

# Change of Self-Image in Patients with Neurotic, Borderline and Psychotic Disturbances

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Changes in the self-image of severely disturbed psychiatric patients diagnosed with Kernberg's (1981) structural interview as having neurotic, borderline and psychotic personality organization (NPO, BPO and PPO) were studied in a naturalistic 5-year follow-up programme of milieu treatment. Self-image was measured with Structural Analysis of Social Behavior (Benjamin, 1974) introject ratings. After treatment all patients had changed in the affiliation dimension of the self-image, while there was almost no change in the interdependence dimension. A more detailed analysis showed that for the NPO and PPO patients the higher overall affiliation was due to a less attacking self-image, while for the BPO patients it was due to more self-love. Both at intake and follow-up the PPO patients' ratings showed a positive self-image and those of the BPO patients showed high self-control. These ratings contrast with the diagnostic descriptions of such patients. It is suggested that these differences in perspective might lead to interpersonal problems. Copyright © 2003 John Wiley & Sons, Ltd.

## INTRODUCTION

Self-image is theoretically (e.g. Kohut, 1977, 1984; Sullivan, 1953) as well as empirically (e.g. Alpher, 1996; Armelius & Granberg, 2000; Ichiyama, Zucker, Fitzgerald, & Bingham, 1996; R. Mestel & A. Voltsmeier, presentation at the 28th Annual Meeting of the Society for Psychotherapy Research, Geilo, Norway, 1997; Swift, Bushnell, Hanson, & Logemann, 1986; Wonderlich, Klein, & Council, 1996) firmly connected to a person's well-being. A negative self-image is associated with poorer functioning in patients (Å. Granberg, K. Armelius, & B.-A. Armelius, unpublished data) and in normal groups (Jeanneau & Armelius, 2000). By the same

logic, a positive self-image is generally associated with better mental health and psychological functioning on various psychological and psychiatric dimensions. There are, however, exceptions to this. As we have shown in previous studies, schizophrenic patients have a positive self-image even though their general functioning is low (Armelius & Granberg, 2000; Öhman & Armelius, 1990). That finding has important theoretical implications as well as practical implications for treatment.

The concept of self-image has been carefully defined in interpersonal models of the self. One such model is Benjamin's Structural Analysis of Social Behavior (SASB; Benjamin, 1974), where the self-image is described in the two dimensions of autonomy and affiliation. In an earlier study (Armelius & Granberg, 2000) we used this model to analyse the introjection of the self-image, defined as the relation between a patient's early memories of their parents and their self-image. The patients studied were all severely disturbed, and

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Kernberg's structural interview (Kernberg, 1981) was used to diagnose their personality organization. We found that the introjection differed depending on the patients' personality organization. In borderline patients and normal subjects, the self-image was related to the images of both parents, while in psychotic patients only the image of mother was important for their self-image. In psychotic patients, self-autonomy and self-control were also found to be related to their mother's love and control. This finding was interpreted as evidence of a lack of differentiation between these two poles in the self-image of psychotic patients. In addition we found that the borderline patients had more negative images of themselves and their parents, especially their father, compared to psychotic patients and the normal subjects, while the psychotic patients' ratings did not differ much from those of the normal subjects. In another study of the same cohort of patients we found that treatment outcome and self-image at intake were significantly related. A more negative self-image at intake was a positive factor for treatment outcome for all patient groups. For patients with a borderline personality organization more self-control was also a positive factor for treatment outcome (Å. Granberg, et al., unpublished data).

In summary the studies cited above show that the self-image is related to perceived symptoms and well-being as well as to psychopathology and treatment outcome. The studies also point out the interpersonal character of the self-image, which originates from early interplay with the parents and influences later social functioning, including the capacity to take advantage of a treatment setting.

The concepts of personality organization and self-image come from different theoretical standpoints. Personality organization refers to intrapsychic structure and is associated with psychoanalytic theory. In clinical practice it is used as both a theoretical concept and a diagnostic category defined by clinical judgement. Self-image, by contrast, is associated with interpersonal theory and has a phenomenological character, signifying a person's immediate impression of himself. In spite of the different origins of the two concepts they are both important when studying how people change after treatment.

