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Self-Pity:

Exploring the Links to Personality, Control Beliefs, and Anger

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Abstract

Self-pity is a frequent response to stressful events. So far, however, empirical research has paid only scant attention to this subject. The present article aims at exploring personality characteristics associated with individual differences in feeling sorry for oneself. Two studies with $N = 141$ and $N = 161$ university students were conducted, employing multidimensional measures of personality, control beliefs, anger, loneliness, and adult attachment. With respect to personality, results showed strong associations of self-pity with neuroticism, particularly with the depression facet. With respect to control beliefs, individuals high in self-pity showed generalized externality beliefs, seeing themselves as controlled by both chance and powerful others. With respect to anger expression, self-pity was primarily related to anger-in. Strong connections with anger rumination were also found. Furthermore, individuals high in self-pity reported emotional loneliness and ambivalent-worrisome attachments. Finally, in both studies, a strong correlation with gender was found, with women reporting more self-pity reactions to stress than men. Findings are discussed with respect to how they support, extend, and qualify the previous literature on self-pity, and directions for future empirical research are pointed out.

Keywords: self-pity; coping; neuroticism; control beliefs; anger; loneliness; attachment

There are a hundred ways to overcome an
obstacle and one sure way not to — self-pity.

(Dale Dauten, columnist)

Introduction

Self-pity is a prevalent response to stressful events such as personal failure, loss, or illness. However, psychological research has paid only scant attention to the investigation of self-pity. The few authors who have provided analyses of self-pity thus far all come from a psychiatric or psychoanalytic background (Charmaz, 1980; Elson, 1997; Grunert, 1988; Kahn, 1965; Milrod, 1972; Wilson, 1985). Even though their clinical observations and theoretical reflections are helpful in providing a first approach to the subject matter, the case studies they describe cannot substitute for systematic empirical studies. Empirical studies on self-pity, however, are even more scarce. Moreover, none of the empirical studies conducted so far have focused directly on self-pity; measures of self-pity have merely been included as one variable among many others. In most of these studies, self-pity has been measured with the respective subscale of the *Stressverarbeitungsforschungsbogen* [Coping with Stress Questionnaire] (Janke, Erdmann, & Kallus, 1985), a German inventory to assess various responses to stress.

Given this background, the present article has three aims. First, I will review the literature on self-pity, presenting observations from the psychoanalytic and psychiatric literature and summarize the findings of the empirical studies available. Second, I will present two empirical studies on self-pity that further explore the links with personality,

control beliefs, and anger for which previous research established first findings. Moreover, I will explore presumed associations of self-pity with loneliness and adult attachment. Specifically, in Study 1, I will show how self-pity relates to the five-factor model of personality, as well as to control beliefs, styles of anger expression, and social and emotional loneliness; then, in Study 2, I will follow up with a detailed analysis of how self-pity relates to the facets of neuroticism, functional and dysfunctional anger reactions, and different attachment styles. Finally, I will discuss potential limitations of the two studies, integrate the present findings with the previous literature, and point out some directions that future studies on self-pity may take.

Psychiatric and Psychoanalytic Reflections

Pity has been defined as "sympathetic heartfelt sorrow for one that is suffering physically or mentally or that is otherwise distressed or unhappy" (Webster's Third New International Dictionary, 1961, p. 1726). Self-pity is pity directed toward the self. Consequently, self-pity may be defined as a sympathetic, heartfelt sorrow for oneself prompted by one's own physical or mental suffering, distress, or unhappiness. Interviews with individuals suffering from chronic illness (Charmaz, 1980) have indicated that self-pity is often accompanied by feelings of sadness and loss and a heightened sense of injustice. Moreover, for a person who feels self-pity, it is characteristic to feel envy of others who have not suffered a similar loss or fate. This is expressed in questions like "Why not them?", "Why me?", or "What did I do to deserve this?", which typically accompany the internal monologue associated with experiences of self-pity (Charmaz, 1980; Grunert, 1988).

The experience of self-pity is not restricted to individuals suffering from chronic illness or severe losses. Rather, it is an emotional experience which, in all likelihood, all humans encounter occasionally (Kahn, 1965). Life holds many opportunities to feel sorry for oneself. Not only critical life events such as not getting a promotion, but also minor incidents such as being rebuffed by someone or simply not getting enough attention may provoke feelings of self-pity. However, like psychological research, the psychoanalytic and psychiatric literature has paid scant attention to self-pity, with few publications mentioning self-pity at all (Wilson, 1985). Nevertheless, these initial efforts based on case studies and informal clinical observations can serve as both a starting point and a frame of reference for the present investigations.

Within the available literature on self-pity, there is considerable agreement that self-pity is an emotional response that emerges in times of stress (e.g., Elson, 1997; Kahn, 1965; Wilson, 1985). The propensity to react to stress by feeling sorry for oneself, however, will show great individual differences related to certain personality characteristics. In this respect, Kahn (1965) was the first to point out that individual differences in neuroticism may predict who will respond with self-pity and who will not. Based on his clinical experience, he argued that self-pity may play a significant role in the lives of people he called "psychoneurotic." These individuals are characterized by great self-insecurity when confronted with problems. Moreover, they are described as people with a "thin skin," who are less able to cope with stress than those who are emotionally more stable, and thus react oversensitively in the face of situational difficulties that others might easily brush off (Kahn, 1965). Moreover, self-pity reactions have been closely linked to individual differences in depression. Grunert (1988), for example, argued that self-pity

plays an important role in melancholia. Moreover, Wilson (1985) stated that he found "an underlying smoldering depression" (p. 183) in all his case studies of pervasive self-pity.

Self-pitying persons are characterized as likely to overindulge in their failures, hardships, and losses, and the circumstances elicited by these setbacks, thus becoming self-consciously preoccupied with their own suffering (Charmaz, 1980). Nevertheless, self-pity is not an emotional response directed exclusively towards the self. Whereas the primary focus in self-pity may be on the self, self-pity also has a strong interpersonal component. Quite often, self-pity is an emotional response directed towards others with the goal of attracting attention, empathy, or help (Kahn, 1965). In this respect, however, it is a strategy doomed to fail. Whereas initially the display of self-pity may evoke empathy from others (Milrod, 1972), pervasive self-pity will not. On the contrary, people who show pervasive self-pity are most likely to be rejected. Even for individuals who suffer from chronic illness, the period of time is quite limited during which the social environment will allow for a display of self-pity. After a while, people are expected to accept their fate, stop complaining, and carry on with their lives (Charmaz, 1980).

Finally, the psychiatric and psychoanalytic literature holds that self-pity is linked to feelings of both loneliness and anger. Clinical observations suggest that individuals who experience self-pity usually expect more from the environment than the environment is willing to give (Kahn, 1965). Personal relationships are perceived as unstable and characterized by high demandingness on the part of the person who experiences self-pity, and who sees his or her environment as unwilling to provide the empathy, comfort, and support he or she demands. Consequently, a person who feels self-pity is permanently frustrated. This permanent frustration with others may have two consequences. First, it may lead to social withdrawal and feelings of loneliness (Charmaz, 1980; Kahn, 1965). Second, it may lead to feelings of aggression, hostility, and anger (Kahn, 1965; Milrod, 1972; Wilson, 1985). However, open displays of aggression, hostility, and anger are in conflict with the aims of attracting empathy, support, and acknowledgment from others. Once more, as Kahn (1965) suggested, individuals with a susceptibility for self-pity often are characterized by great self-insecurity. Thus, they may lack the self-assertiveness needed to confront others openly. As a consequence, the direct expression of aggression and hostility will be inhibited. Only mild forms of anger will be expressed, whereas strong anger will be suppressed, turned inward, or even turned against oneself (Milrod, 1991; Wilson, 1985). Under the surface, however, the anger against others will continue to exist, often accompanied by ruminations about retributions for the past (Charmaz, 1980).

Empirical Findings

Empirical studies on self-pity are largely restricted to research conducted with the Streßverarbeitungsfragebogen (SVF; Janke et al., 1985), simply because it is the only questionnaire that contains a reliable and valid scale to assess individual differences in self-pity.¹ Overall, the SVF comprises 19 scales to assess different ways of coping, covering a wide spectrum of behavioral and cognitive strategies that people use to deal with stress. One of those scales measures *Selbstbemitleidung* or, in English, self-pity (see Appendix A).

The self-pity scale of the SVF contains six items. One item addresses self-pity directly; the other items address characteristics that are typical for self-pity such as "Why me?" questions and envy of others who seem to fare better (e.g., Charmaz, 1980; Grunert, 1988). Factor analyses of the SVF scales have resulted in solutions with four or six

higher-order factors of coping with stress. In all these solutions, self-pity loaded on the same higher-order factor as rumination, self-accusation, social withdrawal, resignation, and avoidance tendencies (Janke et al., 1985). Thus, self-pity clearly falls into the class of ineffective coping strategies that are more likely to exaggerate a problem and create new difficulties than to help deal successfully with stressful situations.

