Motivation and Emotion, Vol. 12, No. 3, 1988

Internal Focus of Attention and Depression: A Study of Daily Experience[1]

Randy J. Larsen[2] and Gregory S. Cowan
Purdue University

The present study investigated the relationship between self-focus of attention and depression, using a naturalistic experiential sampling methodology. Daily ratings of mood and descriptions of daily life events were obtained from 62 subjects over a period of 56 consecutive days. Daily events were rated for severity and coded as referring to a self-focused or external-focused event. Scores on private self-consciousness (PSC) and depression questionnaires both correlated significantly with the number of daily events coded as self-focused and negative. Self-focusing to positive life events did not correlate with depression or with PSC. If depression and high PSC individuals do respond with negative mood to internal events, then their daily moods should be more unpredictable from the objective conditions of their daily life. This hypothesis was examined by assessing the linkage between daily moods and objective life events for each subject. Mood–event linkage scores were computed as within-subject correlations between each subject's daily mood ratings and the raters' evaluation of the severity of the subject's life events each day. High PSC individuals showed daily moods that were less linked to the objective conditions of their daily life. Again, this effect held only for negative life events. Results are discussed in terms of attentional biases and the relative importance of self-referential processing of negative rather than positive life events in the maintenance of depression.

An increase in the popularity of cognitive approaches to depression has occurred in the past few years. For example, Beck (1967) proposed that depres-

[1]Preparation of the manuscript was supported, in part, by grant number R01 MH42057 from the National Institute of Mental Health to the first author.
[2]Address all correspondence to Randy J. Larsen, Department of Psychological Sciences, Purdue University, West Lafayette, Indiana 47907.

0146-7239/88/0900-0237$06.00/0

sion is associated with negative, as well as largely inaccurate, assessments of one's self, future, and environment. Learned helplessness models of depression (Abramson, Seligman, & Teasdale, 1978) implicate causal attributions in the development and maintenance of depression. One of the more recent cognitively oriented theories of depression focuses on attentional processes and their role in the maintenance and exacerbation of depression. The particular attentional process emphasized is private self-consciousness, defined as "the dispositional tendency to focus on one's inner thoughts and feelings" (Smith & Greenberg, 1981, p. 324). Smith and Greenberg (1981) list a number of parallels between self-focus of attention and depression. Both correlate with low self-esteem, attributions of internal causality for negative events, extremes of negative affect, and increased accuracy of self-report measures. Smith and Greenberg (1981) obtained significant correlations between measures of depression and the private self-consciousness subscale of the Self-Consciousness Scale (Fenigstein, Scheier, & Buss, 1975). Of course, the authors pointed out that the correlational nature of their study precludes conclusions as to whether the life experiences of depressives cause them to turn their attention inward or, alternatively, that chronic self-focus serves to worsen the effect of negative experiences. Nonetheless, the authors suggest that the connection between internal focus of attention and depression may justify the targeting of this phenomenon in cognitive therapy strategies.

Smith, Ingram, and Roth (1985) assessed not only the relationship between private self-consciousness and depression but also the connection between each of these variables and several theoretically predicted correlates. Measures of ideal–real self-discrepancy, self-deception (an indirect measure of accuracy of self-report), and attribution of negative events to internal causes were administered, along with private self-consciousness and depression scales. The predicted relationships were found between depression and ideal–real self-discrepancy (positive *r*), self-deception (negative *r*), and attribution of negative events to internal causes (positive *r*). Similar correlations were found when private self-consciousness was correlated with the latter three measures, with the exception that the expected positive correlation between private self-consciousness and attribution of negative events to internal causes did not reach significance.

Ingram and Smith (1984) examined the relationship between depression and a different measure of self-focus of attention. Using a sentence-completion task, they hoped to gain a more "current" assessment of self-focus of attention. Responses on the sentence completion task were coded either "internal-focused" or "external-focused." As predicted, the authors found that depressed subjects showed fewer external-focused and more self-focused responses than did nondepressed subjects. In addition, Ingram and Smith examined the valences of both the internal- and external-focused events. Depressed subjects showed a higher proportion of negative self-focused state-

ments then did nondepressed subjects. The authors claimed that the differences in self-focused responding were due primarily to an increased number of negative responses by the depressed group. Ingram and Smith (1984) interpreted their results as showing "the 'power of nonnegative thinking'... that indicates that the presence of positive self-referent thought may not be as important in facilitating adaptive behavior as is the absence of negative self-referent cognitions" (p. 147).

