

## **Depressive Styles, Self-Esteem Structure, and Health: A Dynamic Approach to Differential Vulnerability in Self-Criticism and Dependency**

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**ABSTRACT** - Two studies ( $N = 180$ ,  $N = 428$ ) examined the importance of a dynamic self-esteem (SE) structure (in terms of basic and competence aspects of SE) for the depressive personality styles self-criticism and dependency. Study 2 was extended to investigate the role of self-related motivational orientations and the predictive status of the depressive styles for self-reported physical health. Overall, the results show that self-criticism is a function of SE, which is based on competence and “toxic” achievement strivings while dependency is related to a low basic sense of SE and affiliation needs. In addition, self-criticism and competence related strivings predicted poor health, over and above negative affect, whereas dependency was not associated with physical health. It is concluded that self-criticism and dependency represent distinct vulnerable personality styles in which SE structure plays a role in regulating cognitive-motivational mechanisms with relevance for adjustment and well-being.

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Blatt (1974) proposed two depressive personality styles termed dependency and self-criticism. Dependency refers to concerns of close interpersonal relationships and fear of abandonment, while self-criticism refers to concerns of failure, achievements, and living up to high standards. Although originating from psychodynamic theory (Blatt, D’Afflitti, & Quinlan, 1976; Blatt & Homann, 1992) the constructs are empirically testable and have gained satisfactory construct validity (Blatt, Schaffer, Bers, & Quinlan, 1992; Ouimette & Klein, 1993). However, the conceptual uniqueness and psychological constitution of self-criticism and dependency are still in dispute (Blaney & Kutcher, 1991; Coyne & Whiffen, 1995). In particular, attempts to identify the real source of vulnerability in these depressive predispositions have been plagued by the obtrusive confounding factor negative affect (Bagby & Rector, 1998; Zuroff, 1994). On this basis, Dunkley, Blankstein, and Flett (1997) propose that dependency and self-criticism may be associated with different neurotic types, that is, a passive and anxious type and a competitive and self-focused type, respectively, supporting the uniqueness of these constructs (see also Mongrain, 1993).

Besides negative affect (neuroticism) self-esteem is also recognized as an important factor in both depressive syndromes (Parker, Bradshaw, & Blignault, 1984; Santor & Zuroff, 1998). An individual’s sense of self-worth can be attached to support and love given by others or to achievements and living up to one’s own or others’ standards (Blatt

& Zuroff, 1992; Crocker, 2002; Johnson & Blom, 2007). Consequently, depression emerges when the need gratification from the personally most important self-related source is frustrated or threatened (Greenberg, Watson, & Goldman, 1998).

To provide a framework for understanding further the mechanisms relevant for well being in the self-critical and dependent styles, the present work extends the current approaches (e.g., Dunkley et al., 1997; Mongrain & Zuroff, 1995; Saragovi, Aubé, Koestner & Zuroff, 2002) by proposing that these styles comprise distinctive sets of vulnerable dispositions which are systematically linked to different self-esteem (SE) structures or strategies. This is realized by (i) relating the depressive styles to a dynamic SE model (Johnson & Forsman, 1995), consisting of basic- and competence aspects of SE, (ii) relating the styles together with congruent motivational and situational factors to the SE model, and (iii) predicting the depressive styles from the SE model and the motivational factors. Finally, as a further means to approach the differential vulnerability in self-criticism and dependency, their status as predictors of reported physical health (beyond the broad factor of negative affect) is examined.

### ***Stages of Vulnerability to Depression***

Blatt (1974) identified two kinds of individuals and developmental courses, referring to dependency and self-criticism, respectively. The “anaclitic” or dependent type exhibits feelings of helplessness and a fear of abandonment by others as a result of experienced frustrations in immediate need gratification in the earliest stage in infancy. The “introjective” or self-critical type maintains feelings of inferiority, and failure to live up to expectations and standards, which derive from a stage when the child’s internal images of caregivers have advanced to a more perceptual and symbolic level (Blatt, D’Afflitti, & Quinlan, 1976).

Later this developmental formula has been linked to different types of insecure attachment and gained more empirical support than Blatt’s original constructs (Blatt & Homann, 1992; Blatt & Zuroff, 1992). In terms of attachment theory (Bowlby, 1980) the self-critical style refers to a dismissive avoidant attachment pattern concerning self-definition, prestige, and control, whereas the dependent style refers to an anxious attachment pattern concerning affectionate close relationships and self-protection (Bartholomew, 1990; Blatt & Schichman, 1983; Brennen & Shaver, 1990; Zuroff & Fitzpatrick, 1995).

### ***Dynamic View on Self-Esteem and the Depressive Styles***

To feel worthwhile as a person is a basic need which governs our reactions and behaviors (Crocker, 2002; Sheldon, Elliot, Kim, & Kasser, 2001). Therefore, to elucidate further understanding of the vulnerable cognitive-motivational mechanisms, which predispose people to depression and related problems, it is important to consider the role of self-esteem and its dynamic constitution.

There is some consensus that self-esteem develops via two routes (Forsman & Johnson, 1996; Harter, 1985; Tafarodi & Swann, 1995); an affective route (self-love, self-acceptance) and a competence based route (self-pride, self-confidence). In this case, the affective source of self-esteem is available earlier in development than that which a child’s own competence provides.

The concept and measure of Basic self-esteem (SE) (Forsman & Johnson, 1996) refers to self-esteem given in the infancy by caregivers' unconditional acceptance and secure attachment (Bowlby, 1980; Rogers, 1951). The items on The Basic SE Scale capture an affective-experiential sense of self-worth, rather than a cognitive self-evaluation (Johnson, 1998), referring to emotional openness (e.g., "I can freely express what I feel"), integrity, and assertiveness (e.g., "I seldom feel inferior to my friends"). As Blatt (1974) and Bowlby (1980) have argued major frustrations concerning the caregiver's nurture and love in a developmental phase when basic sense of self-love and security are founded, create emotional dependency.