In self-psychology and interpersonal theory (Kiesler, 1996) the self is closely associated with a person's past and present relations to important others, with relations in childhood typically being fundamental to the development of the self but

with imprints from later relations also affecting an individual's self-image. The theoretical underpinnings of personality organization also assume a connection between early experiences and later self-image or identity and psychological functioning (Kernberg, 1980). Benjamin (1993) analyzed how adaptive patterns from childhood are expressed in the adult personality in the different personality disorders of the DSM system (American Psychiatric Association, 1994).

Another important issue is the stability of the self-image in adults. Will it change in a treatment situation that focuses on changing certain aspects of a person's health? The Vanderbilt research group from the mid-1980s on in their successive analyses of data from the Vanderbilt databases addressed this question. They developed a three-stage generic model of the therapeutic process in which interpersonal relations between the patient and therapist and the in-session interpersonal process (the alliance) are linked to treatment outcome (Henry, Schacht, & Strupp, 1990; Hilliard, Henry, & Strupp, 2000). In this model the change in the self-image as measured with the SASB model is used as a measure of outcome.

Henry et al. (1990) analysed the importance of the dyadic interpersonal process for psychotherapeutic change. The outcome of short-term psychotherapy was classified as good or poor according to the amount and direction of change in the patient's self-image. They found a relationship between the types of statements made by therapist and patient, also judged with the SASB model, and the change in the patient's self-image. They also found a relation between the therapist's self-image and the type of statements made by them in therapy.

However, as has been noted in previous research, 'collapsing across disaffiliative and affiliative codes in the SASB codings largely masks the variability in disaffiliative codes' (Hilliard et al., 2000, p. 128). As Henry et al. (1990) concluded in psychotherapy even small amounts of negative behaviour by the psychotherapist have a negative effect on treatment outcome because of the ease with which existing negative self-expectations (self-image) can be evoked in patients. These findings suggest that it is meaningful to analyse the different parts of the self-image and how they change during the course of a treatment programme. Such an analysis was done by Junkert-Tress, Schnierda, Hartkamp, Schmitz, and Tress (2001) who used the weighted positive and negative scores of the affiliation dimension of the SASB to study the effect of short-

term dynamic psychotherapy for patients with different disorders. They found a positive and congruent development in both affiliation indexes for patients with neurotic and somatoform disorders, while the personality disordered patients showed an improvement on the affiliative scores and deterioration on the disaffiliative scores. There was also less improvement in self-rated symptoms in the personality disordered group.

The purpose of the present study was to analyse changes in the self-image of patients diagnosed with Kernberg's structural interview (Kernberg, 1981) as having psychotic (PPO), borderline (BPO) and neurotic (NPO) personality organization over a 5-year follow-up period. The patients participated in a milieu-therapy programme. From our previous studies we know that all groups improve in mental health and psychological well-being. It was therefore expected that the average self-image would change after treatment and become less negative or more positive for all groups and that this change would be largest in the non-psychotic groups. In terms of the SASB model, this expectation meant that the disaffiliative clusters would be rated lower at follow-up and/or the affiliative clusters would be rated higher. It is more difficult to predict changes in the interdependence dimension of the SASB model (self-control—autonomous self). Although we found a positive correlation between self-control and outcome for BPO patients in our earlier study (Å. Granberg et al., unpublished data) more data is needed to predict change in that dimension in different patient groups.

## METHOD

### *Participants and Setting*

The participants in this study were 116 patients from the Swedish Small Treatment Homes Study (M. Jeanneau & K. Armelius, unpublished data). Treatment homes are small psychiatric units for

long-term in-treatment of severely disturbed psychiatric patients with psychotic or personality disorders. Each home treated seven to 10 patients each. The homes differed in their ideological orientation but shared a milieu treatment approach in which everyday activities are used to teach the patients about themselves and their illness. The patients rated their self-image with the SASB introject questionnaire both at intake and at follow-up after 5 years. The long follow-up period was chosen both to ensure that treatment was completed and to have some time after treatment for all patients. To be included in the present study the patients also had to have been diagnosed at intake with Kernberg's structural interview. As this was a naturalistic study we had little ability to manipulate our sample in advance. Therefore some characteristics of the patient sample are unevenly distributed across the diagnostic subgroups (see Table 1).