In a study experimentally manipulating self-focus of attention for depressive and nondepressive subjects, Pyszczynski, Holt, and Greenberg (1987) found that inducing an external focus resulted in decreased pessimism for the depressive groups. These authors suggest that self-focus serves to maintain depression through the frequent activation of an increasingly negative self-schema. Other researchers (e.g., Derry & Kuiper, 1981; Kuiper, MacDonald, & Derry, 1983) have suggested that the self-schema of depressive persons is generally more negative than the self-schema of nondepressive persons. Consequently, since self-focus makes one's self-schema salient, the activation of *negative* thoughts, images, memories, expectancies, and inferences through self-focus will occur more frequently for depressive persons.

Studies mentioned so far have conceptually replicated each other in their assessment of the relationship between internal focus of attention and depression. These studies, however, share certain limitations. For example, their data mainly consistent of responses based on single-session self-report questionnaires. The purpose of the present study will be to test whether depressives are more prone to be self-focused on an ongoing basis in their natural daily lives. Using the experiential sampling technique (Hormuth, 1986), assessments of subjects' moods, ratings of daily life-event severity, and whether the day-to-day events were internal or external were made for 62 subjects for 56 consecutive days. These data give us new information regarding the hypothesis that depressives are more internally focused day by day in their natural lives rather than in a one-time laboratory setting.

A second purpose of this study is to examine the relation between depression and the "linkage" between objective life events and mood. If depressed individuals are indeed more prone to focus on internal events, then their moods should not be as closely linked to their objective life circumstances as are the moods of nondepressed subjects. In other words, nondepressed individuals should show a tighter linkage between mood and objective life events, being happy when positive events occur and sad when negative events occur. The mood of depressives, however, should appear more "free-running," or less closely linked to objective life events, if they are in fact responding more to internal events.

The hypotheses regarding more day-to-day internal focus of attention and more "free-running" mood for depressives will be examined separately for positive and negative affect-provoking life events. This will be done be-

cause recent research (Ingram, Smith, & Brehm, 1983; Pyszczynski & Greenberg, 1985) suggests that the self-focus and depression hypothesis might operate mainly for negative events, and that depressives might not necessarily be prone to, or may even be aversive to, self-focus after positive life events. The Ingram and Smith (1984) study previously mentioned showed that depressives were more likely to give negative responses when asked for a self-focused statement. Pyszczynski and Greenberg (1985) found that depressed subjects prefer a self-focusing exercise after negative experiences, whereas nondepressed subjects prefer self-focus after positive experiences. This pattern of selective self-focus appears to support the notion of a self-serving attentional bias on the part of nondepressed subjects, a bias that has been demonstrated in a number of studies (e.g., Alloy & Abramson, 1979; Lewinsohn, Mischel, Chaplin, & Barton, 1980; Tabachnik, Crocker, & Alloy, 1983). Ingram and Smith's (1984) "power of nonnegative thinking" is another example of strategies that nondepressives employ in order to avoid an internal focus of attention following negative events, strategies that appear to serve an adaptive function.

Strengths of the current study include increased ecological validity due to the gathering of data over time in real-life situations, and highly reliable scores due to aggregation of data over many occasions. In addition, this study, unlike much of the research examining self-focus of attention and depression, avoids *total* reliance on self-report data. Trained raters were used to judge the life events that the subjects reported on a daily basis. These events were coded for whether they referred to something internal or external to the subject. These improvements over previous methodology not only enable us to assess the relationship between naturalistic self-focus of attention and depression but also give us this information in a form that reflects the continuous day-to-day nature of these variables.

METHOD

Subjects

Subjects were undergraduate students enrolled in an independent research course described as a project on "daily moods and life events." Sixty-two participants completed the semester-long project and earned 3 credit hours for which they received a grade of "satisfactory." There were virtually no constraints on who could enroll in this course. The data to be reported in this article were collected as part of an ongoing research project on daily mood, coping, and life-satisfaction (see Larsen, Diener, & Emmons, 1986).

