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Faculty of Biology and Medicine Publication

This paper has been peer-reviewed but does not include the final publisher proof-corrections or journal pagination.

Published in final edited form as:

Title: Defence and coping in bipolar affective disorder: stability and

change of adaptational processes.

Authors: Kramer U

Journal: The British journal of clinical psychology

Year: 2010 Sep

Issue: 49

Volume: Pt 3

Pages: 291-306

DOI: 10.1348/014466509X457397

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Running head: Defense and Coping in Bipolar Affective Disorder

Defense and Coping in Bipolar Affective Disorder: Stability and Change of Adaptational Processes

Ueli Kramer

¹Institute for Psychotherapy, Dpt of Psychiatry-CHUV, University of Lausanne

²Institute of Psychology, University of Lausanne

Word count (exc. figures/tables): 4000

^{*}Requests for reprints should be addressed to Dr Ueli Kramer, Institute for Psychotherapy, Cèdres-Cery; CH-1008 Prilly-Lausanne, Switzerland (e-mail: ueli.kramer@chuv.ch).

RUNNING HEAD: DEFENSE AND COPING IN BIPOLAR AFFECTIVE DISORDER
Defense and Coping in Bipolar Affective Disorder: Stability and Change of Adaptational
Processes

DEFENSE AND COPING IN BIPOLAR AFFECTIVE DISORDER 2

ABSTRACT

Abstract

Objectives: Defense mechanisms and coping have rarely been investigated from an integrative

point of view (Cramer, 1998). We are particularly interested in stability and change of these

adaptational processes in clinical crisis situations of inpatients presenting with Bipolar

Affective Disorder.

Design: We conducted a controlled interview study including an inpatient and a matched

control group; longitudinal data is provided by follow-up interviewing for all participants.

Methods: A total of N = 18 participants per group (patients presenting with Bipolar Affective

Disorder and non-clinical controls) were recruited and interviewed twice. All interviews were

transcribed and analysed according to observer-rater systems for coping (Coping Action

Patterns) and defense mechanisms (Defense Mechanism Rating Scales). SCL-90-R, as well as

specific symptomatic measures, were used for symptomatic assessment and HLM modelling

was used for statistical computation.

Results: Overall Defensive Functioning remains stable over a three-month period, whereas

Overall Coping Functioning increases over the same period in patients, as they are discharged

from inpatient treatment; no such effect was found in controls.

Conclusions: Overall stability in adaptational processes may be attributed to defensive

functioning, whereas change over short periods of time are related to coping concepts in

inpatients presenting with Bipolar Affective Disorder.

Key-Words: Defense Mechanisms, Coping, Bipolar Affective Disorder, Crisis

Intervention, Observer-Rater Method

DEFENSE AND COPING IN BIPOLAR AFFECTIVE DISORDER: STABILITY AND CHANGE OF ADAPTATIONAL PROCESSES

Defense mechanisms and coping processes have both aroused increasing interest in recent research on personality, psychopathology and psychotherapy (Cramer, 1998a; Lazarus, 2000; Skinner, Edge, Altman, & Sherwood, 2003). Even if they stem from different conceptual backgrounds - psychoanalysis and cognitive science -, one may ask whether one can differentiate the underlying psychological processes (Cramer, 1998a). These concepts may be applied to the clinical crisis situation of Bipolar Affective Disorder cases undergoing inpatient treatment. Bipolar Disorder (BD) implies psychological and biological dysregulation of the affective experience (Goodwin, & Jamison, 1990); defense and coping as affect regulating processes in BD may therefore be relevant. We refer to classical definitions of defense by A. Freud, 1936 (cited by Cramer, 1998a, p. 920¹) and coping by Fleishman, 1984 (cited by Holahan, & Moos, 1987, p. 946²). According to Cramer (1998a), both processes can be called adaptational, since they serve the individual's need for adaptation to reality. In this sense, defense and coping may both be defined with reference to their functionality, as suggested by Brenner (1979) for the defense concept.

Differentiation between defense and coping has already been evoked by Freud with regard to two different psychological processes underlying the defense mechanism of isolation, one of them being neurotic and the other adaptive (Freud, 1926; see also Hartmann, 1958 and the discussion of denial by Sjöbäck, 1973). We do not intend to discuss Horowitz'

^{1 «} Defense Mechanisms – i.e., mental mechanisms that alter veridical perception – were postulated to function so as to protect the person from excessive anxiety, whether the source of that anxiety be the perception of a disturbing external event or the presence of a disruptive internal psychological state..."