The concept and measure of Earning SE (Forsman & Johnson, 1996) refers to the aspect of general self-esteem which can be acquired by one's own acts (Franks & Marolla, 1976; Harter, 1985), and is unrelated to basic SE. The items on The Earning SE Scale capture an individual's need to earn self-esteem conditionally by competence (e.g., "Others' appreciation of what I have done strengthens my self-esteem a lot"), by responsibility, and having high standards of own accomplishments (e.g., "I always dedicate myself a hundred percent to things"). This aspect of self-esteem deals with self-definition inferred from feedback concerning one's own capacities and, analogously with self-criticism, Earning SE requires a more matured symbolic level of cognitive functioning.

This SE model developed by Forsman and Johnson (1996) resonates with other contemporary pairs of SE constructs, such as true/contingent SE (Deci & Ryan, 1995) and self-liking/self-competence (Tafarodi & Swann, 1995). However, it provides a unique basis for studies which focus on the functioning of self-esteem (Johnson & Forsman, 1995). There are two reasons for this: First, basic SE is more stable and more independent of external events than global self-esteem (Johnson, 1998; Johnson & Forsman, 1995). Second, the model differentiates clearly, both theoretically and empirically, between the 'essence' of self-esteem and the 'instrumental' competence related aspect of self-esteem.

In support of this view, Johnson and Forsman (1995) demonstrated that the role of earning SE depends on the level of basic SE (see also Johnson & Patching, 2009). These experiments revealed important differences in adaptive behavior depending on the combination of basic and earning SE levels. Two of these combinations or structures are vulnerable and have relevance for the two depressive styles. First, the structure of low basic SE/high earning SE (*Striving for SE*) which implicates that one's self-worth is defined by outcomes of acts, results in unrealistic ambitions with poor performances, and a "toxic" achieving pattern (Johnson, 2002; Johnson & Forsman, 1995; Koivula, Hassmén & Fallby, 2002). This SE structure makes the individual sensitive to failures, as one's perception of one's own deeds is often over-critical, due to an impoverished basic self-love (Johnson & Blom, 2007; Johnson & Forsman, 1995). Second, the structure of low basic SE/low earning SE (*Renouncing SE*) predisposes to helplessness and deference (Johnson & Forsman, 1995), characteristics linked to dependent persons (Birtchnell, 1984). This structure reflects self-esteem based on relational reassurance rather than success and competence (Johnson & Blom, 2007). In contrast, the high basic SE/high earning SE structure (*Enhancing SE*), which implicates that successful acts enhance, but not define, one's self-worth, entails adaptive adjustment of ambitions and is related to

“non-toxic” achieving, whereas the high basic SE/low earning SE structure (*Maintaining SE*) creates individuals who are secure and contented as they are (Johnson, 2002; Johnson & Forsman, 1995).

In this respect, the internalized working models arising from early experiences of emotional deprivation and rejection (Bornstein, 1996) poises a person to seek incessantly self-validation in emotional reassurance from others. In contrast, if the working models arise from being accepted only when successfully living up to certain standards the result is a highly self-critical and demanding self-esteem, dependent upon external sources such as achievements and prestige (Dunkley, Zuroff, & Blankstein, 2003; Johnson & Blom, 2007). Therefore, the main focus of the present paper is to approach the distinctive nature of vulnerability involved in self-criticism and dependency by emphasizing their relation to self-esteem structure, that is, basic and earning aspects of self-esteem and their dynamic interplay.

### ***Strivings, Needs, and Congruent Events***

As the concept of self-criticism refers to self-definition through prestige, control, and achievements the underlying motivational orientation is thought to be achievement-related, whereas the orientation in dependency is affiliation-related as the concept refers to relational bondage and reassurance (Blatt, Cornell & Eshkol, 1993; Blatt & Schichman, 1983; McClelland, 1989; Mongrain & Zuroff, 1995). However, the consequences of motivational dispositions depend upon the meaning, which they have for a particular individual (see Emmons, 1991). Therefore, self-esteem, which also is an important human need (Sheldon et al., 2001), may be a crucial factor for determining the meaning of the social needs. For example, high affiliation need combined with an impoverished sense of basic self-esteem entails dependency and neediness, whereas high achievement motivation results in self-criticism, perfectionism, and an incessant striving to succeed, as self-esteem is at stake (Johnson, 2002; Johnson & Blom, 2007). By way of contrast, high basic self-esteem attenuates the compelling nature of these strivings (Deci & Ryan, 1995; Johnson & Blom, 2007; Johnson & Forsman, 1995) resulting in gratifying and enriching experiences of achievements or relationships.

Further, there is empirical evidence to suggest congruency between strivings, needs, and perceived significance of corresponding life events (Coyne & Whiffen, 1995). Rejection and losses in close relationships have major significance for a dependent individual, whereas a self-critical individual tends to react harder to failures in achievements (Dunkley et al., 2003; Coyne & Whiffen, 1995).

Individual differences develop as a result of particular needs, with their origins in early experiences, and the ensuing behaviors and self-regulation attempts are goal-driven aimed at fulfilling and maintaining those needs (Harlow & Cantor, 1994). Therefore, the vulnerability emerges as a result of an interactive process between traits, needs, and goals in daily life. On this basis, a further aim of this work is to study the importance of self-esteem structure for needs, strivings, and negative life events congruent with self-criticism and dependency.

### ***Well-Being***

The two depressive styles, and in particular self-criticism, can be thought as mediators for physical health (Booth-Kewley & Friedman, 1987; Denollet, 1997). In this respect, Blatt and his co-workers (1993) have proposed that a self-critical style implies an integrated structure (concerns of anger, control, self-worth, achievements, failure), predisposing for cardiovascular disease, whereas a dependent style implies a structure (repression of emotions, helplessness), inclining to immunogenic disease (see also Johnson, 2009). In addition, chronic failures to live up to internal and external standards have been associated with somatic complaints such as migraine, anorexia, and muscle tension (Higgins, Vookles, & Tycokinski, 1992). Further support has been provided by a recent finding, which suggests, that people high in hostility and self-criticism report more tension diseases (Johnson, 2003) than other ailments. Dependent helplessness, although earlier associated with stomach problems (Greenberg & Bornstein, 1988), is today considered for its relevance for the progression rather than the etiology of disease via passive coping strategies (e.g., Levenson & Bemis, 1991).

