

Responses to Depression and Their Effects on the Duration of Depressive Episodes

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I propose that the ways people respond to their own symptoms of depression influence the duration of these symptoms. People who engage in ruminative responses to depression, focusing on their symptoms and the possible causes and consequences of their symptoms, will show longer depressions than people who take action to distract themselves from their symptoms. Ruminative responses prolong depression because they allow the depressed mood to negatively bias thinking and interfere with instrumental behavior and problem-solving. Laboratory and field studies directly testing this theory have supported its predictions. I discuss how response styles can explain the greater likelihood of depression in women than men. Then I integrate this response styles theory with studies of coping with discrete events. The response styles theory is compared to other theories of the duration of depression. Finally, I suggest what may help a depressed person to stop engaging in ruminative responses and how response styles for depression may develop.

There are substantial individual differences in the duration of depressive episodes. Some people remain depressed for only a few days whereas others remain depressed for months or even years (Aneshensel, 1985; Keller, Shapiro, Lavori, & Wolfe, 1982). I propose that the ways individuals typically respond to their depressed moods influence the duration of these moods. Specifically, individuals with a ruminative style of responding to depressed mood will have protracted periods of depressed mood. Ruminative responses involve repetitively focusing on the fact that one is depressed; on one's symptoms of depression; and on the causes, meanings, and consequences of depressive symptoms. In contrast, individuals who tend to use pleasant, distracting activities to relieve their moods before they attempt to focus on their problems and solve them will have shorter periods of depressed mood.

Responses to Depressed Mood

Ruminative responses to depression can be defined as behaviors and thoughts that focus one's attention on one's depressive symptoms and on the implications of these symptoms. These behaviors and thoughts are thus symptom focused and contemplative. Ruminative responses may include isolating oneself to think about one's symptoms (e.g., thinking about how tired one feels), possible causes of the depression (e.g., asking oneself "Why do I get depressed when other people don't?"), and the

possible consequences of depression (e.g., thinking "I'm not going to be able to finish my work if I keep feeling this way"; cf. Nolen-Hoeksema, 1987, 1990). The content of cognitions people with a ruminative response style eventually come to may sometimes resemble automatic negative thoughts, as described by Beck and others (Beck, Rush, Shaw, & Emery, 1979; Hollon & Kendall, 1980), but the style is not to be equated with automatic negative thoughts. The ruminative response style is conceived as a pattern of behaviors and thoughts that focus the individual's attention on his or her emotional state and inhibit any actions that might distract the individual from his or her mood. Negative thoughts (e.g., "I'm a loser") may arise as a result of this behavioral-attentional style, but it is the style and not the content of the negative cognitions that is at the center of the present analysis.

Sometimes people will ruminate about life events that accompany their depression. Again, however, the key characteristic of a ruminative response style is that people are focusing on their negative emotional state. This emotion-focusing component of a ruminative response style is important for two reasons. First, in perhaps the majority of cases, there is no life event clearly tied to a depression (Lloyd, 1980), yet the depressive symptoms are still present, impairing people's functioning and giving them something to ruminate about. Second, when depressed people are focusing on their emotional state, they obviously are focusing on something negative, and this may make it more likely that their thinking will be negatively biased by their mood (cf. Teasdale, 1983).

Ruminative responses, as defined here, differ from structured problem solving in that individuals simply think about or talk about how unmotivated, sad, and lethargic they feel without doing anything to relieve their symptoms, or they worry about the meanings of the symptoms without making plans to change their situation. Three correlational studies suggest that subjects who endorse ruminative, emotion-focused responses of the sort described here are significantly less likely to engage

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in active, structured problem solving (Carver, Scheier, & Weintraub, 1989; Nolen-Hoeksema & Morrow, 1991b; Nolen-Hoeksema, Parker, & Larson, 1991). Furthermore, Morrow (1990) found that subjects who engaged in a ruminative task while in a depressed mood were less able to generate possible solutions to a life problem than subjects induced to distract in response to the depressed mood. Thus, although people may believe they are going to understand themselves and solve their problems by passively focusing on their negative emotional states, ruminative responses are not the same as problem solving and may actually interfere with effective problem solving.

Ruminative responses to depression can be contrasted most clearly with distracting responses, defined here as the purposeful turning of one's attention away from one's symptoms of depression and its possible causes and consequences to pleasant or neutral activities. Effective distracting responses will be engrossing and will have a high probability of positive reinforcement to the individual. Examples of distracting responses include engaging in an activity with friends, working on a hobby, or concentrating on one's work. Activity does not always help the individual distract; individuals can still ruminate while engaging in many activities. Thus, whether individuals engage in ruminative or distracting responses should be a stronger predictor of the duration of their depressed mood than whether individuals are active or passive.¹

There are a few responses to depression that may be distracting but also are inherently maladaptive because they can lead to negative consequences for the individual's health and functioning. Examples of such a response include engaging in violent or reckless behavior (e.g., driving quickly on mountain roads). Although such behavior may distract the individual and help to relieve his or her depression in the short run, it will probably lead to more depression in the long run because of the consequences associated with such behavior. However, there are many distracting responses to depression that are not inherently dangerous to the individual, and these responses are the focus of the theory presented here. In addition, in a sample of 230 subjects, Nolen-Hoeksema and Morrow (1991b) found no relationship between the tendency to use pleasant or neutral activities to distract oneself from depression and the tendency to engage in reckless, dangerous activities ($r = -0.5$, *ns*). In contrast, there was a significant positive relationship between using ruminative responses to depression and engaging in reckless behaviors ($r = .36$, $p < .01$). In other words, subjects who tended to ruminate in response to depression were more likely to engage in dangerous activities. Hull and his colleagues found that people high in self-consciousness are at increased risk for alcohol abuse following personal failures; in contrast, people low in self-consciousness do not tend to increase alcohol use following failure (Hull, Levenson, Young, & Sher, 1983; Hull & Young, 1983; Hull, Young, & Jouriles, 1986). Hull (1981) argued that alcohol consumption and abuse may often be the result of attempts to reduce self-referent thinking. Similarly, our data suggest that people who tend to ruminate about their depressed moods are at increased risk for substance abuse and other dangerous activities, perhaps because these activities are used to distract them from their ruminations.

Several theorists have hypothesized that individual differences in the tendency to self-focus, rather than to use active

coping strategies, may influence the course of depression (e.g., Blaney, 1986; Ellis & Ashbrook, 1988; Ingram, 1984, 1990; Lewinsohn, Hoberman, Teri, & Hautzinger, 1985; Musson & Alloy, 1988; Pyszczynski & Greenberg, 1987; Smith & Greenberg, 1981). There is considerable evidence that depressed people are more likely to self-focus and are more self-conscious than nondepressed people (e.g., Ingram & Smith, 1984; Smith & Greenberg, 1981; Smith, Ingram, & Roth, 1985). However, whether self-focusing actually mediates important features of depression, including the course of depression, is not clear from existing studies (Ingram, 1990; Musson & Alloy, 1988). Moreover, previous theorizing and research has not focused on the role of purposeful behavioral-attentional coping strategies for negative mood, such as the ruminative and distracting response styles described earlier, in the maintenance of depressed mood (Ingram, 1990; Musson & Alloy, 1988). Instead, self-focus has been conceptualized as a state that is aroused by important events or negative self-evaluations (cf. Carver & Scheier, 1981) or as a disposition to self-analyze that is not contingent on an individual's mood (Fenigstein, Scheier, & Buss, 1975). The theory and studies presented here diverge from previous theories and research by focusing on the role of purposeful styles of responding to or trying to cope with negative mood in the perpetuation of that mood.

Responses to Depressed Mood: Tests of Predictions

Evidence that ruminative responses lead to longer periods of depression than nonruminative, distracting responses comes from controlled laboratory studies and from correlational studies. Morrow and Nolen-Hoeksema (1990) had subjects in whom a depressed mood had been induced engage in one of four

¹ The descriptions of distracting and ruminative responses to depressed mood given here may appear similar to Byrne's (1964) constructs of repression and sensitization. There are important differences between them, however. First, Byrne described repression as a defense mechanism in which the people avoid negative stimuli of most kinds, including their own negative feelings and negative self-evaluations. Repressors deny they even experience negative feelings and tend to give a very socially desirable, rosy assessment of their life. In contrast, the response styles theory defines distraction as a willful response to depression. By definition, people have to acknowledge that they are experiencing depression before responding with distracting activities. Byrne defined sensitization as the tendency to approach rather than avoid negative stimuli. His measure of sensitization, however, consists of items from the depression, anxiety, psychasthenia scales of the MMPI. Thus, although the construct may be somewhat similar in definition to a ruminative response, the method by which it has been measured disallows meaningful research on the relationship between sensitization and the experience of depression. Indeed, Bell and Byrne (1978) note that the extremely high correlations that have been found between the Repression-Sensitization Scale and measures of negative affect are probably accounted for by the substantial overlap in items on the scales. I also argue that Byrne's sensitization construct loses utility because it is too global. Studies based on social learning theory have taught us that people's cognitive and behavioral styles often differ across domains. For example, because of sex role socialization, women may tend to focus inward and ruminate when depressed, but not when angry. In contrast, men may be prone to ruminate when angry but not when depressed.

randomly assigned activities designed as analogues of response styles for depressed moods. These activities were either ruminative or distracting and either passive or active. In the ruminative-passive condition, subjects silently read sentences that involved self-focusing, emotion-focusing, or self-questioning (e.g., "I wonder why things turn out the way they do," and "I want to understand things"). Subjects in the distracting-passive condition read sentences that stated facts such as "Napa Valley is in northern California," and "Canada's biggest industry is lumber." Independent raters judged that the sentences in the ruminative and distracting conditions were equally neutral in tone. In the ruminative-active condition, subjects were given cards printed with positive and negative adjectives such as independent, confident, dissatisfied, and depressed, and were asked to sort these cards into piles according to how well each adjective described them. Markers for the piles covered the length of an 8-foot table, so that subjects had to walk around to sort, thereby being more physically active than subjects in the passive conditions. In the distracting-active condition, subjects sorted cards printed with the names of countries of the world according to the industrialization of the countries.

The primary prediction in this study was that subjects in the distracting conditions would show greater decreases in depressive affect than the subjects in the ruminative conditions. The secondary prediction was that activity would result in more decrease in depressive affect than passivity, largely because activity aids in distraction. The results strongly supported these predictions. The greatest remediation of depressive affect was seen in subjects in the distracting-active condition, followed in order by subjects in the distracting-passive condition, the ruminative-active condition, and the ruminative-passive condition. Indeed, subjects in the distracting-active condition showed levels of depressive affect following their response to depression that were lower than the levels of depressive affect they showed before the induction procedure. In contrast, subjects in the two ruminative conditions were still significantly more depressed following their responses to depression than they were before the induction procedure.

In a similar study using subjects with naturally occurring depressed mood and a control group of nondepressed subjects (Nolen-Hoeksema & Morrow, 1991a), all subjects engaged in a task similar either to the ruminative-passive task or to the distracting-passive task described earlier. Among the nondepressed subjects, neither the ruminative nor distracting tasks lead to significant changes in mood. In contrast, depressed subjects who engaged in the ruminative task were significantly more depressed following the task than subjects who engaged in the distracting task. These results suggest that ruminative focusing on oneself and one's mood is not inherently depressing, but can prolong an existing depressed mood (for similar results, see Needles & Abramson, 1990).

In each of the aforementioned studies, responses to depressed mood were assigned to subjects. Do people have consistent styles of responding to depressed mood that predict the duration of their naturally occurring moods? A recent study of daily fluctuations in mood addressed this question (Nolen-Hoeksema, Morrow, & Fredrickson, 1991). Seventy-nine subjects tracked their experiences of sad or depressed mood and responses to these moods for 30 consecutive days. If subjects

experienced a sad or depressed mood on a given day, they indicated how severe the mood was, how long it lasted, and which of 16 ruminative responses and 16 distracting responses they had used. Examples of ruminative responses included "I isolated myself to think about how I was feeling," and "I thought 'I won't be able to get anything done if I don't snap out of this mood.'" Examples of distracting responses included "I did something fun to get my mind off how I was feeling," and "I talked with friends about something other than how I was feeling." A method of testing the homogeneity of behavioral count data, described by Rogosa, Floden, and Willett (1984), was used to evaluate the consistency with which each subject either ruminated or distracted in response to depressed mood across the all days on which they had experienced some depressed mood. Even when a conservative criterion for consistency was used, 83% of the subjects were classified as consistent in the ways they responded to depressed mood. In a study with a similar design, Wood, Saltzberg, Neale, Stone, and Rachmiel (1990) found evidence for consistency in subjects' tendencies to focus inwardly during a depressed mood. Thus, there is evidence that people do have styles of responding to depressed mood.

Furthermore, people with more ruminative styles of responding appear to have longer periods of depressed mood. In the aforementioned study of daily fluctuations in mood, subjects with ruminative response styles had significantly longer episodes of depressed mood (Nolen-Hoeksema, Morrow, & Fredrickson, 1991). More important, a significant relationship between ruminative responses and the duration of depressed mood remained even after the initial severity of the depressed mood was taken into account. This indicates that ruminative responses and severity of mood predicted separate variance in the duration of depressed mood.

In another study, students' responses to depression predicted the duration of their depressed moods following the 1989 Loma Prieta Earthquake (Nolen-Hoeksema & Morrow, 1991b). Measures of response styles and depressed mood on 137 students were obtained before the October 1989 Loma Prieta Earthquake near the San Francisco Bay. Ten days following the earthquake, measures of depression on these same students were obtained, as well as the amount of time they ruminated about the earthquake and the amount of quake-related damage they witnessed. Levels of depression were then reassessed in a subset of these students 7 weeks following the earthquake. Regression analyses showed that students who, before the earthquake, had a more ruminative style of responding to depressed mood were significantly more likely to be depressed 10 days and 7 weeks following the earthquake than were students with a less ruminative style. Similarly, students who, during the 10 days following the earthquake, reported relatively more ruminations about their earthquake experiences were more depressed 7 weeks later. These results were obtained even after students' initial levels of depression and the amount of destruction they witnessed were taken into account. These results indicate, again, that the relationship between ruminative responses and duration of depression is not simply attributable to a common relationship with severity of depression.

The depressed moods reported by subjects in the aforementioned studies were usually of moderate severity, at the worst.

Do responses to depressed mood also predict more severe depressed moods? One group at high risk for severe depressed moods is caregivers of terminally ill patients (Gallagher, Rose, Rivera, Lovett, & Thompson, 1989). Nolen-Hoeksema, Parker, and Larson (1991) interviewed 190 adults with a terminally ill loved one. The interview included a structured assessment of depressive symptoms that allowed researchers to make *Diagnostic and Statistical Manual of Mental Disorders* (rev. 3rd ed., DSM-III-R; American Psychiatric Association, 1987) diagnoses of mood disorders (the Inventory to Diagnose Depression; Zimmerman, Coryell, Corenthal, & Wilson, 1986), an assessment of respondents' histories of depression (the Structured Clinical Interview for Depression; Spitzer, Williams, & Gibbon, 1987), and an extensive assessment of subjects' styles of responding to depressed mood. The mean depression score of the family members in this study was more than double that found in studies of randomly selected adults. Twenty-five percent of these family members met the DSM-III-R criteria for a unipolar depression. Regression analyses showed that the more ruminative and less distracting that subjects' styles of responding to their moods were, the more severely depressed they were, even after history of previous depressions, sex, age, and relationship to the terminally ill patient were taken into account. In addition, people with a more ruminative, less distracting response style were significantly more likely to have a history of previous clinical depressions.

Burns and Nolen-Hoeksema (1991) recently completed a study of the coping strategies of people seeking treatment for a mood disorder. Clients at a clinic for cognitive-behavioral therapy completed the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and a Self-Help Inventory (Burns, Shaw, & Crocker, 1987) before receiving therapy. The Self-Help Inventory is a 45-item questionnaire that lists a number of behaviors people can use to cope when they are feeling depressed. Most of the behaviors described are active and either distracting or mastery-oriented. Subjects are asked to indicate how frequently they currently engage in each of the behaviors when depressed and how willing they would be to engage in each behavior if recommended by a therapist or friend. Twelve weeks after therapy began, these same clients completed the BDI again. The more frequently subjects were engaging in these active responses to depression before therapy, the less depressed they were at that time and also at the 12-week follow-up. Willingness to try the active responses also correlated with lower levels of depression before therapy and at the 12-week follow-up. Indeed, patients who were more willing to learn active coping had lower levels of depression at follow-up, regardless of their initial levels of depression. Patients' initial frequency of using active coping strategies did not predict final depression scores, once initial levels of depression and willingness to learn active coping were taken into account. Perhaps it was because patients were undergoing cognitive-behavioral therapy, in which they were being taught active, mastery-oriented coping skills, that their willingness to learn such strategies was a better predictor of their response to cognitive-behavioral therapy than their pretreatment coping skills.

In summary, laboratory studies in which ruminative or distracting tasks are assigned to subjects indicate that ruminative tasks maintain depressed moods whereas distracting tasks lead

to relief from depressed moods. Correlational studies of responses to naturally occurring moods suggest that most people have consistent styles of responding to their depressed moods and people with more ruminative styles have longer periods of depressed mood.

One goal for future research is more extensive investigation of response styles on the duration of severe depressions. Although the studies described here (Burns & Nolen-Hoeksema, 1991; Nolen-Hoeksema, Parker, & Larson, 1991) show that severely depressed people and people with histories of clinical depressions have more ruminative, less distracting response styles, there is still no evidence that response styles influence the duration of severe depressions.

A second goal for future research is the development of improved self-report measures of distracting response styles. In all of the correlational studies described earlier, the number of ruminative responses subjects reported using was a significant predictor of the duration or severity of their depressed moods. In some but not all of these studies the number of distracting responses subjects reported using was also predictive of their depressed moods. However, the simple number of distracting responses people use may be an inadequate measure of a distracting response style. Some people, when they distract, may put all their attention into the distracting activity; they also may seek activities that are inherently more pleasurable and engrossing. Other people, when they distract, may engage in an activity for a short time then go back to ruminating; they also may use less pleasurable and engrossing activities (cf. Wenzlaff, Wegner, & Roper, 1988). Laboratory studies have clearly shown that when depressed people are forced to distract actively with tasks that require much concentration, their depressed moods subside (Morrow & Nolen-Hoeksema, 1990). Such results suggest that a self-report measure of distraction should assess not only how many types of distractors people use, but also the amount of effort and concentration people put into each distractor and perhaps how engaging the distractor itself is.

Sex Differences in Responses to Depression

The response styles theory was proposed originally to explain why women are about twice as likely as men to show depression (cf. Nolen-Hoeksema, 1987, 1990). I argued that women are more likely to engage in ruminative responses when depressed, thereby amplifying their symptoms and extending the depressive episode. Men are more likely to distract themselves from depressed mood, thereby dampening their symptoms.

Evidence for sex differences in responses to depression comes from a number of self-report studies (Chino & Funabiki, 1984; Funabiki, Bologna, Pepping, & Fitzgerald, 1980; Kleinke, Staneski, & Mason, 1982; Nolen-Hoeksema, 1987). The most definitive of these is the aforementioned study in which subjects tracked their depressed moods and responses to these moods for 30 days (Nolen-Hoeksema, Morrow, & Fredrickson, 1991). Women in this study were significantly more likely to ruminate in response to their depressed moods than men. In turn, the women experienced longer and more severe periods of depressed mood. Moreover, regression analyses showed that once the effects of response styles and initial levels

of depression on the duration of depression were taken into account, the sex differences in duration of depression disappeared.

In an experimental setting, Ingram, Cruet, Johnson, and Wisnicki (1988) found that women, particularly feminine sex-typed women, were significantly more likely than men to self-focus following a negative event. In turn, at least two studies have found that depressive mood inductions lead to negative biasing in information processing more reliably in women than in men (Clark & Teasdale, 1985; Rothkopf & Blaney, in press). Perhaps men fight off negative mood inductions through distraction or other means, thereby attenuating the effects of the inductions on thinking, whereas women are less likely to fight the mood induction (Parrott & Sabini, 1990; Rothkopf & Blaney, in press).

Although women's greater tendency to ruminate may lead them to suffer increased rates of depression, men who chronically choose to avoid their negative moods by engaging in dangerous activities may be vulnerable to pathologies other than depression (see also Ingram et al., 1988; Nolen-Hoeksema, 1987). In questionnaire studies, men are more likely than women to indicate that they respond to depressed moods by drinking alcohol (see Nolen-Hoeksema, 1987). People who rely on alcohol as a method of coping with emotions are at increased risk for becoming abusers (Cooper, Russell, & George, 1988; Farber, Khavari, & Douglass, 1980). Alcohol consumption may be viewed as a method of distracting oneself from one's negative moods and thus may be considered part of men's more distracting response style. Recall, however, that earlier I described evidence that people with a distracting response style do not tend to engage in dangerous activities, such as alcohol abuse, in response to their depressed moods. Rather, it was subjects with ruminative response styles who were more likely to engage in dangerous activities. Hull and his colleagues also have found that people high in self-consciousness are at increased risk of alcohol abuse after personal failures (Hull et al., 1983; Hull & Young, 1983; Hull et al., 1986). This leads me to suggest that men who engage in alcohol abuse may be those who are otherwise prone to ruminating, and turn to drastic measures to stop their ruminations.

Mechanisms by Which Response Styles Influence Depression Duration

The mechanisms by which a ruminative response may prolong a depressed mood and a distracting response may shorten it have been suggested in a number of previous theories and studies (Blaney, 1986; Ingram & Smith, 1984; Lewinsohn et al., 1985; Musson & Alloy, 1988; Teasdale, 1983).

Ruminative Responses Allow Depressed Mood to Affect Thinking

Several previous theorists have argued that one way depressed mood is maintained is through the effects of depressed mood on information processing (Blaney, 1986; Bower, 1981; Ingram, 1984; Lewinsohn et al., 1985; Teasdale, 1983). According to the semantic network theory (Bower, 1981), memories often are connected together by associations with the mood the

person was in when memories were stored. Thus, all memories associated with a negative mood (e.g., the memory of the death of a parent) are linked in a network. When individuals find themselves in the mood associated with these memories, the network containing the memories is activated, enhancing the accessibility and probability of retrieval of these memories. Schwarz and Clore (1987) argued that people often use their own negative moods as information when making evaluations of themselves, other people, or circumstances. That is, when asked to make evaluative judgments, people ask themselves "How do I feel about it?" and if they are in a negative mood may decide that a negative evaluation is appropriate.

Depression may be maintained when a vicious circle develops: depressed mood leads to negative attributions and self-evaluations, which in turn contribute to more depressed mood, and so on (Blaney, 1986; Ingram, 1984; Lewinsohn et al., 1985; Musson & Alloy, 1988; Teasdale, 1983). Support for the first half of this model has been found in a wide variety of studies on mood and thinking. In most of these studies, sad mood is induced in otherwise nondepressed subjects, then the effects of the mood on information processing are examined. These studies have shown that people in sad moods, as compared with people in neutral or happy moods (a) show selective recall of sad memories from their lives (Bower, 1981; Clark & Teasdale, 1982; Teasdale & Fogarty, 1979), (b) remember more false negative evaluations (Natale & Hantas, 1982), (c) interpret their own behavior in social interactions more negatively (Forgas, Bower, & Krantz, 1984), (d) rate their life satisfaction as low (Schwarz & Clore, 1988), (e) form more negative impressions of others (Forgas & Bower, 1987), (f) make more negative interpretations of Thematic Apperception Test cards (Bower, 1981), and (g) are less likely to show an optimistic illusion of control over outcomes (Alloy, Abramson, & Viscusi, 1981).

Support for the second half of the depressed mood-negative thinking-depressed mood model is found in studies of the effects of pessimistic cognitions on depression (cf. Abramson, Metalsky, & Alloy, 1989; Abramson, Seligman, & Teasdale, 1978; Beck et al., 1979). Subjects who make or are induced to make self-blaming, pessimistic attributions for events and who have negative expectations for their control over events are more likely to show depressed affect (see Abramson et al., 1989; Coyne & Gotlib, 1983; Peterson & Seligman, 1984; Robins, 1988; Sweeney, Anderson, & Bailey, 1986). When people engage in ruminative responses to depression, they may be more likely to fall into this vicious circle. Needles and Abramson (1990) examined the relationship between ruminative versus distracting activities and depressed subjects' access to negative cognitions. Subjects with elevated depression scores participated either in a ruminative task or a distracting task. Then subjects completed the Hopelessness Scale, a reliable measure of negative expectations (Beck, Weissman, Lester, & Trexler, 1974), in a manner that allowed the experimenters to measure how quickly subjects responded to the items. Needles and Abramson reasoned that subjects in the ruminative condition should show greater activation of hopeless cognitions and therefore respond more quickly to the items on the Hopelessness Scale than subjects in the distracting condition. Their prediction was confirmed. Subjects in the ruminative condition had significantly shorter response latencies to the first item on the Hope-

lessness Scale and, on average, across all 20 items on the scale. In turn, measures of depressed mood showed that subjects in the ruminative condition showed significant increases in depressed mood as a result of the ruminative task, whereas subjects in the distracting condition showed some decrease in depressed mood. These data support the hypothesis that a ruminative response to depression accentuates the effects of negative expectations by making the negative cognitions more accessible.

Several theorists have noted that the effects of self-focusing on thinking are remarkably similar to the effects of depressed mood on thinking (Ingram, 1984; Lewinsohn et al., 1985; Musson & Alloy, 1988; Smith & Greenberg, 1981). They have suggested that the tendency to self-focus may mediate the effects of depressed mood on thinking. Ingram (1990) reviewed studies pertinent to this hypothesis and concluded that, although there is a reliable association between self-focusing or self-consciousness and depressed mood, the evidence that self-focusing actually mediates the accessibility of negative cognitions in depressed people and thereby affects the intensity and duration of depressed moods is mixed. Experimentally inducing depressed subjects to focus on themselves increases negative expectancies (Pyszczynski, Holt, & Greenberg, 1987) and reduces their illusions of control (Gibbons et al., 1985; Musson & Alloy, 1988). Yet, self-consciousness does not appear to lead to more negative attributions (Gibbons et al., 1985; Smith et al., 1985), to mediate the effects of low self-esteem on depression (Smith et al., 1985), or to increase recall of negative memories in depressed subjects (Rothkopf & Blaney, *in press*).

Self-focusing alone may not be enough to increase people's access to negative cognitions. People may need to focus more directly on their negative moods and the causes of those moods in the manner defined here as a ruminative response in order for the response to affect the saliency of negative cognitions. When depressed people are focusing on their emotional state and pondering its causes, they are clearly focusing on something about themselves that is negative. Even if they make entirely external attributions for their depressed moods, the perceived causes will still likely involve negative aspects of their environment (e.g., their rotten boss or their difficult spouse). In contrast, although self-focusing during a depressed mood may sometimes involve focusing on negative aspects of the self, at other times it may involve focusing on positive aspects of the self, perhaps in a conscious effort to lift one's mood.

Morrow (1990) examined the relative effects of emotion focusing and focusing on aspects of the self other than one's emotions on the duration of depressed moods. After inducing a sad mood in subjects, she had them engage in one of four tasks: (a) focusing on their current affective-somatic state (e.g., their level of energy or their level of happiness or sadness); (b) focusing on nonemotional aspects of themselves (e.g., their goals or their most dominant personality characteristics); (c) focusing on both their current affective state and nonaffective aspects of themselves (the full rumination condition); or (d) focusing on geographic locations (the distraction condition). Judges rated the focusing stimuli across these four conditions as equally neutral in tone. Subjects in both the full rumination condition and the emotion-focusing condition experienced no significant relief from their depressed mood as a result of their tasks. In

contrast, subjects in the self-focusing condition and the distraction condition showed significant, nearly full, relief from their depressed mood. We do not know if subjects in the conditions that included emotion focusing were more likely to fall into the vicious circle between mood and thinking than subjects in the self-focusing condition because cognitions were not assessed. Emotion focusing clearly maintained the depressed mood to a greater extent than self-focusing, however.

Ruminative Responses Interfere With Instrumental Behavior

Ruminative responses may exacerbate depression by their interference with instrumental behavior (Carver et al., 1989; Lewinsohn et al., 1985; Miller, 1975; Musson & Alloy, 1988; Pyszczynski & Greenberg, 1987). Individuals who ruminate in response to depression may not engage in behaviors that provide positive reinforcement and a sense of control. In turn, this lower rate of positive reinforcement and lower control may contribute to learned helplessness and further depression (cf. Seligman, 1975). Simply having subjects self-focus interferes with their performance of cognitive tasks and with effective interpersonal behavior (Coyne, Metalsky, & Lavelle, 1980; Fenigstein, 1979; Strack, Blaney, Ganellen, & Coyne, 1985). The achievement motivation literature also has shown that rumination on self-related, task-irrelevant cognitions interferes with instrumental behavior (e.g., Brockner & Hulton, 1978; Heckhausen, 1980; Sarason, 1975). In turn, the failures resulting from deficits in instrumental behaviors lead to lowered expectancies for future success, lowered self-evaluations, and lowered motivation to meet new challenges.

In contrast, distracting responses, such as recreating with friends or playing basketball, can provide positive reinforcement that can reduce depressive affect (Heiby, 1983; Lewinsohn & Libet, 1972; Rehm, 1986). Miller (1975) reviewed studies showing that periods of distracting activity can lead to improvements in depressed people's performance at motor tasks (see also Ellis & Ashbrook, 1988). Subsequent studies have shown that having depressed people engage in distracting tasks reduces the effects of helplessness (Coyne et al., 1980; Pasahow, 1976; Snyder, Smoller, Strenta, & Frankel, 1981).

Kuhl (1981) investigated the effects of state orientation, the tendency to think about recent events and about one's physical state, and action orientation, the tendency to take action following negative events, on performance following uncontrollable cognitive tasks. The state-oriented subjects showed more helpless behaviors on subsequent tasks than did the action-oriented subjects. The state-oriented subjects did not come to the experiment with a generalized belief that they could not succeed at the tasks. Rather, the state-oriented subjects' excessive ruminations about their failures on the first set of tasks appeared to interfere with learning in subsequent tasks. With regard to depression, Kuhl argued that state orientation may explain certain symptoms of depression: if a person is obsessively thinking about the problems associated with his or her depression, this thinking will inhibit even the simplest of behaviors, such as eating.

Ruminative Responses May Interfere With Problem Solving

Ruminative responses to depression may interfere with effective problem solving because they make negative cognitions

more accessible and because they interfere with the initiation of positive behaviors. The inability to solve problems linked to one's depressed mood could then help to maintain the mood. In contrast, people who engage in distraction long enough to relieve their mood may then be able to engage in more effective problem solving. This hypothesis was tested in a study by Morrow (1990). She induced sad mood in subjects, then had them engage in ruminative or distracting tasks comparable to those used by Morrow and Nolen-Hoeksema (1990). Following these tasks, subjects were asked to generate as many possible solutions to some life problem. Subjects who had engaged in the ruminative task generated half as many possible solutions (2.7 solutions) to the problem than subjects who had engaged in the distracting tasks (6.3 solutions).

As noted earlier, correlational studies have shown that subjects with a ruminative, emotion-focusing response style do not tend to endorse active, problem-solving strategies (Carver et al., 1989; Nolen-Hoeksema & Morrow, 1991b; Nolen-Hoeksema, Parker, & Larson, 1991). Conversely, I have found that subjects who say they use benign distractions to respond to their depressed moods also tend to endorse active problem-solving strategies.

An important area for future research is the timing of different strategies for coping. The response styles theory would suggest that distraction is a good short-term, immediate strategy for reducing negative mood, but a search for problems that may have led to the mood and solutions to those problems should follow so that future periods of depression can be averted.

Integration With the Coping Literature

A large literature on how people cope with discrete, identifiable events in the environment has emerged over the past 20 years, independently of the literature on self-focusing tendencies (see Carver et al., 1989; Folkman & Lazarus, 1980, 1986; Moos & Billings, 1982). Two general categories of coping responses have been described: problem-focused coping, which includes behaviors intended to solve concrete problems, and emotion-focused coping, which includes a wide variety of behaviors and thoughts focused on the moods brought about by an event.

Problem-focused coping is often viewed as the most effective type of coping when there is a controllable problem to be solved (Folkman, 1984; Moos & Billings, 1982). Some studies have found that people who endorse active problem-solving coping strategies show lower levels of depression and anxiety immediately after and long after a stressful event (Billings & Moos, 1981; Mitchell, Cronkite, & Moos, 1983).

When there is no problem or event clearly linked to an individual's depressed mood, coping behaviors that focus on relieving depressed mood are considered appropriate (Folkman, 1984). Whereas the self-focus literature and the response styles theory proposed here suggest that focusing inward on one's mood and its causes is a maladaptive way of coping with negative mood, the thrust of much of the coping literature has been that avoiding negative emotions aroused by an event is a maladaptive response (cf. Aldwin & Revenson, 1987; Billings & Moos, 1981; Holahan & Moos, 1987). The apparent contradiction between these two literatures may be explained by the ways

emotion-focused coping styles have been measured. Measures of emotion-focused coping often include a disparate collection of responses to negative mood, such as engagement in pleasant events to distract oneself, wishful thinking, suppression or denial, and potentially dangerous activities (e.g., drinking alcohol). Thus, it is not clear to what to attribute the negative relationships found between the use of emotion-focused strategies and recovery from depression.

When researchers have examined the relationships between depression and more narrowly defined types of emotion-focused coping, their results have often been consistent with the general idea that ruminative responses maintain depressed mood. For example, people who focus on a negative event, wishing it would have gone differently, report more negative mood symptoms (Coyne, Aldwin, & Lazarus, 1981; Felton & Revenson, 1984). People who seek excessive information about a situation before acting are more likely to be depressed (Coyne et al., 1981; Folkman & Lazarus, 1986; Miller & Lewis, 1977). In contrast, Carver et al. (1989) found that distraction or denial may be an adaptive coping strategy in the short-run, perhaps because it allows the individual to control distress and engage in problem-focused coping (see also Cohen & Lazarus, 1973; Wilson, 1981).

One coping strategy that often is prescribed as helpful is seeking social support (Cobb, 1976; Cohen & Willis, 1985). In particular, Pennebaker (1990) and Silver, Boon, and Stones (1983) argued that confiding one's deepest feelings to others aids in the process of recovery from traumatic events. However, the relationship between social support and recovery from trauma appears to be complex (Coyne & DeLongis, 1986; Kessler, Price, & Wortman, 1985). People who have at least one close, confiding relationship appear to recover better from trauma and depression than those people who do not (Brown & Harris, 1978). But other studies have found that people who like to "ventilate" their feelings to others tend to be more depressed and may recover from depression more slowly (Aldwin & Revenson, 1987; Berman & Turk, 1981; Billings & Moos, 1984; Costanza, Derlega, & Winnstead, 1988; Tolor & Fehon, 1987). The response of friends and relatives to one's support seeking may be an important mediator of the effects of support seeking on health (Coyne, 1976; Coyne, Kahn, & Gotlib, 1987).

I propose that another mediator of the effects of social support on recovery from depression is the extent to which others help one to stop engaging in ruminative responses and start engaging in distracting responses or problem solving. In the study of students' reactions to the Loma Prieta earthquake (Nolen-Hoeksema & Morrow, 1991b), the extent to which students sought others to talk about their feelings and experiences positively correlated with the extent to which they ruminated about the earthquake ($r(137) = .63, p < .01$). But students' levels of depression 7 weeks after the earthquake were predicted only by the amount they ruminated during the 10 days immediately following the quake and not by the amount they talked with others about the earthquake.

In the study of family members of the terminally ill (Nolen-Hoeksema, Parker, & Larson, 1991), response styles and levels of social support each predicted significant variance in levels of depression, but there also was a significant interaction between social support and response styles in the prediction of depres-

sion levels. Response styles were more strongly related to depression among people with low social support than among people with high social support. This finding suggests that having strong social supports may mitigate the effects of a ruminative response style on depression, perhaps because friends help to distract and to engage in effective problem solving.

Comparisons With Other Theories

There are many other theories of depression, but most are concerned with the onset of depression and not its duration. The response styles theory complements rather than contradicts most theories of the onset of depression. A ruminative response style should help to maintain depressed moods initially brought about by a variety of factors. Two recent theories offer alternative accounts of the determinants of individual differences in the duration of depression.

Self-Awareness and Depression

As noted, several theorists have argued that self-focused attention plays a role in depression (Carver & Scheier, 1981; Duval & Wicklund, 1972; Ingram, 1984, 1990; Lewinsohn et al., 1985; Musson & Alloy, 1988; Pyszczynski & Greenberg, 1987; Smith & Greenberg, 1981). The recent theory of depressive self-focusing by Pyszczynski and Greenberg (1987) incorporated most features of the previous theories. They argued that disruptions (e.g., failures, frustrations, losses) induce individuals to focus inward and to evaluate whether they are meeting important personal goals and values; in the language of the theory, people evaluate whether there is a discrepancy between their ideal self and their real self (cf. Pyszczynski & Greenberg, 1987, pp. 126–127). If a discrepancy is discovered but can be reduced, the person will not experience negative affect. If a discrepancy cannot be reduced, the individual may remain chronically self-focused. Self-focus then maintains the depressed mood by focusing the individuals' attention on their real-ideal self-discrepancy and possibly by leading to negatively biased thinking (Pyszczynski & Greenberg, 1987). In addition, Pyszczynski and Greenberg (1987) described a particular self-focusing style that results from this perseveration in the self-regulatory cycle. This depressive self-focusing style is characterized by the tendency to self-focus following loss, frustration, failure, or some other bad life event and the tendency to focus externally following positive events. They argued that this style allows the depressed person to maintain low self-expectancies and a negative self-image and thereby make minimal demands on the self. But this depressive self-focusing style also contributes to perpetual awareness of discrepancies between the real and ideal selves, minimization of positive events, and more depression (Greenberg & Pyszczynski, 1986).

The response styles theory can be contrasted with these self-awareness theories in several ways. First, self-awareness theories suggest that self-focus is induced by negative events and the theories focus only on depressions that are the result of negative events. In contrast, I argue that ruminative responses should contribute to longer term depressed moods, even when there is no obvious cause of the mood. Indeed, rumination may be an even more dangerous response to depression when the

cause of the depression is unclear. Schwarz and Clore (1983) demonstrated in a series of experiments that when subjects were provided with an easy explanation of their negative mood (e.g., the gloomy weather) there were no effects of the mood on ratings of life satisfaction. But when subjects were unclear as to the source of their negative mood, they rated their life satisfaction significantly lower than control subjects in a positive or neutral mood. Schwarz and Clore argued that when there is a clear cause of one's negative mood that is irrelevant to the evaluative judgments being made, then the mood serves no informational value and is not taken into consideration in the evaluations. However, when one's negative mood cannot be attributed to some external cause, it becomes a relevant source of information in making evaluations such as life satisfaction. This finding suggests that when depressed individuals have no obvious attribution they can make for their mood, the depressed mood may have larger effects on their thinking than when they can clearly attribute it to some external, specific cause.

Second, whereas the self-awareness theories suggest that focusing on a real-ideal discrepancy is crucial to the maintenance of depressed mood, the response styles theory suggests that simply focusing on one's emotional state without taking action to relieve it is enough to maintain depression, even in the absence of a real-ideal discrepancy. As described earlier, the study by Morrow (1990) showed that having subjects focus on their current emotional state maintained their depressed mood more reliably than having subjects focus on their personal qualities, goals, and experiences. Self-focus theorists may argue that the self-focus condition in Morrow's experiment did not maintain depression because subjects were not directed specifically to focus on real-ideal self-discrepancies. However, because subjects were instructed to think about their personal characteristics, goals, and experiences, any subject entering this condition with a real-ideal self-discrepancy probably would have focused on this discrepancy frequently. Thus, the self-focus conditions at least should have led to less remediation of depressed mood than the distraction condition. Subjects in the self-focus condition showed nearly as much relief from their depressed mood after self-focusing as subjects in the distraction condition showed after distracting themselves from their moods, however.

