Agreement between clients with schizophrenia and mental health workers on clients’ social quality of life: The role of social cognition and symptoms

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Objective. Studies have showed that therapists and mental health workers of persons with schizophrenia tend to estimate their patients’ social quality of life (SQoL) as poorer than the clients’ own estimation. This study explores the hypothesis that this discrepancy is related to clients’ social cognition and symptomatology.

Design. Cross-sectional assessment of both clients and their mental health workers.

Methods. Ninety persons with schizophrenia and 12 persons who were formal care providers participated in the study. All responded to a parallel version (client and clinician) of social quality-of-life scales. Clients’ emotion identification, theory of mind and symptoms were also assessed.

Results. Low social cognitive abilities of persons with schizophrenia, as well as negative symptomatology and having children, may be related to the negative bias of mental health workers, with regard to their client’s SQoL.

Conclusions. While more severe levels of negative symptoms and more deficits of social cognition were related to reduced levels of agreement, paradoxically, a relatively normative family life that includes parenting was also related to lower levels of agreement.

Practitioner points

- Attention should be given to low agreement between clients with schizophrenia and clinicians with regard to the client’s quality of life, as it is central to alliance and outcome.
- Clinicians tend to estimate clients’ social quality of life as poorer than the clients’ own estimation when those clients have low social cognition, high negative symptomatology and children.
- There is a need to identify additional factors that contribute to agreement and alliance in therapy.
- Longitudinal assessment during therapy can trace the process of construction of agreement.

Agreement between mental health professionals and persons seeking mental health services about the goals of treatment is widely considered to be a precondition for the undertaking of the most basic elements of psychiatric rehabilitation (Solomon, Draine, & Delaney, 1995; Tam & Law, 2007). A significant lack of agreement between clinicians and clients within the mental health system regarding clients’ mental health needs has been
noted as the most commonly reported barriers to positive outcome (Solomon et al., 1995). Failure to agree on the challenges facing clients has been viewed as hindering the development of a trusting and effective working alliance, a phenomenon which, independent of the kind of intervention offered, has been found to be closely linked with outcome (Priebe & McCabe, 2006).

One important area where client – clinician agreement may be especially significant, concerns the social quality of life (SQoL) of persons with schizophrenia. Persons with schizophrenia often experience difficulties in developing and maintaining social relationships (Addington & Addington, 2000; Carson, Butcher, & Mineka, 2000) and often experience social isolation and alienation. Thus, identifying clients’ social needs is essential in order for various interventions to enhance the SQoL of the client. This idea is in accord with viewing quality of life as a framework to formulate goals in psychiatric rehabilitation (Narvaez, Twamley, McKibbin, Heaton, & Patterson, 2008).

Agreement between clients and clinicians with regard to clients’ quality of life tends to vary from zero to moderate (Bowie et al., 2007; Hasson-Ohayon, Roe, Kravetz, Levy-Frank, & Meir, 2011; Kravetz, Faust, & Dasberg, 2002). Notably, agreement seems to be more present in objective domains of quality of life, such as the activities of daily living and economic life domains, and not in the relatively subjective domain of SQoL (Hasson-Ohayon et al., 2011). Few studies have addressed possible explanations for the limited degree of agreement, which is commonly presented as negative bias (i.e., underestimation of the therapist) of the mental health worker with regard to positive outcome of the client.

Viewing the bias as underestimation on behalf of the mental health worker, it may be that underestimation occurs due to the possibly stereotyped view of the client by the worker, as a person that may not have a satisfactory SQoL due to the illness. This idea is supported by first persons’ accounts (Bassman, 2000; Deegan, 2007) that discuss the mental health system as viewing them as incapable of achieving meaningful life. It may also be that mental health workers relate to and tune in better with clients with a coherent narrative (Hasson-Ohayon et al., 2011), and therefore, the level of psychopathology may create a bias in the perception of the worker.