Further support for the claim that self-pity is a highly ineffective coping strategy comes from two studies. In one study (Kröner-Herwig, Muck, & Weich, 1988), a sample comprised of experts (psychologists) and laypersons (engineers and university employees) judged the effectiveness of the coping strategies presented in the SVF. For each coping strategy, participants indicated how effective such a reaction would be to help cope with a stressful situation and regain psychological balance. Overall, there was considerable agreement between experts and laypersons about the effectiveness of the various strategies. Self-pity was judged to be one of the least effective coping strategies. Only aggression, social withdrawal, resignation, and drug use received even lower effectiveness ratings. Another study (Becker, 1985) investigated the relationship of the SVF coping strategies with mental health. Mental health was measured with a combination of L-data (life data) and Q-data (questionnaire data). L-data were based on reports from the participants' physicians, and included diagnoses on mental health and interview data on social adjustment, emotional stability, and self-actualization. Q-data were based on participants' self-reports, and included global ratings on emotional stability and a number of measures tapping the degree of self-actualization (e.g., satisfaction with life, self-acceptance, openness, and purpose in life). L-data and Q-data were subjected to a principal component analysis, and the regression scores from the first principal component were taken as a comprehensive measure of mental health. When this measure of mental health was correlated with the SVF subscales, self-pity was among the strategies that showed the highest negative correlation — even higher than those obtained for resignation and drug use.

Systematic findings on self-pity regarding possible links to personality are largely restricted to studies including the traits of neuroticism and extraversion (Janke et al., 1985). Across different samples, findings have shown that self-pity is closely related to neuroticism, but largely unrelated to extraversion. Correlations with neuroticism were in the range of .40 to .60, thus supporting Kahn's (1965) view that self-pity seems to be an emotional response that is characteristic of "psychoneurotic" individuals. In addition, Janke and colleagues found self-pity to be highly correlated with measures of depression, as well as with sensitization as measured with Byrne's (1961) Repression-Sensitization Scale. Originally, Byrne's scale was constructed as a means to measure individual differences in defensiveness and repression. Psychometric research, however, produced evidence that Byrne's scale correlates with measures of trait anxiety in the same order of magnitude as its own reliability. Therefore, it has been argued that Byrne's scale is a measure of trait anxiety rather than sensitization (for a review, see Krohne, 1996). Consequently, the high correlation between self-pity and sensitization may indicate that self-pity is not only closely related to depression, but also to trait anxiety.

Apart from high correlations with neuroticism, depression, and sensitization (trait anxiety), research has produced only few findings that show self-pity to have systematic associations with other personality variables. However, there are two noteworthy exceptions. These relate to individual differences in control beliefs and styles of anger expression. In a study with a large community sample (Janke et al., 1985), self-pity showed a significant negative correlation with locus of control as measured with Rotter's (1966) I/E scale, indicating that individuals with a tendency for self-pity have a more external locus

of control. Further, in a study with a large student sample (Schwenkmezger, Hodapp, & Spielberger, 1992), self-pity showed substantial correlations with Spielberger's (1988) anger expression scales, indicating that individuals with a tendency for self-pity show higher levels of both anger-in and anger-out as well as lower levels of anger control.

Open Questions

The available empirical findings, albeit few and unsystematic, provide first empirical support for some of the notions on self-pity proposed in the clinical literature. Some questions are still unanswered. With respect to broad dimensions of personality, systematic research including self-pity has been restricted to the traits of neuroticism and extraversion, thus leaving open the question of whether self-pity will show links with any other broad dimensions of personality. The five-factor model of personality is currently the dominant model for capturing broad dimensions of personality. Its "big five" dimensions have been labeled (a) neuroticism or, its opposite, emotional stability, (b) extraversion or surgency, (c) agreeableness, (d) consciousness or dependability, and (e) openness, culture, or intellect (John, 1990). Though there has been — and still is — considerable debate as to whether these five dimensions constitute an adequate and comprehensive description of personality (e.g., Block, 1995; McAdams, 1992), the five-factor model of personality represents an established base from which one may start to explore potential relationships between self-pity and personality. Moreover, with measures available on both trait level and facet level, this model allows for a hierarchical assessment of personality (Costa & McCrae, 1995a, 1995b). In this regard, it may be particularly useful to further explore the relationship between self-pity and the neuroticism facets of depression and anxiety, and to investigate further the previous findings related to depression and sensitization.

Furthermore, the finding that self-pity is related to an external locus of control also leaves some questions unanswered. The reason is that Rotter's (1966) I/E scale conceptualizes control beliefs as a unidimensional construct with internality and externality as the endpoints of a continuum. This unidimensionality, however, has proven untenable, with most factor analyses of Rotter's scale clearly showing multidimensional solutions. In the wake of these findings, efforts were undertaken to develop models and instruments that took the apparent multidimensionality of control beliefs into account. One prominent outcome of these efforts was Levenson's (1974, 1981) tripartite model of control beliefs. This model distinguishes three dimensions of control: (a) internality, (b) externality related to powerful others, (c) and externality related to chance. The differentiation between powerful others and chance was based on research with students who engaged in political activism (Levenson, 1974). This research demonstrated that it makes a great difference whether people conceive of their fate as controlled by chance or controlled by powerful others. Only in the latter case does the potential exist for the individual to regain personal control and initiate changes. Studies correlating measures from Levenson's tripartite model with Rotter's I/E scale have shown that Rotter's scale mainly captures externality related to chance (e.g., Brosschot, Gebhardt, & Godaert, 1994). Consequently, with respect to the findings of Janke and colleagues (1985), it remains an open question as to whether self-pity is associated only with externality related to chance, or if it also shows associations with externality related to powerful others or internality.

Finally, some open questions remain from the previous research findings on self-pity and anger (Schwenkmezger et al., 1992). First, these findings appear somewhat inconsistent, if not contradictory, because they indicate that self-pity is closely related to non-expression of anger (anger-in) and, at the same time, to outward expression of anger (anger-out) and low anger control. Second, they are not in line with observations reported in the psychoanalytic and psychiatric literature, where there is broad agreement that self-pity is associated with the suppression of anger. Whereas subtle expressions of anger may be observed in self-pity, open expressions of anger and aggression are unlikely. From

these accounts, one would expect individuals with a tendency to react with self-pity to show high levels of anger-in, but neither high levels of anger-out nor low levels of anger control. A potential explanation for these inconsistencies may lie in the fact that the three anger expression scales of the Spielberger inventory show substantial overlap; anger-out and anger control in particular have shown substantial correlations (e.g., Schwenkmezger et al., 1992; Spielberger, 1988). Consequently, taking this overlap into account and exploring unique relationships between self-pity and anger expression may produce a different pattern of correlations that would show more internal consistency and more congruence with the literature.

Following the same line of reasoning, it may also be important to control for gender differences. Studies with the SVF have shown that women report higher self-pity scores than men (Janke et al., 1985). The potential effect that gender differences may have on the observed correlations has not been considered in any of the previous studies. Consequently, it may well be the case that correlations between self-pity and variables for which women show higher values have been inflated because of shared variance with gender.

Aims of the Present Studies

Based on these questions, the aim of the present studies was to investigate the relationships between self-pity and personality traits, control beliefs, and styles of anger expression in order to replicate, extend, and possibly qualify the previous findings. To this end, the aim of Study 1 was to locate self-pity within the five-factor model of personality, to investigate the relationships between self-pity and Levenson's control beliefs, and to re-investigate the relationships between self-pity and styles of anger expression. Moreover, Study 1 had the goal of providing a first investigation of the relationship between self-pity and dimensions of loneliness. From the clinical literature and the previous research findings, it was expected that individuals with a tendency for self-pity would show higher levels of neuroticism, external locus of control, loneliness, anger-in, and anger-out, as well as lower levels of anger control. Moreover, women were expected to show higher levels of self-pity than men. All other analyses, regarding both the relationships of self-pity with the remaining dimensions of the five-factor model, and the associations of the aforementioned variables after control of gender effects and overlap between scales, were exploratory.

Study 1

Method

Participants

A sample of $N = 141$ students (75 females, 66 males) was recruited at the Martin-Luther University of Halle-Wittenberg. Average age was 22.6 years ($SD = 3.1$). Participants volunteered in exchange for one hour of extra course credit or for a lottery ticket for a chance to win 100 German marks (approximately 47 US dollars).

Measures

Self-pity. Self-pity was measured with the 6-item self-pity scale of the Streßverarbeitungsfragebogen (Janke et al., 1985; see Appendix A). Items are answered on a five-point scale from "not at all" (0) to "very likely" (4). Scores are computed by summing across items. In the present sample, the scale displayed a Cronbach's alpha of .84.

Big Five personality traits. The personality traits of the five-factor model were measured with the NEO Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992; German version: Borkenau & Ostendorf, 1993). The NEO-FFI is a widely used, reliable, and valid measure of the Big Five personality dimensions (see Borkenau & Ostendorf, 1993). It comprises five 12-item scales that capture individual differences in *neuroticism* (e.g., "I often feel tense and nervous"), *extraversion* ("I really like talking to other people"), *openness* ("I enjoy to play with theories or abstract ideas"), *agreeableness* ("Most of the people I know like me"), and *conscientiousness* ("I work hard in order to reach my goals"). Items are answered on a five-point scale from "strongly disagree" (0) to "strongly agree" (4). Scores are computed by averaging across items. With alphas ranging from .72 to .87, internal consistency was satisfactory for all scales.