² Coping defined as « overt and covert behaviors that are taken to reduce or eliminate psychological distress or stressful conditions. »

model (Horowitz et al., 1992) on control processes in association with defenses, because the model does not refer to coping as defined above. According to Cramer (1998a), the differentiation between defense and coping may be discussed with regard to several criteria: functionality, consciousness, stability v change or degree of association with psychopathology. In this article, we focus on stability and change.

The question of stability and change over time of defenses and coping refers to the underlying question of stable trait- and fluctuating state-aspects in defense and coping. Defenses, in line with Cooper (1998) and Perry (1993; see also the afore-mentioned definition by A. Freud), were said to be elicited by intra-psychic or individual-related external conflicts, which means that there is a (stable, personality-related) trait- as well as a (supposedly fluctuating) state-aspect. Nevertheless, stability of overall defensive functioning – or of an idiosyncratic profile of defensive pattern – was said to be characteristic of the concept of defense (Bergeret, 1985; Kernberg, 1984); short-term changes being limited (Drapeau, de Roten, Perry, & Despland, 2003; Perry, & Cooper, 1989; Cramer, 1998b; Vaillant, 1976). With regard to coping, even if data and theoretical elaborations have appeared on the subject of personality variables influencing coping processes (Beutler, Harwood, Alimohamed, & Malik, 2002; Carver, Scheier, & Weintraub, 1989; Costa, & McCrae, 1990), the processvariable coping was conceived as situation-dependent, thus referring more narrowly to the aspect of state in personality psychology (Cramer, 1998a; Lazarus, & Folkman, 1984; Steffens & Kächele, 1988; see also the afore-mentioned definition offered by Fleishman, 1984). Within behavior theory, "stable" coping processes in the same individual can be explained by the short-term benefits of a coping strategy, i.e., by referring to negative reinforcement. Since coping is conceived as state-dependent, compared to defenses, it seems sensible to postulate that coping processes are more closely related to situational parameters and should change more rapidly than defenses.

Thus far, only very few empirical studies have investigated differences or potential linkages between defenses and coping, with respect to the afore-mentioned theoretical elaborations. Callahan and Chabrol's research (2004), based on the assumptions detailed in Chabrol and Callahan (2004), found in a questionnaire-study on a student sample (N = 190) moderate correspondence between mature defenses and adaptive coping, as well as between immature defenses and maladaptive coping (Callahan, & Chabrol, 2004). Similarly, Grebot, Paty, and Girard Dephanix (2006) studied specific relations between defense and coping in a questionnaire-study on a sample of psychology students (N = 184) and found partial confirmation of the link between mature defenses and adaptive coping and partial confirmation of the link between neurotic, immature defenses and maladaptive coping. These results are based on a series of Spearman correlations, which are sensitive to the multiplication of measurement errors; Labouvie-Vief, Hakim-Larson, and Hobart (1987) controlled for this limitation by using canonical correlations. No observer-rater method has been applied in these studies, which is a disadvantage, due to the limited face-validity of questionnaires when non-conscious aspects of a individual's functioning are measured (Cramer, 1998a; the same criticism applies to the study on adolescents by Erickson, Feldman, & Steiner, 1997, as well as those on age-differences and maturation by Whitty, 2003 and by Labouvie-Vief, Hakim-Larson, & Hobart, 1987 and on bipolar affective disorder by Thomas et al., 2007). Using the Defense Mechanism Rating Scales as observer-rater scale based on session-transcripts (DMRS; Perry, 1990a; see Method section), Hersoug, Sexton, and Hoglend (2002) found positive correlations between adaptive coping (measured by the questionnaire WCCL; Vitaliano, Russo, Carr, Maiuro, & Becker, 1985) and overall defensive functioning (ODF). Finally, Küchenhoff and Manz (1993) have conducted a study inspired by the Steffens and Kächele's (1988) integrative model on defense and coping. The authors devised their own model based on several layers of consciousness associated with coping

(situated on a fully conscious level of the individual's functioning) and defenses (situated on a fully unconscious level), as well as presumably pre-conscious derivates of defenses (situated in-between). The multi-layer model seemed confirmed on a sample of N = 118 patients presenting Morbus Crohn illness in the acute phase, but was not confirmed for the same patients in the rehabilitation phase. A recent psychotherapy process study has shown a moderate link between defense and coping (r = .18), by using canonical correlations (N = 32; Kramer, de Roten, Michel and Despland, in press).