Procedure

Self-Consciousness and Depression Measures. Dispositional self-consciousness was assessed with the private self-consciousness (PSC) subscale of the self-consciousness inventory (Fenigstein et al., 1975). This subscale was factor-analytically derived and contains items referring to a tendency to attend to one's inner thoughts and feelings. Responses are made using a Likert-type format. Much previous research has established the reliability and construct and discriminant validity of this subscale (Fenigstein et al., 1975; Carver & Glass, 1976; Turner, Scheier, Carver, & Ickes, 1978). This scale is frequently used in studies on the relationship between self-focus of attention and depression (e.g., Smith & Greenberg, 1981).

Degree of depression was assessed using the Beck Depression Inventory (BDI; Beck, 1967). This 21-item questionnaire has been found to be valid for use in college student populations (Bumberry, Oliver, & McClure, 1978). The BDI is frequently used in research on depression among college students (e.g., Ingram et al., 1983).

Daily Mood Ratings and Event Descriptions. Subjects completed a "Mood and Event Report" each evening for 56 consecutive days. This daily report form contained several mood adjective rating scales and several questions about events that happened that day. The mood adjectives were rated in response to the following question: "How much of each of the following emotions did you experience today?" Subjects responded on a 6-point response scale, anchored with 1 = "not at all" and 6 = extremely much." The positive mood adjectives rated were *happy, joyful, pleased,* and *enjoyment.* The negative mood adjectives rated were *unhappy, depressed, frustrated, angry,* and *worried.* These adjectives were selected on the basis of a factor analysis of a large number of emotion adjectives rated on a daily basis (Diener & Larsen, 1984) and have been used in several published research projects on daily mood (e.g., Larsen & Diener, 1985, 1987). The positive mood adjectives are averaged to form a daily Positive Affect (PA) score, and the negative mood ratings are averaged to form a daily Negative Affect (NA) score. Diener and Larsen (1984) report that these PA and NA composite scores obtain a coefficient alpha of .89 and .84, respectively. These coefficients are quite high considering that the summary scores are based on only a few items each. The mood data thus consist of daily reports of Positive and Negative Affect for each of 62 subjects on each of 56 consecutive days.

Subjects also responded to four questions on their daily report form about the events that occurred each day: (1) "What event most influenced your positive affect today?" (2) "How good was this event?" (3) "What event most influenced your negative affect today?" and (4) "How bad was this event?" Questions 1 and 3 were open-ended and subjects responded by writ-

ing a brief description of each event. Questions 2 and 4 were answered using a 4-point rating scale anchored with 1 = "slightly good" or "slightly bad" (depending on whether they were rating the good or bad event), 2 = "moderately good" or "moderately bad," 3 = "very good" or "very bad," and 4 = "extremely good" or "extremely bad." These "goodness" and "badness" ratings assigned by the subjects to their own life events will be referred to as *subjective event ratings.*

An attributional rating was also made by each subject for each event recorded each day. Subjects were instructed to evaluate whether the occurrence of the event was due to them or due to the actions of others. Subjects rated each event on a 7-point attribution rating scale, with 1 anchored as "due to others" and 7 anchored as "due to me."

Subjects completed the daily report form in the evening before retiring. To ensure compliance, subjects were required to turn in each completed form the following day, except for weekends, after which they turned in the reports for Friday, Saturday, and Sunday on Monday.

Objective Ratings of the Daily Life Events. The daily event descriptions that each subject wrote down were transcribed onto rating sheets and given to a team of nine undergraduate raters. These raters were blind as to the purpose of the study and to the identity of the subjects. Occasionally, an event description was missing or illegible. In all, the total number of ratable good-event descriptions was 3,064 and the total number of ratable bad-event descriptions was 2,907. The raters were instructed to judge "How objectively good or bad is this event for the average college student?" Raters used a scale from 1 to 9. The middle point (5) was anchored as "neutral," points 6 through 9 were anchored, respectively, as "slightly good," "moderately good," "very good," and "extremely good," and points 4 through 1 were anchored, respectively, as "slightly bad," "moderately bad," "very bad," and "extremely bad."[3]

The team of nine raters underwent an initial training session and several retraining sessions, in which they practiced rating events and discussed and resolved discrepancies when two or more raters gave the same event very different ratings. Raters were also guided by a set of "goodness" and "badness" rating norms for events typical to college students. In a prior study, we had gathered a large number of daily life event descriptions from college students. This list of typical life events was narrowed down to 172 by eliminat-