Control beliefs. The control beliefs of Levenson's (1974) tripartite model were measured with the respective scales from the Questionnaire on Competency and Control Beliefs (Krampen, 1991). The questionnaire contains three 8-item scales that capture individual differences in *internality* (e.g., "The course of my life is only determined by my own behaviors and efforts"), *externality related to powerful others* ("The course of my life is in many aspects determined by other persons"), and *externality related to chance* ("Many things that happen in my life are determined by chance"). Following Krampen (1991), items are answered on a six-point scale from "very false" (-3) to "very true" (+3) without a zero-point. Scores are computed by summing across items. With alphas from .73 to .75, all scales displayed satisfactory reliability. In line with previous findings (Krampen, 1991; Levenson, 1974), powerful others and chance were highly correlated ($r = .56$) and moderately related to internality ($r = -.28$ and $-.39$, respectively).

Anger expression. Styles of anger expression were measured with the scales from the State-Trait Anger Expression Inventory (Spielberger, 1988; German version: Schwenkmezger et al., 1992). The inventory contains three 8-item scales capturing individual differences in *anger-in* (e.g., "I could explode, but I do not let anybody notice"), *anger-out* ("I lose my composure"), and *anger control* ("I control my anger"). Items are answered on a 4-point scale from "almost never" (1) to "almost always" (4). Scores are computed by summing across items. Alphas ranged from .84 to .89, indicating high reliability for all three scales. In line with previous studies (Schwenkmezger et al., 1992; Spielberger, 1988), anger-out and anger control were highly correlated ($r = -.63$), while both were unrelated to anger-in.

Loneliness. Loneliness was measured with a German short form of the UCLA Loneliness Scale (Russell, Cutrona, Rose, & Yurko, 1984; Russell, Peplau, & Cutrona, 1980). This was developed for inclusion in the Berlin Aging Study (see, e.g., Baltes & Smith, 1997)² and comprises two scales of 4 items each that were selected from the UCLA Loneliness Scale to assess the two facets of loneliness differentiated by Weiss (1973), namely *emotional loneliness* (four items dealing with feelings of isolation, of being alone, and of being secluded from contact with others; e.g., "I feel alone") and *social loneliness* (four items asking about perceptions of not belonging to a social group and general unavailability of trusted others; e.g., "There are people I can openly talk to", reverse-scored). Items were interspersed with NEO-FFI items. Thus, the same 5-point answer scale used in the NEO-FFI applied, and scores were computed by averaging across items. With alphas of .76 (emotional loneliness) and .62 (social loneliness), both

scales displayed alphas that are acceptable for research purposes (Carmines & Zeller, 1979). In line with previous findings (e.g., Russell et al., 1984), emotional and social loneliness were highly correlated ($r = .51$).

Preliminary Analyses

Because of the large number of statistical tests and the exploratory nature of some analyses, an error level of .01 was adopted for all significance tests in order to take potential inflation of type-1 error into account. Preliminary analyses using LISREL (Jöreskog & Sörbom, 1999) indicated that the correlation matrices of male and female participants did not differ significantly. Therefore, data were collapsed across gender. Appendix B shows the zero-order correlations between all measures.

Results

Gender Differences and Zero-Order Correlations

First, gender differences were inspected. A one-way MANOVA with gender (female, male) as between-participants factor was performed on all measures used in Study 1. With the use of Pillai's criterion, results indicated a significant overall main effect of gender, $F(14, 126) = 5.06, p < .001$. To investigate which variables showed significant gender differences, follow-up univariate ANOVAs were conducted. In line with the other analyses, a significance level of $p < .01$ was adopted to adjust for inflation of type-1 error. Results are displayed in Table 1. As expected, female participants showed higher levels of self-pity than male participants. Moreover, female participants showed higher levels of extraversion and agreeableness, and lower levels of social loneliness than male participants. With respect to control beliefs and anger expression, gender differences were not significant.

Next, the zero-order correlations of self-pity with the variables under investigation were inspected (see Table 2). Replicating previous findings, self-pity showed a high correlation with neuroticism while being unrelated to extraversion. In addition, the present study indicated that self-pity also was unrelated to the traits of openness, agreeableness, and conscientiousness. When inspecting the relationship between self-pity and the control beliefs from Levenson's tripartite model, results showed that self-pity was positively correlated with externality beliefs related to both powerful others and chance, thus corroborating previous findings that self-pity is associated with an external locus of control. Moreover, there was a smaller negative correlation with internality beliefs. With respect to styles of anger expression, the present results showed that self-pity was related to all three expression scales of the Spielberger inventory. Replicating previous findings, self-pity again showed positive correlations with both anger-in and anger-out, as well as a negative correlation with anger control. Finally, results confirmed expectations from the literature concerning a link between self-pity and loneliness. However, self-pity was related only to emotional loneliness, not to social loneliness.

Regression Analyses

To investigate which of the above relationships would still hold when overlap between subscales and shared variance with gender were controlled for, hierarchical regres-

sion analyses were computed for the present sets of variables. In each regression analysis, self-pity was the dependent variable. Gender was always entered in step 1 with an R^2 of .08, $p < .001$. All variables from a set were then entered simultaneously in step 2.³ To investigate the unique contribution of each variable in the prediction of self-pity, semipartial correlations were computed. Semipartial correlations, when squared, show the proportion of variance predicted by each variable while controlling for the other variables in the regression (Tabachnick & Fidell, 1996).

In all regression analyses, the set of variables entered contributed significantly to the prediction of self-pity beyond gender (see Table 2). For the five-factor personality traits, the regression analyses did not qualify the results obtained from the zero-order correlations, as the resulting pattern of semipartial correlations closely mirrored that of the zero-order correlations. The same held for loneliness. For control beliefs and anger expression, however, the results from the regression analyses showed a different pattern. With respect to control beliefs, internality failed to make a significant contribution to the prediction of self-pity after controlling for overlap with external beliefs. Moreover, the semi-partial correlations of the two externality facets were of about equal size, thus indicating that externality beliefs related to powerful others and chance may contribute equally to self-pity reactions to stress. With respect to anger expression, anger control failed to make a significant contribution to the prediction of self-pity after controlling for overlap with the other expression scales. Moreover, the semi-partial correlations showed that the contribution of anger-in to the prediction of self-pity was considerably greater than that of anger-out.

Discussion

To summarize, the results of Study 1 replicated, extended, and qualified previous empirical findings on self-pity, and provided some support for assumptions derived from clinical observations. Moreover, the findings indicated that, when investigating potential predictors of self-pity, it is worth including sets of variables that allow for within-construct differentiation by looking at unique contributions within these sets of variables. With respect to the five-factor model of personality, Study 1 corroborated previous findings that self-pity is closely related to neuroticism, but unrelated to extraversion (Janke et al., 1985). Furthermore, the near-zero correlations of the present results with openness, agreeableness, and conscientiousness indicate that self-pity also may be largely unrelated to the other superfactors of the five-factor model of personality. With respect to control beliefs, the present results replicated and extended Janke and colleagues' (1985) findings on self-pity and locus of control as measured with Rotter's I/E scale. Using scales derived from Levenson's (1974) tripartite model of locus of control, and controlling conceptual and statistical overlap, the present results indicated that self-pity is unrelated to internality, but instead strongly associated with externality beliefs related both to powerful others and chance. With respect to anger expression, the present findings corroborated the previous findings of Schwenkmezger and colleagues (1992), in that self-pity was associated with high levels of both anger-in and anger-out as well as with low levels of anger control. However, when additional regression analyses were computed with a simultaneous investigation of the three anger expression scales and gender, only anger-in and, to a lesser degree, anger-out still displayed significant regression weights. Finally, the present findings confirm observations reported in the clinical literature that self-pity is related to loneliness. However, as the two-dimensional conceptualization

following Weiss's (1973) typology of loneliness showed, self-pity was related only to emotional loneliness, but not to social loneliness.

Some questions remain, however. First, the links between self-pity and neuroticism require further investigation. Whereas the broad dimensions of the five-factor model of personality may provide a general orientation as to where to locate a construct, further analyses on a subordinate level are needed. Costa and McCrae (1992, 1995a) have developed a measure of the Big Five traits that is comprised of facet scales. For neuroticism, their conceptualization defines six facets: anxiety, angry hostility, depression, self-consciousness, impulsivity, and vulnerability. While other models of personality favor different facets of neuroticism (e.g., H. J. Eysenck, 1995), only the conception presented by Costa and McCrae contains depression and anxiety on the facet level. Thus, it allows for a simultaneous inspection of these two facets in order to investigate the question of whether self-pity is related to both depression and trait anxiety and, if so, to which facets unique associations exist.