Similarly, Rholes, Riskind, and Lane (1987) found that inducing sad affect by having subjects read statements describing the negative somatic symptoms of depression led to equally as large increases in sad affect as having subjects read negative self-evaluative statements. In addition, subjects in the somatic-induction condition showed biases in their retrieval of positive and negative memories just as subjects in the self-evaluation-induction condition did, although the self-evaluation induction led to stronger retrieval biases. Thus, focusing on the somatic symptoms of depression induced just as much negative affect as focusing on negative self-evaluations, and the sadness produced by focusing on somatic symptoms has similar effects on thinking as the sadness produced by self-evaluation (see also Clore, Schwarz, & Kirsch, 1983). This finding suggests that an individual need not detect a real-ideal self-discrepancy to fall into a sadness that affects his or her thinking.

Finally, the study of family members of terminally ill patients also suggests that one need not have a real-ideal self-discrep-

ancy for ruminative response style to affect depressed mood (Nolen-Hoeksema, Parker, & Larson, 1991). One of the measures used in this study was the Dispositional Optimism Scale (Scheier & Carver, 1985). Although this scale does not explicitly ask subjects about discrepancies between their ideal and real selves, it is plausible that people who have such a discrepancy tend to be less optimistic about themselves and the future than people without such a discrepancy. Nolen-Hoeksema, Parker, and Larson tested the hypothesis that dispositional optimism would mediate the relationship between response styles and depression; that is, a ruminative response style may be dangerous only for pessimists. They divided subjects at the median on dispositional optimism then regressed ruminative response scores on depression scores separately for the two groups. The relationship between ruminative responses and depression was nearly identical for optimists and pessimists (standardized betas were .54 and .50, respectively, $ps < .01$). This relationship suggests that emotion- and self-focusing are associated with more intense depression, regardless of dispositional optimism.

In summary, Pyszczynski and Greenberg (1987) argued that the tendency to self-focus on real-ideal self-discrepancies after negative events contributes to longer and more severe depressions. In contrast, the response styles theory suggests that a ruminative response, involving focusing on one's negative mood and the causes and consequences of it, is important to the maintenance of depression. There is evidence to support predictions from the response styles theory that (a) internally focusing enhances depressed mood and depressed cognitions even when there is no triggering event for the mood; (b) emotion-focusing is a stronger mediator of depressed mood than is self-focus; and (c) ruminative responses exacerbate a depressed mood in the absence of a negative self-image. Further research is needed to test the different predictions made by the self-awareness theories and the response styles theory.

Teasdale's Differential Activation Theory

Teasdale (1988) argued that, although depressed mood activates negative memories and schemas for most people, there are individual differences in the patterns of thinking activated by depressed mood. He stated that "individuals differ in the nature of representations and interpretative constructs that are accessible in the state of initial depression, and that these differences will determine whether or not experiences will be interpreted as highly aversive and uncontrollable. This, in turn, determines whether or not a vicious cycle [between thinking and depression] that will act to maintain depression will be set up" (Teasdale, 1988, pp. 254-255). Thus, the more negative the representations and schemas that are activated when individuals are depressed, the more likely individuals are to judge their situation as aversive and uncontrollable, and the more likely they are to fall into a vicious cycle whereby depression negatively influences the individual's processing of information. In turn, the negative cognitions activated by the depression perpetuate the depression. Thus, people in whom depression activates particularly negative schemas should remain depressed longer. In support of this latter hypothesis, Dent and Teasdale (1988) found that the more negative trait adjectives that depressed women used to describe themselves at an initial assessment, the

longer they remained depressed. Similarly, Lewinsohn, Steinmetz, Larson, and Franklin (1981) found that, among subjects initially meeting criteria for a major depression, those scoring more highly on measures of negative thinking were more likely to continue to be depressed 8 months later than those scoring low.

Teasdale (1988) noted the similarities between his differential activation hypothesis and an earlier version of the response styles theory (Nolen-Hoeksema, 1987), but pointed to one fundamental difference. He argued that "the tendency to respond to initial feelings of depression with either a ruminative or active coping response can itself be seen *as a result* [italics added] of differences . . . in the cognitive processes activated in mild depressed mood. Some of these are likely to lead to a focus on external coping responses, whereas others are likely to direct further cognitive processing to internal events" (Teasdale, 1988, p. 268). In other words, if negative cognitive schemas are activated when depressed, the individual is more likely to turn attention inward on those negative self-thoughts, whereas if negative cognitive schemas are not activated the individual will be likely to cope with depressive symptoms more actively. In this view, ruminative-passive responses are essentially similar to helpless responses to negative cognitions, whereas distracting-active responses are like mastery-oriented responses by people who have optimistic cognitions about a situation.

This view suggests that people with positive schemas should not engage in ruminative responses and perhaps that ruminative responses should have no effect on depression in these people. However, as noted earlier in the study of family members of terminally ill patients, a ruminative response style was associated with more severe depressed moods in both dispositional optimists and dispositional pessimists. Teasdale (1988) also stated that subjects who are undergoing more aversive circumstances, who have less social support, or who have histories of depression should be more likely to fall into the vicious cycle between mood and depression, out of which ruminative cognitions and behaviors come. Yet, in the study of family members of terminally ill patients, ruminative responses were predictive of levels of depression even after the aversity of current life circumstances, levels of social support, and histories of depression were accounted for (Nolen-Hoeksema, Parker, & Larson, 1991). These results suggest that a ruminative response style is an important predictor of depression and not just a by-product of negative schemas and situations that activate negative schemas.

What Stops Depression?

Under what conditions might an individual with a ruminative style of responding to depression stop engaging in ruminative responses, thereby allowing his or her depression to lift? The suggestions offered here are speculative because the requisite research has not been conducted. I propose that people with ruminative response styles, in order to recover from a depressive episode, must either (a) be distracted from their ruminative thoughts long enough for their depressed mood to be relieved substantially or (b) develop the belief that they can change situations they think lead to their depressed moods (cf. Bandura, 1986).