Several studies have already shown the importance of defenses and coping, separately, in Bipolar Affective Disorder (see for coping: Knowles et al., 2005: Paykel, 2001; Thomas, et al., 2007; for defenses: Baruch, 1997; Perry & Cooper, 1986; Sjöbäck, 1973), but no studies have studied them together including the focus on stability and change over time.

This leads us to our research hypotheses: (1) Coping and defense present limited overlap; (2) If overlap there is, adaptive (mature) defenses relate to adaptive coping, and maladaptive defenses relate to maladaptive coping; (3) Patients presenting Bipolar Affective Disorder (BD) practice less adaptive coping and less adaptive defenses than matched controls; (4) Defenses are stable between inpatient treatment and after three months, whereas coping changes over time.

METHOD

Sample

A total of 18 inpatients with Bipolar Affective Disorders (BD) were included in the study. A total of 12 (67%) were female, with a mean age of 47.1 years (SD = 11.2; ranging from 21 to 60). Their socio-demographic level was assessed by means of the total number of years of education in any field. On average, the patients had 12.2 years of education (SD = 0.7; range from 10 to 16). All had a DSM-IV-R diagnosis of Bipolar Disorder I (either F30.x[296.x], F31.x[296.4x or .5x] or F31.6[296.6x]) and were included in the study

irrespective of the nature of the most recent phase or of the level of chronicity. Some (43%) presented co-morbid disorders, such as drug abuse (23%; cannabis, alcohol, cocaine), personality disorders cluster C (10%), compulsive-obsessive disorders (3%), acute suicidality (3%) and epilepsy (3%). Diagnoses were established by trained medical staff by means of SCID (Structured Clinical Interview for DSM-IV, only part on BD; First, Spitzer, Williams, & Gibbon, 2004). The number of inpatient treatments in psychiatry, including current treatment, varied between 1 and 29 (Mean = 7.7; SD = 7.0).

A strictly matched control group was introduced; matching criteria were gender, age and years of education, as these have an influence on defensive functioning and coping (Labouvie-Vief, Hakim-Larson, & Hobart, 1987; Whitty, 2003). A total of N = 18 persons from a community sample were recruited for the study. Out of these, 12 (67%) were female, with a mean age of 42.5 (SD = 13.1; range from 23 to 65). Their mean number of years of education was 12.6 (SD = 1.0; range from 11 to 18), corresponding to intermediate education level. No inpatient treatment in psychiatry is known for these participants and general symptomatology was in the normal range for all control participants. T-tests yielded no significant differences in the matching variables between the groups (see table 1). All participants gave written consent.

Instruments

Defense Mechanism Rating Scales (DMRS; Perry, 1990; French translation: Perry, Guelfi, Despland, & Hanin, 2004). The DMRS is an observer-rater scale assessing 28 defense mechanisms, based on the hierarchical conception of defensive functioning by Vaillant (1993). Seven levels ranged according to the criteria of adaptiveness are included, from the least adaptive to the highly adaptive: (1) Action (acting out, passive aggression, hypochondriasis), (2) Borderline (splitting of self/object images, projective identification), (3) Disavowal (denial, rationalisation, projection) and autistic fantasy (for further

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computation, this defense will be considered on level 3, even if conceptually distinct) (4)

Narcissistic (omnipotence, devaluation self/other, idealization self/other), (5) Neurotic

(repression, dissociation, reaction formation, displacement), (6) Obsessional (isolation of
affect, intellectualization, undoing) and (7) Mature (affiliation, altruism, anticipation, selfassertion, humour, self-observation, sublimation, suppression). For example, the following
excerpt was rated as omnipotence (narcissistic defense): "I told him 'President of the Jury,
may I tell you something. We live in a huge villa with seven rooms. We own cable-television,
several cars, we have everything." (3018.1.alinea 56-57). Quantitative scoring has been used,
yielding relative frequency scores per defense level, as well as an Overall Defense

Functioning (ODF) score which can be computed by weighting the absolute frequency of the
defenses by their level. For the current study, reliability coefficients on 20% of the ratings
were established among fully-trained raters and yielded satisfactory results in terms of intraclass correlation coefficients (2, 1; Shrout and Fleiss, 1979) varying between .70 and .99

(Mean = . 86; SD = .09). For these reliability analyses, the defense level was unit of analysis
(7 categories).