Second, the links between self-pity and anger may require further exploration. One reason is that the anger expression scales of the Spielberger inventory refer to anger in general terms only. In particular, they do not specify the source of anger. Research on anger has demonstrated that anger-provoking experiences may be classified into three different categories: personal frustrations, interpersonal frustrations, and interpersonal exploitation (Snell, McDonald, & Koch, 1991). In the first category, anger relates to personal frustrations such as personal inadequacies and failures related to unattained pursuits and goals. In the other two categories, anger relates to interpersonal frustrations such as frustrating events associated with public/social aspects of the self on the one hand, and incidents associated with interpersonal exploitation and injustices on the other hand. Because self-pity is related to beliefs that powerful others are in control of one's life, it could well be that, compared to participants low in self-pity, participants high in self-pity have different anger situations in mind (viz. interpersonal rather than personal frustrations) when responding to the expression scales of the Spielberger inventory. Moreover, anger-in and anger-out both represent somewhat dysfunctional styles of reactions to anger. Recent analysis of anger reactions have provided evidence that it is useful to expand the perspective on potential reactions to anger by including functional reactions (Tangney, Hill-Barlow, Wagner, Marschall, Borenstein, et al., 1996; Weber, Eue, Titzmann, & Freese, 1999; Weber & Titzmann, 2001). Consequently, a further exploration of self-pity and anger may profit from (a) being explicit about the source of the anger-provoking experiences and (b) inspecting both functional and dysfunctional ways of reacting to these experiences.

Third, it may be worthwhile to follow up on the finding that self-pity is related to emotional loneliness, but not to social loneliness. Research on the differences between social and emotional loneliness has revealed that social loneliness is primarily related to lack of social provisions such as social integration or reassurance of worth. In contrast, emotional loneliness is primarily related to attachment problems (for a review, see Di-Tommaso & Spinner, 1997). Following studies with children, research on attachment has differentiated three main styles of adult attachment — secure, avoidant, and ambivalent — that are formed in infancy, but carry over to close relationships across the life span (Ainsworth, 1989; Ainsworth, Blehar, Waters, & Wall, 1978). Individuals with secure attachments have experienced early relationships with a nurturing adult who was sensitive to their signals of distress and available in times of need, thus creating a basic trust in the world and the self. In contrast, individuals with avoidant and anxious-ambivalent attachments lack this experience of a "secure base." Whereas secure attachment can be

conceptualized as an inner resource that may help individuals to successfully cope with stress, avoidant and ambivalent attachment styles are considered potential risk factors for maladaptive coping (Mikulincer & Florian, 1997). Consequently, it may be expected that self-pity will be related to problematic attachments as expressed in avoidant or ambivalent attachment qualities.

The aims of Study 2 were thus threefold. The first objective was to investigate which facets of neuroticism best predict reactions of self-pity, with a particular focus being placed on depression and trait anxiety. The second goal was to explore further the relationships between self-pity and anger by investigating the relationship between self-pity and both functional and dysfunctional anger reactions, with the source of anger being restricted to interpersonal situations. The third aim was to examine the relationship between self-pity and adult attachment styles. As it can be assumed that self-pity is related to one or more problematic attachment styles, Study 2 should provide for a particularly differentiated assessment of dysfunctional attachment qualities.

Study 2

Method

Participants

A sample of $N = 161$ students (88 females, 73 males) was recruited at the Martin Luther University of Halle-Wittenberg. Average age was 21.9 years ($SD = 2.1$). All participants volunteered in exchange for a lottery ticket for a chance to win 100 German marks (approximately 47 US dollars).

Measures

Self-pity. As in Study 1, self-pity was measured with the 6-item self-pity scale of the Streßverarbeitungsfragebogen (Janke et al., 1985). In the present sample, Cronbach's alpha was .78, again indicating satisfactory reliability.

Facets of neuroticism. Facets of neuroticism were measured with the respective scales of the revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992; German version: Ostendorf & Angleitner, 1993). For neuroticism, the NEO-PI-R comprises six 8-item scales that capture individual differences in *anxiety* (e.g., "I am frequently concerned that things may go wrong"), *angry hostility* ("People think of me as an irascible, quick-tempered person"), *depression* ("Sometimes everything appears rather dark and hopeless to me"), *self-consciousness* ("When among other people, I am afraid that I may make a bad impression"), *impulsivity* ("I have difficulties to resist my cravings"), and *vulnerability* ("I often feel helpless wishing there was someone who would solve my problems for me"). Items are answered on a five-point scale from "strongly disagree" (1) to "strongly agree" (5). Scores are computed by summing across items. With alphas ranging from .61 to .78, all scales displayed reliabilities acceptable for research purposes (Carmines & Zeller, 1979). As expected, the scales showed substantial intercorrelations (mean $r = .44$) with individual correlations ranging from $r = .04$ (between self-consciousness and impulsivity) to $r = .71$ (between depression and vulnerability). When aggregating all items to a total score for neuroticism, the resulting score displayed an alpha of .87.

Anger reactions. Anger reactions were measured with the reactions scales of the Anger-related Reactions and Goals Inventory (Weber et al., 1999; Weber & Titzmann, 2001). The questionnaire contains six 4-item scales that capture individual differences in functional and dysfunctional reactions to anger in interpersonal situations (i.e., situations in which another person is the source of one's anger). Three scales capture anger reactions that are considered dysfunctional, namely *outburst* (e.g., "I explode"), *rumination* ("Instead of forgetting the whole thing, I keep thinking about it"), and *submission* ("I give in to avoid arguing"); and three scales capture anger reactions that are considered functional, namely *feedback* ("I tell the other person what annoys me, but without becoming aggressive"), *noninvolvement* ("I try not to get angry in the first place"), and *humor* ("I find the whole thing funny"). Items are answered on a four-point scale from "almost never" (1) to "almost always" (4). Scores are computed by summing across items. With alphas ranging from .70 to .89, all scales displayed satisfactory reliability. In line with previous findings (e.g., Weber et al., 1999), the scales showed only moderate intercorrelations (mean $|r| = .24$), with individual correlations ranging from $r = -.40$ (between rumination and noninvolvement) to $r = .57$ (between noninvolvement and humor).

Attachment styles. Attachment styles were assessed with the Measure of Attachment Qualities (MAQ; Carver, 1997; own version, employing translations and backtranslations by myself and other colleagues versed in both German and English). Whereas most measures of adult attachment follow the classical tripartite conceptualization of attachment (i.e., secure, avoidant, and ambivalent attachment), Carver's measure employs a four-tired approach by further differentiating ambivalent attachment into two separate factors, namely ambivalence-worry and ambivalence-merger, thus allowing for a more differentiated analysis of dysfunctional attachment styles. The MAQ thus comprises four scales capturing individual differences in *security* (e.g., "It feels relaxing and good to be close to someone"), *avoidance* ("I prefer not to be too close to others"), *ambivalence-worry* ("I often worry that my partner doesn't really love me"), and *ambivalence-merger* ("I have trouble getting others to be as close as I want them to be"). The scales for security, ambivalence-worry, and ambivalence-merger each comprise three items; the scale for avoidance comprises five items. Items are answered on a four-point scale from "I DISagree with the statement a lot" (1) to "I agree with the statement a lot" (4). Scores are computed by averaging across items. With alphas ranging from .69 to .74, all scales displayed satisfactory reliability. In line with previous findings (Carver, 1997), only security and avoidance ($r = -.55$) and ambivalence-worry and ambivalence-merger ($r = .33$) were significantly correlated.

Preliminary Analyses

For the same reasons as in Study 1, a significance level of .01 was adopted for all analyses. Again, analyses using LISREL (Jöreskog & Sörbom, 1999) indicated that the correlation matrices of male and female participants did not differ significantly, so data were collapsed across gender. Appendix C shows the zero-order correlations between all measures.

Results

Gender Differences and Zero-Order Correlations

First, gender differences were inspected. Like in Study 1, a one-way MANOVA with gender (female, male) as between-participants factor was performed on all measures simultaneously. With the use of Pillai's criterion, results indicated a significant overall main effect of gender, $F(17, 143) = 3.74, p < .001$. To investigate which variables showed significant gender differences, follow-up univariate ANOVAs were conducted with the significance level again set to $p < .01$. Results are displayed in Table 3. In line with the previous findings, female participants again showed significantly higher levels of self-pity than male participants. Moreover, with respect to the facets of neuroticism, they showed higher levels of anxiety, depression, impulsivity, and vulnerability; with respect to anger reactions, they showed lower levels of noninvolvement and humor; and, with respect to attachment styles, higher levels of security.

Next, the zero-order correlations of self-pity were inspected (see Table 4). As in Study 1, self-pity again showed a high correlation with the personality trait of neuroticism with the correlation between self-pity and neuroticism total score being $r = .52, p < .001$. When inspecting the correlations on the facet level of neuroticism, a more differentiated picture emerged. In line with previous findings, self-pity showed high correlations with depression. Moreover, as suggested by the findings on self-pity and sensitization, there also was a high correlation with trait anxiety. In addition, self-pity was substantially related to the neuroticism facets of vulnerability, self-consciousness, and (albeit to a lesser degree) angry hostility. In contrast, the correlation with impulsivity failed to reach significance. When functional and dysfunctional anger reactions in interpersonal situations were inspected, self-pity showed a substantial positive correlation with rumination and moderate negative correlations with noninvolvement and humor. Thus, individuals with a inclination for self-pity react to anger-provoking social situations with a pattern of heightened rumination, low noninvolvement, and low humor. Finally, when inspecting the correlations with attachment qualities, self-pity was related to higher levels of ambivalence-worry. Moreover, and somewhat unexpectedly, self-pity showed a significant positive correlation with security.