[3]These objective event ratings were rescaled prior to analysis. This was done in order to have the objective event ratings on a metric where low numbers indicated less extreme events and high numbers indicated more extreme events. Objective events rated as "neutral" were assigned the code of 0, "slightly good" and "slightly bad" events were given the value of 1, "moderately good" and "moderately bad" events were given the value of 3, and "extremely good" and "extremely bad" events were given the value of 4.

ing redundancies and events that were highly specific or unique. Normative ratings of each of these events were then obtained from several hundred college students who provided ratings of "How good or bad is this event for the average college student?" The means of these ratings served as norms for the raters in the present study. That is, out of all the events reported for the present study, most were similar to at least one of the 172 normed events. (This list of normed events, plus their normative ratings, is available from the first author.)

Each of the nine raters rated an approximately equal number of events, thereby ensuring that no single rater would bias the results. In order to assess interrater reliability, slightly over half of the event descriptions were rated by two out of the nine raters. A total of 3,605 event descriptions were rated by two raters. Across all of these event ratings the intraclass correlation (McNemar, 1969) between raters was .89. Owing to this high degree of interrater agreement, a mean rating was computed for those events rated by two raters. These "goodness" and "badness" ratings assigned to the daily event descriptions by the raters will be referred to as *objective event ratings.*

The raters also coded each event as to whether it referred to something *external* to the subject (i.e., their bike got a flat tire, they received an A+ on a test) or whether it referred to something *internal* or represented a self-focused event (i.e., preoccupied with anticipation, worried over health matters). Across the events that were coded by two raters, there was agreement on 96% of the internal/external event codings. The 4% of the events on which the raters disagreed were excluded from analysis.

RESULTS

Private Self-Consciousness, Depression, and Internal Focus of Attention

The Pearson product-moment correlation between the BDI and PSC subscale was .29 ($p < .05$).[4] This value is very close to those reported by previous researchers who have examined the relationship between questionnaire measures of depression and private self-consciousness (e.g., Ingram & Smith, 1984; Smith & Greenberg, 1981; Smith et al., 1985). The present finding thus provides another replication of the relationship between cross-sectional measures of private self-consciousness and depression.

[4]All correlations are Pearson correlations. Since hypotheses in this study are directional, one-tailed significance tests were used.

In order to quantify the degree of self-focused content in the life events reported over the 2-month sampling period, a count was first made of the total number of events coded by the raters as internal or external for each subject. Then the degree of self-focus was computed for each subject by subtracting the number of external events from the number of internal events. A high daily self-focus score thus indicates that the subject reported more internal than external events over the 56 days of the study. Two such daily self-focus scores were created: one for the positive events reported and another for the negative events reported by each subject.

Correlations between these daily self-focus scores and the PSC and BDI are presented in Table I. For the negative life events, it can be seen that depression and private self-consciousness both correlate significantly with the extent of daily self-focus. This finding indicates that high PSC and BDI subjects, when asked to describe the worst events that happened to them on a daily basis, report significantly more events that are coded as self-focused. Identical analyses applied to the positive events showed no such relationships. That is, when subjects were asked to describe their most positive experiences each day, no relationship was found between the number of events coded as self-focused and either the PSC or the BDI.

In terms of attributions for the events reported, average scores were computed over the 56 sample days for each subject's ratings on the question of the extent to which the event was due to them or due to others. These causal attribution scores were computed separately for the positive and negative life events. Thus, each subject has two causal attribution scores—one for the positive events and one for the negative events—both consisting of the average internal attributional rating aggregated within subjects over the 56 occasions in this sample. Correlations between these aggregated attribution scores and the PSC and BDI are also presented in Table I. For the negative events, it can be seen that the degree of internal attribution correlates significantly with the depression measure but not significantly with the PSC. It may be that internal attributions of responsibility for negative life events occur only in more severe forms of depression and are not necessarily implicated in dispositional self-consciousness. Similar correlations computed between the average attribution rating and the PSC and BDI for the positive events were insignificant on both counts.

