

Appendix 1.

The original SRA-74 questionnaire, of which Dutch, French, German, Spanish, Turkish and Arabic translations can be downloaded on www.rgoc.nl.

01. I feel more like myself
02. I am more stable
03. I can think more clearly
04. I feel calmer
05. I am able to follow conversations better
06. I feel more depressed
07. My mind is blank more often
08. I feel more restless
09. My emotions are dull
10. I sleep too much
11. My thoughts are calmer
12. I feel less confused
13. I react more slowly
14. My emotions are too dull
15. I feel down
16. I think more slowly
17. My sex drive has decreased
18. I am less anxious
19. I have an increased appetite
20. I am more confident
21. I black-out more often
22. I am less creative
23. I am less interested in socializing
24. I get mentally tired more quickly
25. I feel more drowsy
26. I can't remember well
27. I can concentrate better
28. I am more active
29. My memory has improved
30. I am less irritable
31. I get psychotic symptoms
32. I am hungry more often
33. My feelings have returned
34. I feel happier
35. I have more control over my thoughts
36. I have more difficulty keeping up with conversations
37. I am less spontaneous
38. My sex drive has increased
39. I am more irritable
40. I am less emotional
41. My muscles are more tense
42. I have increased salivation
43. I get physically tired more easily
44. I am dizzy more often
45. I am constipated more often
46. I have gained too much weight
47. I perspire more

48. My muscles are more stiff
49. I am less psychotic
50. I move more slowly
51. I need more sleep
52. I hear fewer voices
53. I leak urine more often
54. I have more tremors
55. It is more difficult for me to have an orgasm
56. I have more trouble sitting still
57. My vision is more blurred
58. I have more difficulty waking up
59. I am nauseous more often
60. My weight has increased
61. I dare to make contact with people again
62. I feel physically healthier
63. Dealing with others is easier
64. I have more interest in my surroundings
65. I have more trouble concentrating
66. I am less fit
67. I have a dry mouth more often
68. I have less energy for socializing
69. My thoughts are subdued
70. My sex drive is too low
71. I am better at holding conversations
72. I can sleep better
73. I am more detached
74. I menstruate less often

Weight Gain (19, 32, 46, 60)

Sexual Anhedonia (17, 55, 70)

Sedation (13, 16, 24, 25, 43, 50)

Increased sleep (10, 51, 58)

Miscellaneous (6, 15, 21, 22, 26, 31, 38, 39, 42, 44, 45, 47, 53, 57, 59, 65, 66, 67, 69, 74)

Recovery (1, 2, 3, 4, 5, 11, 12, 18, 20, 27, 28, 29, 30, 33, 34, 35, 49, 52, 61, 62, 63, 64, 71, 72)

Emotional Flattening (9, 14, 40)

Extrapyramidal Symptoms (8, 41, 48, 54, 56)

Diminished Sociability (7, 23, 36, 37, 68, 73)

Appendix 2.

Visualization of latent structure by similarity analysis

We used similarity analysis based on the amount of mutual information shared between items, according to Shannon's information theory (Pierce 1980). In contrast to EFA, the estimates of mutual information are independent of the prevalence of responses, i.e. insensitive to the distribution of 'no'-responses. So far, mutual information has mainly been applied to analyze similarity in biomedical signals (Ben-Shalom et al. 2003), imaging and genotyping data (Dawy et al. 2006; Pluim et al. 2003), but relatively scarce in psychometrics (Shieh et al. 2010; Oruç et al. 2009).

The similarity matrix was composed of pair-wise mutual information for the responses on all 73 items, using the formula

$$I(X;Y) = \sum_{y \in Y} \sum_{x \in X} p(x,y) \log \frac{p(x,y)}{p(x)p(y)},$$

where $p(x,y)$ is the frequency of (x,y) in the data, and $p(x)$ and $p(y)$ are the frequencies of x and y , respectively. Here x and y , are the outcomes of two items being compared. Mutual information $I_{(x,y)}$ is a measure of similarity yielding values in the range of $[0, \infty)$. Since the values of $I_{(x,y)}$ are considered to have no obvious interpretation (Shieh et al. 2010), examination of the similarity matrix was data driven. Factors having at least two items sharing a relevant amount of mutual information were deemed reliable.

The similarity between items within each factor in terms of mutual information was analyzed by loading all possible combinations of the 73 items as individual crosstabs into MATLAB Version 2011. Mutual information was calculated for all crosstabs using logarithms (the in-home created script is available on request) and visualized by a 73x73 similarity matrix. Items were grouped according to the factors from the Exploratory Factor Analysis (EFA).

References

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Dawy, Z., Goebel, B., Hagenauer, J., Andreoli, C., Meitinger, T., Mueller, J.C., 2006. Gene mapping and marker clustering using Shannon's mutual information. *IEEE/ACM Trans.Comput.Biol.Bioinform.* 3 (1) 47-56.

Oruç, O.E., Kuruoglu, E., Vupa, O., 2009. An Application of Entropy in Survey Scale. *Entropy.* 11 598-605.

Pierce, J.R., 1980. *An Introduction to Information Theory: Symbols, Signals and Noise.* 2nd ed. Courier Dover Publications, Dover, New York.

Pluim, J.P., Maintz, J.B., Viergever, M.A., 2003. Mutual-information-based registration of medical images: a survey. *IEEE Trans.Med.Imaging.* 22 (8) 986-1004.

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Appendix 3.

Similarity matrix, comparing the amount of mutual information shared between all 73 SRA-items (n=1478). All SRA-items on the x- and y-axis were listed according to the factor structure of the exploratory factor analysis. The amount of information shared between two items varied between high (red color) and low (blue color).

Appendix 4.

The SRA-34 questionnaire in random order, divided into nine subscales for undesired effects and five for desired effects. The SRA-34, together with Dutch, French, German, Spanish, Turkish and Arabic translations of the full version, can be downloaded on www.rgoc.nl.

Item	Because of the antipsychotic medication:
01	My emotions are dull
02	I feel happier
03	My weight has increased
04	I have less energy for socializing
05	I can't remember well
06	I react more slowly
07	I am less anxious
08	I feel more depressed
09	I am constipated more often
10	I can concentrate better
11	I leak urine more often
12	My vision is more blurred
13	I have more trouble sitting still
14	I hear fewer voices
15	It is more difficult for me to have an orgasm
16	I have a dry mouth more often
17	My memory has improved
18	I have more tremors
19	I have more interest in my surroundings
20	I am nauseous more often
21	My sex drive has decreased
22	I am dizzy more often
23	Dealing with others is easier
24	I can think more clearly
25	I get physically tired more easily
26	I have more difficulty waking up
27	I am less creative
28	My muscles are more stiff
29	I have more control over my thoughts
30	I have increased salivation
31	I have more trouble concentrating
32	I have an increased appetite
33	I can sleep better
34	I menstruate less often (<i>for females only</i>)

Undesired effects

Weight & Appetite (3,32)	Increased Sleep (26)
Sexual Problems (15,21)	Social Withdrawal (4,25)
Slowed Down (5,6,31)	Emotional Flattening (1)
EPS (18,28)	Depressive Symptoms (8)
Other Undesired effects (9,11,12,13,16,20,22,27,30,34)	

Desired effects

Recovery Psychosis (7,14)
Recovery Cognition (24,29)
Recovery Social (19,23)
Recovery Attention (2,10,17)
Recovery Increased Sleep (33)