

Rorschach test and retest in psychotherapy and in forensic psychology

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The sample of study

- This pilot study compares ten Rorschach test and retest at the beginning and at the end of a psychotherapy with Gestalt approach.
- This work, besides, compares a test/retest Rorschach given in a forensic context by two different psychologists.

The goals of this study

- The goals of this pilot-study are:
 - ✓ The relation between Rorschach test and psychotherapy;
 - ✓ The inner relation between test and retest Rorschach through the most important test indexes;
 - ✓ The reliability of Rorschach test in a forensic context .

Hypothesis of the study: answers

- 1) Can Rorschach test represent a validation instrument of psychotherapy process ?
- 2) Which is the internal consistency of Rorschach indexes between test and retest ?
- 3) How reliable the repeat of Rorschach test in forensic context?

Validity and Reliability

- **Validity:** is concerned with the study's success at measuring what the researcher set out to measure
- **Reliability:** is concerned with the accuracy of the actual measuring instrument or procedure

Patterns of reliability used in this pilot-study

Test-retest:

- ✓ Used to assess the consistency of a measure from one time to another.
- ✓ Results are compared and correlated with the initial test to give a measure of stability.

Inter-rater or inter-observer reliability:

- ✓ Used to assess the degree to which different raters/observers give consistent estimates of the same phenomenon.
- ✓ Interrater reliability addresses the consistency of the implementation of a rating system.

Internal consistency:

- ✓ It is a measure of the precision between the observers or of the measuring instruments used in a study.
- ✓ This type of reliability often helps researchers interpret data and predict the value of scores and the limits of the relationship among variables.

Rorschach test-retest indexes

subjects 1-5

	1 F test	1 F retest	2 M test	2 M retest	3 F test	3 F retest	4 M test	4 M retest	5 F test
R	20	20	22	22	19	31	54	36	12
R+%	75	90	68	81	58	71	77	68	21
F%	65	56	68	68	68	71	80	42	67
F+%	77	81	73	80	58	70	80	70	31
W%	40	34	52	36	42	39	21	15	92
W/M	8/2	7/4	12/4	8/1	8/1	12/5	11,5/3	5/7	11/0
W+%	81	86	75	100	62	73	80	100	23
$\sum FC/\sum CF + C$	0/3	5/0	0/2	3/2	0/4	0/3	3/5	7/6	0/3
M/m	2/6	4/3	4/1	1/1	1/4	5/7	3/7	7/11	0/3
Ban%	27	22	25	41	21	16	7	11	0
H%	15	25	41	14	26	24	18	39	17
A%	50	49	41	41	21	31	42	36	17
Cont.	7	7	6	7	9	10	11	8	5
Aff. index	1 30	0,8 35	1,2 23	0,7 27	0,9 26	1,2 26	1 37	0,6 42	1 25
Impul.index	0,7	0,6	1	0,6	1	0,7	0,35	0,5	1
Self-control index	2/3	9/0	4/2	4/2	1/4	5/3	6/5	14/6	0/4
Reality index	6	5	4	5	4	6	5	7	0

Rorschach test-retest indexes

subjects 6-10

	6 M test	6 M retest	7 M test	7 M retest	8 F test	8 F retest	9 M test	9 M retest	10 F test	10 F retest
R	22	24	27	18	15	38	35	38	23	69
R+%	77	85	81	89	77	75	79	80	78	80
F%	82	79	85	72	67	42	71	63	52	72
F+%	79	89	83	96	85	69	76	79	75	81
W%	29	42	20	33	69	38	56	59	64	15
W/M	6,5/1	10/1	5/1	6/1	11/2	14,5/8	19,5/6	22,5/7	15/5	10,5/8
W+%	77	85	97	83	91	80	77	77	73	62
$\sum FC / \sum CF + C$	3/2	1/3	1/2	2/2	1/0	7/6	1/1	2/2	1/3	3/6
M/m	1/4	1/3	1/6	1/2	2/7	8/12	6/2	7/5	5/6	8/9
Ban%	14	25	27	28	30	17	27	18	22	9
H%	23	21	26	11	27	24	24	21	17	16
A%	27	50	52	72	33	26	47	45	43	33
Cont.	8	7	6	5	6	10	11	7	7	17
Aff. index	0,5 50	0,8 37	0,8 30	0,6 39	1,5 27	0,7 37	0,9 26	0,8 32	0,9 22	0,8 41
Impul. index	0,4	0,4	0,9	0,6	0,5	0,5	1	0,7	1,4	0,35
Self-control index	4/2	2/3	2/2	3/2	3/2	15/6	7/0	9/2	5/3	11/6
Reality index	4	7	5	5	4	5	6	5	4	5