Coping Action Patterns (CAP; Perry, Drapeau, Dunkley, & Blake, 2005; French translation by Kramer, & Drapeau, 2005). CAP is an observer-rating system assessing coping processes based on interview transcripts (Drapeau, & Perry, 2005). The rating scale encompasses 12 categories of coping (based on Skinner, Edge, Altman, & Sherwood, 2003). Three general domains have been identified (relatedness, competence, autonomy) encompassing each four categories ("families") of coping. Moreover, six of the coping categories are conceived as coping with stress appraised as challenge (problem-solving, information-seeking, self-reliance, support-seeking, accommodation, negotiation) and the other half as coping with stress appraised as threat (helplessness, escape, delegation, isolation, submission, opposition). Therefore, 12 coping categories are assessed by this instrument. For

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example, the following excerpt was rated Opposition – behavioral: "Yes, because he [her son] didn't want me to have the key!! The key! So he took the key, so that it was impossible for me to lock myself in the bathroom! [...]On this day, I wanted to lock myself in the bathroom and that's what I did!" (3020.1.alinea 106-110). Relative frequencies are computed for all coping processes. Based on Skinner, Edge, Altman, et al. (2003), an Overall Coping Functioning (OCF) score can be computed (relative frequency of challenge-coping). Preliminary empirical validation data have been presented by D'Iuso, Blake and Drapeau (2007), Drapeau and Perry (2005), Drapeau, Perry, Blake, and D'Iuso (2007) and Perry, Drapeau, Dunkley, Foley, Blake and Banon (2007) for the original English version, Kramer (2006), Kramer, Drapeau, Perry, Bodenmann, Despland and de Roten (2007), Kramer, de Roten, Michel, & Despland (in press) and Kramer and Drapeau (in press) for the French version used for this study. For the current study, reliability coefficients on 20% of the ratings were established among fullytrained raters and yielded satisfactory results in terms of intra-class correlation coefficients (2, 1) varying between .54 and .94 (M = .84; SD = .10; the .54 score is the only one below .60). These coefficients have been established on coping category as the unit of analysis (12 categories). Intra-class correlation coefficients (2, 1) with the CAP authors' group of raters vary between .51 and .83 (M = .71; SD = .11; the .51 score is the only one below .60).

Symptom Check List SCL-90-R (Derogatis, 1994). This questionnaire includes 90 items addressing various somatic and psychological signs of distress. These items are scored using a Likert-type scale from 0 (not at all) to 4 (very much). Although the instrument is composed of 10 subscales, our study used only the General Symptomatic Index (GSI, score ranging from 0 to 4), which is a mean rated over all symptoms. Clinical cut-off score is 0.80. The French validation study has been carried out by Pariente and Guelfi (1990) and yielded satisfactory coefficients. Cronbach alpha for this sample was .98. Mean symptom level for patients is higher than for controls (see table 1; range of the patients' scores is 0.12 – 3.17).

Bech-Rafaelson Mania Scale (BRMS; Bech, Rafaelson, Kramp, & Bolwig, 1978). The BRMS is a clinician-rated scale for manic symptoms, based on 11 items tapping activity level, mood, and other characteristics of mania. The items are rated on a scale from 0 (normal) to 4 (extreme). Clinical cut-off score for mania is 15 (hypomania 6). The range of our patients' scores is 0 – 12. Inter-rater reliability has proven to be high (.80 - .95; Bech, Rafaelson, Kramp, &, Bolwig, 1978; Altman, 2004). BPRS is effective in assessing outcome in clinical trials on BD (Bech, 2002). The French translation has been realized by Chambon, Poncet and Kiss (1989). Cronbach alpha for our patient sample was .77.

Montgomery-Asberg Depression Rating Scale (MADRS; Montgomery, & Asberg, 1979). MADRS is a clinician-rated scale for depressive symptoms, including among others items on sadness, internal tensions, insomnia, appetite reduction, cognitive impairment and suicidal ideation. The 10 items are anchored on a scale from 0 (absence of symptoms) to 6 (invalidating presence of symptoms). Clinical cut-off score for depression is 15. The range of our patients' scores is 0 – 38. Several validation studies have reported satisfactory coefficients for the original version (Montgomery, & Asberg, 1979) and concurrent validity (Kearns, 1982; Maier, & Philipp, 1985). The French translation has been realized by Lemperière, Lepine, Rouillon, Hardy, Ades, Luauté and Ferrand (1984) and validation studies on this version yield satisfactory coefficients on specificity, homogeneity and internal consistency (Pellet, Decrat, Lang, Chazot, Tatu, Blanchon, & Berlier, 1987). Cronbach alpha for our patient sample was .89.