While current age and age at onset of illness did not differ between the groups, the NPO patients had a shorter duration of illness as well as a shorter treatment time in the treatment home. This group also had more females than the other two groups.

### *Attrition*

Out of 205 patients there was a pre-programme attrition rate of 18 patients who attended the treatment programme but did not want to take part in the follow-up research programme. Their non-participation did not affect the distribution over diagnostic groups. Another 18 patients in the initial group were never diagnosed and were therefore not included in this study and another six patients did not complete the SASB questionnaire at intake. Of the remaining 163 patients, a further 47 dropped out (five died before follow-up, 17 dropped out during the 5-year follow-up period, and 19 at the follow-up assessment and another six patients did not complete the SASB questionnaire at follow-up).

Table 1. Sex, age, onset and duration of illness in the NPO, BPO and PPO groups

	NPO	BPO	PPO
Number at follow-up	12	29	75
Percentage male	35	49	60
Age at intake	26.8 (SD = 6.4)	26.8 (SD = 8.3)	26.6 (5.4)
Onset of illness (age)	21.9 (SD = 4.6)	19.1 (SD = 5.7)	20.1 (4.5)
Duration of illness (years)	4.7 (SD = 4.6)	8.2 (SD = 6.6)	6.5 (4.9)
Years in treatment home	1.0 (SD = 1.0)	1.9 (SD = 1.9)	1.9 (1.4)

Thus 116 patients took part in the follow-up assessments with their SASB ratings. There were no differences in age or gender between those who were followed up and those who dropped out. There were also no differences between those who dropped out during the follow-up period and those who dropped out at follow-up. All the patients who died had been diagnosed as PPO. In total 28% of the PPO patients dropped out compared to 17% in the BPO group and 15% in the NPO group.

### Comparison Group

To show deviance (or non-deviance) from normal ratings a comparison group was included. This group consisted of 52 subjects, 24 males and 28 females, with a mean age of 33 years ( $SD = 9.5$  years, range 20–56 years). All subjects in the comparison group were either working or studying and none had any known psychiatric problems at the time of the testing.

### SASB Introject Surface

The patients were assessed with several instruments at intake and at follow-up. In this study our interest was in the intake and follow-up measurement of the self-image. The self-image was measured with the Swedish version of the SASB questionnaire for self-image ratings (Armelius, Lindelöf, & Mårtensson, 1983).

The basic dimensions in the SASB model are affiliation (from self-rejecting and self-destroying to self-loving and cherishing) and interdependency (from self-monitoring and restraining to autonomous and free self). These dimensions have been related to Bowlby's attachment theory and the basic needs of attachment and exploration (Florsheim, Henry, & Benjamin, 1996). In normal development the relation between parent and child is centred around positive attachment or the affiliation pole of the SASB model, and there is a balanced level of self-control and autonomous self that results in a positive self-image with moderate autonomy/control (Florsheim et al., 1996).

The introject surface of the SASB model consists of 36 points encircling the intersection between the orthogonal axes of affiliation and autonomy. In the questionnaire these points are formulated as statements reflecting the subject's view of him/herself. The subject whose self-image is being estimated states to what extent statements that reflect each

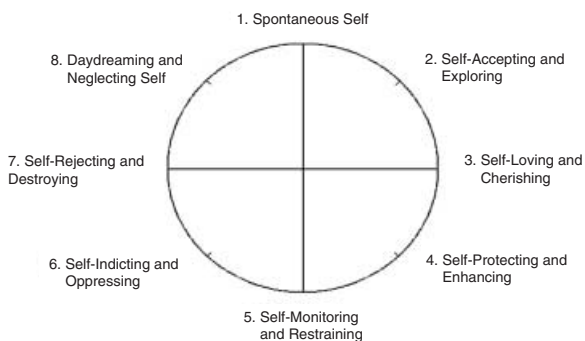


Figure 1. The introject surface (self-image) of the Structural Analysis of Social Behavior (SASB)

point apply to him/herself, on a scale from 0 to 100. The instruction given to the patients in the present study was: 'This is a questionnaire about your view of yourself. Please answer the questions as honestly and openly as you can. The best answer is often the first one that comes to your mind. There are no right or wrong answers. It is your own view that is important'.

In the cluster version of the SASB the 36 points are collapsed into eight clusters by computing the mean of four or five adjacent points (see Figure 1). Benjamin (1996) has called clusters 1, 2 and 3 the attachment group of clusters and clusters 6, 7 and 8 the disruptive attachment group of clusters.

### Procedure

The SASB questionnaire was administered together with the other instruments by a staff member at the treatment home who also was available to help the patients to understand the questions if needed. In only a few cases was it necessary to read the items to a patient.

### Measures

From the ratings three different measures were computed: cluster scores, vectors, and vector component scores. Cluster scores are defined above. The clusters, which reflect different aspects of the self, are shown in Figure 1.

### Vectors

The vectors were computed as weighted sums of the eight clusters, with the weight of each cluster representing its position relative to the horizontal affiliation axis or the vertical autonomy axis. As recommended by Pincus, Newes, Dickinson, and

Ruiz, (1998a) we used the weights from Benjamin (1988) to obtain a standard scoring routine for the vectors. The equations for the affiliation (AFF) and the autonomy (AUT) vectors are:

$$\begin{aligned} \text{AFF} = & 0 \times \text{cluster 1} + 4.5 \times \text{cluster 2} + 7.8 \\ & \times \text{cluster 3} + 4.5 \times \text{cluster 4} + 0 \times \text{cluster 5} \\ & - 4.5 \times \text{cluster 6} - 7.8 \times \text{cluster 7} - 4.5 \\ & \times \text{cluster 8} \end{aligned}$$

$$\begin{aligned} \text{AUT} = & 7.8 \times \text{cluster 1} + 4.5 \times \text{cluster 2} + 0 \\ & \times \text{cluster 3} - 4.5 \times \text{cluster 4} - 7.8 \times \text{cluster} \\ & 5 - 4.5 \times \text{cluster 6} + 0 \times \text{cluster 7} + 4.5 \\ & \times \text{cluster 8} \end{aligned}$$

According to Pincus et al. (1998a) the vectors have significant advantages over other compared SASB indexes: they are more normally distributed, they exhibit independence between the dimensions (orthogonality) and good convergent validity, and they are also easier to compute.

#### Vector Component Score

The two vectors were further separated into a positive and a negative component. For the affiliation vector these components were self-love and self-attack. The self-loving component (SELFLOVE) is formed from those clusters that are to the right of the vertical affiliation axis, while those to the left of that axis form the self-attacking component (SELFATTACK). The weights for the clusters are the same as in the equation for the affiliation vector. In the same way two components are formed for the vertical autonomy vector, where the autonomy-giving component (SELFAUTONOMY) is formed from the clusters above the horizontal axis and the control component (SELFCONTROL) from the clusters below that axis.

#### Statistical Methods

All measures were analysed with a 3 (PO groups)  $\times$  2 (intake/follow-up) ANOVA with repeated measurements on the second factor. Bonferoni *post-hoc* tests were applied. The ratings of the self-image of those patients who dropped out of the study and those who were followed up were compared with Student's *t*-test for each group separately. The significance level was  $p < 0.05$ .

## RESULTS

### Drop-outs

A comparison was carried out of the SASB ratings at intake for the group who finished the research

programme, that is, the present study group, and those who did not (drop-outs). This comparison was undertaken for all three measures: cluster scores, vectors and vector component scores. For the PPO and NPO groups there were no significant differences on any measure between those who dropped out and those who remained in the study. In the BPO group the patients who dropped out had higher AUT scores,  $t(37) = 2.47$ ,  $p < 0.05$ , higher SELFLOVE,  $t(37) = 2.33$ ,  $p < 0.05$  and higher SELFAUTONOMY,  $t(37) = 2.92$ ,  $p < 0.01$ , higher ratings of cluster 1,  $t(37) = 2.72$ ,  $p < 0.01$ , of cluster 2,  $t(37) = 2.15$ ,  $p < 0.04$  and of cluster 3,  $t(37) = 2.31$ ,  $p < 0.05$  than those who were followed up. In summary, the BPO patients who dropped out had a more positive self-image and a more autonomous self than those who were followed up.

### Cluster Scores

Figure 2 presents the mean cluster scores at intake and follow-up of the SASB introject surface for the groups studied together with values for the comparison group.

The ANOVA showed significant effects of diagnostic group and assessment time for cluster 2,  $F(2,113) = 2.40$ ,  $p < 0.01$  and  $F(1,113) = 9.34$ ,  $p < 0.0$ , for cluster 3:  $F(2,113) = 4.91$ ,  $p < 0.00$  and  $F(1,113) = 12.85$ ,  $p < 0.00$ , for cluster 6:  $F(2,11) = 6.67$ ,  $p < 0.01$  and  $F(1,11) = 16.06$ ,  $p < 0.00$  and for cluster 7:  $F(2,112) = 6.60$ ,  $p < 0.00$  and  $F(1,112) = 10.16$ ,  $p < 0.00$ . For clusters 1, 4 and 5 differences between diagnostic groups were significant but not that between assessment time,  $F(2,113) = 4.50$ ,  $p < 0.01$ ,  $F(2,113) = 3.58$ ,  $p < 0.05$ , and  $F(2,113) = 4.24$ ,  $p < 0.05$  for each cluster respectively. For cluster 8 assessment time was significant but diagnostic group was not,  $F(1,113) = 7.75$ ,  $p < 0.01$ . There were no significant interaction effects for any cluster.

At intake the PPO patients rated the positive clusters (2 and 3) higher and the negative clusters (6 and 7) lower than the other two groups. The NPO patients had lower self-control (cluster 5) than the other two groups. There were no differences between the groups for cluster 1 and cluster 8 at intake. Thus, the main characteristics of the introjected self-image for the PPO group were high acceptance of self and high self-love, while the main characteristics of the BPO group, and to some extent also of the NPO group, were the high rating of the negative clusters oppressing and rejecting the self (cluster 6 and cluster 7).

At follow-up the BPO patients had higher ratings than the NPO group for self-control (cluster 5) and

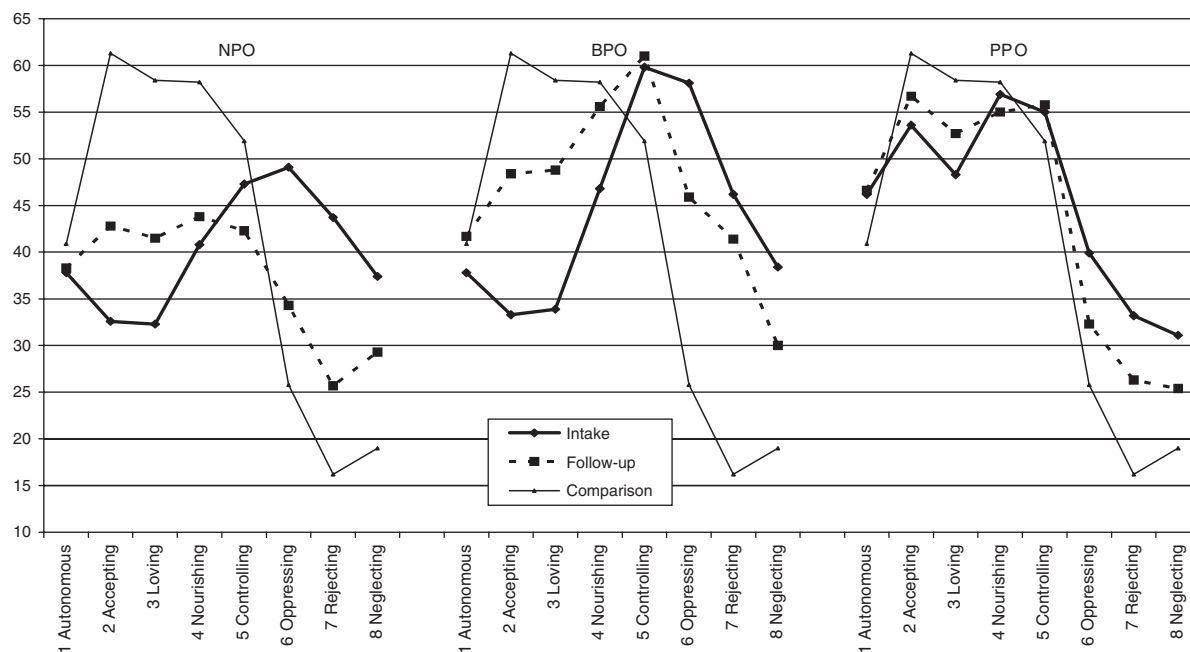


Figure 2. Mean cluster scores at intake and follow-up for NPO, BPO and PPO patients together with values for a normal group

higher ratings for oppressing and rejecting the self (cluster 6 and cluster 7) than the PPO group. Thus, this group's negative self-image with high self-control was also evident at follow-up.