Regression Analyses

To investigate which of the above relationships would still hold when overlap between subscales and shared variance with gender were controlled for, hierarchical regression analyses were computed for each set of variables, following the method outlined in Study 1. In each regression analysis, self-pity was the dependent variable. Gender was always entered in step 1, this time with an R^2 of .14, $p < .001$. All variables from one set of measures were then entered simultaneously in step 2.⁴

Even though the proportion of variance explained by gender was considerably larger than in Study 1, each set of variables again contributed significantly to the prediction of self-pity beyond gender (see Table 4). Moreover, all regression analyses produced a pattern of semi-partial correlations that differed markedly from that of the respective zero-order correlations. With respect to neuroticism, results showed that depression was the only facet that still made a unique contribution to the prediction of self-pity after gender and overlap between facet scales were controlled for. All other facets, including anxiety, showed semi-partial correlations near zero. Thus, it appears that only depression predicts differences in self-pity beyond the common variance shared by all neuroticism facets. With respect to functional and dysfunctional anger reactions, noninvolvement and humor failed to make a significant contribution to the prediction of

self-pity after shared variance was controlled for. Only rumination still displayed a substantial semi-partial correlation, indicating that rumination may contribute significantly to differences in self-pity beyond shared variance with other functional and dysfunctional anger reactions and gender. With respect to attachment qualities, results showed that only ambivalence-worry still contributed significantly to the prediction of self-pity after gender and overlap between attachment scales were controlled for. Thus, the significant positive correlation between self-pity and security may possibly be attributed to variance shared with gender, as both variables showed substantial gender differences (see Table 3). This was corroborated in a follow-up analysis with gender and security entered stepwise to predict self-pity. Results showed that after gender entered the regression ($R^2 = .14$, $sr = .37$, $p < .001$), security failed to further contribute significantly to the prediction of self-pity ($\Delta R^2 = .01$, $sr = .12$, ns). In sum, from each set of variables, only one variable made a unique contribution to the prediction of self-pity beyond variance shared with gender and other variables, namely depression (from facets of neuroticism), rumination (from anger reactions), and ambivalence-worry (from attachment styles).

Finally, to investigate whether these three variables held independent relationships to self-pity, a multiple regression analysis was computed in which gender was entered in step 1, followed by depression, rumination, and ambivalence-worry in step 2. Results showed that the three variables combined were associated with an increase in R^2 (ΔR^2 .Gender) of .26 resulting in a total R^2 of .40, both $ps < .001$. Inspecting the individual contributions, only depression and anger rumination still displayed significant semipartial correlations ($sr = .29$, $p < .001$ and $sr = .20$, $p < .01$, respectively), whereas worry-ambivalent attachment did not ($sr = .08$, ns). Thus, worry-ambivalent attachment failed to make a unique contribution to the prediction of self-pity after controlling for gender, depression, and anger rumination.

Discussion

Though discussion of the main findings of Study 2 will be left to the general discussion, there are two correlations that warrant attention at this point. The first concerns one of the facets of neuroticism, namely the nonsignificant correlation of self-pity with impulsivity. This correlation is of particular note because impulsivity was the only facet of neuroticism not associated with self-pity. A potential reason for this may be that impulsiveness is not as clearly related to the superfactor of neuroticism as the other facets are. In a factor analysis with the facet scales of the five-factor model (Costa & McCrae, 1991), impulsivity not only displayed the lowest loadings of all neuroticism facets on the factor that represented neuroticism; it also showed substantial positive loadings on the factor that represented extraversion, and substantial negative loadings on the factor that represented conscientiousness. With impulsivity apparently being some joint function of neuroticism, extraversion, and low conscientiousness on the one hand, and with self-pity being unrelated to extraversion and conscientiousness on the other (see Study 1), the nonsignificant correlation between self-pity and impulsivity is perhaps not too surprising.

The second correlation concerns the nonsignificant correlation of self-pity with anger outburst. This correlation is of particular note in relation to Study 1, where self-pity was found to be substantially correlated with anger-out. Previous findings have indicated that the anger outburst scale of the Anger-related Reactions and Goals Inventory is

closely related to the anger-out scale of the Spielberger measure (Weber et al., 1999; Weber & Titzmann, 2001). However, a close inspection of the item content of the respective scales suggests that some of the reactions subsumed in the anger-out scale are less direct, less aggressive, and less extreme than those described in the outburst scale. Moreover, anger-out is unspecific as to the source of anger, whereas the anger reactions of the Weber measure explicitly refer to interpersonal situations. As such, the finding that self-pity is related only to anger-out in general (Study 1), but not to angersome outburst in social situations (Study 2), is well in line with notions found in the literature that self-pity is related to more subtle expressions of anger.

General Discussion

Two studies were conducted to explore the links of self-pity to personality, control beliefs, and anger, employing multidimensional measures of personality, control beliefs, anger, loneliness, and adult attachment. The results can be summarized as follows. With respect to personality, results showed that self-pity was strongly associated with neuroticism, particularly the depression facet, but unrelated to the other dimensions of the five-factor model of personality (i.e., extraversion, openness, agreeableness, and conscientiousness). With respect to control beliefs, self-pity showed equally strong associations with externality beliefs related to powerful others and externality beliefs related to chance, indicating that individuals with a tendency for self-pity seem to have generalized beliefs that their life is controlled by external forces. Analyses of anger showed that self-pity was primarily related to nonexpression of anger. This was demonstrated when analyzing anger expression styles in general and when analyzing anger reactions in interpersonal situations in particular. With respect to the former, self-pity had a strong unique relationship with anger-in; with respect to the latter, it showed a strong unique relationship with anger rumination. Concerning loneliness, analyses indicated that self-pity showed a substantial correlation with emotional loneliness, but none with social loneliness. Because emotional loneliness is closely related to attachment problems, further analyses were conducted to explore the relationship between self-pity and adult attachment. Results showed that self-pity was related to specific dysfunctional attachment qualities such that individuals with a tendency to feel sorry for themselves indicated higher levels of ambivalence-worry in their interpersonal relationships. Finally, in both studies, a strong correlation with gender was found, with women reporting more self-pity reactions to stress than men.

Integration of Findings

The pervasive gender effect may indicate that self-pity is a stress response that is more prevalent in women than in men. Moreover, this gender effect does not seem to be restricted to adulthood, but is already apparent in early adolescence, as demonstrated in a Maltese survey on bullying in schools (Borg, 1998). In this nationwide survey, students aged 9 to 14 years were asked how they responded emotionally to being bullied by other students. Of all emotional reactions under study, self-pity displayed the largest gender difference. Whereas only 28% of boy victims reported feelings of self-pity after being

bullied, 46% of girls victims reported such feelings. Thus, gender differences in coping by means of self-pity seem to have an early adolescent onset, comparable to that observed for ruminative coping. Research on gender differences in depression has found that women more often rely on ruminative coping when facing loss and failure than men do (Nolen-Hoeksema, 1991, 1995). This gender difference starts to emerge in early adolescence, when boys tend to chose more active, aggressive coping strategies for dealing with adversities, whereas girls tend to chose more passive, emotional coping strategies and ruminate more about these adversities. It has been suggested (Broderick, 1998; Nolen-Hoeksema, 1991) that sex-role socialization may play an important role in differentially shaping children's repertoire for handling stress, loss, and negative affect. Parents' expectations of which emotional reactions are appropriate for boys and which for girls will lead to encouragement of some reactions, and sanctions for others. Thus, parents may shape masculine and feminine ways of reacting to stress, and encourage gender-related differences in the expression and suppression of certain emotional reactions. Self-pity, like rumination, seems to be a typical feminine response to stress in this regard.

The present findings provide empirical support for some of the notions on self-pity that have been put forward in the psychiatric and psychoanalytic literature on the basis of informal observations and unsystematic case studies. Moreover, they replicate, extend, and qualify previous empirical findings on self-pity. First, the analyses of relations with social and emotional loneliness corroborated anecdotal findings that self-pity is related to loneliness (Kahn, 1965). Moreover, the finding that self-pity is related only to emotional loneliness lends support to the view that individuals who experience self-pity, even if they are not actually socially isolated, may nevertheless feel emotionally isolated (Charmaz, 1980). Emotional loneliness has been related to dysfunctional attachments. Analysis of the relationships between attachment qualities and self-pity indeed showed self-pity to have the expected relationship with dysfunctional attachments: Individuals with a disposition towards self-pity indicated ambivalent-worrisome attachment, suggesting that these individuals show increased levels of fear of not being loved and worry about being abandoned. In particular, people with anxious-ambivalent attachments have been shown to deal with stress in a hypervigilant manner. Unable to suppress negative emotions, they cannot detach from inner pain. Instead, they direct attention towards their distress and towards mentally ruminating on negative thoughts, memories, and affects (Mikulincer & Florian, 1997).

With respect to control beliefs, the present findings show that the two externality dimensions defined by Levenson (1974) — chance and powerful others — play an equally strong role in predicting self-pity reactions to stress. According to Levenson (1974, 1981), externality beliefs related to powerful others may motivate individuals to initiate actions with the goal of regaining power and control over one's life. In contrast, externality beliefs related to chance are likely to lead to amotivation and inactivity. Consequently, with the two facets of external control beliefs being equally strong predictors of self-pity, individuals with a propensity to feel sorry for themselves may find themselves in a state of emotional inertia and fatigue caused by a deadlock between competing action tendencies: to confront others in order to change their fate (activism) or to give up (passivity).