Viewing the bias as overestimation on behalf of the client, this positive bias may be a feature of general unawareness of illness or incoherent narrative (Hasson-Ohayon et al., 2011). Additionally, the high level of symptoms experienced by the client is also associated with his/her overestimation (Lysaker, Hasson-Ohayon, et al., 2013). It may be that overestimation of the client appears when clients fail to accurately appraise areas of psychosocial need in a manner similar to how they may deny that they experience symptoms or require treatment in general. A second possibility is that deficits in self-monitoring or in understanding the perspective of others reduce agreement and leads to the gap in perception.

Deficits in both metacognition and social cognition have been broadly observed in schizophrenia (Lysaker, Vohs, et al., 2013; Rabin et al., 2014) and could impair the abilities of clients with this condition to piece together elements of their experience into more complex ideas about psychosocial challenges (Hasson-Ohayon et al., 2015; Lysaker & Hasson-Ohayon, 2014; Ofir-Eyal, Hasson-Ohayon, & Kravetz, 2014). In other words, it may not be that clients with schizophrenia are unaware of specific negative experiences (i.e., lack insight into the disorder), but that they may not construct those into larger needs as identified by clinicians (i.e., lack of metacognition).

This study is focused on social cognition, rather than on metacognition. These two concepts are regarded as distinct, yet similar concepts as both refer to reflections about social processes (Brüne, 2014; Brüne, Dimaggio, & Lysaker, 2011; Green & Leitman,
While social cognition is generally used to refer to the ability to make accurate inferences about the cognitive or emotional states of people who are disconnected from the participant’s own life or relationships (Brüne, 2014; Lysaker & Hasson-Ohayon, 2014), metacognition has been used to describe the complex ongoing processes of constructing holistic and integrative representations of self and other in the context of the participant’s actual life (Hasson-Ohayon et al., 2015; Lysaker & Dimaggio, 2014; Lysaker, Gumley, et al., 2013; Lysaker, Vohs, et al., 2013).

In this study, we gathered data on client and clinician assessments of SQoL and sought to determine whether underestimation of the clinician is related to assessments of social cognition and symptoms. As social cognition is a multidimensional phenomenon, we included measures of both affect recognition and theory of mind (ToM). We additionally gathered demographic information to explore whether specific characteristics of clients might skew mental health workers’ judgment with regard to the clients’ SQoL.

We predicted that less negative bias (i.e., underestimation) of the mental health workers regarding the SQoL of their clients would be found among workers of clients with higher social cognition and lower symptomatology. We made no predictions about which specific tests of social cognition would be linked with workers’ bias and considered the analysis of the individual tests as exploratory in nature.

**Method**

**Research participants**

One hundred and six patients with schizophrenia and 12 persons who were formal care providers were enrolled in this study. All signed informed consent and 16 (15.1%) of these persons who volunteered to participate in the study failed to complete the research protocol. Final sample included 90 clients with an ICD10 diagnosis of schizophrenia as indicated by their medical files, lived in the community and were aged 21–68 years ($M = 41.8$ years, $SD = 12.3$ years). Forty-seven of them were females, 71 were born in Israel, 18 in Western and Eastern Europe and one in Africa. Fifteen participants were married, 19 divorced and the remainder were single. Mean education was 11.39 years ($SD = 2.39$). Average age of clients at first hospitalization was 21.76 years ($SD = 7.70$). Mean length of time since last hospitalization was 20.5 years ($SD = 12.07$), and the mean number of hospitalizations was 5.8 ($SD = 4.00$). All clients were in personal contact with one care provider during, at least, the last 2 months, and were receiving psychiatric medications at the time of the study. Fifty-four clients lived in various levels of supervised housing in the community, 19 lived with their family of origin, six lived by themselves and 11 lived with a spouse or permanent partner. All but five of the clients were employed in a variety of vocational rehabilitation settings.

Exclusion criteria were any other ICD10 diagnosis in addition to schizophrenia, having a hearing or sight impairment that was not compensated for, immigration to Israel after the age of 20, residing in Israel for <8 years, and not speaking or reading Hebrew. To control for attention and memory deficits or comprehension difficulties, clients who failed to answer more than two ToM Faux Pas control questions (see below the description of instrument) were excluded.