Student *t*-test for paired comparisons showed that the PPO group had a significant decrease in the negative clusters (cluster 6,  $t(74) = 2.96$ ,  $p < 0.00$ ; cluster 7,  $t(74) = 2.49$ ,  $p < 0.05$  and cluster 8,  $t(74) = 2.38$ ,  $p < 0.05$ ). The BPO group showed a significant increase in the positive clusters (cluster 2,  $t(28) = 3.21$ ,  $p < 0.00$ ; cluster 3,  $t(28) = 3.74$ ,  $p < 0.00$  and cluster 4,  $t(29) = 2.13$ ,  $p < 0.05$ ) and a significant decrease in oppressing the self (cluster 6,  $t(28) = 2.19$ ,  $p < 0.05$ ). The NPO patients had significantly lower ratings of oppressing and rejecting the self (cluster 6,  $t(11) = 3.04$ ,  $p < 0.01$  and cluster 7,  $t(11) = 2.60$ ,  $p < 0.05$ ) at follow-up.

Thus, at follow-up after 5 years the self-image had become more positive in all groups. The attachment group of clusters had higher ratings and the disruptive attachment group had lower ratings. In fact, the profile for all groups had become more like the normal profile during the follow-up period after participating in a milieu-therapy programme. The small changes in the clusters reflecting self-autonomy and self-control are

worth noting. Although the scores for cluster 1 and cluster 5 are on different levels for the different groups, the scores do not change between assessments.

### Vectors

The vectors **AFF** and **AUT** at intake and follow-up are shown in Figure 3. There were significant effects of diagnostic group and assessment time for **AFF**,  $F(2,110) = 6.98$ ,  $p < 0.00$  and  $F(1,110) = 22.62$ ,  $p < 0.00$  and for **AUT**,  $F(2,110) = 5.87$ ,  $p < 0.00$  and  $F(1,111) = 4.31$ ,  $p < 0.05$ . At intake the PPO patients had a more affiliative self-image than the other two groups and the BPO patients had a less autonomous self-image than the PPO group. At follow-up the BPO patients still had a less autonomous self-image than the other groups but there was no longer a significant difference in **AFF**. Thus the difference between the groups on the affiliation dimension had decreased during the follow-up period.

There were significant changes of the affiliation dimension between intake and follow-up for all groups ( $p < 0.01$  for all groups). The generalized

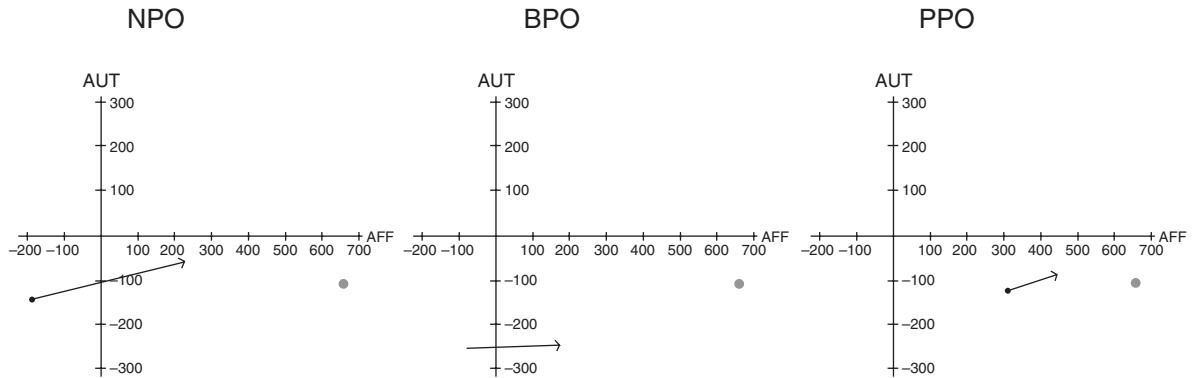


Figure 3. Change of vector scores. The arrows mark the change between intake and follow-up. The dots mark the scores for a normal group

self-image had thus become more affiliation-oriented. However the autonomy vector was very stable over the 5-year period. Only the NPO group had a significant change in that dimension and had a more autonomous self at follow-up,  $t(11) = 2.51$ ,  $p < 0.05$ . Thus, the NPO group showed the greatest change on both dimensions of the SASB.