To examine further the differential vulnerability in dependency and self-criticism, assumed to reflect different self-esteem structures, the present work also explores the importance of the two depressive styles for physical health over and above the broad factor negative affectivity. Self-criticism was thought to be a more profound predictor of physical well-being than dependency due to its stronger association with depression (Mongrain & Zuroff, 1994; Niezel & Harris, 1990) and its connectedness to hostility, control, and high standards of striving (Blatt, et al., 1993).

### **Study 1**

This first study investigated the importance of self-esteem (SE) structure, that is, basic and earning SE and their combinations, for dependency and self-criticism. On the basis of the current theory and previous empirical research, it was hypothesized that self-criticism is a function of high earning SE (by competence) and low basic SE, in particular when high earning SE is combined with low basic SE (external sources define self-esteem), and that dependency reflects low basic SE in particular when combined with low earning SE.

### ***Method***

#### ***Participants***

The sample comprised 180 undergraduates from Stockholm University (72 men and 108 women) with a mean age of 27 years (ranging from 19-45).

#### ***Measures***

*Basic Self-esteem* was measured using The Basic Self-esteem Scale (Forsman & Johnson, 1996). This self-esteem scale (37 items) is based on a psychodynamic formula and indicates one's fundamental self-love and acceptance of own libidinal and aggressive needs. It comprises two factors reflecting emotional warmth and openness (e.g., "I can freely express what I feel" or "My relations with others are emotionally warm) and self-assertiveness (e.g., "I find it easy to say no to other's demands and expectations" or "I

seldom need to excuse myself or explain myself to others”). A shortened version (14 items) was used. Cronbach alpha in this study was 0.86.

*Earning Self-esteem* was measured using The Earning Self-esteem Scale (Forsman & Johnson, 1996). This scale (28 items) provides an indication of an individual’s need to gain or enhance self-esteem by competence. The scale comprises three factors reflecting conditionally acquired self-worth (e.g., ”I think my self-esteem would be damaged if I were to fail in my studies” or ”I don’t need others’ appreciation of what I have done”, reversed coding), perfectionism and responsibility (e.g., ”I always dedicate my self a hundred percent to things” or ”I am a responsible person”), and a need of influence and control over others (e.g., ” Whenever I have managed to influence a friend it has strengthened my self-esteem considerably”). A shortened version (13 items) was used. Cronbach alpha in this study was 0.79.

The basis for the shortened self-esteem scales was the balance between the criteria of highest multiple R-squared and highest factor loadings of the items. The short forms have displayed high reliability and gained good construct validity (Johnson & Blom, 2007; Johnson, 1998; Koivula et al, 2002).

*Self-criticism and Dependency* were measured by The Depressive Experiences Questionnaire, (DEQ; Blatt, D’Afflitti, & Quinlan, 1979). It is a 66-item scale where Self-criticism reflects preoccupation with failures and high standards (e.g., ”If I fail to live up to expectations I feel unworthy”) and Dependency reflects concerns of separation and fear of loss (e.g., ”I urgently need things that only other people can provide”). Cronbach alphas for the scales in this study were .81 and .85, respectively. The factor Efficacy was excluded from the study.

The responses on all scales were given on a 5-point scale ranging from 1 - ”strongly disagree” to 5 - ”strongly agree”. There was no item overlap between the self-esteem and depressive styles measures.

*Negative affect* was measured by The Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988), indicating emotional distress. Only the items indicating negative affect were employed (10 items). The scale was adjusted to a five-point Likert format (e.g., ”I often feel distressed”). Cronbach alpha in this study was 0.79.

## **Results**

First, Pearson correlation analyses, controlling for negative affect, were performed which showed that SCR and DEP correlated weakly ( $r = 0.21, p < .01$ ), while Basic and Earning SE were unrelated to each other ( $r = 0.04, p > .05$ ). Basic SE correlated negatively with both SCR ( $r = - .38, p < .001$ ) and DEP ( $r = - .32, p < .001$ ) while Earning SE correlated only with SCR ( $r = .25, p < .01$ ).

Second, two hierarchical regression analyses were performed, on the SE model and depressive styles, in which gender was controlled in the first block and negative affect in the second block. The analyses showed that Basic SE, but not Earning SE, was a significant predictor of both SCR ( $\beta = -0.46, p < .001$ ) and DEP ( $\beta = -0.33, p < .01$ ). They revealed further that the interaction term Basic SE x Earning SE (centered scores; Aiken & West, 1991) was a significant predictor of both SCR ( $\beta = -0.27, p < 0.01$ ) and DEP ( $\beta = 0.19, p < 0.05$ ). These results support the hypotheses and indicate that both SCR and DEP are a function of low Basic SE. They indicate further that a structure with high

earning SE combined with low basic SE (*Striving for SE*) resulted in significantly higher self-criticism than when combined with high basic SE (*Enhancing SE*) and that a structure with low earning SE combined with low basic SE (*Renouncing SE*) entails higher dependency than when combined with high basic SE (*Maintaining SE*) confirming the importance of distinctive SE structures for SCR and DEP.

## Study 2

This study extends Study 1 by investigating the broader self-related motivational implications of the two depressive personality styles to provide further understanding of their vulnerability status. The study has three specific aims: One aim is to examine further the role of the dynamic SE model for self-criticism and dependency by determining whether the results of Study 1, which examined a Swedish sample, would replicate in an English sample. As self-related needs and strivings are considered an important part of adjustment (Deci & Ryan, 1995) a further aim was to examine motivational and situational factors, congruent with the two vulnerable styles, in relation to the SE model. A final aim was to explore the relevance of self-criticism and dependency for physical health.

### *Hypotheses*

The hypotheses were based on the documented positive relations between earning SE and achievement strivings/type-A behavior; between basic SE and sociability/extraversion; between self-criticism and hostility; between relation based self-esteem and dependency/affiliation; and between competence based self-esteem and “toxic” strivings/perfectionism (e.g. Forsman & Johnson, 1996; Johnson, 2002, 2003; Johnson & Blom, 2007; Johnson & Forsman, 1995). There were three general hypotheses of the interrelated patterns:

i) Self-criticism, earning SE, especially when combined with low basic SE, “toxic” achievement strivings, and the salience of negative achievement events are associated with each other.

ii) Dependency, low basic SE, in particular when combined with low earning SE by competence, affiliation needs, and the salience of negative interpersonal events show an interrelated pattern.

iii) Self-criticism, due to its linkage to hostility, control, and high standards of striving is a stronger predictor of poor reported health than dependency. On the same basis, competence based (low basic/high earning) SE and “toxic” strivings were hypothesized to be stronger predictors of general health than the other dispositions in this study.

Finally, specific interactive hypotheses were formulated for individuals representing the four SE structures or profiles regarding the patterning of the depressive styles and congruent motivational and situational factors (Coyne & Whiffen, 1995; Johnson, 2002; Johnson & Blom, 2007; Johnson & Forsman, 1995): i) People with the *Enhancing SE* (high basic/high earning) profile, typified by achieving without anxiety for failure, were expected to be low in both depressive styles but high in “non-toxic” achievement striving and affiliation needs; ii) those with the *Striving for SE* (low basic/high earning) profile, denoting an anxious and frustrated achiever, were predicted to be high in self-criticism, “toxic” achievement striving and reported salience of negative achievement events; iii)

individuals with the *Maintaining SE* (high basic/low earning) profile, referring to a stable and contented type, were predicted to be low in both depressive styles and high in affiliation needs without achievement strivings; iv) those with the *Renouncing SE* (low basic/low earning) profile, typified by helplessness and deference, were expected to be particularly high in dependency and affiliation needs, and in reported salience of negative interpersonal events.

## **Method**

### ***Participants***

The sample consisted of 428 students; undergraduates and Open University students at the University of York and undergraduates at Nottingham University, UK. There were 152 men and 276 women with mean age of 22 years (ranging from 18 to 56).

### ***Measures***

*Basic and Earning self-esteem* were measured by the shortened forms of The Basic and Earning Self-esteem Scales (Forsman and Johnson, 1996) as used in Study 1. The Cronbach alphas in this study were 0.88 and 0.78, respectively. (In regard to the selection criteria of the short scales and their reliability see Study 1).

*Self-criticism and Dependency* were measured by The Depressive Experiences Questionnaire, (DEQ; Blatt, et al., 1979) which was used in Study 1. Self-criticism was, in this study, measured by 16 items (Cronbach alpha was .82) and Dependency by 14 items (Cronbach alpha was .79). The items were selected so that the factor overlapping of the two dimensions was minimized. In line with Study 1 the factor Efficacy was excluded.

*Need for Achievement* was measured by items from several well-validated achievement scales (WOFO; Helmreich, & Spence, 1978; STAQ; Birks & Roger, 2000; Manifest Needs Questionnaire; Steers & Braunstein, 1976). The items were selected on theoretical grounds to distinguish between more relaxed "non-toxic" and compulsive "toxic" types of achieving (see Birks & Roger, 2000; Roger, Nash, & Najarian, 1995). Both subscales comprised 10 items. The Cronbach alpha of the non-toxic items (e.g., "I find satisfaction in exceeding my previous performance even if I don't outperform others" or "Getting a good degree is important but I wouldn't say it was everything") was .86 and of the toxic items (e.g., "I find it difficult to accept that others perform better than I on a task or a game" or "I hate being slowed down by other peoples' mistakes") the alpha was .82. All the original achievement indexes have shown good validity in a number of studies (e.g., Johnson & Blom, 2007; Marongiu & Ekehammar, 1999; Spence, Helmreich, & Pred, 1987).

*Need for Affiliation* was measured by 8 items from The Manifest Needs Questionnaire (Steers & Braunstein, 1976). As this scale was created for work context, 6 items were added from The Interpersonal Orientation Scale (IOS; Hill, 1987) reflecting positive stimulation of communion with others ("I seem to get satisfaction from being with others more than a lot of other people do" or "I would find it very satisfying to be able to form new friendships with whomever I liked"). Cronbach alpha of the total scale was .81. Both original scales have appeared as highly valid indexes of affiliative needs (e.g., Hill, 1991; Marongiu & Ekehammar, 1999).

*Negative affect* was measured by The Positive and Negative Affect Scale (PANAS; Watson et al., 1988), as used in Study 1. Cronbach alpha in this study was 0.83

The response format for all personality items was a five-point Likert scale ranging from

1 (strongly disagree) to 5 (strongly agree). The items were presented in random order so that the questionnaire, for the respondents, appeared as one single instrument.

*Salience of negative life events* was measured by The Life Experiences Survey (LES; Sarason, Johnson & Siegel, 1978). A version (Bartelstone & Trull, 1995) indicating the importance of negative interpersonal events (e.g., "A close friend breaks off the relationship" or "Serious illness of a close friend") and negative achievement events (e.g., "Severe failure in an important job interview" or "Failing an important exam") was utilized in the present study. The items which clearly differentiated between these two areas of life (based on three independent judges' categorization) were selected to the study (see Kwon & Whisman, 1998). Both parts of the final scale comprised 10 items. The Cronbach alpha was .80 for achievement events and .86 for interpersonal events. The LES asked hypothetically about the severity of the impact of a negative event. Participants were instructed to vividly imagine themselves in each situation and give their responses on a five-point scale from Very little impact to Very severe impact. There was also a question about whether the participants had actually encountered some of the events within the latest 4 weeks. However, these scores did not influence the hypothetically perceived importance of the events. LES has been used in several studies (e. g., Roberts, Ciesla, Direnfeld, & Hewitt, 2001; Sarason et al, 1978) and hypothetical approaches are frequently used to gain greater understanding of affect and depression (Larsen, Diener, & Emmons, 1986; Mongrain & Zuroff, 1989).