Twelve mental health workers (social workers $N = 8$, art therapists $N = 1$, occupational therapists = 1, social aides $N = 2$) participated in this study. These care providers were members of the professional staffs of the rehabilitation settings. Duration of acquaintance with care users was <6 months for 57.1% of the mental health workers and
more than 2 years for 25.7% of the mental health workers. The care provided by these workers consisted of rehabilitation counselling, psychotherapy and case management. This care was provided in regularly in individual/group meetings.

**Instruments**

**Social quality of life**

Social quality of life was measured by the social subscale of Kravetz et al. (2002) Hebrew translation of the Wisconsin Quality of Life Index-Mental Health questionnaire (Becker, Diamond, & Sainfort, 1993). This subscale consists of three parallel measures of the client’s SQoL that assesses the SQoL of the client from the perspective of the client, the perspective of the clinician and the perspective of a significant other. For the purposes of this study, the client’s and the clinician’s versions of the SQoL subscale were used.

The client’s subscale of SQoL consists of seven items: the extent to which the client reports (1) satisfaction with number of friends, (2) satisfaction with how she or he gets along with friends, (3) satisfaction with the relationship to her or his family, (4) satisfaction with the people with whom she or he lives, (5) satisfaction with how she or he gets along with other people, (6) the number of people she or he can count as friends and (7) the extent of the support that she or he receives from family and friends.

The original clinician’s SQoL subscale was made-up of four items on which the clinician rated: the extent to which the care user (1) received family and social support, (2) the extent to which she or he developed and maintained social relationships, (3) the extent to which she or he engaged in social activities and (4) the general quality of her or his family relations. To increase the accuracy of this measure in this study, the first item was divided into two: one item that referred to family support and a second item that referred to social support. In addition, the second item was divided into two: one item that referred to the development of social relations and another item that referred to the maintenance of social relations. In this study, internal consistency was .70 for the clinician’s version and .68 for the client’s version of the SQoL subscale, as estimated by Cronbach’s alpha.

**Assessment of the attribution of false beliefs**

This study made use of first-order and second-order false belief tasks as one of its measures of ToM capacity. A Hebrew translation (Leiser & Bonshtein, 2003) of the false belief tasks that was constructed by Frith and Corcoran (1996) was used. These tasks consisted of six stories. The first three require the research participant to distinguish between the protagonist’s belief about a given situation and the real situation and are therefore considered to be measures of the participant’s capacity to appropriately attribute first-order false belief. The last three stories require the participant to relate to the beliefs that one protagonist attributes to another protagonist and therefore are considered to measure the participant’s capacity to appropriately attribute second-order false beliefs.

Researcher read the six stories to each participant, emphasizing that the story would be reread at the participant’s request. The last three stories were accompanied by illustrations to ascertain that they were understood. After each story, the participant was asked two questions. The first question assessed the participant’s capacity to attribute a false belief to the story’s protagonist, whereas the second question assessed the participant’s understanding of the story. Thus, the participants’ responses to the false
belief question regarding a story were included in the calculation of the score for this task only if the participant’s response to the control question concerning the story indicated that she/he understood the story. Accordingly, the task was scored as the percentage of correct answers to the false belief questions from those stories that the participants showed that they understood. The internal consistency of the responses to both the first and second false belief items as estimated by Cronbach’s alpha was .65.

**Faux pax comprehension**

The attribution of affective states was assessed by a faux pas comprehension task developed by Stone, Baron-Cohen, and Knight (1998) and translated into Hebrew for use in Israel by Shamay-Tsoory, Tomer, Berger, Goldsher, and Aharon-Peretz (2005). The original version of this task consisted of 10 research stories and 10 control stories. For the purpose of this study, on the basis of pre-tests and because of the large number of complex tasks, this task was reduced to six research stories and four control stories.