However, it seems rather unlikely that individuals with a leaning towards self-pity will confront others directly (Kahn, 1965). This also was reflected in the findings on self-pity and anger. With respect to styles of anger expression, regression analyses indicated that self-pity was primarily correlated with anger-in, and only to a lesser degree with anger-out. Moreover, follow-up analyses on the links between self-pity and anger reactions

in interpersonal situations showed a strong and unique association of self-pity with ruminative responses to anger. This pattern of findings (viz. large correlations with anger-in and anger rumination, and a smaller correlation with anger-out) dovetails nicely with the clinical observations on self-pity that hold self-pity to be closely related to feelings of anger and hostility. Most of the time, direct expression of these feelings will be avoided (Milrod, 1972). Instead of venting their anger, individuals who experience self-pity will keep a lid on their angry feelings and keep their anger in, while at the same time ruminating about potential injustices suffered, and fantasizing about possible retributions (Charmaz, 1980).

Moreover, corroborating the views of Kahn (1965) and replicating the findings of Janke and colleagues (1985), the present findings demonstrate that self-pity is a stress response that is closely related to individual differences in the trait of neuroticism. Research on the relationship between the five-factor personality traits and coping has found neuroticism to be the strongest and most persistent predictor of dysfunctional coping mechanisms. In the face of stress, individuals with high neuroticism scores tend to refrain from active, problem-focused coping strategies. Instead, they rely on emotion-focused and ineffective forms of coping such as wishful thinking, escapist fantasies, denial, self-blame, avoidance, passivity, and withdrawal (for reviews, see O'Brien & DeLongis, 1996; Watson & Hubbard, 1996). Inasmuch as the present findings show that neuroticism is highly predictive of self-pity responses to stress, they add a further facet to this picture, by pointing out that self-pity is another dysfunctional response to stress which is prototypical for individuals high in neuroticism.

Finally, in line with the clinical literature and previous findings, the present findings show that self-pity is closely related to depression, even when common variance with gender and other facets of neuroticism are controlled for. In comparison, the significant relationship with trait anxiety was reduced to values around zero after controlling for common variance with the other facets of neuroticism. In the same vein, the relationship between self-pity and worry-ambivalence in attachment was reduced to nonsignificance after controlling for common variance with depression and angersome rumination. As worry is the cognitive component of anxiety (M. W. Eysenck, 1992), both findings may indicate that self-pity is a stress response that is specifically related to depression, rather than to anxiety. Thus, self-pity may be an important characteristic that researchers in abnormal psychology need to attend to when looking for specifics that differentiate depression from anxiety (e.g., Beck, Brown, Steer, Eidelson, & Riskind, 1987; Nitschke, Heller, Imig, McDonald, & Miller, 2001).

Limitations and Future Directions

The limitations of the present studies mainly pertain to three points. First, some of the analyses were exploratory. This applies in particular to the regression analyses. Consequently, their results may be considered preliminary. Moreover, the self-pity scale of the Streßverarbeitungsfagebogen (Janke et al., 1985) only captures relatively mild and fleeting forms of self-pity, and both of the present studies were conducted with university students. Therefore, it remains an open question as to whether the chronic and pervasive forms of self-pity described in the psychoanalytic and psychiatric literature will show the same pattern of relationships as self-pity responses to stress observed in normal student samples. Nevertheless, the present findings are well in line with theoretical reflections, clinical observations, and empirical findings from the previous literature. One can thus be

fairly confident that the overall picture presented here will hold in further replications. Second, it remains unclear whether the pervasive gender differences in the present studies represent differences in the experience of self-pity, or merely differences in reporting self-pity. Charmaz (1980), for example, holds that reporting self-pity seemed to be easier for women than for men. Consequently, the present gender differences could possibly be caused by men underreporting the frequency of self-pity. Third, the findings are cross-sectional. Consequently, they do not allow for any inferences about causal relationships among the variables under study. Still, in view of the hierarchical status of the present variables, it seems reasonable to assume that those variables representing global personality traits or stable trait-like characteristics (neuroticism, personal beliefs, and attachment styles) are more likely to be responsible for differences in situation-specific reactions (viz. self-pity reactions to stress) than vice versa. The potential causal relationships between self-pity and the other variables under study (anger expression, anger reactions, and loneliness), however, remain uncertain, as it is perfectly possible that they represent concurrent processes to self-pity or consequences of self-pity.

Future research on self-pity may therefore profit from replicating the present findings, additionally employing longitudinal designs in order to investigate the direction of the potential influences between variables and to establish further evidence on the causes for individual differences in self-pity. In addition to identifying the characteristics which may dispose individuals to feeling sorry for themselves, future research may also benefit from closer investigation of the *effects* of self-pity. A future goal here may be to arrive at a functional analysis of self-pity responses to stress in a similar way as has been achieved for ruminative coping with depression. It may be valuable to employ studies with experimental manipulations of self-pity, and to extend the investigation of self-pity beyond student samples to more chronic and pervasive cases of self-pity as reported in the clinical literature (e.g., Charmaz, 1980). Moreover, future research may investigate how self-pity is different from, or similar to, other emotion-focused coping responses to stress. Finally, as was recently suggested by Funder (2000), it may be of advantage to integrate the present trait-oriented approach with the social-cognitive approach to personality in order to investigate how self-pity, both through processes of self-regulation and through processes related to the interaction of person and environment, may become a prominent reaction to stress in some people some of the time, and in others most of the time.

Conclusions

Self-pity has been much neglected in psychological research, despite suggestions that it may be a frequent response not only to major failures and losses, but also to minor problems and everyday hassles. Building on informal observations and unsystematic findings, the present studies attempted a first systematic investigation of self-pity responses to stress, linking these to personality, personal beliefs, and anger, with additional analyses including loneliness and attachment styles. The strong associations with neuroticism and depression, generalized externality beliefs, anger-in and anger rumination, as well as emotional loneliness and ambivalent-worrisome attachments corroborate previous contentions of self-pity as a highly ineffective, if not self-damaging way of coping with stress (Grunert, 1991) that, rather than resolving distressing situations, may instead amplify the associated states of distress. Moreover, self-pity seems to contain a strong interpersonal component, including not only feelings and fears of loneliness, but also feelings of envy, blame, anger, and hostility directed towards others. While the present

studies provide a first systematic pattern of findings, further research is needed to establish a clearer picture of the precipitants, concomitants, and consequences of self-pity. In this endeavor, gender differences and the potential reasons for the higher prevalence of self-pity in women may remain an important focus.

References

- Ainsworth, M. D. S. (1989). Attachments beyond infancy. *American Psychologist, 44*, 709-716.
- Ainsworth, M. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Potomac, MD: Erlbaum.
- Baltes, P. B., & Smith, J. (Eds.). (1997). The Berlin Aging Study [Special section]. *Psychology and Aging, 12*, 395-472.
- Beck, A. T., Brown, G., Steer, R. A., Eidelson, J. I., & Riskind, J. H. (1987). Differentiating anxiety and depression: A test of the cognitive content-specificity hypothesis. *Journal of Abnormal Psychology, 96*, 179-183.
- Becker, P. (1985). Bewältigungsverhalten und seelische Gesundheit [Coping behavior and mental health]. *Zeitschrift für Klinische Psychologie, 14*, 169-184.
- Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin, 117*, 187-215.
- Borg, M. G. (1998). The emotional reactions of school bullies and their victims. *Educational Psychology, 18*, 433-444.
- Borkenau, P., & Ostendorf, F. (1993). *NEO-Fünf-Faktoren Inventar (NEO-FFI)* [NEO Five Factor Inventory (NEO-FFI)]. Göttingen, Germany: Hogrefe.
- Broderick, P. C. (1998). Early adolescent gender differences in the use of ruminative and distracting coping strategies. *Journal of Early Adolescence, 18*, 173-191.
- Brosschot, J. F., Gebhardt, W. A., & Godaert, G. L. R. (1994). Internal, powerful others and chance locus of control: Relationships with personality, coping, stress and health. *Personality and Individual Differences, 16*, 839-852.
- Byrne, D. (1961). The Repression-Sensitization Scale: Rationale, reliability, and validity. *Journal of Personality, 29*, 334-349.
- Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity assessment*. Beverly Hills, CA: Sage.
- Carver, C. S. (1997). Adult attachment and personality: Converging evidence and a new measure. *Personality and Social Psychology Bulletin, 23*, 865-883.
- Charmaz, K. (1980). The social construction of self-pity in the chronically ill. *Studies in Symbolic Interaction, 3*, 123-145.
- Costa, P. T., Jr., & McCrae, R. R. (1991). Trait psychology comes of age. In T. B. Sonderegger (Ed.), *Nebraska Symposium on Motivation* (Vol. 39: Psychology and aging, pp. 169-204). Lincoln, NE: University of Nebraska Press.
- Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five Factor Inventory: Professional Manual*. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., Jr., & McCrae, R. R. (1995a). Domains and facets: Hierarchical personality assessment using the Revised NEO Personality Inventory. *Journal of Personality Assessment, 64*, 21-50.
- Costa, P. T., Jr., & McCrae, R. R. (1995b). Solid ground in the wetlands of personality: A reply to Block. *Psychological Bulletin, 117*, 216-220.
- DiTommaso, E., & Spinner, B. (1997). Social and emotional loneliness: A re-examination of Weiss' typology of loneliness. *Personality and Individual Differences, 22*, 417-427.

- Elson, M. (1997). Self-pity, dependence, manipulation, and exploitation: A view from self-psychology. *Annual of Psychoanalysis*, 25, 5-16.
- Eysenck, H. J. (1995). *The Eysenck Personality Profiler and Eysenck's theory of personality*. London, UK: Corporate Assessment Network.
- Eysenck, M. W. (1992). *Anxiety: The cognitive perspective*. Hove, UK: Erlbaum.
- Funder, D. C. (2000). Personality. *Annual Review of Psychology*, 52, 197-221.
- Grunert, U. (1988). Der Selbstdialog im Selbstmitleid [The self-dialogue in self-pity]. *Psyche*, 42, 602-627.
- Grunert, U. (1991). Selbstmitleid ist immer selbstschädigend [Self-pity is always self-damaging]. *Psychologie heute*, 18(5), 21-26.
- Janke, W., Erdmann, G., & Kallus, W. (1985). *Stressverarbeitungsfragebogen (SVF) nach W. Janke, G. Erdmann und W. Boucsein* [Coping with Stress Questionnaire after W. Janke, G. Erdmann, and W. Boucsein]. Göttingen, Germany: Hogrefe.
- John, O. P. (1990). The "Big Five" factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 66-100). New York: Guilford.
- Jöreskog, K., & Sörbom, D. (1999). LISREL 8.3 [Computer software]. Chicago, IL: Scientific Software International.
- Kahn, E. (1965). Self-pity. *American Journal of Psychiatry*, 122, 447-451.
- Krampen, G. (1991). *Fragebogen zu Kompetenz- und Kontrollüberzeugungen (FKK)* [Questionnaire on Competency and Control Beliefs (QCC)]. Göttingen, Germany: Hogrefe.
- Krohne, H. W. (1996). Repression-Sensitization. In M. Amelang (Ed.), *Enzyklopädie der Psychologie. Differentielle Psychologie und Persönlichkeitsforschung, Band 3: Temperaments- und Persönlichkeitsunterschiede* [Encyclopedia of psychology. Differential psychology and personality research. Volume 3: Individual differences in temperament and personality] (pp. 153-184). Göttingen, Germany: Hogrefe.
- Kröner-Herwig, B., Muck, C., & Weich, K.-W. (1988). Bewertung der Effizienz von Bewältigungsverhalten am Beispiel der Stressverarbeitungsmaßnahmen aus dem SVF [Evaluation of the effectiveness of coping behaviors: The example of the coping-with-stress strategies from the SVF]. *Zeitschrift für Differentielle und Diagnostische Psychologie*, 9, 295-307.
- Levenson, H. (1974). Activism and powerful others: Distinctions within the concept of internal-external control. *Journal of Personality Assessment*, 38, 377-383.
- Levenson, H. (1981). Differentiating among internality, powerful others, and chance. In H. M. Lefcourt (Ed.), *Research within the locus of control construct* (Vol. 1, pp. 15-63). New York: Academic Press.
- MacAndrew, C. (1989). Factors associated with the problem-engendering use of substances by young men. *Journal of Studies on Alcohol*, 50, 552-556.
- Maier, H., & Smith, J. (1999). Psychological predictors of mortality in old age. *Journal of Gerontology: Psychological Sciences*, 54B, 44-54.
- McAdams, D. P. (1992). The five-factor model in personality: A critical appraisal. *Journal of Personality*, 60, 329-361.
- Mikulincer, M., & Florian, V. (1997). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 143-165). New York: Guilford.
- Milrod, D. (1972). Self-pity, self-comforting, and the superego. In R. S. Eissler (Ed.), *The psychoanalytic study of the child* (Vol. 27, pp. 505-528). New York: Quadrangle.
- Nitschke, J. B., Heller, W., Imig, J. C., McDonald, R. P., & Miller, G. A. (2001). Distinguishing dimensions of anxiety and depression. *Cognitive Therapy and Research*, 25, 1-22.
- Nolen-Hoeksema, S. (1991). Responses to depression and their effects on the duration of depressive episodes. *Journal of Abnormal Psychology*, 100, 569-582.
- Nolen-Hoeksema, S. (1995). Gender differences in coping with depression across the lifespan.

- Depression*, 3, 81-90.
- O'Brien, T. B., & DeLongis, A. (1996). The interactional context of problem-, emotion-, and relationship-focused coping: The role of the big five personality factors. *Journal of Personality*, 64, 775-813.
- Ostendorf, F., & Angleitner, A. (1993). *Deutsche Bearbeitung des NEO Personality Inventory-Revised (NEO-PI-R) nach Costa und McCrae (1992)* [German version of the NEO Personality Inventory-Revised (NEO-PI-R) after Costa and McCrae (1992)]. Unpublished manuscript, University of Bielefeld, Germany.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80, No. 609.
- Russell, D., Cutrona, C. E., Rose, J., & Yurko, K. (1984). Social and emotional loneliness: An examination of Weiss's typology of loneliness. *Journal of Personality and Social Psychology*, 46, 1313-1321.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, 39, 472-480.
- Schwenkmezger, P., Hodapp, V., & Spielberger, C. D. (1992). *Das State-Trait-Ärgerausdrucks-Inventar STAXI* [The State-Trait Anger Expression Inventory STAXI]. Bern, Switzerland: Huber.
- Smith, J., & Baltes, P. B. (1997). Profiles of psychological functioning in the old and oldest old. *Psychology and Aging*, 12, 458-472.
- Snell, W. E., Jr., McDonald, K., & Koch, W. R. (1991). Anger provoking experiences: A multidimensional scaling analysis. *Personality and Individual Differences*, 12, 1095-1104.
- Spielberger, C. D. (1988). *State-Trait Anger Expression Inventory (STAXI): Research edition*. Odessa, FL: Psychological Assessment Resources.
- Sundberg, C. P. (1988). Loneliness: Sexual and racial differences in college freshman. *Journal of College Student Development*, 29, 298-305.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics* (3rd ed.). New York: HarperCollins.
- Tangney, J. P., Hill-Barlow, D., Wagner, P. E., Marschall, D. E., Borenstein, J. K., Sanftner, J., Mohr, T., & Gramzow, R. (1996). Assessing individual differences in constructive versus destructive responses to anger across the lifespan. *Journal of Personality and Social Psychology*, 70, 780-796.
- Watson, D., & Hubbard, B. (1996). Adaptational style and dispositional structure: Coping in the context of the five-factor model. *Journal of Personality*, 64, 737-774.
- Weber, H., Eue, N., Titzmann, P., & Freese, A. (1999). *Der Fragebogen zum Verhalten bei Ärger (FVÄ)* [Anger-related Reactions and Goals Inventory (ARGI)]. Unpublished manuscript, Ernst Moritz Arndt University of Greifswald, Germany.
- Weber, H., & Titzmann, P. (2001, September). *Anger-related reactions and goals: A two-dimensional anger inventory*. Paper presented at the 6th European Conference on Psychological Assessment, Aachen, Germany.
- Webster's Third New International Dictionary. (1961). Springfield, MA: Merriam.
- Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation*. Cambridge, MA: MIT Press.
- Wilson, S. L. (1985). The self-pity response: A reconsideration. In A. Goldberg (Ed.), *Progress in self-psychology* (Vol. 1, pp. 178-190). New York: Guilford Press.

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Footnotes

¹There are two English publications that contain scales to measure "self-pity." Both scales have problematic aspects, however. First, the measure presented by MacAndrew (1989) seems to have low face validity, as is suggested by inspection of its items (e.g., "Several times a week I feel as if something dreadful is about to happen," "I have often found people jealous of my good ideas, just because they had not thought about them first"). Another study (Sundberg, 1988) contains a scale that measures self-pity, but only in combination with rejection and lack of purpose. Moreover, all items refer to situations in which the respondent feels lonely.

²For further information and evidence for the differential predictive validity of the two scales, see, for example, Smith and Baltes (1997) or Maier and Smith (1999).

³When variables were entered stepwise, all results remained essentially the same.

⁴When variables were entered stepwise, all results again remained essentially the same.