*Self-reported physical health* was measured by The Health Status Checklist (HSC; Meadows, 1989), derived from an extensive survey of doctors in general practice. The selected 18 items referred only to physical symptoms like "eczema", "gastritis", "cold", or "head ache". The HSC asked about participants' assessment of their general inclination to be troubled by the different diseases ranging from very low inclination (1) to very high inclination (5). The high scores indicated poor health and the low scores good self-reported health. The HSC is well validated by general practitioners (Meadows, 1989) and has been used in several studies as an index of health status (e.g., Birks & Roger, 2000; Johnson, 2002).

## **Results**

The results were analyzed in three steps. First, intercorrelations were calculated between all variables. Second, multivariate and univariate analyses of variance were employed to test the significance of SE structure for self-criticism and dependency and congruent motivational factors, including the salience of negative life events. Third, a series of hierarchical regression analyses were conducted to examine the importance of self-esteem types and different strivings as predictors of self-criticism and dependency, and the status of self-criticism and dependency as predictors of reported health, among the other personality traits and dispositions (over and above negative affect).

**Intercorrelations**

Table 1 displays an overview of the relations among the variables in the study (low scores in HSC indicate good health). As negative affect (NA) is related strongly to most of the variables the partial correlations, where NA is controlled, are presented in the upper diagonal.

**Table 1**

***Intercorrelations Among Personality Variables, Importance of Negative Life-Events, and Self-Reported Health in the Total Sample. Partial Correlations, When Negative Affect is Controlled, are Presented in the Upper Diagonal. (N = 428)***

	1	2	3	4	5	6	7	8	9	10
1. Basic SE		.03	-.37**	-.36**	.31**	-.25*	.19*	-.14	.08	-.27**
2. Earning SE	-.09		.05	.28**	.11	.43**	.13	.46**	.13	.03
3. DEP	-.41**	.13		.18	.36**	.07	-.10	.17	.42**	.09
4. SC5	-.68**	.30**	.30**		-.22*	.47**	-.24*	.21*	.07	.28**
5. AFF	.34**	.14	.22*	-.26*		-.15	.24*	.11	.41**	-.16
6. Ach-T	-.37**	.47**	.18	.49**	-.22*		-.34**	.28**	-.07	.26*
7. Ach-NT	.28**	.10	-.22*	-.37**	.28**	-.41**		-.03	.05	.02
8. AE	-.26**	.49**	.28**	.40**	.04	.37**	-.13		.21	.12
9. IE	-.14	.16	.50**	.20	.33*	.04	-.04	.19		.05
10. Health	-.49**	.07	.23*	.41**	-.10	.29**	-.17	.26*	.18	
11. NA	-.61**	.12	.46**	.67**	-.16	.14	-.30**	.34**	.28**	.52**

Note. SE, self-esteem; DEP, dependency; SCR, self-criticism; AFF, affiliation need; Ach-T/NT, Toxic/Non-toxic achievement strivings; AE, salience of achievement events; IE, salience of interpersonal events; NA, Negative affect

\*\* $p < .001$  \* $p < .01$

Table 1 shows that dependency (DEP) was moderately related to affiliation striving (AFF), low Basic SE, the salience of negative interpersonal events (IE), and slightly to the salience of achievement events (AE). Table 1 further shows that self criticism (SCR) was related moderately to Earning SE, low Basic SE, the salience of negative AEs, and strongly to “toxic” achievement striving (Ach-T). In addition, Earning SE correlated positively with Ach-T and AE while Basic SE correlated positively with AFF and “non-toxic” achievement strivings (Ach-NT) and negatively with Ach-T. It appears also that when NA was controlled only SCR, Ach-T, and Basic SE correlated significantly with self-reported physical health. In particular, high SCR and Ach-T were related to poor health (high scores) and high Basic SE to good health (low scores).

These results confirm the predicted relations among the personality variables. Only three of the variables were gender related indicating that women scored slightly higher in dependency,  $r = -0.17$ ,  $p < 0.05$  and health (poorer health)  $r = -0.16$ ,  $p < 0.05$  while men scored higher in “toxic” strivings  $r = 0.21$ ;  $p < 0.01$ ). As these correlations were weak gender is not considered further.

***Importance of Self-Esteem Structure for Depressive Styles and Congruent Strivings***

A 2 (level of Basic SE) x2 (level of Earning SE) multivariate analysis of variance (MANCOVA) with NA as a covariate was performed on the two depressive styles, affiliation and achievement strivings, and the salience of different negative life events. The division of the four self-esteem groups, with different combinations of high and low scores in Basic and Earning SE, was based on the median split of the scores of the SE scales. A check of the distributions was performed<sup>1</sup>. This analysis was chosen as most

appropriate to test the hypotheses regarding the SE profiles and the patterning of the dependent variables.

The analysis showed multivariate main effects of Basic SE  $F(7, 418) = 38.36, p < .001$  and of Earning SE  $F(7, 418) = 26.71, p < .001$ . In addition the analysis revealed a significant interaction between the SE types  $F(7, 418) = 5.54, p < .01$ . A series of univariate analyses of variance (ANCOVAs) were then performed, where the effect of NA was controlled. Table 2 shows the means and standard deviations of the depressive styles, motivational dispositions, and the salience of negative events, for the four SE profiles. The analysis regarding SCR showed a significant interaction between the SE dimensions,  $F(1, 424) = 7.11, p < .001$ , indicating that high earning SE combined with low basic SE (*Striving for SE*) resulted in higher scores in SCR (Tukey HSD,  $p < 0.01$ ) than when combined with high basic SE (*Enhancing SE*). By similar vein, regarding DEP a significant interaction  $F(1, 424) = 4.38, p < .01$  indicated that people with low level of basic SE combined with low need of earning SE (*Renouncing SE*), were significantly more dependent (Tukey HSD,  $p < .01$ ) than those with high level of basic self-esteem without competence needs (*Maintaining SE*). These results confirm the hypothesis of the depressive styles and self-esteem structure and so resonate with those obtained in Study 1. The implication is that the results of Study 1 are extendable to other (non Swedish) European populations.