Procedure

All patients and controls were asked to participate in a dynamic interview (Perry, Fowler, & Semeniuk, 2005) lasting 50 minutes. Dynamic interview (DI) is a non-directive research interview that has been developed from clinical practice of psychodynamic psychotherapy; thus, the context of DI is comparable to the context of an intake

psychotherapy interview. It has been widely used in psychotherapy research (Perry & Cooper, 1989; Hoglend & Perry, 1998). As shown by Perry, Fowler and Semeniuk (2005) and Fowler and Perry (2005), high-quality dynamic interviews are associated with Interviewer's and Overall Dynamic Interview Adequacy (I-DIA and O-DIA). Five tasks of the interviewer compose the I-DIA: (1) Setting the interview frame: work-enhancing strategies; (2) Offering support: questions, support strategies, associations; (3) Exploration of affect: questions, reflections, clarifications, low-level defense interpretations; (4) Trial interpretations: defense and transference interpretations; (5) Offering a synthesis.

All inpatients participated in the dynamic interview, as soon as their symptomatic state allowed it. This means that the patients were included in the final third of the duration of inpatient treatment, shortly before discharge. Only two patients had to be excluded from the study due to non-feasibility of the research interview; all other patients responding to the inclusion criteria and willing to participate were included. The patients were given treatment as usual, encompassing non-specific supportive therapy and medication. All patients were appointed for a second interview at a three-month interval. At the second interview, the patients were all discharged from inpatient treatment. Along with the dynamic interview, the evaluation procedure encompassed clinician-ratings of depression and mania. The patients were given the questionnaires at the end of the interview and were asked to fill them in and send them back within two days. The study was endorsed by the expert ethical committee of the psychiatric hospital.

The control group was recruited by means of two local institutions: (1) School of Social Studies; (2) Association promoting Community Activities and Service. Matching criteria were transparently issued at the outset of the control group recruitment. Therefore, only nine participants had to be refused from participation due to failure to meet the matching criteria. The control participants, unlike the patients who were not paid, were given a

contribution (the equivalent of USD 16). The study was endorsed by the expert ethical committee of the School of Social Studies.

All interviews were tape-recorded and transcribed by Master's-level psychology students, according to the method defined by Mergenthaler and Stigler (1997).

Interviews were rated based on the transcripts. All DMRS ratings were done by the author; reliability of these ratings was established with fully-trained colleagues and supervisors on a randomly chosen 20% of all interviews (for the results see under Instruments). For CAP, in-depth training during four months and supervision was organized for all raters. Four Master's-level-psychology students were trained by the author and reliability was established on a dyadic basis among the student raters, between the student raters and the trainer and between the student raters and the authors of the CAP-method. A randomly chosen 20% of all interviews was rated by two raters independently, in order to establish inter-rater reliability checks (results see under Instruments).

Data Analytic Strategy

Pearson's and canonical correlations (Tabachnik, & Fidell, 1996) were carried out (on the patient's first interviews only) in order to test our first and second hypotheses. Multivariate statistics were performed in order to test our third and fourth hypotheses, applying Bonferroni correction. In addition, we implemented Hierarchical Linear Modeling (HLM; Bryk, & Raudenbush, 1987), to deal optimally with data dependency between the first and second session; sessions (level 1) are nested within participants (level 2). In assessing change, HLM avoids the limiting assumptions of exploratory repeated measures MANOVA by taking into account each individual's trajectory of scores over time. A mixed model (group as fixed factor) predicting alternatively ODF and OCF was carried out (for level 1: ODF or OCF = $\beta_{0j} + \beta_{1j} + \varepsilon$; for level 2: $\beta_{0j} = \gamma_{00} + \gamma_{01} + u_{0j}$; $\beta_{1j} = \gamma_{10} + \gamma_{11} + u_{1j}$). For computation, we used the program MixReg (Hedeker, & Gibbons, 1996).

RESULTS

Comparison between Defense and Coping

Canonical correlations on the patient's first session showed a non-significant, however moderate, effect between DMRS-ODF and CAP-OCF (t = 2.00; r = .40; p = .06; Pearson's correlation: r = .45, ns) and a non-significant overall effect on 7 DMRS-levels and 12 CAP categories (t = 1.02; r = .20, ns; see table 2). These results are in line with the results on N = .20 psychotherapy patients using the same methodology where a canonical correlation of r = .18 was found (Kramer, de Roten, Michel, & Despland, in press).

Defense and Coping in BD

Multivariate statistics carried out on the first session yielded several results in terms of between-group differences for defense and coping (table 3). Overall, ODF and OCF were both lower in patients, compared to controls. At inpatient treatment, BD patients practiced fewer mature, fewer obsessional, but more narcissistic, more disavowal, more borderline and more action defenses. With regard to coping, BD patients practiced less self-reliance, less accommodation and more delegation and opposition in inpatient treatment.