**Vector Component Scores**

The vector component scores are shown in Figures 4 and 5.

The vector component scores for the affiliation dimension showed different changes in different groups. For the BPO patients SELFLOVE was higher at follow-up,  $t(28) = 3.79$ ,  $p < 0.01$  and for the NPO and PPO patients SELFATTACK was lower at follow-up compared to intake,  $t(11) = 3.20$ ,  $p < 0.01$  and  $t(74) = 3.14$ ,  $p < 0.01$  for the NPO and PPO group respectively.

The SELFAUTONOMY and SELFCONTROL components did not change significantly in any group. There was only a tendency for the NPO patients to score lower on SELFCONTROL at follow-up  $t(11) = 2.02$ ,  $p = 0.07$ .

Thus, when the two vectors were divided into two components, the BPO patients were shown to have changed in their self-image on the positive side of the model, while the other two groups had changed on the attacking side. The other two vector components were more stable over time. There was only a tendency for self-control to have decreased for the NPO patients after treatment.

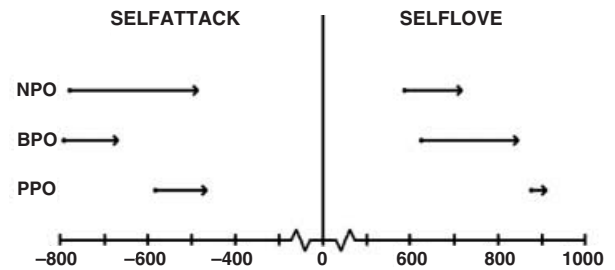


Figure 4. Change of component scores for the affiliative vector. The arrows mark the change between intake and follow-up

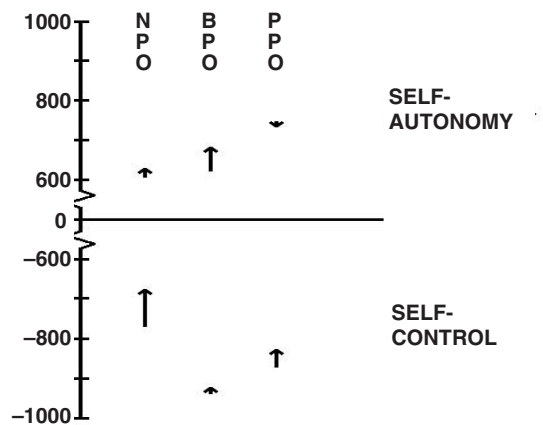


Figure 5. Change of component scores for the autonomy vector. The arrows mark the change between intake and follow-up

## DISCUSSION

As predicted, the average introjected self-image showed an increase in affiliation in all three patient groups over the 5-year follow-up period. This trend was more pronounced the less disturbed the patients were—the NPO patients had the largest increase in the **AFF** score and the PPO patients showed the least change. In our earlier outcome study of these patients (Å. Granberg et al., unpublished data) we discussed whether this 'declaration of satisfaction' contributes to the PPO patients' reduced ability to change in other outcome measures compared to the other groups. It seems obvious that if, like the NPO and BPO patients, one's view of oneself is 'oppressing and rejecting' the motivation to change is greater than with an 'accepting and loving' self-image like that of the PPO patients.

However, while both NPO and BPO patients had a negative self-image, the analysis of vector component scores seems to indicate different kinds of changes in affiliation in these two groups. The BPO patients showed a change in positive affiliation compared to the NPO patients whose change was on the negative side of affiliation. Thus the BPO patients had the highest rating of negative affiliation both before and after treatment. A negative self-image seems to be fairly stable for the BPO patients, which accords with the common view that self-attack is the key symptom of BPO patients, for whom the attacking component seems to be more resistant to change. These results are also in agreement with those obtained in the study by Junkert-Tress et al. (2001) who found an improvement only on the affiliative scores for the personality disordered patients.

