We hypothesized that neuroticism would be negatively linked to these active problem-solving strategies, again reasoning that the higher levels of neuroticism might make stressors emotionally overwhelming, leading to less frequent attempts to confront them directly.

Third, we predicted that lower levels of neurocognitive impairment and higher levels of extroversion would predict greater preference for the WCQ dimension social support seeking. Here, we reasoned that graver impairments on the neurocognitive tests administered would make it difficult to understand the complex social rules that govern interpersonal interactions, leading persons with greater deficits to be less likely to seek social interaction when faced with stress. We hypothesized that more extroverted participants would be more likely to seek social support, given research that such a relationship exists in the general population.

Of note, because the neurocognitive and personality domains measured represent conceptually separate phenomena and have been found to be relatively unrelated in past studies (e.g., Lysaker et al. 1999b), we hypothesized that the relationship of neurocognition to coping would share little variance with the relationship of personality to coping.

Methods

Participants. Participants were 71 persons with DSM-IV (APA 1994) diagnoses of schizophrenia or schizoaffective disorder enrolled in a larger study of the benefits of vocational rehabilitation for persons with schizophrenia. Participant characteristics are presented in table 1.

All were initially recruited from the outpatient psychiatry services of a Department of Veterans Affairs Medical Center or a community-based mental health center. All participants were in a postacute phase of illness, as defined by having no hospitalizations or changes in medication or housing in the month prior to entering the study. Excluded from the study were participants with a history of mental retardation. Participants were also excluded if they were so severely thought disordered that it was highly unlikely that they could validly understand the directions and content of the coping questionnaire. To operationalize severe thought disorder, we used ratings of bizarre and idiosyncratic thought on the Gorham Proverb Test (Marengo 1986). Specifically, we excluded participants with responses rated as severely bizarre or idiosyncratic on 3 or more of the 12 proverbs on this test. This was chosen as a cutoff based on a priori reasoning that if 25 percent or more of the proverb test was responded to in such a debilitated fashion, the validity of results of the coping questionnaire would be dubious. The data from five participants in the study were excluded using this rule.

Instruments. The WCQ (Folkman and Lazarus 1988) is a self-report instrument that asks participants to call to mind a recent stressor and then rate how often they have used 66 different coping strategies. Individual scale scores are derived from specific items that are summed and divided by a total score to provide a relative score. This relative score then reflects participants' relative preferences among a set of discrete coping strategies. Relative

Table 1. Background characteristics (n = 71)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, mean ± SD</td>
<td>42.4 ± 8.5</td>
</tr>
<tr>
<td>Education, mean ± SD</td>
<td>13.3 ± 1.9</td>
</tr>
<tr>
<td>Lifetime psychiatric hospitalizations, mean ± SD</td>
<td>9.1 ± 12.1</td>
</tr>
<tr>
<td>Age at first psychiatric hospitalization, mean ± SD</td>
<td>25.0 ± 7.5</td>
</tr>
<tr>
<td>Sex, n</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>16</td>
</tr>
<tr>
<td>Male</td>
<td>55</td>
</tr>
<tr>
<td>Ethnicity, n</td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>27</td>
</tr>
<tr>
<td>Latino/a</td>
<td>4</td>
</tr>
<tr>
<td>White</td>
<td>40</td>
</tr>
<tr>
<td>Diagnosis, n</td>
<td></td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>50</td>
</tr>
<tr>
<td>Schizoaffective</td>
<td>21</td>
</tr>
<tr>
<td>Antipsychotic medication, n</td>
<td></td>
</tr>
<tr>
<td>Typical</td>
<td>25</td>
</tr>
<tr>
<td>Atypical</td>
<td>51</td>
</tr>
</tbody>
</table>

Note.—SD = standard deviation.
scores are generally preferable because, among other things, they control for response bias.

For this study, the relative scores for five subscales were calculated: distancing, escape avoidance, planful problem solving, positive reappraisal, and seeking social support. Distancing describes cognitive efforts to passively detach oneself and to minimize the significance of the situation and includes items such as “I made light of the situation” and “I went on as if nothing had happened.” Escape avoidance describes wishful thinking and behavioral efforts to actively escape or avoid the problem and includes items such as “I hoped a miracle would happen” and “I tried to make myself feel better by eating, drinking, smoking, using drugs, or medication, etc.” Planful problem solving describes deliberate problem-focused efforts to alter the situation, coupled with an analytic approach to problem solving, and includes items such as “I knew what had to be done, so I doubled my efforts to make things work” and “I made a plan of action and followed it.” Positive reappraisal describes efforts to create positive meaning by focusing on personal growth and includes items such as “I changed or grew as a person in a good way” and “I found new faith.” Seeking social support describes efforts to seek informational support, tangible support, and emotional support and includes items such as “I talked to someone to find out more about the situation” and “I talked to someone who could do something concrete about the problem.”

