Depression and Self-Focused Attention¹

Timothy W. