

**PERSONALITY CHARACTERISTICS AND FUNCTIONAL
CAPACITY IN DEPRESSION AND ANXIETY DISORDERS**

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ABSTRACT

Personality characteristics and functional capacity in depression and anxiety disorders

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The objective was to analyze personality characteristics and functional capacity in depression and anxiety disorders. Personality characteristics were measured by Rorschach Comprehensive System variables related to control and stress tolerance, information processing, dealing with experience, interpersonal relationships, and affect modulation. Functional capacity was measured by Global Assessment of Functioning, an interviewer rating, and Social Adjustment Scale Self-Report. The subjects were outpatients from The Helsinki Psychotherapy Study ($n = 150$). The objective was to compare whether patients with depression and anxiety disorders differ in their personality characteristics and functional capacity, and to explore the associations between different test methods. The results indicated that subjects with depression and anxiety disorders had similar personality characteristics as indicated by Rorschach (CS). Personality styles found in the subjects of this study were maladaptive social functioning, rigid coping style, and emotional adjustment. However, functional capacity was more impaired in depression and in comorbid depression and anxiety disorder than in anxiety disorder alone. The cross-method comparison provided significant but weak associations. Some of the associations showed unexpected reverse correlations. According to the results it can be seen that these methods measure different aspects of personality and functional capacity.

Keywords: Rorschach CS, Global Assessment of Functioning, Social Adjustment Scale, personality characteristics, functional capacity, depression, anxiety, cross-method study

TIIVISTELMÄ

Tässä tutkimuksessa tutkittiin persoonallisuuden piirteitä ja toimintakykyä masennus- ja ahdistuneisuushäiriöissä. Persoonallisuuden piirteitä kuvaamaan käytettiin Rorschach Comprehensive System -musteläiskämenetelmästä poimittuja stressinsietokykyä, informaation käsittelyä, kokemukseen suuntautumista, sosiaalisia suhteita kuvaavia ja tunteiden säätelykykyä mittaavia muuttujia. Toimintakykyä mitattiin Global Assessment of Functioning -haastattelijanarvioinnilla ja Social Adjustment Scale -itsearviointilla. Tutkimusotos oli Psykoterapiaprojektin alkumittaututkimuksesta (n = 150). Tutkimuksessa selvitettiin masennus- ja ahdistuneisuushäiriöissä ilmeneviä eroja ja yhtäläisyyksiä persoonallisuuden piirteiden ja toimintakyvyn suhteen. Samalla tutkimuksiin valittujen menetelmien keskinäistä vertailua suoritettiin. Tulokset osoittivat, ettei masennus- ja ahdistuneisuushäiriöissä ole löydettävissä erilaisia persoonallisuuden piirteitä valittujen muuttujien suhteen. Tyypillisiä persoonallisuuden piirteitä tässä otoksessa olivat huono sosiaalinen toimivuus, jäykkä sopeutumiskeinojen käyttö, ja emotionaalinen sopeutumiskyky. Sen sijaan toimintakykyisyys erotteli häiriöt toisistaan. Masennushäiriöstä ja yhtäaikaista masennus- ja ahdistuneisuushäiriöstä kärsivät henkilöt olivat toimintakyvyltään heikompia kuin ainoastaan ahdistuneisuushäiriöstä kärsivät henkilöt. Tämä tulos oli nähtävissä sekä haastattelijanarvioinnin että itsearvioinnin perusteella. Tutkimuksessa käytettävien menetelmien keskinäinen vertailu tuotti vain heikkoja, joskin mielenkiintoisia, yhteyksiä. Osa yhteyksistä oli päinvastaisia kuin odotettiin. Tulosten perusteella voidaan päätellä menetelmien mittaavan eri puolia persoonallisuudesta ja toimintakyvystä.

Avainsanat: Rorschach CS, Global Assessment of Functioning, Social Adjustment Scale, persoonallisuuden piirre, toimintakyky, masennushäiriö, ahdistuneisuushäiriö, vertailututkimus

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INTRODUCTION

The purpose of this study is to examine personality characteristics and functional capacity in depression and anxiety disorders. Personality characteristics are measured with Rorschach variables according to Comprehensive System (Exner, 1993). Variables reflect control and stress tolerance, information processing, dealing with experience, interpersonal relationships and affect modulation. Functional capacity is measured by Global Assessment of Functioning (GAF), an interviewer rating, and Social Adjustment Scale Self Report (SAS-SR).

Impairment in functional capacity accompanies almost all psychiatric disorders, but defining it is a complex issue. The impact of psychiatric disorders extends beyond the core symptoms, such as feelings of exhaustion. High levels of functional impairment have been demonstrated especially in depression. During acutely depressed state, psychiatric illness contributes as much disability or even more than other medical illnesses (Hays, Wells, Sherbourne, Rogers, & Spitzer, 1995; Lyness, Caine, Conwell, King, & Cox, 1993). Impairment affects many daily activities such as the individuals' capacity to function socially, maintain relationships, enjoy work and leisure, and experience satisfaction in life (Brugha et al, 1982; Fredman, Weissman, Leaf, & Bruce, 1988; Hirschfeld et al., 2000; DeLisio et al., 1986). Dysfunction is mainly a psychosocial and not a physical condition. Functional capacity can therefore be seen as a key feature of the quality of life (Hirschfeld et al., 2000). In this study, the definition of functional capacity is based on work-related characteristics.

Functional capacity can be divided at least to two components. Mintz, Mintz, Arruda, and Hwang (1992) suggest dividing functional capacity into functional aspects of work impairment, and affective impairment. Functional aspects of work impairment, such as absenteeism, decreased productivity, and interpersonal friction, are behavioral impairments, and they appear to be highly responsive to symptomatically effective treatment in adequate given time. Affective impairment, such as loss of interest, being ashamed of one's work, and emotional distress, are more prevalent, and may remain longer than functional work impairment, until the total remission of symptoms is achieved. In depression, affective impairment is related to every severity level from the lowest one to the severe, when risk for functional work impairment is most notable at

moderate to high levels of depression. According to this, it could be expected that depressive outpatients suffer mainly from affective impairment, whereas depressive inpatients have functional work impairment as well as affective impairment.

Most systematic studies of functional capacity in depression and anxiety disorders have focused on self-reports and interviewer ratings (Hirschfeld et al., 2000). Studies of personality characteristics associated to functional capacity in affective disorders are rather rare. In this study, the personality characteristics and psychological functions are studied with Rorschach Comprehensive System (CS). The Rorschach (CS) has been developed by J.E. Exner (1991; 1993) since the late 1960's. Comprehensive System has been used to assess personality functions, and it has become by far the most widely used Rorschach method. Rorschach (CS) is a measure of perception as well as that of association. It evokes subject's cognitive operations in a problem-solving situation, and articulations of the responses bring clues to the way subject is dealing with life experiences (Exner, 1993; Weiner, 1998). Gathering information about the subject's personality structure is possible with Rorschach (CS). According to Exner (1993) and Weiner (1998) personality structure constitutes of personality states and personality traits. Personality states refer to the nature people are defined by their thoughts and feelings. These affects are relatively transitory across the situations. Personality traits are more persistent and stable dispositions, which conduct people in certain ways. The variables of this study reflect both of these aspects of personality structure. According to earlier findings (for example Ilonen, 1999), it would be assumed that the presence of state-related variables is more related to affective disorders than the trait-related ones. An interest of using Rorschach CS in this study is on the one hand to find out if it is possible to differentiate depression and anxiety disorders by personality functions, and on the other hand to study whether it is possible to find associations between individual Rorschach (CS) variables, and functional capacity. It is important to clarify cross-method validity, since CS variables may measure more than has been proved yet. The results might show some guidelines in the assessment of work capacity.

Studies concerning personality characteristics in depression and anxiety disorders measured by Rorschach (CS) demonstrate that it is important to study available coping resources, organizational activity, subjectly felt distress and information processing (Blackall, 1995; Ilonen, 1999; Shapiro, Leifer, Martone, & Kassem, 1990; Sinacori, 2000; Sinniger & Brabender, 1993). Affective and interpersonally related variables are important when affective disturbance is considered (Blackall, 1995; Uhinki, 1996).

Rorschach (CS) is also a useful method in differential diagnosis between psychiatric disturbances. It is possible to describe and differentiate personality organizations for example in schizophrenia and depression (Mason, Cohen, & Exner, 1985), and in unipolar and bipolar depression (Sinnger & Brabender, 1993). It will be interesting to explore whether the chosen Rorschach (CS) variables are useful in the differential diagnosis of depression and anxiety disorders.

Diagnosis is a contradictory issue in functional assessment. Diagnosis and symptom severity need not parallel functional disability; the range of dysfunction is great. Some individuals are functionally incapacitated even though their symptoms are mild, while some people continue to fulfill their occupational and psychosocial roles despite severe symptoms and substantial subjective distress (Goethe & Fischer, 1995; Lyness et al., 1993). Anxiety and depression disorders overlap in many features. Both patient groups may suffer from inner tension, reduced sleep, concentration difficulties, psychic anxiety, agitation, loss of appetite, loss of libido, and autonomic symptoms (Montgomery, 1990; Mullaney, 1984). The relationship between anxiety and depressive disorders has been mainly unresolved in psychiatry (Perugi, Akiskal, Masetti, Simonini, & Cassano, 1994), and there is often comorbidity among these disorders. There are at least two different perspectives or pathways from anxiety to depressive disorders. Wittchen, Kessler, Pfister, and Lieb (2000) have named them as "lumper's perspective" and "splitter's perspective". According to lumper's perspective, anxiety and depression reflect the same core psychopathological processes; anxiety is prodromal stage of depression, and severity marker of depressive state. This perspective seeks for commonalities in an attempt to identify ways of grouping these disorders together. From splitter's perspective it is assumed that anxiety and depression disorders are separate disorders with different risk factors, natural courses and features. In splitter's perspective, anxiety precedes depression, and is a risk factor for developing depression. The reason for developing a so-called 'secondary depression' could be due to a stressful life situation or persisting life restrictions (Perugi et al., 1994) or it could be induced by gradual shifts in cognitive-behavioral and neurobiological processes (Wittchen et al., 2000). Secondary depression is often the trigger condition for seeking psychiatric treatment (Hecht, Zerssen, Krieg, Pössl, & Wittchen, 1989).

That clinical depression leads to serious functional impairment is well documented (for example Goethe & Fischer, 1995) but it is less clear whether anxiety disorders lead to a similar level of impairment (Perugi et al., 1994). It has been argued that subjects

with anxiety disorders are more closer to healthy controls than depressive subjects in their functional capacity (Hecht et al., 1989). According to prior research, at least two differences are found in the functional capacity of patients with depression or anxiety disorders. Depressive illness appears to affect quality of life more globally than anxiety. According to Perugi et al. (1994), the ability to enjoy and feel pleasure in different areas of life is damaged in depression. Depressive subjects have more impairment in their social functions, sexual relationships, work, and leisure activities than subjects suffering from anxiety disorders. Often this loss is prolonged, and therefore the impairment in these areas could represent more sustaining trait disturbance in depression, such as altered hedonic functioning. Especially the impairment of leisure activity and liking for one's job seem to persist even in less symptomatic level of depression (DeLisio et al., 1986). In anxiety, such inability to feel pleasure is rarely seen or it is not as obvious. Another finding is that people suffering from depression are more socially handicapped than those suffering from anxiety disorder (Hecht, Zerssen, & Wittchen, 1990). Brugha et al. (1982) found that depressives have fewer social contacts, attachment figures, good friends and relatives than healthy control subjects do. They also spend less time in any social interaction (including contacts with not good friends and close relatives), and they have more negative interaction than normal control subjects do. In anxiety disorders, social impairment is not that well documented. In fact, according to Hecht et al. (1989), social impairment in anxiety disorder increases the risk for developing depressive disorder. In anxiety, the role of social relationships is often contrary to depressive disorders. Social relationships can become more important, if other people are needed for support. This can create other kind of stress on interpersonal relationships. However, interpersonal relationships should be examined well in all affective disorders, because often problems in this area contribute to a poor prognosis, and risk developing of future relationships (Hirschfeld et al., 2000).

The influence of comorbidity on psychosocial functioning is an important question in psychiatry. Hecht et al. (1990) have found that subjects suffering simultaneously from depression and anxiety are more severely impaired than those suffering from depressive disorder alone. Their social lives are more handicapped, and they have higher risk for developing severe depressive disorder. Subjects with a mixed depression and anxiety disorder show more rigidity in their personality pattern, and have more coping deficits than subjects suffering from only anxiety disorder (Hecht et al., 1989). In this study, the influence of comorbidity in functional capacity is examined.

Assessment of functional capacity should consider both global functioning and well-being as well as social roles and interpersonal functioning. Therefore two separate assessment methods were chosen for this study, the Global Assessment of Functioning (GAF) and Social Adjustment Scale Self-Report (SAS-SR). GAF is a rating scale included in the DSM-IV (American Psychiatric Association, 1994), in axis five. It was first introduced in DSM-III-Revised in 1987 (Piersma, & Boes, 1995) and it is being used by clinician's all over the world. GAF was developed for evaluation of symptoms as well as for relational, social, and occupational functioning (Hilsenroth et al., 2000). Combining all these areas on a single scale is problematic, and there have been questions whether GAF is more related with symptom severity and global psychopathology than psychosocial functioning (Goldman, Skodol, & Lave, 1992). However, GAF has been found to correlate with social functioning in cases like limited social networks, and need for support (Hilsenroth et al, 2000; Moos, McCoy, & Moos, 2000; Jones, Thornicroft, Coffey, & Dunn, 1995). In this study, GAF has a meaningful role for assessing the severity of subject's impairment from a more diagnostic perspective and also in the eyes of an external rater.

Social Adjustment Scale Self-Report (SAS-SR) was chosen for this study to detect adjustment problems in social, occupational, and interpersonal functions. A self-administered version of Social Adjustment Scale was developed by Myrna Weissman (Weissman, & Bothwell, 1976). SAS-SR is a widely used evaluating method, and it is well-regarded for it's broad coverage in different areas of role functioning. It contains questions to measure either instrumental or expressive role performance in several areas of life. The sub-scale work, including areas of work at workplace, household, and/or study, is covered in this study. SAS-SR was originally developed because of an increased interest in social roles and adjustment, being separate from symptom severity (Weissman, & Bothwell, 1976). It has been proven to differentiate social morbidity among psychiatric patients (Perugi, Akiskal, Musetti, Simonini, & Cassano, 1994) and it is associated with feelings and behaviors of most interpersonal orientation, such as diminished contacts, friction, social discomfort, and loneliness (Shea et al., 1990). SAS-SR was chosen for this study in order to have information about subjects' self-evaluated functioning in their everyday lives.

One of the aims of this study is to explore how different test methods fit together. In other words, do they measure the same phenomenon or not. Comparing results obtained by separate methods is complicated. The connection between Rorschach (CS) and self-

reports has proved to be weak or unexpectedly inverse in prior studies (for example Carlson, Kula, & Laurent, 1997; Greenwald, 1997; Lipovsky, Finch, & Belter, 1989). However, the reason for problems in cross-method studies may result from different test methods describing different personality dimensions. Viglione (1996) suggests that disagreement between Rorschach (CS) and self-reports is caused because Rorschach (CS) is prospective and self-reports are retrospective, and therefore no connection between them can be found.

Some issues about the use of self-ratings in depressive subjects could be raised. In acutely depressed state people may evaluate themselves or their current life situation more negatively than they would usually do. After a symptom recovery, there is a marked improvement found in the ratings (Andrew, Hawton, Fagg, & Westbrook, 1993; Morgado, Smith, Lecrubier, & Widlöcher, 1991). This may reflect the negative self-appraisal of the depressed person, and if no other evaluation methods are used, it might lead to the overrating of disturbances. According to Meyer (1996), self-reports are easily influenced by social suitability and defensiveness. They can be seen as to give proper information about what the subject is willing to tell about himself and how he wants to see himself. In order to get proper information the subject has to be psychologically oriented, has to know himself very well and to be aware of his own character. There are also problems found in all psychological test-methods such as relating with the researcher, current psychological well-being, motives and environmental factors. All these things can interfere with the test results. In this study, the connection between Rorschach (CS), GAF and SAS-SR is explored in order to clarify some aspects of cross-method research with Rorschach (CS). I did not find any previous studies available where all these methods had been used together, and therefore no prior assumptions about how these particular methods fit together can be made. Studies using both GAF and SAS-SR have been made earlier. Most of the studies concern psychosocial functioning, and these methods have shown significant correlations (for example Furukawa, Awaji, Nakazato, & Sumita, 1995; Kocsis et al., 1997).

In conclusion, the following three main objectives are proposed in this study:

1. To determine whether patients with depression, depression and anxiety, or anxiety disorders differ in their personality characteristics
2. To determine whether patients with depression, depression and anxiety, and anxiety disorders differ in their functional capacity
3. To explore the associations between Rorschach (CS), GAF, and SAS-SR

METHODS

Subjects

The subjects of this study are outpatients from The Helsinki Psychotherapy Study (HPS). The HPS has been conducted jointly by the Social Insurance Institution, the Department of Psychiatry, Helsinki University Central Hospital, the National Public Health Institute, and the Rehabilitation Foundation. The Helsinki Psychotherapy Study is a longitudinal study aimed at evaluating the effects of four forms of psychotherapy in the treatment of depressive or anxiety disorders. The objective is to compare the outcomes of problem solving therapy, short-term psychodynamic therapy, long-term psychodynamic therapy, and psychoanalysis. Participants were addressed to the HPS by Mental Health Centers for Outpatients, Student Health Care Services, private psychiatrists, Primary Health Care, and Occupational Health Agencies. Participants were randomly assigned to one of the therapy groups, except for the participants of psychoanalysis group who were self-selected (Helsinki Psychotherapy Study, 2000).

Altogether 333 outpatients from the Helsinki region took part in the HPS, the first 150 of them were included in this study. The subjects were selected by the HPS according to inclusion and exclusion criteria. They were all between 20 and 46 years of age and they all suffered from either depression and/or anxiety disorders which had been diagnosed by DSM-IV (American Psychiatric Association, 1994). They were diagnosed by psychiatrists and clinical psychologists in the HPS. The main disorder had lasted at least a year and it had threatened subject's ability to work or study. Subjects who had a substance-related disorder, eating disorder, brain damage or other serious physical illness, or who were mentally retarded, were excluded from this study (Helsinki Psychotherapy Study, 2000). The data of this study is from the baseline status assessment carried out between March 1995 and June 1997.

As seen in Table 1, three quarters of the subjects of this study were women. One quarter of the subjects were men. Average age was 31 years. Most of them were either single or married and only 10 % were separated or divorced. Half of the subjects were diagnosed for depression only, one quarter had both depression and anxiety disorder, and one quarter had anxiety disorder. Almost half of the subjects had finished high

school and/or had occupational education. One quarter had academic education and one quarter had elementary education. Most of the subjects were currently working, one quarter of them were students, and 10 % were housekeepers or unemployed.

TABLE 1: Demographic information

| Category | F | % |
|---|-----|------|
| Male | 39 | 26.0 |
| Female | 111 | 74.0 |
| Marital status: Single | 68 | 45.3 |
| Marital status: Married | 68 | 45.3 |
| Marital status: Divorced | 14 | 9.3 |
| Educational level: Elementary school | 36 | 24.0 |
| Educational level: High school / Occupational | 70 | 46.7 |
| Educational level: Academic | 44 | 29.3 |
| Employment | 93 | 62.0 |
| Housekeeper | 5 | 3.3 |
| Student | 42 | 28.0 |
| Unemployed | 10 | 6.7 |
| Diagnosis: Depression | 75 | 50.0 |
| Diagnosis: Depression and Anxiety | 40 | 26.7 |
| Diagnosis: Anxiety | 35 | 23.3 |

MEASURES

Rorschach (CS) Variables

Rorschach Comprehensive System is a measure of personality functions, and it serves clinical diagnostic and treatment work as well as applied clinical research. The Rorschach (CS) assessment includes four different stages:

1. Administration, recording the subject's responses in verbatim, and inquiry
2. Scoring the individual responses
3. Summarizing the responses to numerous ratios, percentages, and indices which is called the structural summary
4. Interpretation of the structural and thematic characteristics of the Rorschach protocol (Exner, 1993).

The variables used in this study are from the structural summary, and they represent different categories of Comprehensive System. The variables chosen for this study are: D -score, Experience Actual (EA), Coping Deficit Index (CDI), Organizational Activity (Zd), Lambda, Active (a) and Passive (p) movement, perceptually distorted human movement responses (M-), Affective Ratio (Afr), and number of responses (R). The selection of the variables is mostly based on earlier research but some variables were chosen because of their interpretative value.

Control and stress tolerance D -score was chosen for this study because distress and diminished stress tolerance ($D < 0$) has been found to relate with non-psychotic depression (Ilonen, 1999). EA combines ideational and affective competence, and is important variable when subject's resources are considered. Therefore it seemed needful to include this variable in this study. Coping deficit index (CDI) was chosen because it has been conceived as a definite marker of adjustment problems, and it has qualities which reflect both limited psychological competence, and helplessness (Exner, 1991). Positive CDI has been found to relate with depression disorder (Shapiro et al., 1990) and emotional disturbance (Sinacori, 2000).

Dealing with experience and information processing Lambda was chosen to this study to detect problems concerning too narrow or too wide manner of dealing with

experience. Elevated Lambda has been found to relate with affective disturbance associated with serious illness (Blackall, 1995). Lambda was included also for validity purposes. There are indications that organizational activity (Zd) is related to depression (Shapiro et al., 1990), and Zd has been found to differentiate affective disorders such as unipolar and bipolar depression (Sinnger & Brabender, 1993). Considering functional capacity, it is important to examine the subject's ability to deal with experience and process information adequately.

Interpersonal relationships and modulating affects M-, a and p, and Afr are related to modulating affects and interpersonal functions (Exner, 1991). Affective modulation (Afr), social perception and empathy (Human movement responses), and interpersonal style (active and passive movements) are significant in studying emotionally felt distress, and personal well-being (Uhinki, 1996). Afr has been found to relate with affective disturbance associated with serious illness (Blackall, 1995). This study includes perceptually distorted human movement responses (M-) because this variable reflects personality characteristics, which are damaging and problematic when interpersonal relationships are considered. This is important feature when the prognosis of affective disorder is evaluated (Hirschfeld et al., 2000) as well as for functional capacity in everyday life. All of these variables could be seen as important features for quality of life and evaluation of affective disturbance.

Productivity The number of responses (R) is important variable for validity purposes, and as a simple measure of productivity. Also, number of responses has been used to detect the degree of anxiety (Vijayakumaran, Ravindran, & Sahasranam, 1994).

The Comprehensive System includes normative data for each of the scores, ratios, percentages, and indices presented in the structural summary (Exner, 1993). The normal values and definitions of the chosen variables are presented in table 2.

TABLE 2: Rorschach variables grouped by the areas of personality functions. Table adapted partly from Tuula Ilonen (1999)

| Personality function | Variables with expected normal values in parenthesis | Definitions |
|---|---|--|
| Control and stress tolerance: The ability to draw on available resources to formulate and implement deliberate behaviors designed to content with demand situations | D (≥ 0) Score for D is derived by an algorithm from the number of Rorschach responses involving movement, color, achromatic color, texture, shading and vista. | This score measures the presence of situational stressors and the individual's ability to cope with them. D < 0 reflects subjectively felt distress resulting from inadequate resources to meet experienced demands. |
| | EA (≥ 7) The sum of human movements and the weighted values for the chromatic color responses | The result provides an index of the extent to which resources are organized in a manner that makes them accessible. EA < 7 indicates limited resources for implementing deliberate strategies of resolving decision-making and problem-solving situations. |
| | CDI (< 4) The five tests with 11 variables in the Coping Deficit Index (CDI) reflect a mixture of interpersonal problems, emotional avoidance or impoverishment, and poor control capacity or limited coping resources. | Conceptually the CDI positive affords a measure that tends to identify those who have coping limitations or deficiencies, and it is a definite marker of adjustment difficulties. |
| Information processing: Affords information regarding the amount a person takes in information, and the quality of the processing | Zd ($> -3, < +3$) The Zd is a difference score obtained by the formula $Z_{sum} - Z_{est}$. | Zd relates to the efficiency of scanning activity. Zd < -3 means insufficient attention to the nuances of one's experience, with superficial scanning of environmental events, and hastily drawn conclusions about their significance. |

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| | | The Zd score of more than + 3.0 prompts the subject to invest more effort and energy into scanning activities than is adaptive. |
| Dealing with experience: | Lambda ($> .30, < .99$) | |
| Affords information how the input is translated efficiently and realistically. | This is the ratio that compares the frequency of pure form responses to all other answers. | It is an index of the extent to which a subject is psychologically willing to become involved in a new stimulus field. Personality functioning with high Lambda ($> .99$) reflects narrow and limited frames of reference and an inclination to respond to situations in the simplest possible terms. Low Lambda ($< .30$) is associated with excessive openness to experience characterized by overly broad focus of attention, and an inclination of overinvolvement with situations. Both high and low lambda values might weaken validity. |
| Interpersonal relationships: | a, p | |
| Attitudes towards other people and preferred style | a means active and p means passive movement, and the total number is counted from human, animal, and inanimate movement responses. | This ratio provides information about assertiveness in social situations. $p > a + 1$ indicates passivity in relation to other people and an inclination to avoid taking initiative and responsibility. |
| | M- (< 1) | |
| | M- means perceptually distorted human movement responses | M- responses provide information about the accuracy of social perception, interpretation of social situations, and empathy. The presence of M- is closely related to adjustment difficulties. |
| Modulating affects: | Afr ($\geq .50$) | |
| The manner and comfort with which people process emotional experience | This is a ratio that compares the number of answers to the last three cards with those given to the first seven cards. | This ratio provides information on affect modulation. $Afr < .50$ refers to maladaptive emotional withdrawal, and is a risk marker for isolation. |

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| Protocol validity and productivity: | R (≥ 14) Total number of responses | Protocols containing fewer than 14 responses are considered brief records, and are not valid for interpretation. Brief records are usually given by highly resistive subjects. |
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The test reliability was measured with interscorer agreement, which is the percentage of agreement between different raters. It was calculated by the HPS for all score categories in the structural summary. It was calculated from 20 test records, and scored by two coders. The results can be seen in Table 3. The agreement levels are quite reasonable; most disagreement occurs in coding the special scores. This indicates that Rorschach (CS) can be reliably scored.

TABLE 3: Interscorer agreement

| Variable | Agreement % |
|-------------------------|-------------|
| Location | 94 |
| Developmental Quality | 93 |
| Determinants | 89 |
| Active/Passive Movement | 89 |
| Form Quality | 87 |
| Pairs (2) | 93 |
| Contents | 89 |
| Popular Responses | 93 |
| Z -scores | 90 |
| Special Scores | 60 |

Global Assessment of Functioning (GAF)

The Global Assessment of Functioning score (GAF) used in this study reflects the clinician's overall judgment of the patient's worst level of psychological, social and occupational functioning for a previous six months. GAF consists of a number of ranked sentences descriptive of functional impairment, associated with numerical ratings on a scale from 1 to 100. Ratings are described at best as "Superior functioning in wide range of activities, life's problems never seem to get out of hand, is sought out by others because of his many positive qualities. No symptoms", and at worst as "Persistent danger of severely hurting self or others or persistent inability to maintain minimal personal hygiene or serious suicidal act with clear expectation of death". Table 4 presents the impairment levels associated with GAF ratings. The reliability of GAF has been demonstrated by high intra-class correlation coefficients among different raters in earlier studies, ranging from .56 to .92 (for example Hilsenroth et al., 2000; Jones et al., 1995).

TABLE 4: GAF ratings and level of impairment according to Moos, McCoy, & Moos (2000)

| Level of impairment | GAF Score |
|---------------------|-----------|
| Pervasive | 1 - 40 |
| Serious | 41 - 50 |
| Moderate | 51 - 60 |
| Mild | 61 - 70 |
| Minimal | 71 - 90 |

Social Adjustment Scale - Self Report (SAS-SR)

Social Adjustment Scale - Self Report (SAS-SR) contains several sub-scales. In this study, work-sub-scale, combined from work at workplace, household, and study, was used to evaluate subject's current functional capacity. There are altogether 22 questions and SAS-SR covers a one-month time period in the HPS. Each question is rated on a five-point scale with a higher score indicating impairment. Questions in each area fall into four major categories: the subject's performance at expected tasks; the amount of friction with others; finer aspects of interpersonal relations, and inner feelings and satisfactions (Weissman & Bothwell, 1976). Questions are such as: "how well have you been able to manage your work for the past month?" and scores range from "1= very well" to "5= very poorly all the time". Subject answers questions in at least one of the subscales regarding to his life situation (employed, housekeeper, and/or student). Role-area means and overall adjustment were obtained by summing the scores of all items and dividing them by the number of items scored. Table 5 presents the mean SAS-SR work-sub-scale scores found in affective disorders, and in one community sample. On the basis of prior research it is seen that SAS-SR score within 1.5 is in the normative range, and SAS-SR score above 3.5 is related to major impairment. According to table 5, average score for work subscale in depression disorder is 2.7, and in anxiety disorder 2.

High internal consistency was found in SAS-SR work and its sub-scales of work at workplace ($\alpha = .86$, $r = .78$), study ($\alpha = .90$, $r = .86$), and household ($\alpha = .88$, $r = .80$). This indicates that SAS-SR can be reliably scored, and has a high item-to-scale reliability across all three sub-scales. To determine the extent which one sub-scale might be exerting a controlling influence on other scales, interscale correlation coefficients were calculated. The results can be seen in Appendix 1. The study sub-scale correlated quite highly with work at workplace and household work. This indicates, that most of the students were also working and taking care of household.

TABLE 5: Mean SAS-SR work scores found in affective disorders and in one community sample (All the studies, except Evans et al. (1996), are of outpatient populations)

| Citation | Study population | Mean Social Adjustment of Functioning-Self Report Score |
|------------------------|--|---|
| Evans et al. (1996) | Double depression (n = 262) | Work: 3.0, Household: 2.6 Student: 2.8 |
| | Episodic major depression (n = 131) | Work: 3.2, Household: 2.5 Student: 2.3 |
| | Dysthymic depression (n = 37) | Work: 2.3, Household: 2.3 Student: 2.9 |
| De Lisio et al. (1986) | Unipolar depression (n = 92) | Work: 2.3, Household: 2.0 |
| | Dysthymic depression (n = 68) | Work: 2.5, Household: 2.2 |
| Mauri et al. (1991) | Panic disorder (n = 21) | Work: 2.1, Household: 3.4 |
| | Generalized anxiety disorder (n = 25) | Work: 2.1, Household: 2.7 |
| | Major depression (n = 48) | Work: 3.5, Household: 4.4 |
| Perugi et al. (1994) | Depressed panic-agoraphobics (n = 48) | Work: 1.8 |
| | Chronic depression (n = 35) | Work: 2.4 |
| Weissman et al. (1978) | Community sample (n = 482) | Work: 1.4 |
| | Acute depression (n = 191) | Work: 2.5 |
| Weissman et al. (1976) | Depression (n = 76) | Work: 2.2 |

PROCEDURES

Rorschach Inkblot Method according to Comprehensive System was applied to subjects before entering therapy. Rorschach was scored by CS -trained psychologists, and structural summary variables were formed. Other test measures such as laboratory tests, psychological tests, interviews, and self-reported questionnaires were also applied by the HPS. These included GAF and SAS-SR. Demographic information about the subjects was also obtained.

Nine variables of Comprehensive System were selected to this study according to their interpretative value. These variables were analyzed both as dichotomous and as continuous variables. The summary scores of GAF and SAS-SR were used in this study to assess functional capacity. Subjects were divided into three patient groups according to their diagnosis. These groups were depression disorder, depression and anxiety disorder, and anxiety disorder.

STATISTICAL METHODS

The data analysis was performed using SPSS for Windows. First, personality characteristics of the subjects were analyzed. Rorschach (CS) was studied as dichotomous and as continuous variables. The frequency and correlation structure of Rorschach (CS) variables was examined. Then the associations of Rorschach (CS), demographic information, and diagnosis were examined. The analyses were done using either the chi-square test or the one-way analysis of variance (ANOVA). The connection between age and Rorschach (CS) was studied with Pearson's correlation.

Second, a principal components analysis (PCA) with varimax rotation was performed on the Rorschach (CS) variables. This method was chosen since the majority of Rorschach (CS) variables are not normally distributed and may not be suitable for inclusion in factor analysis (Zillmer, & Vuz, 1995). PCA transforms the original set of variables into sets of linear combinations of uncorrelated principal components. According to Zillmer and Vuz (1995), this has certain advantages with Rorschach (CS)

variables. PCA is less affected by co-linearity which many Rorschach (CS) variables show. PCA also automatically partitions variables, and makes hierarchical ordering of the components in terms of the variance. In this study, the principal components were needed to obtain information about the variable structure, and for data reduction purposes. The principal components were also used in further data analysis. The connection between PCA and diagnosis was studied with one-way analysis of variance (ANOVA).

Third, the information obtained from GAF and SAS-SR was evaluated. The oneway analysis of variance (ANOVA) was used to study the possible associations among GAF, SAS-SR, and the demographic characteristics of the subjects, and to measure if there are differences among the patient groups in terms of their functional capacity. The connection between GAF, SAS-SR, and age was studied with Pearson's correlation.

Fourth, the association between Rorschach (CS), GAF, and SAS-SR was explored. The correlation structure among continuous Rorschach (CS) variables, GAF scores, and SAS-SR scores was studied. The associations were examined closer with the oneway analysis of variance (ANOVA) and the chi-square test. To find out possible associations related to diagnosis, the correlation structure between the methods was reanalyzed in each diagnostic group. The association among Rorschach (CS) principal components, GAF scores, and SAS-SR scores was examined with a linear regression analysis. The connection between GAF and SAS-SR was studied first with Pearson's correlation, and then by Cronbach's alpha in order to evaluate the association between these methods.

RESULTS

Validity of the Rorschach (CS) protocols

Table 6 presents the validity of the protocols. Both the number of responses (R) and lambda indicated that the protocols were valid for interpretation. The average amount of responses was 26, ranging from 12 to 72 responses on a record. Only three subjects (2 % of the subjects) had fewer than 14 responses in their protocol. Lambda value is reasonable. According to Mattlar's (1993) data of Finnish adult nonpatients, the mean for number of responses is 22, and the mean for Lambda is .78. This shows that the subjects of this study gave a bit more responses, and in less simplifying manner than would be expected.

TABLE 6: Validity of the Rorschach (CS) protocols

| | Mean | Standard deviation |
|-------------------------|-------|--------------------|
| Number of responses (R) | 26.72 | 11.10 |
| Lambda | .66 | .57 |

Demographic information and Rorschach (CS) variables

The associations of continuous Rorschach (CS) variables and demographic information are presented in Appendix 3 and Appendix 4. The association was studied with comparing the means and standard deviations between the demographic variable groupings. The relation with Rorschach (CS) and age was studied with Pearson's correlation. The one-way analysis of variance showed a significant association between high lambda value and lowest educational level ($F = 4.74$, $p = .001$). Post-hoc tests

(Bonferroni and LSD) showed unequal variances across the educational levels. According to this, low educated subjects have more simplifying manner of dealing with experiences. The associations between Rorschach (CS) and other demographic variables (sex, marital status, educational level, work status and age) was found insignificant.

Frequencies of Rorschach (CS) variables in depression and anxiety disorders

Frequencies of variables were calculated as seen in Table 7. The findings indicate, that the variables related to interpersonal problems, and poor affect modulation were most common among the subjects. When compared to Mattlar's (1993) data of Finnish adult nonpatients, the subjects of this study showed increased maladaptive impairment of social perception (M-), and more lack of assertiveness in social relationships ($p > a+1$). Since the mean for Affective Ratio is .46 (standard deviation .16) in Finland (Mattlar, 1993), and .69 (standard deviation .16) in USA (Exner, 1991), the cut-off score for Afr was lowered from .50 to .46. The subjects of this study have marked tendency towards emotional withdrawal, and insufficient affect modulation.

Variables concerning diminished control and stress tolerance, failures in information processing, and problems dealing with experience were less evident for the subjects of this study. When compared to Finnish adult nonpatients (Mattlar, 1993), the subjects tend to have available resources ($D < 0$ and $EA < 7$), and adequate coping capacity ($CDI \leq 3$). Dealing with experience (Λ) was similar to healthy subjects (Mattlar, 1993). Overincorporate information processing style ($Zd > 3$) was found from more than expected. A oneway analysis of variance (ANOVA) revealed that the patient groups did not differ from their personality functions or protocol length when the means of the continuous Rorschach (CS) variables were compared.

TABLE 7: Frequencies of Rorschach (CS) variables

| Variable | Depression (n = 75) | | Depression and Anxiety (n = 40) | | Anxiety (n = 35) | | All (n = 150) | |
|--------------------------------------|------------------------|------|------------------------------------|------|---------------------|------|------------------|------|
| | n | % | n | % | n | % | n | % |
| Interpersonal relationships: | | | | | | | | |
| M- > 0 | 42 | 56.0 | 24 | 60.0 | 19 | 54.3 | 85 | 56.7 |
| p > a + 1 | 31 | 54.7 | 19 | 47.5 | 15 | 42.9 | 65 | 43.3 |
| Modulating affects: | | | | | | | | |
| Afr < .46 | 35 | 46.7 | 20 | 50.0 | 13 | 37.0 | 68 | 45.3 |
| Information processing: | | | | | | | | |
| Zd < -3 | 19 | 25.3 | 12 | 30.0 | 5 | 14.3 | 36 | 24.0 |
| Zd > +3 | 22 | 29.3 | 16 | 40.0 | 11 | 32.4 | 49 | 32.7 |
| Dealing with experience: | | | | | | | | |
| Lambda > .99 | 18 | 24.0 | 10 | 25.0 | 6 | 17.1 | 35 | 23.3 |
| Lambda < .30 | 13 | 17.3 | 4 | 10.0 | 5 | 14.3 | 22 | 14.7 |
| Control and stress tolerance: | | | | | | | | |
| D < 0 | 17 | 22.7 | 7 | 17.5 | 4 | 11.4 | 28 | 18.7 |
| EA < 7 | 13 | 17.3 | 9 | 22.5 | 6 | 17.1 | 28 | 18.7 |
| CDI positive | 10 | 13.3 | 9 | 22.5 | 8 | 22.9 | 27 | 18.0 |

Principal Component Analysis with Rorschach (CS) variables

The continuous Rorschach (CS) variables (D, EA, M-, CDI, Afr, Lambda, a, p, R, and Zd) were chosen for the principal component analysis (PCA). The problem concerning many of the variables derived from the structural summary is that they share common scores, and may thus include the same qualities. CDI, D -score, EA, M-, a, and p are related to each other, but have different interpretative meanings. Therefore none of the variables were dismissed but the association had to be noted when the results of PCA were analyzed.

First the correlation matrix of Rorschach (CS) variables was examined. The intercorrelations between the variables can be seen in Appendix 2. According to Bartlett's Test of Sphericity, the correlations seemed reasonable ($\chi^2 = 821.3$, $p < .001$), and on the basis Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO, index .73), the correlation matrix was acceptable to PCA. Table 8 describes the individual variables and their communalities. All the communalities are one, since all the variables are assumed to be uncorrelated in PCA (Zillmer, & Vuz, 1995). Variables were subjected to PCA with varimax orthogonal rotation. Rotation converged in five iterations. Table 9 displays the PCA matrix.

TABLE 8: Descriptive Statistics and Communalities

| Variable | Mean | Standard Deviation | Initial | Extraction |
|----------|-------|--------------------|---------|------------|
| EA | 11.58 | 5.38 | 1.00 | .85 |
| a | 6.40 | 4.05 | 1.00 | .64 |
| p | 6.70 | 3.84 | 1.00 | .74 |
| M- | 1.13 | 1.37 | 1.00 | .66 |
| R | 26.72 | 11.10 | 1.00 | .89 |
| D | 10.11 | 6.92 | 1.00 | .85 |
| Lambda | .66 | .57 | 1.00 | .67 |
| Zd | .95 | 6.37 | 1.00 | .49 |
| Afr | .49 | .20 | 1.00 | .69 |
| CDI | 2.20 | 1.27 | 1.00 | .68 |

TABLE 9: Total variance explained

| Component | Initial Eigenvalues | | Extraction Sums of Squared Loadings | | Rotation Sums of Squared Loadings | |
|-----------|---------------------|---------------|-------------------------------------|---------------|-----------------------------------|---------------|
| | Total | % of Variance | Total | % of Variance | Total | % of Variance |
| 1 | 3.87 | 38.67 | 3.87 | 38.67 | 3.55 | 35.47 |
| 2 | 2.08 | 20.83 | 2.08 | 20.83 | 2.10 | 21.01 |
| 3 | 1.24 | 12.43 | 1.24 | 12.43 | 1.55 | 15.45 |
| 4 | .85 | 8.49 | | | | |
| 5 | .62 | 6.16 | | | | |
| 6 | .48 | 4.84 | | | | |
| 7 | .37 | 3.67 | | | | |
| 8 | .22 | 2.22 | | | | |
| 9 | .18 | 1.81 | | | | |
| 10 | .01 | .89 | | | | |
| | | 38.67 | | 38.67 | | 35.47 |
| | | 59.49 | | 59.49 | | 21.01 |
| | | 71.92 | | 71.92 | | 15.45 |
| | | 80.41 | | | | |
| | | 86.57 | | | | |
| | | 91.42 | | | | |
| | | 95.09 | | | | |
| | | 97.31 | | | | |
| | | 99.11 | | | | |
| | | 100.00 | | | | |

Three components were created, and together they accounted for 71.9 % of the total variance. This is quite reasonable for three components. Table 9 shows the component loadings of the variables. Loadings higher than .25 are considered significant (Zillmer, & Vuz, 1995). Variables EA, a, R, D, and Lambda have loadings for two components, which is noted in the interpretation of the components.

Interpretation of the components involves both high positive and high negative loadings in the dimensions. The first component contains EA, a, p, M-, R, D, and Lambda (negative sign). It accounted 35.47 % of the variance. Variables are related to available resources, interpersonal style, social perception, productivity, and openness to experience. The highest loadings relate to social situations and available resources but also to maladaptive features in social perception and to passivity. Therefore this component can be called Maladaptive Social Functioning. M- is methodologically difficult variable in this personality style, and it will be reviewed in Discussion.

The second component had highest loadings of D, R, Zd (negative sign), and Lambda, and it explained 21 % of the variance. These variables relate to coping capacity, productivity, and a tendency to underincorporate, and simplify matters. These features seem to reflect a personality style in which an individual is functioning relatively well, but with a non-flexible, rigid manner. Therefore, this personality style is called Rigid Coping Style.

The third component contains variables Afr, CDI (negative sign), EA, and a. It explained 15.45 % of the variance. These variables describe adaptive affect modulation, sufficient, and functioning coping capacities, adequate resources, and assertiveness in social interaction. According to this, the third component was interpreted as Emotional Adjustment. This could be expected to be quite adaptive personality style. These three personality styles, and their connection to depression and anxiety disorders are examined in Discussion.

TABLE 10: Rorschach (CS) principal components

| Variable | Maladaptive Social Functioning | Rigid Coping Style | Emotional Adjustment |
|----------|-----------------------------------|--------------------|-------------------------|
| EA | .89 | -.01 | .28 |
| a | .74 | -.12 | .29 |
| p | .85 | .14 | -.01 |
| M- | .81 | -.00 | -.00 |
| R | .65 | .66 | .19 |
| D | .29 | .84 | .24 |
| Lambda | -.49 | .65 | -.01 |
| Zd | .12 | -.66 | .18 |
| Afr | -.00 | .17 | .81 |
| CDI | -.25 | .19 | -.77 |

The principal components Maladaptive Social Functioning, Rigid Coping Style, and Emotional Adjustment were examined as personality styles. Their relation to diagnosis was studied with one-way analysis of variance (ANOVA). Table 11 shows the means and standard deviations in the diagnostic groups. None of the differences was significant. This means that personality styles do not differentiate patients by their diagnosis.

TABLE 11: Rorschach (CS) principal components and diagnosis: means and standard deviations (in parenthesis)

| | Maladaptive Social Functioning | Rigid Coping Style | Emotional Adjustment |
|------------------------|-----------------------------------|--------------------|-------------------------|
| Diagnosis: | F (1.28) | F (.48) | F (.56) |
| Depression | .09 (1.04) | .08 (1.12) | .06 (1.00) |
| Depression and Anxiety | .03 (1.02) | -.05 (.84) | -.14 (1.02) |
| Anxiety | -.24 (.87) | -.11 (.90) | .03 (.99) |

GAF, SAS-SR and functional capacity

GAF and SAS-SR scores were calculated from all the subjects. Table 12 shows the impairment levels according to GAF and SAS-SR. All the subjects of this study had pervasive to mild impairment in their global and social functioning. The average functional capacity of the subjects is at moderate level of impairment. GAF mean is 54.92 (standard deviation 6.40) and SAS-SR mean is 2.19 (standard deviation .55). According to GAF scores, mild functional impairment (GAF score ≥ 61) was found from 21 (14 %) subjects. Most of the subjects had moderate functional impairment. Only three (2 %) subjects had pervasive functional impairment (GAF score ≤ 40). When SAS-SR scores were examined, it was seen that 12 (8 %) subjects had rated their functional capacity close to community sample (< 1.5). Most of them had rated their impairment in the moderate level. As seen previously in table 5, the ratings are similar to other outpatient populations. Only two (1 %) subjects rated their status as very poor (> 3.5).

TABLE 12: Level of functional impairment among the subjects

| Variable | F | % |
|----------------------|-----|----|
| GAF score: | | |
| 1 - 40 pervasive | 3 | 2 |
| 41 - 50 serious | 26 | 17 |
| 51 - 60 moderate | 101 | 67 |
| 61 - 70 mild | 21 | 14 |
| 71 - 90 minimal | 0 | 0 |
| SAS-SR score: | | |
| < 1.5 | 12 | 8 |
| 1.5 – 2.4 | 101 | 67 |
| 2.5 – 3.5 | 35 | 24 |
| > 3.5 | 2 | 1 |

The GAF and SAS-SR scores did not differ significantly in demographic characteristics (table 13), but they varied substantially in diagnoses. Association with age was studied using Pearson's correlation, and it did not provide any significant results (With GAF $r = .08$; with SAS-SR $r = .08$). As seen in Table 13, a oneway analysis of variance (ANOVA) on GAF and SAS-SR showed significant differences between the groups of depression, depression and anxiety, and anxiety disorders. Post-hoc tests (Bonferroni and LSD) showed unequal variances across the groups as patients in the anxiety disorder group differed significantly from the patient groups of depression, and depression with anxiety disorders. Subjects with anxiety disorder showed less impairment in their global and social functional capacity, while groups with depression disorder and coexistence of depression and anxiety disorders showed quite similar functional capacity. The largest range between the ratings was found in the depression disorder group, in GAF from 20 to 69 and in SAS-SR from 1.13 to 4.00. This indicates that depression patients are very heterogeneous in their functional capacity.

TABLE 13: Demographic information and functional capacity, means and standard deviations (in parentheses)

| Category | GAF | SAS-SR |
|---------------------------|-----------------|---------------|
| Sex: | F (1.28) | F (.77) |
| Male | 53.92 (8.26) | 2.25 (.46) |
| Female | 55.27 (5.60) | 2.16 (.58) |
| Marital status: | F (.33) | F (.20) |
| Single | 55.37 (6.54) | 2.17 (.56) |
| Married | 54.47 (6.47) | 2.22 (.52) |
| Divorced | 54.93 (5.57) | 2.14 (.71) |
| Educational level: | F (1.04) | F (1.27) |
| Elementary school | 54.44 (6.09) | 2.08 (.64) |
| High School | 54.43 (6.80) | 2.19 (.54) |
| Academic | 56.09 (5.95) | 2.28 (.49) |
| Work status: | F (.79) | F (.31) |
| Employment | 55.44 (6.63) | 2.21 (.55) |
| Housekeeper | 54.00 (4.74) | 2.28 (.66) |
| Student | 54.45 (5.62) | 2.14 (.60) |
| Unemployed | 52.50 (7.98) | 2.10 (.33) |
| Diagnosis: | F (6.83) | F (7.49) |
| Depression | 54.79 (7.41) | 2.25 (.55) |
| Depression and anxiety | 52.60 (5.00) | 2.34 (.56) |
| Anxiety | 57.86 (3.98)*** | 1.89 (.45)*** |

Note. *** $p < .001$

The cross-method comparison

The connection between Rorschach (CS), GAF, and SAS-SR was examined to explore possible associations between different assessment methods, and in order to gain more understanding of the Rorschach (CS) variables in functional assessment. First, the correlation coefficients among the continuous Rorschach (CS) variables, and summary scores from GAF and SAS-SR were examined. The correlation matrix can be seen in Appendix 2. GAF did not correlate with any of the continuous Rorschach (CS)

variables. However, there was significant, although not strong, correlation between SAS-SR scores and some of the continuous Rorschach (CS) variables. SAS-SR correlated positively with EA, available resources ($r = .31, \alpha = .12$); active ($r = .22, \alpha = .11$) and passive ($r = .26, \alpha = .13$) interpersonal style; and R, productivity ($r = .19, \alpha = .04$). Negative correlation was found with Lambda ($r = -.27, \alpha = .42$), indicating a simplifying manner of dealing with experience. This association was the most reliable when measured by Cronbach's alpha. However, it's not very significant. For the interpretation of the results, it is important to note that a higher SAS-SR score indicates more impairment in social functions. These results are a bit unexpected because the association between these methods seems to be reversed. Dichotomous Rorschach (CS) variables, GAF, and SAS-SR were analyzed with the chi-square analysis. No association was found.

To find out how much diagnosis has influence on the associations between Rorschach (CS), GAF, and SAS-SR, the correlation structure between the methods was reanalyzed in each patient group. Appendix 5 shows the results. With GAF the results stayed the same and no association between Rorschach (CS) was found. However, between SAS-SR and Rorschach (CS) the correlations changed. Association between Lambda and SAS-SR was significant in groups of depression disorders ($r = -.30, \alpha = .46$) and depression and anxiety disorders ($r = -.32, \alpha = .46$). Connection between EA and SAS-SR was found in depression disorders ($r = .30, \alpha = .11$) and anxiety disorders ($r = .36, \alpha = .14$). The association with M- was found only in anxiety disorders ($r = .37, \alpha = .38$).

A Linear regression analysis was performed between Rorschach (CS) principal components, GAF, and SAS-SR. The results showed that the principal components did not explain nearly any of the variance with GAF or SAS-SR. Appendix 6 displays the results of the analysis. GAF explained only 2 % and SAS-SR explained 9 % of the variance with the first principal component, Maladaptive Social Functioning. No other associations between GAF, SAS-SR, and Rorschach (CS) principal components were found.

Correlation coefficient between GAF and SAS-SR was significant ($r = .33$). The correlation matrix can be seen in Appendix 2. However, when Cronbach's alpha was performed to measure the reliability of this association, their connection proved to be weak ($\alpha = .11$). These results indicate that GAF and SAS-SR measure different aspects of functional capacity.

DISCUSSION

The purpose of this study was to examine personality characteristics and functional capacity in depression and anxiety disorders. Three main objectives were proposed: to determine whether patients presenting depression, depression and anxiety, and anxiety disorders differ in their personality characteristics; to determine whether patients with depression, depression and anxiety, and anxiety disorders differ in their functional capacity; and to explore the associations between Rorschach (CS), GAF and SAS-SR.

Personality characteristics With regard to the first objective, the subjects with depression, depression and anxiety, and anxiety disorders showed quite similar personality characteristics when measured with Rorschach (CS) variables. No significant differences between these groups were found. This is an interesting finding. According to this, depression and anxiety disorders share the same kind of vulnerabilities, of which interpersonal problems and affective impairment are the most notable ones. Depression and anxiety could reflect the same core psychopathological processes, and this supports the lumpers' perspective described by Wittchen et al. (2000). It could be suggested that Rorschach (CS) variables serve more diagnostic evaluations based on personality structure and degree of psychopathology than descriptive diagnostic classification. However, it is now important to consider that Rorschach (CS) is generally used as a measure of personality features and not that of the diagnostic characteristics.

Problems concerning interpersonal relationships ($M- > 0$, $p > a+1$) and affect modulation ($Afr < .46$) were most apparent for the subjects of this study. These results were supported by earlier research (Blackall, 1995; Uhinki, 1996). These variables, each of them found from around half of the subjects, represent something very characteristic of affective disorders, at least for those subjects who seek help from psychotherapy.

Passivity and lack of assertiveness are features which describe social relationships most of the subjects of this study have. Compared to Mattlar's (1993) data of Finnish adult nonpatients, this is clearly more than expected. It could be hypothesized that in the fear of being criticized or rejected by others, a person suffering from depression or anxiety disorder rather stays inactive, and withdrawn in social circumstances. However, this situation might lead into a vicious circle, if the individual lacks all positive

interaction with others, and is left only with low expectations on future social interactions. Also, affective disorders might reduce interest in social circumstances and other people.

Another significant result describing interpersonal relationships was the elevated number of perceptually distorted human movement responses. According to that, the subjects of this study have problems with interpretation of social situations, and suffer from an experienced lack of empathy. This finding supports the tendency towards negative interaction with other people often found in affective disorders (Brugha et al., 1982). Impairment in this area often brings troubles, when people misinterpret the motives of the others and disregard social nuances. Depression and anxiety disorders may also disturb perception in a way that other people seem critical, unfriendly or fake, even though this is only a reflection of the negative self-appraisal. While both of these personality functions ($p > a+1$, $M- > 0$) are related to difficulties in interpersonal relationships, they may also create sustaining risk factors for future interaction. These problems may often persist long after the recovery (Perugi et al, 1994) risking maintaining satisfying social life, and therefore leading to a poor prognosis (Hilsenroth et al., 2000) and isolation.

The avoidance of emotional, intimate situations and poor affect modulation was found in half of the subjects. The results support the connection to affective disturbance noted in earlier study (Blackall, 1995). According to this finding, the subjects of this study are in significant risk for social isolation. If this result is studied together with earlier findings about interpersonally related variables, social isolation seems evident. Often this feature is related to others perceiving the person as distant and reserved (Exner, 1991). Also, this finding shows that the subjects of this study have problems concerning their affect modulation. Recognition of their own affects could feel difficult and this might lead to feelings of emptiness and sorrow. This feature seems to reflect something quite typical to affective disorders.

Problems concerning information processing ($Zd < -3$, $Zd > +3$), dealing with experience ($\Lambda > .99$, $\Lambda < .30$), and control and stress tolerance ($D < 0$ and $EA < 7$) were less common among the subjects. These findings show that the subjects have more state-like problems than trait-like problems, as expected (Ilonen, 1999). The presence of distress ($D < 0$) was not evident for the subjects of this study, even though this feature was supported by earlier research (Ilonen, 1999). The subjects of this study were less affected by problems concerning control and stress tolerance, information

processing, and dealing with experience. In fact, when compared to Mattlar's (1993) data of Finnish adult nonpatients, the subjects of this study have sturdy stress tolerance, and available resources. They have even less coping limitations than healthy subjects. When CDI is considered, the subjects of this study show no signs of helplessness and coping difficulties. This is a bit unexpected, since according to prior research these features are often connected to depression and anxiety disorders and emotional disturbance (Shapiro et al., 1991; Sinacori, 2000). However, what differentiates the subjects from healthy population is their inclination to overincorporate information. This means that they are prone to take in more information than they are able to organize efficiently, as if they were trying to examine everything very carefully, trying to give their best effort on the task at hand. This feature is often associated to handicap decision making, and time pressures may contribute underachievement (Weiner, 1998). In this regard, the perceptual-cognitive processes of the subjects fail. Considering the framework that the subjects of this study are outpatients and most of them are currently working or studying, their disorder has not incapacitated them to an extent that often describes severe affective disorders in need of hospitalization. It could be argued, that the subjects of this study are relatively healthy compared to outpatients with depression and anxiety disorders. This of course weakens the comparability of the results outside the study population.

An important fact to consider is the degree of the disorder. As noted earlier, affective impairment is related to every severity level in depression, but behavioral impairment is mainly associated from moderate to severe depression (Mintz et al., 1992). According to this, it could be interpreted that until a certain distress level is achieved, a person may still be able to function with everyday demands and challenges, even if emotionally overburdened. In fact, some people might put their effort in coping strategies and resourceful activity to cope with their situation. They might try to compensate by doing things more carefully, and try to avoid making mistakes. It would be expected that Rorschach (CS) variables related to more sustaining trait-like features (poor control and stress tolerance, lack of resourcefulness and trying, and problems concerning dealing with experience) are more notable among severely impaired patients. In the HPS it will be interesting later to analyze whether the CS -state-type variables change along with the outcomes in symptomatic situation after therapies.

When demographic information and Rorschach (CS) variables were examined, an association between low educational level and simplifying manner of dealing with

matters (high Lambda) was found. This would imply that subjects with less education have more limited way of dealing with experience. Perhaps low education is related to issues that explain this association, such as less complicated style of viewing things. It could be expected that education brings more broad and analytic focus on the world in general. This seems to be reflected to the manner a person deals with the visual stimulus in Rorschach. In general, Rorschach (CS) variables do not differ according to demographic characteristics (Exner, 1993) and that makes this finding interesting. It has to be considered that this is only a random finding. In this study, no other connection was found between demographic information and Rorschach (CS) variables. Age, sex, marital status and working status were examined. This is also a meaningful finding because it shows that for example marriage or employment might not have such a high protective influence on psychological well-being that could be assumed. Perhaps the results would be different in more serious psychiatric disturbances, such as schizophrenia.

Principal components analysis (PCA) with Rorschach (CS) variables uncovered three interpretatively meaningful personality styles associated with depression and anxiety disorders. These were Maladaptive Social Functioning, Rigid Coping Style, and Emotional Adjustment. Maladaptive social functioning explained most of the variance of the variables, and therefore was the most typical personality style among the subjects of this study. It was named according to its highest loadings of available resources, interpersonally related styles, productivity, and poor social perception. The presence of poor social perception, and lack of empathy could yield from at least two reasons. Either this is merely an artefact caused by high correlation with the other variables, or it could imply that despite available resources, flexibility, social orientation and productivity, the interpersonal problems and negative interaction are present and disturbing the subject. If this interpretation is true, it could describe the situation that has caused the person to seek treatment, in this case, psychotherapy. However, this is only speculation and further studies to clarify this topic would be needed.

Rigid coping style had features related to adaptive stress tolerance, and productivity, as well as to underincorporative and simplifying manner of dealing with matters. Subjects seem to have resources, and they are able to function, but they also have maladaptive features in their personality style. Exner (1991) and Weiner (1998) argue that limiting the focus of attention, and taking in too little information could serve as an adaptive strategy. This would be when the person is avoiding of becoming upset or

disorganized by ignoring to recognize fully the circumstances in their lives. Taking too little information could also serve as a secure method for not making mistakes, if the total available information is beyond one's current abilities to process it. Underincorporation often leads to mistakes and to the lack of accomplishment, as if the person is 'giving up' despite the resources or abilities. This implication would suit to affective disorders, especially depression, in which patients are often described of having lack of effort.

Emotional adjustment style contains adaptive affect modulation, functional coping capacities, available resources, and an inclination towards active social interactions. In this population, it could be hypothesized that this personality style is associated with managing situations fairly well, and possibly even gaining strength from social relationships. In depression and anxiety disorders, this would serve as a positive marker for prognosis, since it is often the affective impairment and interpersonal problems which are persistent and damaging. Unfortunately this was the least typical personality style associated with the subjects of this study.

When the connection between Maladaptive Social Functioning, Rigid Coping Style and Emotional Adjustment was analyzed together with diagnosis, no significant association was found. It supports the earlier finding made in this study about the association between dichotomous or continuous Rorschach (CS) variables and diagnosis. There is no marked difference between the personality styles in depression or anxiety disorders.

Functional capacity The second objective concerned functional capacity in depression and anxiety disorders. As expected by the prior research (Hecht et al., 1990; Perugi et al., 1994), anxiety disorder proved to be less incapacitating than depression or coexistence of depression and anxiety. This result was seen both in interviewer rating as well as in self-report. In comparison with the results of former research (Hecht et al., 1990), subjects with comorbid depression and anxiety disorder were not more severely impaired in terms of functional capacity.

Depressive illness seems to be much more incapacitating than anxiety disorder. It affects more globally the subject's quality of life and ability to function. Among depressive subjects the range of dysfunction was much larger than among subjects suffering from anxiety or depression and anxiety disorders. Some depressive subjects' functioning was only mildly impaired, while others were almost incapacitated. This shows that depressive disorders are very heterogeneous, and in fact it could be argued

that it is even more heterogeneous than anxiety disorder. The range of functional capacity in anxiety disorders was very limited. In this study, the subjects suffering simultaneously from depression and anxiety disorder did not show more impairment than subjects suffering only from depressive disorder. This result was different when compared to earlier research in this area (Hecht et al., 1990). This finding is a bit surprising, since it could be assumed that comorbidity would bring more problems and life restrictions. It might be that the semi-structured diagnostic procedures used in the HPS were not strict enough in considering comorbidity.

The information about different diagnostic subgroups among the depression and anxiety disorders was not available for this study. This particular information might have brought more specific knowledge about the area. In anxiety disorders, for example, generalized anxiety disorder and panic-agoraphobic disorder are very different from their natural courses and features, and generalized anxiety disorder is closer to depression disorders (Kendler, 1996). It might be an interesting area for future research to study what are the reasons causing this discrepancy in the impairment levels between depression and anxiety disorders. Diagnostic subgroups could help to understand the psychopathology associated in it. Yet some hypotheses can be raised. On one hand, the reason may be that anxiety is situation related, and as long as difficult situations are avoided, the subject's global functioning stays relatively normal or only mildly impaired. On the other hand, it might be that subjects with anxiety disorder are able to cope with their illness by functioning in the areas of work and leisure. They may also seek and receive more support and reassurance from others than depressive subjects.

The cross-method comparison The third objective of this study was to explore the associations between different test methods. No clear or strong connection was found between Rorschach (CS), GAF and SAS-SR, although they had some associations. GAF and SAS-SR had negative correlation, as expected. The findings support earlier cross-method comparisons made with Rorschach (CS) and self-reports (for example Carlson et al., 1997; Greenwald, 1997; Lipovsky et al., 1989). SAS-SR and Rorschach share some connection. Simplifying manner of dealing with experience (Lambda) was most strongly associated with SAS-SR. It shows that subjects with narrow and limited manner dealing with experiences have less subjectively felt problems. This could serve the same kind of adaptive strategy described earlier in rigid coping style. Also, according to the results, the subjects would show more resources (EA) the more they have self-evaluated problems. This finding is a bit complicated. The subjects of this study have

resources: most of them are working, and have occupational or academic education. Their problems are related mainly to interpersonal situations and affective competence, not to cognitive resources. SAS-SR was also associated with interpersonal styles (a and p). This is expected, since many questions in SAS-SR refer to social situations.

The association between Rorschach (CS) variables and SAS-SR varied when diagnosis was included in the analysis. In depression and depression and anxiety disorders functional capacity seems to be more related to problems with narrow and simplifying focus on the matters. In anxiety on the other hand, problems related to misperception of social relationships are more evident for functional capacity. According to results, subjects with depression or anxiety disorders have inversed connection between functional capacity and available resources. None of the associations was particularly strong. The results show some guidelines concerning the analysis of Rorschach (CS) variables but more information is still needed.

In this study, each of the test methods provides useful information, but when they are compared to each other, they seem to reflect different aspects of personality and functional capacity. Some of the associations between Rorschach (CS) and SAS-SR seem to be in a wrong direction. Different test structures make cross-method comparisons even more difficult. Self-reports and interviewer ratings are formed very differently, and made for different purposes. Conclusions about validity derived from cross-method comparisons should be made carefully. Different measures seem to reflect different aspects of personality and therefore serve as tools for clinicians to obtain as much information as possible. A new approach to cross-method comparison is the study of response-character styles in Rorschach (CS) and self-report methods, such as Minnesota Multiphasic Personality Inventory (MMPI). By making comparisons like this, more promising results have been obtained (Gannellen, 1995; Meyer, 1999).

Validity and limitations One question raised in the beginning of this thesis was whether self-reports of depressive subjects can be reliable (Andrew et al., 1993; Morgado et al., 1991). Self-reports are always subjective, but it could be argued that it is important to have knowledge on the subjects own experience. In this study, people suffering from depression rated their functional capacity lower than others did. The fact that this result was seen also in the interviewer rating, supports that fact that this is not the cause of a negative self-image and world-view often held by the depressives. However, it would be interesting to study further if the depressives' self-report ratings change more drastically than among subjects suffering from anxiety disorders.

In Rorschach (CS) assessment subjectivity has been minimized. The examiner has specific instructions and structure for the process (Exner, 1993). This increases the validity of the method. However, the nature of Rorschach (CS) is quite unstructured, and this influences on how subject responses. Or in other words, how he *chooses* to respond. Subjects may behave differently when responding to Rorschach (CS) or when answering to self-reports.

When Lambda and number of responses (R) are considered, the protocols used in this study seem to be valid. Three subjects produced less than 14 responses, and in clinical practice these protocols would be classified as invalid for interpretation. However, in a large population like the sample of this study, their inclusion in the study does not have any statistical difference. Some of the Rorschach (CS) variables are not normally distributed and it creates difficulties and limitations with the data analysis. For example in this study it was not possible to use factor analysis when the Rorschach (CS) variables were examined together. Another problem was that there was not a normative data for Finnish adult nonpatients with depression and anxiety disorders.

The subjects of this study are a subpopulation of patients seeking psychotherapy, which might cause problems in the generality of the results. All the subjects have already been diagnosed as having some problems with occupational and/or psychosocial function. After all, this was one of the initial reasons for applying to therapy treatment. However, this fact also makes them of an interesting population to examine different aspects of functional impairment and it's severity in different diagnostic groups. It is important to note that despite their psychosocial problems, most of the subjects were currently working or studying, and were able to cope with their problems therefore fairly well. According to GAF and SAS-SR, most subjects' functional capacity was not seriously impaired. This might explain also why when Rorschach (CS) was considered, the perceptual-cognitive resources of the subjects were not impaired. In this study, the information on the psychiatric medication used, hospitalization, mortality, disability pensions, and sick-leave periods was not available, and therefore it is difficult to say what the actual, behaviorally measured status of well-being is. Also, it has to be kept in mind that all of the subjects were outpatients, and that the results of this study cannot be generalized into inpatient population.

This study was done using a rather large population. Of course then the individual's experiences and emotions cannot be reached that well. However, this is the manner that most of the psychological evaluation methods work. A test has to be based on a

normative data on which the results are being compared against. Still, this does not mean that the individual, subjective experience is less important.

Methodology Methodologically, Rorschach (CS) provided interpretatively meaningful information concerning personality characteristics among outpatients suffering from depression and anxiety disorders. It must be remembered that only few variables from the comprehensive system were included in this study. Naturally, it is difficult to do research with all the CS variables, and it is not even meaningful at all times. In individual assessment the Rorschach (CS) and the information applied from it is viewed as a whole and not as separate variables. This is also a challenge to research made with Rorschach (CS) variables because it should not be too far apart from the everyday clinical practice. When only few variables are chosen for the study, something is always lost. This is also one of the limitations of this study.

Rorschach (CS) is widely used method in defining work capacity. According to this study, there are many aspects that should be considered. It is important to study how well personality characteristics and work demands fit together. Rorschach (CS) provides information about the control and stress tolerance, available resources, and interpersonal styles. Each of these characteristics influence on the type of work the subject is suitable for. Some of the areas might function better than others. Also the subject's expectations and needs should be weighted. The findings of this study underline the importance of evaluating interpersonal styles, not just cognitive abilities. That purpose supports the use of Rorschach (CS) in defining work capacity. However, one future research implication could be to study more closely whether Rorschach (CS) is mainly a personality assessment method for clinical purposes or could it be useful in other areas of psychological assessment, such as in work psychology.