In each of the six research stories, a protagonist says something that she/he would not have said if she/he would have been aware of the potential unintentional discomfort her/his remarks would cause the listener. The control stories consisted of descriptions of interpersonal verbal exchanges that are characterized by unintentional discomfort that is not a direct consequence of the verbal exchange. After each of the research stories, the participants were asked the following six questions: ‘Did anyone say something they shouldn’t have said?’, ‘Who said something they shouldn’t have said?’, ‘Why shouldn’t the speaker have said it?’, ‘Why did the speaker say it?’, ‘Did the speaker know that she/he shouldn’t have said what she/he did say?’ and ‘How did the hearer feel?’ Finally, a control question about an obvious detail of each story was asked to assess whether the participant had become confused and had forgotten the details of the story. If a participant answered this question in a manner that indicated confusion with regard to two or more stories, that participant was excluded from the study. If the participant’s answer to the first of six research questions was that no one said something they should not have said, she/he was asked no further questions and given a score of ‘0’ for that story. If the participant’s answer to the first question was positive, she/he was given a score of ‘1’ and asked the remaining five questions. Answers to these questions were scored ‘1’ if they indicated that the participant perceived the story as representing a faux pas. The four control questions served as distracters. Thus, scores on this task could range from ‘0’ indicating low or no comprehension of faux pas to ‘6’ indicating high comprehension of faux pas. Internal consistency for this task as estimated by Cronbach’s alpha was .69.

**The Positive and Negative Syndrome Scale (Kay, Fiszbein, & Opler, 1987)**

This 30-item questionnaire was used to assess the positive and negative symptoms of schizophrenia of the participants. Persons were rated on these items on the basis of a structured clinical interview conducted by the first author after training and achieving satisfactory inter-rater reliability with a psychiatrist in the participating centre ($r = .83$, $p < .001$, $N = 14$). On each item, a person can receive a rating of severity from 1 to 7, where 1 represents the absence of the symptom and 7 represents an extremely severe symptom. Cronbach’s alpha for this study for the positive symptoms was .73, for the negative symptoms, .83 and for general psychopathology, .79. In this study, the correlation between the positive and negative symptoms was .17 ($p < .05$), whereas the correlation between the negative symptoms and general psychopathology was .70.
The correlation between positive symptoms and general psychopathology was \( p < .001 \), and the correlation between positive symptoms and general psychopathology was \( p < .0001 \). Because of these high correlations between general psychopathology and both positive and negative symptoms, general psychopathology was not included in this study's subsequent data analyses.

The Japanese and Caucasian Brief Affect Recognition Test (JACBART; Matsumoto et al., 2000)

Affect recognition was measured by the JACBART which consists of 56 photographs of male or female Japanese or Caucasian faces expressing one of the following seven emotions: anger, contempt, disgust, fear, happiness, sadness and surprise. Participants were exposed to these photographs by means of a computer screen. Each of the photographs expressing one of seven emotions was embedded between two photographs of the same face with a neutral expression. Following a one-second exposure of each of these sets of three photographs, participants were asked to focus on the photograph expressing the emotion and to identify it from the list the seven emotions. Each of the seven emotions was shown to each of the research participants eight times by means of the same number of female, male, Japanese and Caucasian faces. The accuracy score for each participant was the percentage of correct identifications. For this study, this score ranged from 10.7% to 80.4% with a mean of 35.1% and a standard deviation of 14.8%. Internal consistency for this task as estimated by Cronbach’s alpha was .87.

Socio-demographic and medical data

A structured interview was used to collect socio-demographic data. Information as to diagnosis, age at first hospitalization, number of hospitalizations and date of last hospitalization was provided by the participants’ case manager.

Procedure

This study was carried out in seven psychiatric rehabilitation settings providing either vocational, residential or social–recreational services. After the research protocol was approved by a hospital-based Helsinki ethics committee, the researcher contacted a key member of the staff of each of these settings and described to her/him the proposed research and the criteria for selecting participants. The researcher met with candidates whom the staff had selected for participation in the study. She told them that the study consisted of an assessment of the social perceptions and quality of life of persons with a diagnosis of schizophrenia. They were also informed that participation in the study was voluntary and that all information collected during the study would be anonymous. Written informed consent was sought from each participant. All participants received the same payment (the equivalent of approximately 6 dollars) for participation.

Statistical analysis

Analyses were computed using the Predictive Analytics Software (PASW, version 18.0; SPSS Inc., 2009). First, we calculated bias score of the mental health worker with regard to his/her estimation of the client’s SQoL. This was performed by reduction of SQoL as reported by the mental health workers from the SQoL score as reported by their clients.
Thus, positive values on the bias index indicate mental health workers’ overestimation of their clients’ SQoL, whereas negative values indicate mental health workers’ underestimation. Second, to explore the relationships between clients’ social cognition and symptomatology on the one hand and mental health workers’ bias on the other, we first performed Pearson correlations. Variables that were found to be significantly correlated with bias were then entered as predictors in a hierarchical linear regression analysis. Although the data had a hierarchical structure (clients nested within mental health workers), the multilevel unconditional model for the bias index found a trivial (ICC = .02) and not significant (estimate = .05, SE = 0.12, p = .654) variability at the worker level (Level 2). Therefore, we used ordinary least squares regression to analyse our data. Significance was set at the .05 level, and all tests of significance were two-tailed.

Results

Descriptive statistics for the research variables

Table 1 presents the descriptive statistics for all of the research variables. As can be seen from this table, the mean SQoL as reported by the clients was higher than the mean SQoL that was reported by the mental health workers. Indeed, the average bias score was negative indicating that as expected mental health workers tended to underestimate their clients’ SQoL. In fact, with regard to 70% of clients in the sample, the workers had a negative bias (i.e., underestimated the client’s SQoL).

Correlational analysis: Associations between agreement and study’s variables

Table 2 presents the Pearson product moment correlations between the research variables and the above-defined measure of bias between the client and mental health worker. As can be seen from this table, the correlations between four of the research variables and bias were statistically significant. These variables were emotion recognition, attribution of false belief, faux pas and symptoms. Whereas emotion recognition, attribution of false belief and faux pas were positively correlated with the bias, negative symptoms were negatively correlated with it. Thus, various metacognitive activities are associated with mental health workers’ less negative bias (i.e., underestimation) with regard to their clients’ SQoL. In addition, having negative symptoms is associated with greater negative bias (i.e., underestimation).

<table>
<thead>
<tr>
<th>Table 1. Means, standard deviations, median and ranges of the research variables</th>
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<tbody>
<tr>
<td><strong>Mean (SD)</strong></td>
</tr>
<tr>
<td>Clinician report SQoL</td>
</tr>
<tr>
<td>Client report SQoL</td>
</tr>
<tr>
<td>Therapist’s bias</td>
</tr>
<tr>
<td>ToM: False beliefs</td>
</tr>
<tr>
<td>ToM: Faux pas comprehension</td>
</tr>
<tr>
<td>Negative symptoms of schizophrenia</td>
</tr>
<tr>
<td>Positive symptoms of schizophrenia</td>
</tr>
</tbody>
</table>

Note. SQoL = social quality of life; ToM = Theory of Mind.
Hierarchical regression analysis was carried out to uncover the sources of mental health workers’ bias. Only those socio-demographic and research variables with statistically significant correlations with workers’ bias were entered into the regression. In this analysis, the socio-demographic variables, age and number of children, were considered control variables, as both of these variables were correlated with bias ($r = .25, p = .02$; $r = .25, p = .02$, respectively). Therefore, these variables were entered at step 1 of the analysis. Then, in step 2 and step 3, the social cognition variable and the negative symptoms level were entered, respectively. Table 3 presents the outcome of the hierarchical regression. As can be seen from this table, the socio-demographic variables entered at step 1 explain 10% of the variance of the bias score. The addition of the variables, emotion recognition, attribution of false belief and faux pas entered to the regression at step 2 increased the marginal percentage of variance explained to 27%. This increase was also statistically significant. However, of the three variables added to the regression, faux pas was the only variable that contributed significantly to the bias score. Thus, greater levels of faux pas were associated with less negative bias (i.e., less underestimation). Adding negative symptoms to the analysis at step 3 did not significantly increase the marginal percentage of variance explained. Thus, the regression analysis indicated that although none of the independent variables significantly explain the bias by itself, all together (i.e., low ToM ability and negative symptomatology), they might account for the differences between the client’s and mental health worker’s judgments of the clients’ SQoL.