It might be argued that depressed or high private self-conscious individuals simply have more severe events in their daily lives. Perhaps high scorers on the BDI or the PSC simply have more frequent events in their daily lives that are extremely or very negative, and this accounts for their elevated self-focus or elevated depression. To examine this alternative explanation, correlations were computed between the PSC, the BDI, and the *number* of events rated as extremely, very, and moderately negative, as well as the number of

Table I. Correlations Between Private Self-Consciousness, the Beck Depression Inventory, and Parameters of Daily Mood and Event Ratings

	PSC[a]	BDI[a]
Negative life events		
Self-focus	.23[b]	.35[c]
Internal attribution	.11	.33[c]
Mood-event linkage	−.32[c]	−.19
Positive life events		
Self-focus	.06	.04
Internal attribution	.10	.06
Mood-event linkage	−.09	−.07

[a]PSC = Private Self-Consciousness Subscale, BDI = Beck Depression Inventory.
[b]$p < .05$.
[c]$p < .01$.

events rated as extremely, very, and moderately positive. None of these correlations were significant (at $p < .05$, two-tailed), suggesting that neither private self-consciousness nor depression is associated with having *frequent* severe life events, at least not in this sample.

Linkage Between Daily Mood and Life Events

Mood-event linkage scores were computed using within-subject correlations. For each subject, a correlation was computed between his/her daily mood ratings and the raters' evaluation of the severity of each daily event. Two within-subject correlations were computed: one between daily self-reported positive affect and the objective ratings of the positive life events, and another between daily self-reports of negative affect and the objective ratings of the negative events. These within-subject correlations indicate the degree to which the subjects' moods are linked to the events in their daily lives. A high within-subject correlation would indicate strong covariation between the individual's daily moods and daily life events, and a low or insignificant correlation would indicate that the subject's daily moods are not linked to the objective circumstances of their daily life. These within-subject correlations were transformed to z scores (McNemar, 1969) since correlation coefficients tend toward nonnormality. These z-transformed within-subject correlations are referred to as "mood-event linkage" scores.

Correlations between PSC and the BDI and the mood-event linkage scores are also presented in Table I. It can be seen that, for the negative life

events, there is a significant tendency for high PSC individuals to show a low linkage between their daily moods and the severity of their daily life events. That is, in terms of negative affect, the high PSC individuals appear *not* to be responding to the objective conditions of their life. A similar tendency was also found for the BDI, although the relationship between depression and a lower linkage between moods and life events did not quite reach significance. A similar analysis of the linkage between positive moods and positive life events showed no relationship to either the PSC or the BDI.

DISCUSSION

The attentional model of depression (Smith & Greenberg, 1981) suggests that dispositional self-focus plays an important role in the etiology and maintenance of depression. The tendency to allocate attention inward toward private aspects of the self is thought to exacerbate depressive states. Prior research evidence in support of a relationship between private self-consciousness and depression has taken two forms: (1) Questionnaire measures of PSC and depression are found to correlate significantly (Ingram & Smith, 1984; Smith & Greenberg, 1981), and (2) experimental manipulations and measures of PSC and depressive mood are found to be related to each other (Brockner, Hjelle, & Plant, 1985; Carver & Scheier, 1981; Ingram & Smith, 1984; Pyszczynski & Greenberg, 1985; Pyszczynski et al., 1987). A major gap in this literature, however, is a test of the self-focus-depression hypothesis using naturalistic data. That is, the question of whether depressive persons are naturally self-focused in their ongoing day-to-day lives had yet to be asked.

The present study employed a daily experiential sampling methodology (Hormuth, 1986) to examine the degree of naturalistic self-focus over a 2-month sampling period for 62 subjects. Subjects scoring high on the depression measure were found to report more negative life events that were rated as self-focused. The significant positive correlation was also found between the amount of naturalistic self-focus to negative life events and a measure of PSC. These findings conceptually replicate the prior results mentioned above. The fact that we used temporally aggregated data gathered naturalistically during the subjects' ongoing day-to-day lives lends a degree of ecological validity to the self-focus/depression hypothesis. Another methodological strength of the current results is that we employed raters to assess the degree of self-focus, thus avoiding total reliance on self-report.

Internal focus of attention is a concept that can have several meanings. It could refer to simply reverberating and ruminating over the external events of the day. Here the thought content still concerns some objective event. In this study, such thoughts would not be considered internally focused. Rather,

we were more concerned with thoughts that elaborated on events to such a degree that the *internal* representation clearly becomes the stimulus for negative affect. Thoughts that were concerned with attribution, guilt or failure fantasies, or anticipation of negative consequences are thus examples of the types of thoughts we considered to be internally focused.