Rorschach retest and psychoterhapy: quantitative indexes

Cognitive indexes

- ✓ N° R: tendency to increase
- ✓ R+%: greatly increase
- ✓ F%: tendency to decrease
- ✓ F+%: generally increase
- ✓ W%: tendency to decrease
- ✓ W+%: tendency to increase
- ✓ V%: without variations
- ✓ H%: greatly decrease
- ✓ A%: without variations
- ✓ Contents: without variations

Rorschach indexes	% readings lower than test	% readings the same in test	% readings higher than test
R	20%	20%	60%
R+%	10%	//	90%
F%	70%	10%	20%
F+%	20%	//	80%
W%	70%	//	30%
W+%	30%	10%	60%
Ban%	50%	//	50%
H%	80%	//	20%
A%	50%	10%	40%
contents	40%	10%	50%

Rorschach test and retest: type of perception

- Type of perception becomes more structured after a psychotherapy process.

subjects	Type of perception TEST	Type of perception RETEST
1 - E. S. Sex: F 1978	<u>W</u> (D) <u>Dim</u>	<u>W</u> (D) Dim
2 - A. D. Sex: M 1982	<u>W</u> <u>Dd</u> Dim	<u>W</u> (D)
3 - L. B. Sex: F 1973	<u>W</u> (D) <u>Dim</u>	<u>W</u> (D) Dd
4 - G. F. Sex: M 1966	W D Dim	(W) (D) Dd Dim
5 - A. G. Sex: F 1962	<u>W</u> <u>Dim</u>	<u>W</u> (D) <u>Dd</u> Dim
6 - M. M. Sex: M 1982	<u>W</u> D Dim	<u>W</u> (D) Dim
7 - M. R. Sex: M 1971	W D Dim Di	<u>W</u> (D) Dim
8 - M.V. Sex: F 1974	<u>W</u> Dd <u>Dim</u>	<u>W</u> (D) Dd Dim
9 - C.A. Sex: M 1949	<u>W</u> <u>Dim</u>	<u>G</u> (D)
10 - S.R. Sex: F 1962	<u>W</u>	(W) D <u>Dd</u>

Rorschach retest and psychotherapy II: quantitative indexes

- Affective indexes
 - ✓ marked increase
 - 1° affectivity index
 - ✓ partial increase
 - 2° affectivity index
 - ✓ middle increase
 - impulsivity index
 - ✓ partial increase
 - selfcontrol index
 - ✓ middle increase
 - reality index

rorschach indexes	% worse in retest	% better in retest
1° aff. ind.	20%	80%
2° aff. ind.	40%	60%
impuls. ind.	30%	70%
selfcon. ind.	40%	60%
reality ind.	30%	70%