**Table 2**  
**Means (M) and Standard Deviations (SD) of Self-Criticism (SCR) and Dependency (DEP) and the Other Personality Factors for the Different Self-Esteem(SE) Types. (N = 428).**

	Low		Basic SE level		High
	M	SD	M	SD	
Earning SE Level	<i>Md</i> = 3.40				
<i>Md</i> = 3.52					
	<i>“Renouncing SE”</i>		<i>“Maintaining SE”</i>		
Low	SCR	3.10 .56	2.88	.55	
	DEP	3.78 .61	2.87	.49	
	AFF	3.41 .53	3.81	.47	
	Ach-T	2.64 .56	2.22	.63	
	Ach-NT	3.21 .56	3.39	.57	
	AE	3.18 .62	2.99	.60	
	IE	3.93 .58	3.42	.63	
	<i>“Striving for SE”</i>		<i>“Enhancing SE”</i>		
High	SCR	3.89 .49	3.01	.60	
	DEP	3.16 .58	2.92	.62	
	AFF	3.02 .47	3.62	.51	
	Ach-T	3.68 .62	2.58	.67	
	Ach-NT	3.16 .56	3.68	.57	
	AE	3.86 .51	3.34	.55	
	IE	3.38 .53	3.53	.51	

A further univariate analysis of variance performed on Ach-T revealed a significant interaction  $F(1,424) = 5.98, p < .001$  indicating that high Earning SE combined with low Basic SE (*Striving for SE*) resulted in higher “toxic” achievement strivings than when combined with high basic SE (*Enhancing SE*) (Tukey HSD,  $p < .01$ ). In contrary, regarding Ach-NT a marginally significant interaction  $F(1,424) = 3.43, p < .05$  indicated that individuals with Enhancing SE exhibit higher non-toxic achievement strivings than those with Striving for SE. In addition, AFF was found to be strongly related to Basic SE,  $F(1,424) = 18.47, p < .001$ . These results indicate that “toxic” achieving and self-criticism share the association with competence dependent SE structure

Additional univariate analyses revealed a greater reported importance of negative achievement events in individuals with low basic SE  $F(1, 424) = 9.83, p < .001$  and in individuals with high earning SE  $F(1,424) = 18.29, p < .001$  than in those with high basic SE and those with low earning SE. No interaction was found regarding AE. However, regarding IE, a marginally significant cross-over interaction between the SE dimensions,  $F(1,424) = 3.79, p < .05$ , was found indicating that interpersonal setbacks were perceived as most severe (Tukey, HSD,  $p < 0.05$ ) by people with low basic SE without competence needs (*Renouncing SE*) and least severe by those whose self-esteem is based on competence (*Striving for SE*).

In all, these patterns of relationships are in agreement with the specific hypotheses of SE- structures and their relation to depressive styles with congruent strivings and event-relevance, indicating that self-criticism and dependency share the specific SE dynamics with congruent motivational and, in part, also situational factors.

### ***Predictors of Depressive Styles and Physical Health***

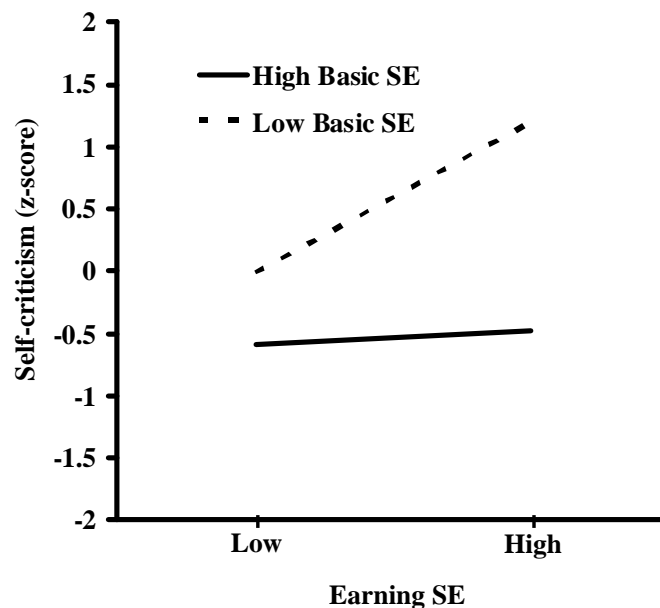
A series of hierarchical regression analyses were conducted to examine in more detail which role SE structure and motivational dispositions, over and above negative affect (NA), have in predicting the variance of self-criticism (SCR) and dependency (DEP). In addition, the unique role of dependency and self-criticism as predictors of the health scores, among the other personality dispositions, was examined hierarchically. In each analysis the effect of NA was controlled in the first block and the respective specific personality measure or health score in the third block. The measures included in the analyses were Basic SE, Earning SE (centered scores), the product term Basic SE x Earning SE (Aiken & West, 1991), Ach-T, Ach-NT, AFF, SCR, DEP and self-reported health. Only the factors with a significance level of  $p < .01$  are reported below.

*Self-criticism.* In line with previous studies (e.g., Dunkley et al. 1997), NA was the dominating predictor of all dependent variables, which were SCR, DEP, and reported health. However, the factor most “impinged” by NA was SCR. Examination of  $R^2$  changes (multiple  $R$  in this model was .79) revealed that 47% of the variance of SCR was explained by NA ( $\beta = .46, t = 13.75, p < .001$ ). However, five of the other personality variables appeared as significant predictors of SCR, over and above the effect of NA. Of these predictors Ach-T ( $\beta = .31, t = 4.62, p < .001$ ) and Basic SE ( $\beta = -.23, t = 4.30, p < .001$ ) contributed with 5% each to the variance of SCR while Earning SE ( $\beta = .18, t = 2.80, p < .01$ ) and AFF ( $\beta = -.16, t = 2.68, p < .01$ ) added 2% each. Finally, the product term Basic SE x Earning SE ( $\beta = -.24, t = 4.36, p < .001$ ) explained 3% of the total

variance (negative  $\beta$  signifies higher values of the product term for individuals with low SCR). The interaction is plotted in Figure 1 and shows that high Earning SE when combined with low Basic SE resulted in higher SCR scores than when combined with high Basic SE.