No effect for either of these variables was observed when we compared subgroups of patients according to their predominant symptomatology, mania or depression, at first session (median-split method applied). No effect was found with regard to the status of the patients (completers v non-completers).

Stability of Defense and Coping in BD

Multivariate statistics carried out on the second session (see table 4) yielded also several between-group differences. First of all, ODF remained significantly different, whereas there was no longer any difference in OCF. With regard to defenses at second session, mature and obsessional ones were less practiced by the patients, whereas neurotic and action were more practiced by the patients, compared to controls. For coping, support-seeking was more

practiced by the patients, whereas self-reliance was less practiced by the patients, compared to controls. Table 5 reports the results on sessions nested within participants (HLM). It appears that there is, for both ODF and OCF, a highly significant group effect; patients present lower scores. Moreover, OCF showed a significant interaction effect (group x session) meaning that, in the second session, the patients presented similar OCF scores to the controls, unlike in the first session. This interaction effect was not found for ODF, meaning that the patients presented invariably lower scores in both sessions, compared to controls.

DISCUSSION

We need to acknowledge the limited power of our study. Nevertheless, the data analytic strategy was adapted to the small number of observations, e.g. by using canonical correlations and applying an HLM model for modelling the within-subject-variation.

Therefore, our discussion is merely a tentative to make sense of the data presented and great care with regard to generalization need to be applied.

The results corroborate parts of our hypotheses. As far as the links between defenses and coping are concerned, we have found marginal significance for overall adaptational functioning, a limited number of correlations between specific processes and a moderate (non-significant) canonical correlation. If there were significant linkages, they all went in the direction postulated: immature defenses pertained to maladaptive coping, (e.g., action, borderline and narcissistic defenses with opposition coping); mature defenses with adaptive coping (e.g., with self-reliance and accommodation coping; see also Grebot et al., 2006). By and large, these results tend to confirm convergent validity for general indices of adaptiveness (ODF and OCF) and tentative divergent validity for the specific adaptational processes.

Immature defenses were convincingly associated with Bipolar Affective Disorder, compared to matched controls (see also Kramer, de Roten, Perry, & Despland, in press). However, only two coping categories when stress is appraised as threat, opposition and

delegation, were linked with the diagnosis (see also, Kramer, Drapeau, Khazaal, & Bodenmann, in press). We hypothesize that this result is an argument in favor of coping as a state-concept, implying situation-induced micro-fluctuations partially independent of the diagnosis.

Our hypothesis regarding stability and change in overall defensive and coping functioning is tentatively confirmed. The afore-mentioned picture regarding between-group differences is highly relevant for the crisis situation of inpatient treatment, but is less convincing for the second session. The importance of the symptomatic decompensation leading up to inpatient treatment as a moment of crisis for the patients, not only on a symptomatic level, but also on the level of adaptational processes, suggests a breakdown in habitual adaptational patterns (Chabrol, & Callahan, 2004; Küchenhoff, & Manz, 1993). Steffens and Kächele (1988; see also Hartmann, 1958) would add that in such situations, the individual has a double agenda: (1) Contain negative affect related to internal conflicts based on the presence of neurotic fear; in other words, use defense mechanisms to create a conflictfree zone where the Ego can (2) Engage in concrete strategies to reduce the stress (elicited this time by realistic anxiety; "Realangst"), as a coping process. On the one hand, as also suggested by preliminary multivariate analyses, defensive functioning remains overall stable in BD patients, irrespective of the presence of a crisis. On the other hand, the level of coping functioning increases after the resolution of the crisis situation and once again comes within the range of the controls' functioning at the second interview. Hence, we may tentatively state that stability is associated with defenses and change with coping in BD patients undergoing inpatient treatment. Yet, we have to acknowledge that despite the statistical significance of the result, the change in OCF might not be clinically relevant. A more detailed comparison between subscales in terms of their change over time, i.e. on the variable of opposition, would be necessary, but the limited statistical power of the study did not allow such a comparison.