Test e retest Rorschach in psicotherapy qualitative indexes

subjects	<i>EB second. test</i>	EB primary -test	<i>EB second. retest</i>	EB primary retest	shock - test	<i>shock - retest</i>	V° column test part. manif.	<i>V° column retest part. manif.</i>
1 - E. S. Sex: F 1978	6/0,5 <i>introversive</i>	2/3 tendency to ambitence	3/1 <i>tendency to introversive</i>	4/2,5 introversive/ ambitence	red, vacuum, colour	<i>reality sex</i>	deterioration starting censorship	<i>deterioration closing censorship</i>
2 - A. D. Sex: M 1982	0/1 <i>coartactive</i>	4/2 introversive	1/2 <i>tendency to ambitence</i>	1/3,5 tendency to introversive	red, black, colour	<i>black</i>	conf. III° lev. deterioration	<i>reflected deterioration</i>
3 - L. B. Sex: F 1973	4/4 <i>ambitence</i>	1/4,5 extratensive	7/3,5 <i>introversive</i>	5/2 introversive	start, red, colour, black, sex	<i>red, colour</i>	selfref. III° lev starting censorship conf. III° lev.	<i>impression conf. 1° lev.</i>
4 - G. F. Sex: M 1966	7/6 <i>extended</i>	3/6,5 extratensive	11/4 <i>introversive extended</i>	7/10 extended	red, black, vacuum, colour	<i>colour</i>	starting censorship disproportion	<i>starting censorship deterioration</i>
5 - A. G. Sex: F 1962	3/0 <i>introversive</i>	0/4 extratensive	4/2,5 <i>introversive/ ambitence</i>	2/5 extratensive	start, red, black, vacuum, sex, colour	<i>red, kinaesthetic, sex, colour</i>	spaltung stereotypy selfref. III° lev.	<i>starting censorship devitalization deterioration</i>
6 - M. M. Sex: M 1982	4/1,5 <i>introversive</i>	1/3,5 tendenza extratensive	3/1,5 <i>tendenza introversive</i>	1/3,5 tendency to introversive	red, colour	<i>colour</i>	devitalization spaltung	<i>devitalization reflected</i>
7 - M. R. Sex: M 1971	6/1,5 <i>introversive</i>	1/2,5 ambitence/ extratensive	2/1 <i>tendency to ambitence</i>	1/3,5 tendency to extratensive	red, colour	<i>sex</i>	disproportion attr. central axis	<i>impression reflected</i>
8 - M.V. Sex: F 1974	7/3,5 <i>introversive</i>	2/2,5 ambitence	12/2 <i>introversive extended</i>	8/9,5 extended	red, colour	<i>red, colour</i>	PCTN devitalization deterioration	<i>starting censorship spaltung splitting</i>
9 - C.A. Sex: M 1949	2/2 <i>ambitence</i>	6/1,5 introversive	5/0,5 <i>introversive</i>	7/3 introversive	red, black, colour	<i>black, sex, colour, vacuum</i>	starting censorship deterioration reflected	<i>PCTN deterioration reflected</i>
10 - S.R. Sex: F 1962	6/3 <i>introversive</i>	4/4 ambitence	9/3,5 <i>introversive extended</i>	8/7,5 extended	start, kinaesthetic, sex, colour	<i>red, kinaesthetic</i>	PCTN starting censorship	<i>PCTN coloris nomen</i>

Rorschach test and retest in psychotherapy qualitative indexes: comments

- The relationship between secondary EB and primary EB becomes, after a psychotherapy, more consistent. Infact, 9 cases on 10, we can observe that secondary EB and primary EB take their place in the same field of personality typology, with a better congruence between structure and superstructure.
- In Rorschach retest we can observe, 8 cases on 10, a substantial reduction of shocks: it seems to show a strengthening of Ego in these subjects trough psychotherapy.
- On 7 cases we can observe a change of the other particular manifestations, that become more egosyntonic and less destructured.

Rorschach-test and psychotherapy: closing considerations

The retest Rorschach in this pilot-study points out the change of following psicological features, after a psychotherapy:

- ✓ Increase of productivity of thought
- ✓ Better flexibility to learning
- ✓ Increase of associative-perceptive skills
- ✓ Better lucidity and clearness of thought
- ✓ Better ability of analysis and of observation
- ✓ Better appropriateness to enviromental stimuli
- ✓ Less impulsivity, more self-control
- ✓ Better contact with reality
- ✓ Lower affective-addicted
- ✓ Consistency between structural and superstructural fields
- ✓ Strengthening of Ego

Correlation between indexes Rorschach test /retest

- By the table below, we can observe that the numbers variation and the percentage variation of most important cognitive indexes of Rorschach test maintain into retest a steady and constant correlation.
- This correlation is confirmed by qualitative indexes into retest – secondary and primary EB, shocks, particular manifestations – which change is consistent and continuous with indexes of Rorschach – test at the beginning of psychotherapy.