These results provide further support for the hypothesized role of self-esteem structure for the depressive style of self-criticism and indicate that self-criticism mirrors “toxic” achievement strivings and a type of self-esteem which is contingent upon competence. In addition they indicate that self-criticism reflect low affiliation needs.

**Figure 1**  
*Relation Between Self-Criticism and Earning Self-Esteem (SE) as a Function of Basic SE. Values for Basic SE and Earning SE are plotted using the values one standard deviation below (low) and above (high) the mean.*

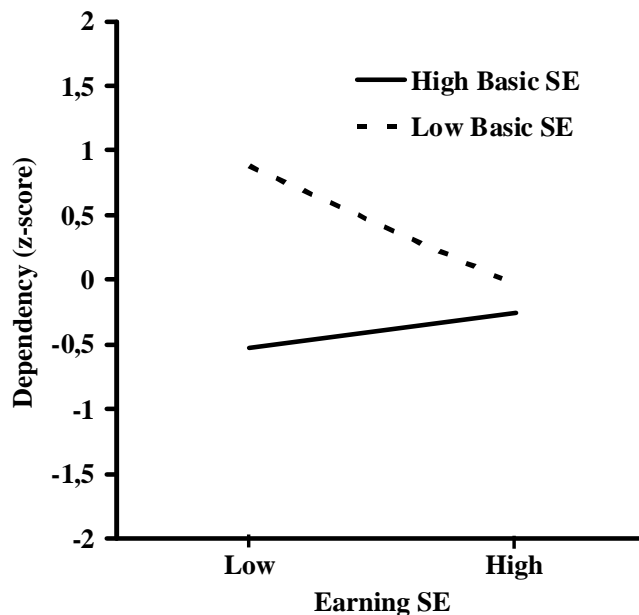


*Dependency.* NA explained 32% (multiple  $R$  in this model was .68) of the total variance of DEP ( $\beta = .34, t = 6.72, p < .001$ ) while the other significant unique predictors were high AFF ( $\beta = .29, t = 5.22, p < .001$ ) and low Basic SE ( $\beta = -.21, t = 4.72, p < .001$ ), adding 9% and 5% to the explained variance, respectively. There was also a marginally significant ( $p < .05$ ) effect of the product term Basic SE x Earning SE on dependency. This interaction is plotted in Figure 2 and shows that low Earning SE combined with low basic SE resulted in higher dependency than when combined with high Basic SE.

These findings support the hypothesized importance of self-esteem structure and motivational strivings for the depressive style of dependency and indicate that dependency mirrors emotional over-sensitivity combined with strong relational needs in order to sustain self-esteem. The results regarding the SE structures and the depressive styles are in line with those in Study 1.

*Health status.* NA was also the strongest predictor of reported physical health ( $\beta = .37, t = 6.38, p < .001$ ), explaining 26% of the total variance of the health scores (multiple  $R$  in this model was .64). However, several other personality factors predicted uniquely and significantly the scores of physical health over and above NA. Of these ACH-T ( $\beta = .26, t = 4.93, p < .001$ ) and SCR ( $\beta = .24, t = 4.72, p < .001$ ) had the strongest effect contributing 5% and 4 % to the explained variance in health scores, respectively, while the product term Basic SE x Earning SE ( $\beta = -.21, t = 3.38, p < .01$ ) added an additional significant 3% (negative  $\beta$  signifies higher values of the product term for individuals with good health). Plotting the interaction indicates that high Earning SE, when combined with low Basic SE, results in higher health scores (poorer health) than when this SE disposition is combined with high Basic SE (see also Johnson, 2004, 2002). Furthermore, Basic SE alone explained 2% ( $p < 0.05$ ) of the health variation explained by the model, whereas AFF provided an additional ( $p < .05$ ), “protective” 1%. DEP, Earning SE and Ach-NT had no significant predictive value for health scores ( $p > .05$ ).

**Figure 2**  
*Relation Between Dependency and Earning Self-Esteem (SE) as a Function of Basic SE. Values for Basic SE and Earning SE are plotted using the values one standard deviation below (low) and above (high) the mean.*



The obtained results confirm the hypothesis that self-criticism, but not dependency, is related to physical health supporting the view that these concepts are distinctive. These findings suggest also that self-criticism, showing a connection to “toxic” self-esteem strivings, has unique health relevance above neuroticism and, so provide important clues concerning the general vulnerability status of the two depressive personality styles.

### Discussion

This study explored the broader dynamic personality patterns with suggested importance for understanding the vulnerability status of self-criticism and dependency by studying the significance of basic and earning self-esteem (SE) for these two depressive styles, congruent motivational orientations, and life-events. In addition, the SE types and motivational dispositions as predictors of dependency and self-criticism, over and above emotional distress (negative affect), were examined. Finally, the status of the two depressive styles as predictors of self-reported physical health, among the SE types and the other dispositions, was studied.

Overall, the results indicate that self-criticism is associated with low basic self-esteem, especially when combined with a high need to earn self-esteem by competence (competence based SE structure), whereas dependency is linked with low basic self-esteem without competence needs providing support for the hypotheses. This pattern of results, obtained using an English sample, resonates with the findings of Study 1 which was based on a Swedish sample and supports the hypothesized relationship between depressive styles and SE structure.

Examining further the role of the self-esteem structure for congruent motivation-event patterns show that, as compared to the other SE profiles, individuals with the Striving for SE profile (low basic/high earning), who were most self-critical, exhibited also strongest “toxic” achievement strivings and highest sensitivity to failures in achievements (see Johnson, 2002; Johnson & Forsman, 1995). Moreover, the particular insensitivity for interpersonal events combined with low affiliation needs displayed by individuals with this profile may reflect a hostile attitude (see Johnson, 2002). In contrast, individuals with the Enhancing SE profile (high basic/high earning) showed highest degree of “non-toxic” achievement strivings combined with relatively strong affiliation needs, without dependent and self-critical implications. The Maintaining SE structure (high basic/low earning) was also associated with strong affiliation needs, without dependency and self-criticism but also without achievement strivings. Participants with this ‘happy go lucky’ SE profile were also least bothered by achievement failures (see also Johnson & Forsman, 1995) but showed some sensitivity to interpersonal setbacks. Finally, individuals with the Renouncing SE profile (low basic/low earning), who were most dependent, were also least achievement oriented and highly sensitive to negative interpersonal events.