Another important result from the current study concerns the differential findings for positive versus negative life events. That is, the relationship between depression and self-focus of attention held only for negative life events. This was not an unexpected finding, given previous results showing that the self-focus/depression relation holds mainly for negative events (e.g., Ingram et al., 1983). The fact that nondepressed individuals do not self-focus after negative experiences has been interpreted as a defensive process that they employ to protect their self-esteem (Pyszczynski & Greenberg, 1985; Tennen & Herzberger, 1987). Depression may represent a breakdown of this normal defensive functioning in the face of negative life events. Nondepressed individuals appear to maintain an attentional bias when confronted with a negative life event, a bias that seems to defensively distort or lessen the involvement of the self with that negative event (Alloy & Abramson, 1979; Lewinsohn, Steinmetz, Larson, & Franklin, 1981). Depressed individuals in the present study showed significantly more self-focus to negative events than did their nondepressed counterparts. Thus, the current results strengthen the position that depression is related not to a *general* self-focusing tendency but rather to a specific tendency to self-focus when confronted with negative events. This highlights the "power of nonnegative thinking" in that avoiding self-focus after negative events may be more important to mental health then emphasizing self-focus after positive events.

Our treatment of the self-focus/depression hypothesis has been somewhat narrow, in the sense that we considered only the presence or absence of self-focus to positive and negative life events. A more detailed consideration of the process of self-focus during and after negative life events is warranted. Certainly nondepressed individuals think seriously about the negative events in their lives, but they also appear inclined to contemplate and enact constructive coping strategies in relation to these negative events. What is it about the attentional process of the depressive person that seems to prevent the movement from self-preoccupation to active coping? Why is it that depressive persons appear unable or unsuccessful in their attempts to reshape negative events into potentially positive outcomes? The answer to these questions will come from exploring more fully and more precisely what is meant by the nature of internal focus of attention in the face of negative life events.

Another important result from the present study concerns the finding that PSC was related to a lower linkage between daily moods and objective life events. High PSC subjects exhibited moods that were somewhat disengaged from the severity of their objectively rated daily life circumstances.

Again, this effect held only for negative life events. This would imply that the negative moods of high PSC individuals are less predictable from the objective conditions of their daily lives. To the objective observer, the negative moods of high PSC individuals would appear to be somewhat random, with negative emotional episodes that appear to have no apparent objective trigger.

This unpredictability of negative emotions from objective life circumstances for high PSC subjects suggests that, for such persons, negative emotions may be elicited mainly by internal causes. And because high PSC individuals are more internally focused when confronted with negative events, it follows that their ongoing moods would be somewhat less tied to objective conditions of their lives than would those of the low PSC individuals, who are not as self-focused during negative life events.

It is interesting to speculate about how high PSC individuals obtain a low linkage score between their moods and negative life events. Several possibilities seem reasonable. High PSC subjects could respond with strong negative affect to all types of negative life events, no matter how trivial or severe. A low linkage score would also result from a random mood pattern or from low variance in daily mood scores (i.e., from consistently high negative affect). A more psychologically interesting possibility would be that the high PSC individuals show more carryover in their daily moods. That is, if something negative happens, high PSC individuals become sad and may stay sad for a few days, whereas low PSC individuals may pull themselves out of negative states more quickly following the same negative event. Some indirect support for this interpretation is given by Zevon and Rounds (1985), who used autocorrelation techniques on daily mood scores to examine day-to-day mood carryover effects. These authors found that the perseveration of mood states over time was positively related to measures of depression and psychological distress. Exploring these speculations would provide interesting topics for future research on the relation between private self-consciousness, daily mood, and depression.

REFERENCES

Abramson, S. Y., Seligman, M. E. P., & Teasdale, J. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology, 87,* 49-74.

Alloy, L. B., & Abramson, L. Y. (1979). Judgment of contingency in depressed and nondepressed students: Sadder but wiser? *Journal of Experimental Psychology: General, 108,* 441-485.

Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects.* New York: Harper & Row.

Brockner, J., Hjelle, L., & Plant, R. W. (1985). Self-focused attention, self-esteem, and the experience of state depression. *Journal of Personality, 53,* 425-434.