Learning to engage in benign distracting activities to control periods of negative mood would seem important for people with a ruminative response style (Musson & Alloy, 1988; Teasdale, 1985; Zeiss, Lewinsohn, & Munoz, 1979). Cognitive-behavioral therapies (CBT) teach such skills (cf. Beck et al., 1979; Lewinsohn, Munoz, Youngren, & Zeiss, 1986). As noted, Burns and Nolen-Hoeksema (1991) found that the willingness of patients about to enter CBT for depressive or anxiety disorders to learn active coping strategies predicted their levels of depression 12 weeks into therapy, even after initial levels of depression were statistically controlled. Kavanagh and Wilson (1989) found that increases in patients' self-efficacy for controlling ruminative thoughts with distraction and other strategies was related to their degree of improvement over the course of CBT. In addition, patients' self-efficacy for controlling ruminations at the end of treatment was a significant predictor of their tendency to relapse, after controlling for posttreatment levels of depression. Thus, some depressed people with a ruminative response style may recover as a result of learning to control ruminative responses through distraction over the course of therapy.

Future research should determine what interventions most effectively alter maladaptive response styles and whether such interventions are better than others at preventing future episodes of depression. Studies comparing the efficacy of CBT to drug therapies for depression suggest that CBT may be better at preventing relapse of depression than drug therapies (Blackburn, Eunson, & Bishop, 1986; Kovacs, Rush, Beck, & Hollon, 1981; Simons, Murphy, Levine, & Wetzell, 1986). Barber and DeRubeis (1989) argued that CBT may be better because in CBT, but not in pharmacotherapy, patients learn skills for challenging their negative thoughts and coping more actively with difficult situations, which they then can use to deal with periods of depression that arise after therapy has ended. An important future study would be to test the hypothesis that patients undergoing CBT learn to replace ruminative responses to depression with more active, distracting responses than those patients undergoing other therapies and that this replacement leads to a lower relapse rate of depression in CBT patients.

Most people who become depressed do not seek treatment. As noted, the study of family members of the terminally ill suggests that friends can mitigate the effects of a ruminative response style on depression. Future research could test the hypothesis that depression often begins to subside in individuals with ruminative response styles when friends and family members push them to engage in pleasant distracting activities to control their moods and then to engage in problem solving.

A second condition that may help depressed people stop engaging in ruminative responses is when they gain answers to their questions about why they are depressed and ways to solve the problems identified. Friends and therapists may provide explanatory schemes for the problems the depressed person is ruminating about, thereby giving him or her the answer to the question "Why am I depressed?" and suggestions for what to do about the situation. Teasdale (1985) argued that an important component to any psychotherapy is the extent to which, early in the therapy, the patient believes his or her depression is controllable, thereby relieving "depression about depression" (see also Barber & DeRubeis, 1989). Indeed, the specific foci and tech-

niques of different types of therapies for depression may be less important than the extent to which these therapies give ruminators satisfying attributions for their depressions and a set of strategies for solving problems that are identified.

Origins of Response Styles

Parents might influence the development of their children's styles of responding to negative affect through the styles the parents display when they are sad and through their socialization practices. First, parents might model a ruminative style (Compas, 1987; Krohne, 1979). Studies of children of clinically depressed parents, many of whom may have a ruminative response style, show that these children have problems in regulating their negative moods (Field et al., 1985; Zahn-Waxler, McKnew, Cummings, Davenport, & Radke-Yarrow, 1984). For example, Nolen-Hoeksema, Wolfson, Mumme, and Guskin (1990) found that 5- to 7-year-old children of depressed mothers were more likely to show passive, helpless responses to frustration situations than children of nondepressed mothers. Moreover, children whose mothers showed more ruminative styles of responding to depressed mood were more likely to have passive, helpless styles of responding to challenge.

Second, children might develop ruminative, passive styles because they have not been taught a repertoire of more adaptive strategies for handling negative affect, such as benign distraction or appropriate problem solving (cf. Baumrind, 1977; Cohn & Tronick, 1983; Kopp, 1982; Patterson, 1982; Shure & Spivack, 1978). In the study of depressed and nondepressed mothers and their children, mothers' styles of responding to their children when they were frustrated predicted children's problem-solving and affect-regulation skills (Nolen-Hoeksema, Wolfson, et al., 1990). Specifically, mothers who (a) were intrusive and therefore did not allow their children to solve many of their own problems, (b) did not teach their children to respond to negative affect by trying new approaches to a problem, and (c) were unsupportive and critical when their children failed, had children with poorer problem-solving skills and the tendency to become helpless and passive when upset.

The literature on sex role socialization suggests that parents' expectations of what types of emotional expression are appropriate for their male and female children may influence children's styles of affect regulation (Block, 1973, 1978). Parents seem particularly concerned that their sons not show feminine-stereotyped characteristics such as displays of emotionality (Maccoby & Jacklin, 1974). Rather, boys are encouraged to "be strong" and "act like a little man." Sanctions against boys showing depressive behaviors continue into adulthood. Siegel and Alloy (1990) found that depressed men were evaluated much more negatively by their roommates than depressed women (see also Hammen & Peters, 1977). Men's tendency to engage in distracting responses to depressed mood may result, in part, from conformity to sanctions against male emotionality. There is little evidence that adults explicitly reinforce passive, ruminative responses to distress in girls (Maccoby & Jacklin, 1974). Adults simply may not encourage distraction and mastery-oriented responses in girls as much as in boys. In addition, because women are told that they are naturally emotional, they may come to believe that depressed moods are unavoidable and

cannot be dismissed easily when present (Nolen-Hoeksema, 1990). Such an attitude would decrease the probability of women taking actions to distract themselves from their moods.

Biological factors also may play a role in the development of response styles to depressed mood. Some people appear to have greater physiological reactivity to stress than other people (cf. Davidson & Fox, 1989; Depue & Monroe, 1986; Gottman & Levenson, 1988). More reactive people may find their negative emotional states more compelling and thus may be more likely to focus on those states. If they frequently become upset when others do not, they may also begin to question their negative emotionality. This focusing on emotion and questioning it may develop into a ruminative style of responding to negative mood.

The aforementioned suggestions are highly speculative and require empirical testing. The development of styles of affect regulation seems a particularly important area for future research.

Conclusion

I have argued that one determinant of the duration of a depressive episode is the type of responses individuals engage in when depressed. People who engage in ruminative responses when depressed tend to remain depressed and may become more severely depressed than people who try to distract themselves from their depressive symptoms. Furthermore, women's tendency to have a more ruminative response style than men may help to explain why they are more likely to be depressed and to report longer periods of depression. Existing laboratory and field studies have supported these predictions. However, much research remains to be done, and I have provided suggestions for future research throughout this article.

The response styles theory represents a shift from a focus on the determinants of individual differences in the onset of depression to a focus on the determinants of individual differences in the duration of depression. Even among people whose depressions appear to be attributable to similar causes, there appear to be large individual differences in the duration of depression (Windholz, Marmar, & Horowitz, 1985). The more researchers understand why some individuals' depressions are particularly protracted, the more clinicians can help depressed patients manage their symptoms and avoid demoralization from the depression itself (Teasdale, 1985). Then perhaps patients can address more effectively the reasons they initially became depressed.

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