A related but different question is why the PPO patients have an impression of themselves that is at such odds with others' opinion about them. They rate themselves as 'loving and cherishing of self', while other people mostly see them as odd and reserved. In addition to listing many of the positive and negative symptoms of schizophrenia described in the DSM system (American Psychiatric Association, 1994) a modern textbook on abnormal psychology states that schizophrenic patients 'also show absence of motivation, affect and quality communication' (Nolen-Hoeksema, 2001, p. 325). There is apparently a great difference between PPO patients' view of themselves and the way other people see them, which may lead to interpersonal difficulties such as problems in understanding what happens in a relationship.

Patients in all groups changed less in the interdependence dimension of the self-image than in the affiliation dimension. In a study in which the SASB self-image was related to perceived ward atmosphere, J.A. Jansson and M. Eklund (unpublished data) found that among patients with psychosis a high level of control in the self-image also made them perceive high levels of support, practical orientation and order in the ward atmosphere. We might speculate that their inner control is mirrored in a perceived order of their interpersonal environment. In this way the patients' inner and outer world cooperates in conserving a controlled self-image.

Pincus, Gurtman and Ruiz (1998b) analysed the structural relations between the SASB model and the five-factor model of personality. They concluded that '... autonomy is a major dimension in theories of human and social development ...' and 'its continued investigation in personality research may lead to additional facets of personality description and link descriptive models and developmental theories' (Pincus et al., 1998b, p. 1642). If the autonomy pole of the interdependence dimension is a unique aspect of personality, the whole dimension of interdependence seems to be a rather stable one among the patients in this study, for both components of the dimension. The only exception was that the NPO patients decreased their self-control over the follow-up period and actually moved closer to the normal group in this respect. Autonomy also seems to be related to psychopathology, for the BPO group in the present study differed from the other groups and scored far higher on self-control in the self-image. A large proportion of the BPO patients also had a DSM diagnosis of borderline personality disorder. In the definition of this diagnosis it is said to be 'a pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts' (American Psychiatric Association, 1994, p. 280). This definition is followed by nine examples of this instability and lack of control. So it seems that for BPO patients there is a marked discrepancy between their experience of themselves and how they are described by other people with reference to the interdependency dimension of personality.

From an interpersonal viewpoint it is interesting that the self-perceptions of the pathological groups of both PPO and BPO differ from how they are typically described by people with whom they are interacting, albeit the disagreements concern dif-



ferent dimensions of the SASB model. While the PPO patients disagree as to how self-loving and self-accepting they are, the BPO patients disagree about how self-controlling they are. In terms of the SASB vector model, their deviant perceptions are about the affiliation and interdependence dimensions of personality respectively. The very aspects that are used to define their pathology are those in regard to which the patients' inner perceptions of themselves differ most from how they are described by their social environment.

Since there was a systematic drop-out of BPO patients who had more self-love and higher self-autonomy at intake, it is important to ask if the results for the BPO group were affected by this drop-out. Do we have reason to suspect that the patients who dropped out would have manifested a pattern of change fundamentally different from that of the patients who remained in the study? For example, those BPO patients who dropped out might have a more positive self-image and a more autonomous self because they were more 'normal' or better functioning than those who remained in the study, or they might have this self-image because they were closer to the PPO patients. Unfortunately, we do not have enough data on these patients to decide between these two options. However, if the more positive and autonomous self-image of the dropped-out BPO patients indicates that they are closer to the PPO patients than to the whole BPO group, we might expect that there would have been a smaller increase in self-love had the entire group of BPO patients been followed up. The naturalistic design of the present study also means that certain other factors could not be controlled for, such as different selection factors relating to patient characteristics and diagnosis that might have influenced our results. Also we had no control over treatment factors which means that the changes or lack of changes in the different aspects of the self-image found in the present study might have been an effect of the special kind of treatment in this setting with small home-like units where the close relationship between staff and patients might have stimulated changes in affiliation more than in autonomy. So the question of stability in the dimension of interdependency in these diagnostic groups still remains to be answered.

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