Bumberry, W., Oliver, J. M., & McClure, J. N. (1978). Validation of the Beck Depression Inventory in a university population using psychiatric estimate as the criterion. *Journal of Consulting and Clinical Psychology, 46,* 150-155.

Carver, C., & Glass, D. (1976). The self-consciousness scale: A discriminant validity study. *Journal of Personality Assessment, 40,* 169-172.

Carver, C., & Scheier, M. F. (1981). *Attention and self-regulation: A control-theory approach to human behavior.* New York: Springer-Verlag.

Derry, P. A., & Kupier, N. A. (1981). Schematic processing and self-reference in clinical depression. *Journal of Abnormal Psychology, 90,* 286-297.

Diener, E., & Larsen, R. J. (1984). Temporal stability and cross-situational consistency of affective, behavioral, and cognitive responses. *Journal of Personality and Social Psychology, 47,* 871-883.

Fenigstein, A., Scheier, M., & Buss, A. (1975). Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology, 43,* 522-527.

Hormuth, S. E. (1986). The sampling of experiences in situ. *Journal of Personality, 54,* 262-293.

Ingram, R. E., & Smith, T. W. (1984). Depression and internal versus external focus of attention. *Cognitive Therapy and Research, 8,* 139-152.

Ingram, R. E., Smith, T. W., & Brehm, S. S. (1983). Depression and information processing: Self-schemata and the encoding of self-referent information. *Journal of Personality and Social Psychology, 45,* 412-420.

Kuiper, N. A., MacDonald, M. R., & Derry, P. A. (1983). Parameters of a depressive self-schema. In J. Suls & A. G. Greenwald (Eds.), *Psychological perspectives on the self* (Vol. 2, pp. 191-218). Hillsdale, NJ: Erlbaum.

Larsen, R. J., & Diener, E. (1985). A multitrait-multimethod examination of affect structure: Hedonic level and affect intensity. *Personality and Individual Differences, 6,* 631-636.

Larsen, R. J., & Diener, E. (1987). Individual differences in affect intensity: A review. *Journal of Research in Personality, 27,* 1-39.

Larsen, R. J., Diener, E., & Emmons, R. A. (1986). Affect intensity and reactions to daily life events. *Journal of Personality and Social Psychology, 51,* 803-814.

Lewinsohn, P. M., Mischel, W., Chaplin, W., & Barton, R. (1980). Social competence and depression: The role of illusory self-perceptions. *Journal of Abnormal Psychology, 89,* 203-212.

Lewinsohn, P. M., Steinmetz, J. L., Larson, D. W., & Franklin, J. (1981). Depression-related cognitions: Antecedent or consequence? *Journal of Abnormal Psychology, 90,* 213-219.

McNemar, Q. (1969). *Psychological statistics.* New York: Wiley.

Pyszczynski, T., & Greenberg, J. (1985). Depression and preference for self-focusing stimuli after success and failure. *Journal of Personality and Social Psychology, 49,* 1066-1075.

Pyszczynski, T., Holt, K., & Greenberg, J. (1987). Depression, self-focused attention, and expectancies for positive and negative future life events for self and other. *Journal of Personality and Social Psychology, 52,* 994-1001.

Smith, T. W., & Greenberg, J. (1981). Depression and self-focused attention. *Motivation and Emotion, 5,* 323-331.

Smith, T. W., Ingram, R. E., & Roth, D. L. (1985). Self-focused attention and depression: Self-evaluation, affect, and life stress. *Motivation and Emotion, 9,* 381-389.

Tabachnik, N., Crocker, J., & Alloy, L. B. (1983). Depression, social comparison, and the false-consensus effect. *Journal of Personality and Social Psychology, 45,* 688-699.

Tennen, H., & Herzberger, S. (1987). Depression, self-esteem, and the absence of self-protective attributional biases. *Journal of Personality and Social Psychology, 52,* 72-80.

Turner, R., Scheier, M., Carver, C., & Ickes, W. (1978). Correlates of self-consciousness. *Journal of Personality Assessment, 42,* 285-289.

Zevon, M. A., & Rounds, J. B. (1985). *Intraindividual mood and its relation to personality: Time-series analyses.* Paper presented at the annual convention of the American Psychological Association, Los Angeles.