Table 3. Summary of hierarchical regression analysis for the clinicians’ underestimation of the clients’ social quality of life ($N = 90$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Age</td>
<td>-.02</td>
<td>0.01</td>
<td>-.19</td>
</tr>
<tr>
<td>Number of children</td>
<td>-.27</td>
<td>0.16</td>
<td>.19</td>
</tr>
<tr>
<td>Emotion recognition</td>
<td>.003</td>
<td>0.01</td>
<td>.03</td>
</tr>
<tr>
<td>ToM: False beliefs</td>
<td>.02</td>
<td>0.01</td>
<td>.28*</td>
</tr>
<tr>
<td>ToM: Faux pas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative symptoms</td>
<td>0.10</td>
<td>0.27</td>
<td>.28*</td>
</tr>
<tr>
<td>$R^2$ for change in $R^2$</td>
<td>4.6*</td>
<td>6.23***</td>
<td>3.70</td>
</tr>
</tbody>
</table>

Note. ToM = Theory of Mind.

*p < .05; **p < .01; ***p < .001 (two-tailed).
Discussion

The current study explored the association between measures of social cognition and symptoms and mental health workers’ bias regarding their clients’ SQoL. Results showed that low social cognition ability of persons with schizophrenia, as well as negative symptomatology, is related to the underestimation of mental health workers with regard to the client’s SQoL. These results are in accord with previous studies that showed insight and symptoms to account for discrepancy in quality-of-life perception and therapeutic relationship (Hasson-Ohayon et al., 2011; Lysaker, Hasson-Ohayon, et al., 2013).

The results of the current study may also provide insights into the mechanism by which social cognition can increase the agreement between clients and their therapists. When the three measures of social cognition activities were entered into the regression analysis at step 2, only the negative relation between faux pas comprehension and the therapists’ negative bias (i.e., underestimation) remained statistically significant. Faux pas comprehension has been defined as the ability to attribute a cognitive and affective mental state to the person making the faux pas and the recipient. Consequently, this capacity may significantly facilitate both the development and maintenance of social relationships and the resolution of interpersonal conflict that involve discussing different opinions and reducing bias. Thus, these results refer to the possibility of overestimation by the clients on their own SQoL as a mirror image of the possible underestimation bias of the care provider. Meaning, from the client’s perspective, it is possible that overestimation is affected by deficits in integrating complex cognitive and affective processes.

As mentioned above, almost all of the clients’ self-reports of their SQoL were higher than the mental health workers’ ratings of these same clients’ SQoL. Although this bias may reflect a failure in tuning with the patient perception on behalf of the workers, this overestimation on behalf to the client may be a function of the defensiveness or expectations (Atkinson, Zibin, & Chuang, 1997; Fitzgerald et al., 2001). Notably, this phenomenon is considered by many clients and therapists as a desirable outcome, that is overestimation as a measure of client’s positive expectations. In his discussion of the analysis of failure, Goldberg (2012, pp. 28–29) suggests that success in psychotherapy may be characterized by an ambiguity as it can generate such a positive feeling on behalf of the client that a therapist might insist upon an unrealistic appraisal of an otherwise hopeless situation. Thus, success and failure in therapy are subjectively defined (Goldberg, 2012) and therefore biases may occur with regard to the perception of the client’s condition and progress.

This study’s search for correlates of bias may hold some promise for understanding the possible ambiguities that are associated with bias as described above. Thus, the finding that the positive correlation between faux pas comprehension and the bias measure is statistically significant at least partially reduces the above-described ambiguities. Accordingly, persons with schizophrenia who, despite their illness, can integrate the cognitive capacity for self-reflection with sensitivity to the emotional consequences of violating personal or social norms should be able to establish the mutual understanding that is conducive to achieving and maintaining agreement with their mental health workers. It may also be that these persons are perceived by their care providers as incapable of having meaningful relationships and consequently high SQoL. Thus, higher ToM of the client may lead to either less overestimation by him/her self due to being able to tune with the therapist perception, or to less underestimation by the therapist due to generalizing the high ToM to the patient in additional areas of life.
Notably, considering the results of the current study from the perspective of the therapist's underestimation would lead to another possible explanation of the bias. As mentioned in the introduction, this underestimation could be a function of a possible stereotyped view of the client by the therapist, as a person that may not have a satisfactory SQoL due to the illness (as evident in first persons' accounts; Bassman, 2000; Deegan, 2007). Additionally, Evans-Jones, Peters, and Barker (2009) showed that clients' ratings of therapist empathy, expertness, attractiveness and trustworthiness as high were associated with greater agreement on their alliance.