On the basis of this study, it is difficult to say whether GAF serves more on clinical diagnosis or the actual occupational, social, and relational assessment it was originally designed to measure. In this study, GAF separated patients by their diagnosis, and the results show similar trends with SAS-SR. SAS-SR provided valuable information regarding the self-evaluated functional capacity of the subjects. It must be noted, that the results obtained from this study cannot be generalized into total 53-item SAS-SR, which contains several sub-scales not included in this study. Problems concerning the use of self-reports of depressive patients were discussed earlier in this thesis and therefore this issue is not raised here.

Conclusions

According to the results obtained from this study, outpatients with depression and anxiety disorders share same personality characteristics. Personality functions were marked with interpersonal problems, and poor affect modulation. The subjects had enough resources, but they were socially incapacitated. This can be seen as a feature of patients applying for psychotherapy. Problems associated with affective disorders are mainly state-related, and detecting them early is important. These features could serve as treatment targets. The personality styles found from the subjects of this study support the importance of examining social functioning, and coping styles in affective disorders. More attention should be paid to social skills training and prevention of isolation. These issues can become important for preventing relapse, and maintaining quality of life.

The fact that differentiates anxiety and depression disorders is functional capacity. Especially depressive patients are in risk for being functionally impaired, and are in need of support mechanisms. However, the range of dysfunction is rather large among subjects with depressive disorders. Further research on what is the cause of discrepancy in functional capacity is needed.

The cross-method comparison provided some associations but the results were partly unexpected or difficult to interpret. Some associations were found between personality characteristics and functional capacity. These findings indicate that it is important to continue exploring Rorschach (CS) variables. For now it can be concluded that different test methods measure different aspects of personality, and different areas of functional capacity.

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APPENDICES

APPENDIX 1: Intercorrelations between work-subcales in Social Adjustment Scale - Self-Report

| SAS-SR Work-subscale | Work (n = 103) | Study (n = 46) | Household (n = 148) | Work-subscale (n = 150) |
|-------------------------|-------------------|-------------------|------------------------|----------------------------|
| Work | | .48** | .27* | .78** |
| Study | .48** | | .35** | .86** |
| Household | .27* | .35** | | .80** |

Note. * $p < .05$, ** $p < .01$

APPENDIX 2: Correlation matrix I: Rorschach (CS) variables, GAF, and SAS-SR (n = 150)

| Variable | D | Lambda | EA | Afr | a | p | M- | Zd | CDI | R | SAS-SR | GAF |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| D | | | | | | | | | | | | |
| Lambda | .32** | | | | | | | | | | | |
| EA | .22** | .32** | | | | | | | | | | |
| Afr | .29** | .22** | .22** | | | | | | | | | |
| a | .16* | .21* | .21* | .29** | .16* | .34** | .16 | -.35** | -.06 | .77** | -.02 | -.03 |
| p | .34** | .42** | .42** | .01 | -.43** | -.34** | -.27** | -.30** | .26** | .10 | -.27** | .14 |
| M- | .16 | .50** | .50** | .21* | .72** | .71** | .66** | .30* | -.43** | .60** | .31** | -.15 |
| Zd | -.35** | .07 | .07 | .07 | .07 | .20 | .06 | .08 | -.33** | .19* | .02 | .01 |
| CDI | -.06 | .42** | .42** | .10 | .42** | .42** | .50** | .12 | -.46** | .49** | .22** | -.09 |
| R | .77** | .66** | .66** | .06 | .50** | .66** | .66** | .07 | -.09 | .58** | .26** | -.09 |
| SAS-SR | -.02 | .20* | .20* | .08 | .12 | .07 | .14 | .14 | -.19* | .44** | .14 | -.08 |
| GAF | -.03 | -.33** | -.33** | -.33** | -.46** | -.46** | -.46** | -.14 | -.14 | -.25** | .01 | -.11 |
| | | .26** | .26** | .19* | .49** | .49** | .44** | -.25** | -.20* | .19* | -.11 | -.01 |
| | | .14 | .14 | .01 | .22** | .26** | .14 | .01 | -.11 | .19* | .19* | -.08 |
| | | -.15 | -.15 | .01 | -.09 | -.09 | -.08 | -.11 | -.01 | -.08 | -.33** | -.33** |
| | | | | | | | | | | | | |

Note. * p < .05, ** p < .01

**APPENDIX 3: Demographic characteristics and Rorschach (CS) variables:
Sex, marital status, educational level and work status as means and standard deviations (in parentheses)**

| Variable | Sex | | Marital Status | | | Educational Level | | | Work Status | | | |
|----------|------------------|-----------------|------------------|------------------|-----------------|-------------------|------------------|------------------|------------------|-----------------|------------------|-----------------|
| | Male | Female | Single | Married | Divorced | 1 | 2 | 3 | 1 | 2 | 3 | 4 |
| a | 6.51 (4.03) | 6.36 (4.07) | 6.19 (4.78) | 6.78 (3.49) | 5.57 (2.34) | 5.83 (4.13) | 6.19 (4.09) | 7.20 (3.89) | 6.53 (4.37) | 5.00 (3.24) | 6.26 (3.74) | 6.50 (2.55) |
| p | 6.59 (3.73) | 6.74 (3.89) | 6.96 (3.95) | 6.34 (3.73) | 7.21 (3.95) | 5.72 (3.45) | 7.07 (4.27) | 6.90 (3.31) | 6.73 (3.63) | 5.00 (3.54) | 6.93 (4.29) | 6.30 (4.24) |
| EA | 11.65 (6.03) | 11.63 (5.21) | 11.26 (5.64) | 11.94 (5.38) | 12.00 (4.63) | 10.74 (5.21) | 11.74 (5.69) | 12.22 (5.16) | 11.54 (5.03) | 8.80 (6.27) | 12.00 (5.92) | 12.50 (6.60) |
| M- | 1.18 (1.21) | 1.12 (1.42) | 1.09 (1.58) | 1.19 (1.22) | 1.07 (.83) | 1.00 (1.07) | 1.14 (1.33) | 1.23 (1.63) | 1.06 (1.34) | 1.00 (1.41) | 1.35 (1.34) | .90 (1.73) |
| Afr | .50 (.21) | .49 (.20) | .49 (.21) | .50 (.20) | .48 (.20) | .49 (.19) | .50 (.21) | .47 (.20) | .49 (.16) | .56 (.29) | .47 (.18) | .64 (.43) |
| CDI | 2.21 (1.22) | 2.19 (1.29) | 2.37 (1.30) | 1.98 (1.25) | 2.36 (1.08) | 2.17 (1.30) | 2.21 (1.26) | 2.18 (1.28) | 2.26 (1.26) | 1.80 (1.30) | 2.07 (1.31) | 2.30 (1.25) |
| Zd | -1.17 (6.59) | 1.33 (6.28) | .56 (6.54) | .96 (6.66) | 2.82 (3.51) | -5.8 (5.24) | 1.37 (6.62) | 1.55 (6.75) | .71 (6.67) | 4.20 (6.03) | 1.32 (6.23) | .00 (7.56) |
| Lambda | .80 (.76) | .61 (.48) | .64 (.51) | .70 (.66) | .56 (.29) | .89** (.83) | .63 (.49) | .52 (.33) | .67 (.57) | 1.18 (1.35) | .61 (.44) | .49 (.38) |
| D | 11.97 (8.48) | 9.42 (6.17) | 10.00 (7.16) | 10.21 (7.17) | 9.93 (4.20) | 9.86 (5.89) | 10.30 (7.21) | 9.93 (7.31) | 9.70 (6.35) | 10.20 (7.60) | 10.60 (8.42) | 11.50 (4.84) |
| R | 30.00 (14.68) | 25.68 (9.39) | 26.37 (12.12) | 27.32 (10.57) | 26.43 (9.04) | 25.67 (11.08) | 27.30 (11.55) | 26.95 (10.62) | 26.87 (11.00) | 23.60 (7.44) | 27.43 (12.41) | 25.20 (8.69) |

Note. ** p < .05

Educational Level: 1 = Elementary school, 2 = High school, 3 = Academic, Work Status: 1 = Employed, 2 = Housekeeper, 3 = Student, 4 = Unemployed

APPENDIX 4: Rorschach (CS) variables and age in Pearson's correlation

| Variable | Age |
|----------|------|
| a | .18* |
| p | -.04 |
| EA | .07 |
| M- | -.13 |
| Afr | .10 |
| CDI | -.12 |
| Zd | .01 |
| Lambda | -.03 |
| D | .02 |
| R | .04 |

Note. * $p < .05$

APPENDIX 5: Correlation Matrix II: Rorschach (CS) variables, GAF, and SAS-SR in depression disorders (n = 75), in depression and anxiety disorders (n = 40), and in anxiety disorders (n = 35)

| | Depression | | Depression and Anxiety | | Anxiety | |
|--------|------------|--------|------------------------|--------|---------|--------|
| | GAF | SAS-SR | GAF | SAS-SR | GAF | SAS-SR |
| D | -.08 | -.13 | .12 | .10 | .17 | -.03 |
| Lambda | .11 | -.30** | .21 | -.32* | .09 | -.16 |
| EA | -.21 | .30** | -.01 | .23 | .09 | .36* |
| Afr | .02 | -.07 | -.00 | .12 | -.04 | .09 |
| a | -.16 | .21 | -.01 | .29 | .04 | .16 |
| p | -.16 | .19 | .10 | .22 | .12 | .33 |
| M- | -.16 | .05 | .09 | .15 | .06 | .37* |
| Zd | .21 | .06 | .04 | .03 | -.06 | -.08 |
| CDI | -.02 | -.06 | .14 | -.26 | -.07 | -.20 |
| R | -.19 | .15 | .13 | .19 | .14 | .26 |

Note. * p < .05, ** p < .01