The authors of the instrument created the individual scales through the use of factor analytic methods. Internal consistency of relative scale scores has been assessed using Cronbach’s alpha and reported to range from 0.61 to 0.79. Evidence of predictive validity includes other studies showing that preferences for positive reappraisal and planful problem solving on the WCQ tend to be related to successful outcomes and positive affects, while preferences for distancing were related to negative outcomes and negative affects (cf. Lazarus 1993). Lastly, in a study using a different sample, we found that, as predicted, persons with schizophrenia report having a reduced preference for planful problem solving and a greater preference for distancing, escape avoidance, and positive reappraisal (Lysaker et al. 2003b).

The Wisconsin Card Sorting Test (WCST; Heaton et al. 1993) is a neuropsychological test in which subjects sort cards that vary according to shape, color, and number of objects depicted. Subjects are told to match cards to “key” cards but not told the matching principle, which changes after 10 correct responses. This study uses one score, the total number of categories correct, a score that is probably the best global indicator that a participant is able to get a set, hold that set, and then shift when necessary. The WCST was chosen for this study because of its well-established links to function in schizophrenia (e.g., Green 1996).

The Wechsler Memory Scale–Revised (WMS–R; Wechsler 1987) is a battery of subtests that assesses memory function. To measure verbal and visual memory for this study, we chose the following specific subtests: the Logical Memory Test immediate recall (LMT) and the Visual Reproduction Test immediate recall (VRT). The LMT is a test of verbal semantic memory that presents participants with two stories, each one paragraph long, and then asks them to recall as much as they can. The LMT is thought to test memory processes that require a deeper level of encoding than simple memory for word lists (Brebion et al. 1997). The VRT is a test of visual memory that asks participants to reproduce four drawings after a brief period of visual exposure. The VRT is thought to be closely associated with visual-spatial problem solving (Lezak 1995). For the LMT and VRT, we used the age-corrected percentile scores. Both the VRT and the LMT have been widely used in other studies of schizophrenia (e.g., Saykin et al. 1991; Lewine et al. 1997), and the LMT has, in particular, been found to be related to outcome in schizophrenia (Lysaker et al. 2000).

The Gorham Proverb Test (GPT) consists of 12 proverbs that are presented verbally to the participant. Thought disorder was measured by rating the idiosyncrasy of each response according to procedures outlined by Marengo et al. (1985).

The NEO Five Factor Inventory (form s) (NEO, Costa and McCrae 1992) is a self-report assessment of personality dimensions based on the five-factor model of personality. This test presents participants with 60 statements and asks them to rate the extent to which those statements describe or do not describe their attitudes and behavior. The NEO form s generates scores for the personality dimensions of neuroticism, extroversion, openness, agreeableness, and conscientiousness. For this study, the first two measures were used: neuroticism and extroversion. Extensive evidence of the factorial validity of the NEO and its applicability to cross-cultural samples has been widely reported (cf. McCrae and Costa 1997). The short form of the NEO was chosen for this study because it has been found to provide good test-retest reliability in schizophrenia (Kentros et al. 1997) and to distinguish persons with schizophrenia from nonpsychiatric controls (Gurrera et al. 2000).

**Procedures.** Following informed consent, diagnoses were determined using the Structured Clinical Interview for DSM–IV (SCID; Spitzer et al. 1994). The SCID was conducted by a clinical research psychologist. Following the SCID, the WCQ, NEO, WCST, GPT, and select WMS–R scales were administered. The WCQ and NEO were
administered to participants individually with a research assistant available to answer any questions that arose during test administration. Neuropsychological testing was performed blind to the results of the WCQ or NEO.

Results

Correlations comparing LMT, VRT, and WCST with NEO scores revealed no significant relationships between personality and neurocognition. Intercorrelations between neurocognitive test scores were as follows: WCST categories correct and LM: \( r = 0.30, p < 0.05 \); WCST and VR: \( r = ns \); VR and LM: \( r = 0.36, p < 0.01 \). The correlation between neuroticism and extroversion was \( -0.55, p < 0.0001 \).

To determine the relative associations of neurocognition and personality to coping, five stepwise multiple regressions were conducted, one for each WCQ variable. In all equations the LMT, VRT, and WCST, and two NEO scores were allowed to enter if they made a significant contribution at the 0.05 level. As summarized in table 2, significant predictor equations were produced for all five WCQ variables: distancing, escape avoidance, planful problem solving, positive reappraisal, and social support seeking.