Table 1

Study 1: Gender Differences

Measure	Females		Males		<i>F</i> (1, 139)
	<i>M</i>	(<i>SD</i>)	<i>M</i>	(<i>SD</i>)	
Self-pity	11.25	(5.30)	8.24	(4.68)	12.64**
Big Five personality traits					
Neuroticism	1.84	(0.72)	1.56	(0.75)	5.18
Extraversion	2.69	(0.63)	2.39	(0.60)	8.00*
Openness	2.86	(0.61)	2.85	(0.49)	0.02
Agreeableness	2.69	(0.52)	2.30	(0.51)	19.43**
Conscientiousness	2.57	(0.60)	2.42	(0.60)	2.12
Control beliefs					
Internality	31.42	(4.59)	32.48	(5.54)	1.56
Powerful others	25.43	(5.27)	25.82	(5.22)	0.19
Chance	25.38	(6.58)	23.36	(5.27)	3.97
Anger expression					
Anger-in	16.97	(4.93)	16.83	(3.84)	0.03
Anger-out	14.85	(5.34)	12.98	(4.00)	5.40
Anger control	20.57	(4.58)	22.23	(4.60)	4.56
Loneliness					
Emotional loneliness	0.90	(0.67)	1.10	(0.80)	2.69
Social loneliness	0.41	(0.39)	0.76	(0.52)	19.90**

Note. *N* = 141 (75 females, 66 males). Means of Big Five personality traits and loneliness measures could range from 0 to 4 (see text for details).

p* < .01. *p* < .001. Two-tailed tests.

Table 2

Study 1: Relations of Self-Pity to Big Five Personality Traits, Control Beliefs, Anger Expression, and Loneliness

Analysis	<i>r</i>	<i>sr</i>	ΔR^2 .Gender	R^2
Big Five personality traits			.31**	.40**
Gender	.29**	.12		
Neuroticism	.59**	.54**		
Extraversion	-.06	.11		
Openness	-.07	-.10		
Agreeableness	.08	.00		
Conscientiousness	-.08	.04		
Control beliefs			.23**	.32**
Gender	.29**	.24**		
Internality	-.22*	-.01		
Powerful others	.42**	.21*		
Chance	.48**	.22*		
Anger expression			.18**	.26**
Gender	.29**	.22*		
Anger-in	.32**	.33**		
Anger-out	.32**	.19*		
Anger control	-.22**	-.05		
Loneliness			.12**	.20**
Gender	.29**	.32**		
Emotional loneliness	.30**	.29**		
Social loneliness	.07	.01		

Note. $N = 141$ (75 females, 66 males). Gender was coded as 1 = female, 0 = male. r = zero-order correlation; sr = semipartial correlation; ΔR^2 .Gender = increase in R^2 with gender controlled for; R^2 = total R^2 .

* $p < .01$. ** $p < .001$. Two-tailed tests.

Table 3

Study 2: Gender Differences

Measure	Females		Males		<i>F</i> (1, 159)
	<i>M</i>	(<i>SD</i>)	<i>M</i>	(<i>SD</i>)	
Self-pity	10.90	(4.81)	7.40	(3.92)	24.85**
Facets of neuroticism					
Anxiety	24.32	(4.89)	21.09	(4.80)	17.62**
Angry hostility	22.41	(4.69)	20.84	(4.35)	4.79
Depression	21.42	(4.40)	19.22	(4.95)	8.93*
Self-consciousness	23.74	(4.09)	22.84	(4.37)	1.83
Impulsivity	24.42	(4.24)	22.49	(4.30)	8.20*
Vulnerability	20.64	(4.11)	18.70	(4.77)	7.67*
Anger reactions					
Outburst	7.70	(2.53)	7.29	(2.31)	1.17
Rumination	9.43	(2.72)	8.37	(3.20)	5.12
Submission	6.48	(2.63)	6.86	(2.22)	0.99
Feedback	10.22	(2.33)	10.02	(1.94)	0.32
Noninvolvement	7.37	(2.41)	8.45	(2.45)	8.00*
Humor	6.92	(2.36)	8.30	(2.91)	11.06*
Attachment styles					
Security	3.59	(0.44)	3.20	(0.63)	21.39**
Avoidance	1.94	(0.49)	2.04	(0.53)	1.78
Ambivalence-worry	2.03	(0.71)	1.97	(0.63)	0.34
Ambivalence-merger	1.71	(0.59)	1.81	(0.49)	1.36

Note. *N* = 161 (88 females, 73 males). Means of attachment styles measures could range from 1 to 4 (see text for details).

p* < .01. *p* < .001. Two-tailed tests.

Table 4

Study 2: Relations of Self-Pity to Facets of Neuroticism, Anger Reactions, and Attachment Styles

Analysis	<i>r</i>	<i>sr</i>	ΔR^2 .Gender	R^2
Facets of neuroticism			.24**	.37**
Gender	.37**	.21*		
Anxiety	.49**	.08		
Angry hostility	.26*	-.05		
Depression	.53**	.20*		
Self-consciousness	.38**	.04		
Impulsivity	.16	.03		
Vulnerability	.47**	.06		
Anger reactions			.20**	.34**
Gender	.37**	.30**		
Outburst	.11	.02		
Rumination	.45**	.33**		
Submission	.17	.11		
Feedback	-.15	-.12		
Noninvolvement	-.21*	-.02		
Humor	-.22*	.02		
Attachment styles			.10*	.23**
Gender	.37**	.28**		
Security	.24*	.16		
Avoidance	.01	.11		
Ambivalence-worry	.28**	.23*		
Ambivalence-merger	.06	.03		

Note. $N = 161$ (88 females, 73 males). Gender was coded as 1 = female, 0 = male. r = zero-order correlation; sr = semipartial correlation; ΔR^2 .Gender = increase in R^2 with gender controlled for; R^2 = total R^2 .

* $p < .01$. ** $p < .001$. Two-tailed tests.

Appendix A

*The Self-Pity Scale of the Streßverarbeitungsfragebogen (SVF; Janke et al., 1985;
English translation: W. Janke, personal communication, March 26, 2001)*

When I feel upset by something or somebody, or when something has thrown me off balance...

... I feel a little sorry for myself.

... I envy others to whom such things don't happen.

... I have the feeling that luck is never on my side.

... I can't understand why I am always the one who has bad luck.

... I think that bad things always seem to happen to me.

... I ask myself why this had to happen to me of all people.

Appendix B*Study 1: Zero-Order Correlations Between Measures*

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Self-pity	—												
2. Neuroticism	.59	—											
3. Extraversion	-.06	-.34	—										
4. Openness	-.07	.00	.25	—									
5. Agreeableness	.08	-.01	.26	.04	—								
6. Conscientiousness	-.08	-.27	.25	.10	.25	—							
7. Internality	-.22	-.35	.25	-.10	-.12	.13	—						
8. Powerful others	.42	.41	-.38	-.14	-.12	.01	-.28	—					
9. Chance	.48	.34	-.23	-.11	.02	-.06	-.39	.56	—				
10. Anger-in	.32	.41	-.32	-.16	.06	-.13	-.27	.33	.26	—			
11. Anger-out	.32	.20	-.03	-.11	-.26	-.16	-.01	.15	.14	-.05	—		
12. Anger control	-.22	-.21	-.05	.05	.16	.15	.07	-.02	-.17	.13	-.63	—	
13. Emotional loneliness	.30	.52	-.46	-.04	-.11	-.26	-.22	.34	.21	.32	.05	-.05	—
14. Social loneliness	.07	.16	-.52	-.26	-.32	-.17	-.05	.31	.22	.20	.03	.06	.51

Note. $N = 141$ (75 females, 66 males). Measures 2-6: Big Five personality traits; 7-9: control beliefs; 10-12: anger expression; 13-14: loneliness.

Correlations of $|r| \geq .22$ are significant at $p < .01$ and correlations of $|r| \geq .28$ at $p < .001$. Two-tailed tests.

Appendix C*Study 2: Zero-Order Correlations Between Measures*

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Self-pity	—															
2. Anxiety	.49	—														
3. Angry hostility	.26	.48	—													
4. Depression	.53	.63	.44	—												
5. Self-consciousness	.38	.64	.36	.58	—											
6. Impulsivity	.16	.23	.42	.14	.04	—										
7. Vulnerability	.47	.68	.41	.71	.55	.22	—									
8. Outburst	.11	.22	.55	.16	.13	.31	.24	—								
9. Rumination	.45	.45	.39	.46	.47	.20	.36	.18	—							
10. Submission	.17	.15	-.07	.25	.33	-.09	.25	-.21	.09	—						
11. Feedback	-.15	-.22	-.04	-.30	-.35	-.01	-.31	-.11	.02	-.32	—					
12. Noninvolvement	-.21	-.31	-.43	-.29	-.30	-.31	-.28	-.35	-.38	.25	.10	—				
13. Humor	-.22	-.40	-.33	-.34	-.35	-.25	-.33	-.23	-.40	.15	.08	.57	—			
14. Security	.24	.06	.05	.08	-.01	.25	.06	.08	.18	-.18	.17	-.26	-.17	—		
15. Avoidance	.01	.00	.04	.07	.21	-.21	.04	-.09	-.06	.24	-.24	.30	.17	-.55	—	
16. Ambivalence-worry	.28	.30	.23	.33	.23	.11	.30	.01	.29	.01	-.12	-.26	-.29	.01	.08	—
17. Ambivalence-merger	.06	.10	.17	.15	.15	.04	.17	.01	.02	.17	-.02	-.05	-.04	-.09	-.02	.33

Note. $N = 161$ (88 females, 73 males). Measures 2-7: facets of neuroticism; 8-13: anger reactions; 14-17: attachment styles.

Correlations of $|r| \geq .20$ are significant at $p < .01$ and correlations of $|r| \geq .26$ at $p < .001$. Two-tailed tests.