In all, these findings were in line with the hypothesized congruent personality patterns indicating the importance of self-esteem structure for self-criticism, dependency, and motivational strivings. Notably, negative interpersonal events were perceived as more severe by highly dependent individuals than by highly self-critical individuals, supporting the hypothesis, whereas the impact of negative achievement events was associated with both types of depressive styles and not only the self-critical style. This asymmetry in the vulnerability-event congruency is in line with previous findings (Coyne & Whiffen, 1995).

Taken altogether, it is clear that self-criticism reflects self-esteem contingent upon achievements, whereas dependency reflects self-esteem contingent upon relationships. This was supported further by regression analyses which revealed that “toxic” achieving and competence based self-esteem structure together with low affiliation needs predicted

self-criticism whereas low basic self-esteem alone and when combined with low earning self-esteem together with need for affiliation predicted dependency (over and above negative affect). Moreover, the findings of regression analysis suggest a unique vulnerability status of self-criticism which can incline to physical disease (see also Johnson, 2003); this vulnerability appears to have similarity with that of “toxic” achievement strivings and competence based self-esteem structure.

### **General Discussion**

The aim of the present work was to approach the vulnerability in self-criticism and dependency by examining patterns of distinctive sets of dispositions assumed to be systematically related to different self-esteem dynamics. An additional goal was to elucidate the role of negative affect in the vulnerability. The studies indicate that the two depressive styles are systematically associated with distinct patterns of self-esteem structure and motivational/situational factors. They suggest further that the two styles have differential vulnerability status concerning physical health and a vulnerability potential over and above negative affect (Dunkley et al., 1997). The same discriminating pattern regarding SE structures and the two depressive personality styles was found in two European countries.

Overall the results suggest the importance of a competence based self-esteem structure, in which the core is low basic self-esteem (see also Johnson & Blom, 2007), for self-critical vulnerability. This specific SE structure has also been found to play an important role in hostility, “toxic” type A behavior, depression, and physical ailments (Johnson, 2002, 2004; Johnson, Paananen, Rahinanti & Hannonen, 1997). As self-criticism in the present study was a unique predictor of physical disease, showed an association with “toxic” strivings, and was related to low affiliation needs, it seems that self-critical persons seek competitive stress but attract less social support (see also Mongrain, 1998; Priel & Shahr, 2000) making them particularly vulnerable. By way of contrast, the finding that dependency did not predict physical health but was related to low basic sense of self-esteem (without competence strivings) coupled with high affiliation needs, indicates that dependent people are “other oriented” and, even if vulnerable to relational stress, gain more protection via close relationships (Fichman, Koestner, & Zuroff, 1994).

The main concern of the present work was to investigate the importance of dynamic self-esteem structure for self-critical and dependent vulnerability. This is a novel approach as the independence between the concepts referring to basic and competence aspects of self-esteem in the model (Forsman & Johnson, 1996) allows for studying interactions between these aspects regarding behavior (Johnson & Forsman, 1995), and so provides unique understanding of the functioning of self-esteem. In addition, basic SE capturing the essence of self-esteem is superior to global measures of self-esteem (see Johnson, 1998), which often comprise both competence and affective aspects inseparably (Tafarodi & Swann, 1995). Moreover, by pointing out important self-related factors and patterns which promises to shed light on the processes related to differential vulnerability the present research makes a valuable contribution to the area of personality and adjustment. For instance, by indicating a closeness of self-criticism and dependency to the concept of contingent self-esteem the present findings also suggest the core of

vulnerability in that kind of maladaptive self-esteem. According to Crocker (2002), people with contingent self-esteem are poised to exaggerated pursuits to validate the self, in the domain of life that their internalized working models point out as most critical for their self-esteem (Crocker, 2002; Zuroff, & Fitzpatrick, 1995). However, these pursuits which often deal with achievements or close relations, become chronic and compulsive only in people whose basic sense of self-esteem is impoverished (Johnson & Blom, 2007).

The present findings of specific self-esteem structures being associated with self-criticism and dependency stand robustly, indicated by valid and reliable assessments in two samples in different countries. However, before drawing overly strong theoretical conclusions on the basis of the present results certain caveats are in order. In particular, the cross-sectional design and self-report data confine the strength of inferences. On the positive side, negative affect, mirroring neuroticism (Watson et al., 1988), was controlled which strengthens the validity of the results, in particular, those regarding self-reported health (Watson & Pennebaker, 1989). The remaining possibility that self-critical people may focus more on their bodily states than dependent people is unlikely. A previous study (Johnson, 2003) indicated clearly that self-critical individuals reported in a higher degree, than dependants did, only one type of complaints - as also those high in negative affect did. Future research might use objective criterion measures to corroborate the tentative findings presented in this paper, and prospective designs for causal inferences. The present research did not show any substantial gender differences but as the two depressive styles reflect sex-role related communal contra agentic strivings (Helgeson, 1994; Saragovi, Aubé, Koestner, & Zuroff, 2002) the issue of gender should be addressed in future studies. Two new scales measuring competence based and relation based contingent self-esteem developed by Johnson and Blom (2007) would be useful in these studies.

In conclusion, the present research, utilizing a large sample and measures in two different countries provides promising new clues concerning the self-critical and dependent vulnerability. In this respect it would appear that self-esteem structure with related needs and strivings play a crucial role in the dynamic patterning of cognitive-motivational personality styles with significance for well-being.

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#### **Footnote**

1. As SE distributions are apt to be skewed in general population a check with different cut-offs (e.g., lowest 33% vs. everyone else) was performed but did not give different patterns of results.

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#### **Author Note**

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