Univariate correlations were next calculated to determine directionality as well as to determine whether there were relationships between coping style and predictor variables that were obscured when shared variance was removed in the stepwise procedures. These indicated the following: higher levels of distancing were predicted by poorer performance on the WCST (\( r = 0.39, p < 0.01 \)); higher levels of escape avoidance were predicted by higher levels of neuroticism (\( r = 0.33, p < 0.01 \)) and poorer performance on the VRT (\( r = -0.25; p < 0.05 \)); higher levels of planful problem solving were predicted by better performance on the VRT (\( r = 0.39, p < 0.01 \)); lower levels of extroversion (\( r = -0.25, p < 0.05 \)); lower levels of neuroticism (\( r = -0.24; p < 0.05 \)); higher levels of positive reappraisal were predicted by lower levels of neuroticism (\( r = -0.26, p < 0.05 \)); and higher levels of social support seeking were predicted by higher levels of extroversion (\( r = 0.25; p < 0.05 \)) and better performance on the LMT (\( r = 0.25; p < 0.05 \)). There was no evidence in the univariate correlations of additional associations of neuroticism or any of the neurocognitive tests with coping style, which was obscured in the stepwise procedures. Greater levels of extroversion were, however, found to be related to a greater preference for positive reappraisal (\( r = 0.24; p < 0.05 \)).

Lastly, several post hoc analyses were conducted. To rule out the possibility that differences in coping were the result of differences in effects of medication, we conducted five analyses of variance (ANOVAs) comparing the WCQ scores of participants taking atypical antipsychotic medication with the WCQ scores of participants taking typical antipsychotic medications. No significant differences were observed. To rule out the possible effects of chronicity on coping, we divided our sample according to whether participants had “greater” or “lesser” hospitalization histories, choosing the sample median 6 or more hospitalizations as our cutoff point. These groups were not found to differ on coping measures even when age was added as a covariate. Lastly, ANOVAs were conducted comparing neurocognitive, NEO, and WCQ scores between participants with schizophrenia and schizoaffective disorder to rule out the possibility that findings were primarily the result of combining these groups. Consistent with other reports (e.g., Evans et al. 1999), no group differences in neurocognition were found on coping or personality.

Table 2. Multiple regressions predicting coping strategies from neurocognitive deficits and personality (\( n = 71 \))

<table>
<thead>
<tr>
<th>Coping strategy</th>
<th>Neurocognitive and personality variables</th>
<th>F</th>
<th>Partial R²</th>
<th>Model R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distancing</td>
<td>Categories correct</td>
<td>5.07**</td>
<td>0.15**</td>
<td>0.15**</td>
</tr>
<tr>
<td>Escape avoidance</td>
<td>Neuroticism</td>
<td>5.87**</td>
<td>0.11**</td>
<td>0.21***</td>
</tr>
<tr>
<td></td>
<td>Visual reproduction</td>
<td></td>
<td>0.06*</td>
<td></td>
</tr>
<tr>
<td>Planful problem solving</td>
<td>Visual reproduction</td>
<td>7.83***</td>
<td>0.15**</td>
<td>0.26***</td>
</tr>
<tr>
<td></td>
<td>Extroversion</td>
<td></td>
<td>0.06*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neuroticism</td>
<td></td>
<td>0.05*</td>
<td></td>
</tr>
<tr>
<td>Positive reappraisal</td>
<td>Neuroticism</td>
<td>4.41*</td>
<td>0.07*</td>
<td>0.07*</td>
</tr>
<tr>
<td>Social support seeking</td>
<td>Extroversion</td>
<td>3.41*</td>
<td>0.06*</td>
<td>0.11*</td>
</tr>
<tr>
<td></td>
<td>Logical memory</td>
<td></td>
<td>0.05*</td>
<td></td>
</tr>
</tbody>
</table>

* \( p < 0.05 \); ** \( p < 0.01 \); *** \( p < 0.0001 \)
Discussion

Results indicate that both neurocognitive deficits and individual differences in personality are related to coping style in schizophrenia. Independent of personality, greater levels of different forms of neurocognitive deficit were associated with increased preferences for escape avoidance and distancing strategies and decreased preferences for planful problem solving and social support seeking. Conversely, independent of neurocognition, higher levels of neuroticism predicted a greater preference for escape avoidance and reduced preferences for planful problem solving and positive reappraisal strategies. Higher levels of extroversion lastly predicted greater reliance on social support seeking.

In practical terms, this suggests that as persons experience greater cognitive deficits and higher levels of neuroticism, they may tend to actively flee from stressors and avoid thinking about ways to solve their problems. With greater cognitive deficits and lower levels of extroversion, persons with schizophrenia may also tend to shy away from seeking out others when under stress and may be more hesitant to attempt active problem solving. These findings are thus consistent with hypotheses that neurocognitive deficits lead to a passive, avoidant, and non-problem-solving coping style, a style that in previous literature has been linked to poorer psychosocial function (e.g., Wiedl 1992; MacDonald et al. 1998). Results also indicate that the relationship between personality and coping in schizophrenia is very similar to the one observed in the general population, suggesting that personality may affect some forms of behavior in schizophrenia in much the way it does in persons without mental illness.