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Finally, in what respect are these results useful for a clinician working on the ward to enhance inpatient crisis intervention for BD patients? It is noteworthy that opposition and delegation coping increase in the crisis situation. Dysphoric mood and aggression – such as related to opposition and delegation coping – are vulnerability factors associated with increased suicide risk in BD (Newman, 2004; see also for suicide prevention in BD: Ellis, & Newman, 1996; Rizvi, & Zaretsky, 2007). Thus, in-depth assessment of suicidality level is indicated in these oppositional inpatients. Moreover, for psychotherapy, it is important for the clinician to know about the stability of overall defensive functioning, irrespective of the crisis. It is also of relevance for the clinician to be aware that coping functioning changes more rapidly than defensive functioning. Short-term treatment strategies should therefore focus on the former, with skills-training being proposed (Linehan, 1993), whereas defensive functioning would need long-term rehabilitative treatment strategies, with interpretative or clarification-oriented work being used (Yeomans, Clarkin, & Kernberg, 2002; Sachse, 2003).

There are several limitations to this study. Limited power as the major shortcoming has already been mentioned. Co-morbidity limits internal validity of the trial. Furthermore, participants in the control group were not randomly chosen due to matching criteria and the voluntary status of participation and thus, their adaptational profiles are not representative of the population; generalizations need to be avoided. Adaptational processes depend on the type and level of stress (Vaillant, 1977) which we did not control for, as we used an observer-rater methodology that takes into account all types of stress and conflicts, without further distinction. In that, our interview-based methodology might not pick up the real-world phenomena, but only the way the individuals present themselves to a clinician. And finally, the operationalization of defense and coping concepts, as done in our study, implies the risk of reification; by using the specific definitions implying a high degree of differentiation, we

were able to distinguish as much as possible these concepts; other definitions and operationalizations may yield a different pattern of results.

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Table 1
Socio-Demographics and Symptoms for Patients and Controls

_	Patients ($N = 18$)		Controls ($N = 18$)			
Criteria	Mean	SD	Mean	SD	<i>T</i> (1,35)	p
Age	47.11	11.24	42.50	13.07	1.28	.12
Education (N Years)	12.22	0.73	12.61	1.03	-1.59	.21
Gender (Female)	67%		67%			
Intimate relationship ¹	37%		40%			
Life situation						
With partner	25%		30%			
With partner & siblings	3%		7%			
Alone	48%		40%			
Alone with siblings	10%		10%			
With parents	7%		13%			
Institution	7%		0%			
GSI ²	1.24	0.87	0.48	0.23	4.47	.00
Mania (BRMS) ²	3.10	2.94				
Depression (MADRS) ²	12.87	10.40				

Note. GSI: General Symptom Index of Symptom Checklist SCL-90-R

¹Considered as stable intimate relationship when lasting longer than 2 years

² Measured at first interview

Table 2 Canonical Correlations (r) between Defense and Coping (N = 18)

DMRS	Mat	Obses	Neur	Narc	Disav	Border	Act
CAP							
PS	.33	.27	31	.04	01	27	.50*
IS	.15	.13	01	21	08	06	.07
Н	.00	.25	07	18	11	.13	.04
Е	33	.22	.11	18	.12	.08	.16
SR	.80**	.24	32	29	08	33	40*
SS	16	14	07	.06	.05	.36	.10
D	22	11	08	.23	.03	.10	.17
I	11	11	.09	23	.39	.07	.04
A	.66**	09	22	02	.05	27	51**
N	.38	.21	08	23	08	30	13
S	03	34	.29	03	.25	06	04
0	57**	32	07	.47*	25	.83**	.62**

Note. CAP: Coping Action Patterns; PS: Problem-solving; IS: Information-seeking; H:

Helplessness; E: Escape; SR: Self-reliance; SS: Support-seeking; D: Delegation; I: Isolation;

A: Accommodation; N: Negotiation; S: Submission; O: Opposition.

^{*} *p* < .05; ** *p* < .01.

Table 3 Between-Group Differences with regard to Defense and Coping: First Session (N = 18)

Defense/Coping	Pati	ents	Controls		F (1, 35)	ES
	M	SD	M	SD		
DMRS						
N (defenses)	32.83	10.47	38.28	14.34	1.69	0.43
ODF	3.91	0.87	4.81	1.11	7.25**	0.90
Mature	5.02	5.99	19.48	11.35	22.86**	1.59
Obsessional	12.69	6.93	23.01	12.91	8.95**	1.00
Neurotic	12.04	12.02	7.51	4.72	2.29	0.50
Narcissistic	17.93	12.99	10.48	9.39	3.90*	0.66
Disavowal	34.41	9.59	24.08	11.31	14.21**	0.99
Borderline	9.33	7.66	.97	3.13	12.15**	1.43
Action	8.59	6.59	2.91	4.37	9.31**	1.02
CAP						
N (coping)	19.60	7.04	22.80	9.36	2.24	0.39
OCF	.47	.15	.67	.19	10.93**	1.17
Problem-solving	1.39	2.82	4.15	6.91	2.46	0.52
Info-seeking	8.58	8.65	11.36	8.40	0.95	0.33
Helplessness	5.36	5.61	5.72	6.97	0.03	0.06
Escape	10.90	9.61	12.27	7.85	0.22	0.16
Self-Reliance	11.51	10.13	21.05	9.78	8.27**	0.96
Support-Seeking	14.72	7.49	11.05	17.08	0.70	0.28
Delegation	8.05	7.02	2.53	3.61	8.80**	0.99
Isolation	3.93	5.33	3.31	4.77	0.14	0.12