Indexes	lower	mean test	higher	lower	mean retest	higher
R	12	25	54	18	31 + 12%	69
R+%	21	69	81	71	79 + 11%	90
F%	52	70	85	42	63 - 10%	72
F+%	31	72	85	69	81 + 11%	91
W%	20	48	92	15	36 - 25%	59
W+%	23	74	97	62	82 + 11%	100
Ban%	0	20	30	9	22 + 10%	41
H% m	18	26	41	11	21 - 20%	39
H% f	15	20	27	8	19 - 5%	25
A%	17	37	52	31	45 + 12%	72

An example...

...to underlined a change, from test to retest!

A.D. - male - born: 21/08/1982

Subject with phobic and obsessive features and a specific fear of blood and illness.

Rorschach - test 30/05/2005

card X : **“the blood, I don’t like it!”**

Rorschach - retest 16/06/2006

card X: **“blood, coagulated blood!”**

Test and retest Rorschach in forensic psychology

(subject: S. V. born: 31/08/1949 - in two different forensic context)

- TEST (psychologist: M.V. 24/10/2005)
- R = 10
- R+% = 82
- F% = 71
- F+% = 75
- G% = 45
- FC = 3
- G/M = 6/1
- Perceptual type: G (D) Dim
- TVI = 1/1,5
- tvi = 1/1
- M/m = 1/1
- H% = 29
- A% = 61
- Affectivity index 1° = 0,55 - 2° = 43
- Self-control index = 4/0
- Reality index = 5
- Shocks: red, sex, colour

- RE-TEST (psychologist: B.M. 5/02/2007)
- R = 11
- R+% = 91
- F% = 64
- F+% = 86
- G% = 52
- FC = 3
- G/M = 6/1
- Perceptual type: G (D) Dim
- TVI = 1/1,5
- tvi = 3/1
- M/m = 1/3
- H% = 18
- A% = 64
- Affectivity index 1° = 0,8 - 2° = 27
- Self-control index = 4/0
- Reality index = 8
- Shocks: red, sex, colour

Inter-rater reliability in Rorschach-test

- **The observation of most significant quantitative and qualitative indexes between Rorschach test and retest shows a substantial superposition of two psychograms.**
- Elements of differentiation between two psychograms are into retest: increase of some cognitive indexes and of reality index, worsening of affectivity index, a type of perception more rigid and , above all, a worsening of relationship between secondary and primary Erlebnis tipus.
- These features seem to propose an intensification of state of depression in the subject, but, both the psychologist, that collected Rorschach test in different periods and sites, close your report in way very similar:
- 1° psy Monia Vagni: *“...the difficulty to solve his present conflicts...reduces the capabilities and functions of adaptation, making a significant condition of uneasiness and awkwardness...”*
- 2° psy Barbara Montanini: *“...the emotional-affective sphere is characterized by a inner context meaningfulness depressive, with contents of anxiety, closing, seclusion, lack of interest and of vitality”.*

Conclusions and answers

In short, by our pilot- study, that requires further and wider in-depht studies, comes out:

- 1) Rorschach test is a fine instrument of validation of psychotherapic process; infact registers in accurate way changes and standard feature of personality of different subjects.**
- 2) The relationship between quantitative and qualitative indexes mantain, into test/retest Rorschach, the correlations and the internal consistency between the statistic variables.**
- 3) The repetition of Rorschach-test in a forensic context, by different psychologist, is strongly reliable, because the psychogram isn't modified, in substantial way, into following tests.**