Serendipitously, this study also uncovered a potentially interesting finding with regard to the impact of a socio-demographic variable on the biased estimation of client’s SQoL. Of all of the socio-demographic variables examined in this study, only the zero-order positive correlations between age and number of children and this study’s underestimation measure were statistically significant. To control for the impact of these variables on the measure of underestimation, they were included in the first step of the regression analysis. This analysis uncovered a statistically significant positive relation between the client’s number of children and the measure of underestimation by the mental health worker. Thus, the more children reported by a client, the more that client’s relationship with his or her worker was characterized by underestimation of the worker. That case can be seen as an example of a matter of dispute between mental health worker and client, in which a client may see in his children as a sign of health or resources while the mental health worker may see the same thing in a critical way.

Because the present study was not designed to test hypotheses regarding the relation between socio-demographic variables and client overestimation or mental health worker underestimation, any explanation of the above finding will be an ex post facto explanation that must be seriously qualified. However, differences between attitudes towards parenthood for persons with a severe mental illness may be a possible source of an explanation of the positive relation between the clients’ number of children and this study’s underestimation measure. It might be that mental health workers’ concerns regarding children affect their perception of the client. Few studies that have addressed this issue reveal important differences between the responses of therapists and clients towards the wish of clients to become parents or towards clients who actually do become parents (e.g., Krumm, Checchia, Badura-Lotter, Kilian, & Becker, 2014).

Therapists seem to experience considerable ambivalence towards the potential or actual parenthood of their clients with schizophrenia. On the one hand, they may have explicit or implicit negative attitudes towards their clients due to their concern that the children of some clients may suffer from development problems due to the manner in which their parents’ mental illness may have limited their parents’ ability to adopt a responsible parental role. Interestingly, it has been found recently that attitudes towards persons with schizophrenia are more negative when they are presented as being involved in an intimate relationship, than if they are not in such a relationship (Hasson-Ohayon, Hertz, Vilchinsky, & Kravetz, 2014). It might be that those therapists share these attitudes that are common in the public and view the involvement in family life as possessing possible risks. On the other hand, therapists are generally committed to granting clients genuine autonomy in their personal and social decision-making. In contrast, clients, especially mothers, although recognizing the severe stresses associated with parenthood, generally view it with delight and joy and as source of personal growth and development (Joseph, Joshi, Lewin, & Abrams, 1999; Mowbray, Oyserman, & Ross, 1995).

Integrating the effects of social cognition, symptoms and number of children on the underestimation of therapists, it seems that while less negative symptoms and less deficits
of social cognition contribute to more agreement between client and mental health worker, paradoxically, a relatively normative family life that includes parenting increases the possibility of underestimation by the mental health worker.

This study’s findings, together with previous research, suggest that establishing agreement between client and mental health worker is challenging but nonetheless important. If the bias in perceptions is due to such cognitive impairments as the limited social cognition of the ability to adopt the perspective of others, then strategies that have been found to help clients improve this ability (e.g., Hasson-Ohayon, 2012; Hasson-Ohayon, Kravetz, & Lysaker, 2017; Lysaker et al., 2014; Hasson-Ohayon et al., 2017) may help clients increase their ability of perspective taking and improve client–mental health worker agreement. In addition, caution by various care providers as to the way they perceive their clients due to both illness characteristics and socio-demographic aspects should be taken into consideration.

Considering this study’s results, a few limitations should be taken into account. First, the cross-sectional nature of the study limits the conclusion regarding causality. It cannot be ruled out that high bias interferes with developing metacognition in therapy. Second, most of the participants were employed in vocational rehabilitation settings and generalizing the result to other setting might be questionable. Third, the mental health workers’ sample was heterogeneous with regard to provider profession and duration of relationship between therapist and client. The duration of therapeutic relationship might be an important factor as research suggests that clients tend to be consistent in their rating of the therapeutic alliance at different stages of treatment (Martin, Graske, & Davis, 2000).

References


Agreement and social quality of life


Received 23 May 2015; revised version received 15 December 2015