Accommodation	8.50	6.28	13.10	10.85	2.42	0.52
Negotiation	2.73	4.27	5.78	6.39	2.87	0.56
Submission	8.60	8.52	4.76	6.42	2.33	0.51
Opposition	15.74	12.00	4.93	5.24	12.29**	1.17

Note. MANOVA: Defenses: F(7, 28) = 7.61; p = .00; Coping: F(12, 47) = 2.30; p = .04.

DMRS: Defense Mechanisms Rating Scales; ODF: Overall Defensive Functioning; CAP: Coping Action Patterns; OCF: Overall Coping Functioning; Bonferroni's correction applied (significance level .05/2 or .01/2).

^{*} *p* < .05; ** *p* < .01

Table 4 Between-Group Differences with regard to Defense and Coping: Second Session (N = 18)

Defenses/Coping	Patio	Patients Controls		trols	F (1, 35)	ES
	M	SD	M	SD	-	
DMRS						
N (defenses)	33.61	21.12	35.61	11.81	0.12	0.12
ODF	4.01	0.52	4.70	0.57	12.02**	1.27
Mature	10.55	9.48	19.30	12.27	4.77*	0.80
Obsessional	13.95	11.83	24.18	8.49	8.87**	0.99
Neurotic	13.23	8.19	7.07	5.49	7.04*	0.88
Narcissistic	13.06	7.75	10.46	7.96	0.99	0.33
Disavowal	34.45	8.44	31.45	10.09	0.94	0.32
Borderline	6.79	5.13	4.40	7.76	1.19	0.36
Action	7.96	7.95	3.14	3.57	5.50*	0.78
CAP						
N (coping)	19.89	7.90	23.78	8.38	2.05	0.48
OCF	.55	.16	.61	.17	1.53	0.36
Problem-solving	2.54	5.04	3.55	4.83	0.37	0.20
Info-seeking	13.28	6.84	12.35	7.52	0.15	0.13
Helplessness	6.54	10.14	9.21	11.55	0.55	0.25
Escape	15.65	10.06	13.98	9.22	0.27	0.17
Self-Reliance	10.29	6.20	16.86	10.31	5.37*	0.77
Support-Seeking	13.22	8.90	7.04	5.95	5.99*	0.82
Delegation	8.97	13.68	3.87	4.70	2.24	0.50
Isolation	3.02	4.72	2.52	4.03	0.11	0.11

Accommodation	11.81	9.21	14.68	9.22	0.87	0.31
Negotiation	3.41	4.46	6.84	8.67	2.24	0.50
Submission	2.65	4.00	4.04	5.40	0.76	0.29
Opposition	8.62	9.25	5.05	6.10	1.87	0.46

Note. MANOVA: Defenses: F(7, 28) = 4.33; p = .00; Coping: F(12, 23) = 2.26; p = .04.

DMRS: Defense Mechanisms Rating Scales; ODF: Overall Defensive Functioning; CAP: Coping Action Patterns; OCF: Overall Coping Functioning; Bonferroni's correction applied (significance level .05/2 or .01/2).

^{*} *p* < .05; ** *p* < .01

Table 5 Mixed model predicting Changes in ODF and OCF between First and Second Session, as a function of Group

Variable	Estimate	SE	Z	<i>p</i> -value
ODF				
Session	-0.25	0.23	-1.05	.29
Group	-0.93	0.26	-3.59	.00
Interaction	0.38	0.34	1.12	.26
OCF				
Session	-0.05	0.05	-1.05	.30
Group	-0.19	0.05	-3.51	.00
Interaction	0.12	0.07	1.79	.05

Note. Nested design using Hierarchical Linear Modeling (HLM). ODF: Overall Defensive

Functioning; OCF: Overall Coping Functioning; SE: Standard Error.