Of note, no predictions were made regarding differential relationships between specific domains of neurocognition and coping, and thus any exploration of this issue must be considered speculative. Nonetheless, the relationships observed are intuitively appealing and may serve as an impetus for further research. In particular, it is intriguing that verbal memory was the domain related to social support seeking. Here, we wonder whether verbal memory impairments may interfere with the communication of complex thoughts and feelings. Perhaps the inability to acquire, store, and recall complex verbal information makes it more difficult to communicate verbally, weakening social bonds and ultimately leading to a disinclination to seek social support during periods of stress. We similarly wonder whether greater impairments in visual memory are related to reduced preferences for problem solving and greater preferences for escape avoidance because with poor visual memory it is more difficult to call forth a mental picture of actions one might take to directly confront a stressor. Last, do the links between distancing and executive function suggest impairments in certain aspects of executive function measured by the WCST (e.g., the ability to shift set) that compromise the ability to understand and respond to stressors, so that distancing becomes the default strategy? Support for this speculation can be found in previous studies demonstrating a link between unawareness of illness and deficits in executive function also measured by the WCST (Lysaker et al. 1998a). Again, these relationships were not predicted at the onset and await replication before they are awarded any weight.

Several predictions were not confirmed. First, preference for positive reappraisal was not related to neurocognitive deficits on any test administered. This may suggest that the ability to see a "silver lining" in desperate times is more dependent on the ability to entertain positive affects than to cognitively manipulate one's perspective on an event. Second, neuroticism was unrelated to distancing. This may suggest that the ability to be detached from or oblivious to a stressful situation may be more closely linked with impairments that inhibit a complete appraisal of a stressor than with personality. Third, lower levels of extroversion predicted higher levels of planful problem solving. Previous research has suggested that in general, higher levels of extroversion are linked with a decreased tendency to inspect and analyze stimuli (Brebner and Cooper 1978; Brebner and Flavel 1978). Persons with schizophrenia and higher levels of extroversion also tend to exhibit poorer work performance (Lysaker et al. 1998b). Thus, higher levels of extroversion in schizophrenia may increase social support seeking while also reducing the degree to which details of a stressor are analyzed and responded to in a considered manner. Again, these speculative comments await future research.

Lastly, there are limitations to this report. First, participants were mostly in their 40s, and all were in a post-acute phase of illness, were compliant with medication, and were interested in rehabilitation. It is possible that these findings may not generalize to adolescents or young adults with schizophrenia, those who refuse medication or vocational rehabilitation, or persons in acute stages of illness. Second, the degree of association between variables was modest, and the chances of a spurious finding were inflated by the use of five multiple regressions. Of note, however, the number of predictor variables was reduced to a minimum (5) to minimize the likelihood of chance findings, we employed 2-tailed tests despite making unidirectional hypotheses, and the directions of association were consistent with one another. Despite these constraints, 8 of 10 hypotheses were confirmed in this study, a higher proportion than can be accounted for by alpha inflation. Third, causality cannot be assessed by our design. Results could be interpreted as indicating that per-
sonality style and neurocognitive deficits cause people to assume certain coping styles; that certain styles cause neurocognitive deficits and personality traits; or that coping style, neurocognition, and personality are all determined by another process. While the second possibility seems intuitively unlikely, the possibility that observed results stem from a larger process or set of variables cannot be ruled out. A final limitation is that because coping preference was assessed using a self-report instrument, impairments in memory may have affected the results. We would suggest, however, that there is no reason to think that memory impairments would bias participants to systematically report decreased levels of social support seeking or problem solving, for example. Nonetheless, more research is needed that examines coping using a variety of assessment techniques across a wider range of persons with the disorder.

In summary, results suggest that different forms of distinct neurocognitive deficits and select personality dimensions in schizophrenia are related to a behavioral style that includes a preference for avoiding rather than trying to solve problems, a style that should intuitively decrease the opportunities for successful problem solving. With replication, these findings may suggest that rehabilitation specialists might want to assess and intervene not only on the level of different domains of neurocognition but also on the level of personality and coping style. This might require the introduction of a rehabilitation-focused psychotherapy into psychosocial programming as well as the development of newer interventions sensitive to the cognitive needs of persons struggling to make sense of a life touched by schizophrenia (Lysaker and France 1999; Lysaker et al. 2003a). At the very least, assessment of domains of neurocognition and personality could provide valuable information about coping preference and yield clues about how to tailor interventions to enhance each individual’s coping effectiveness.

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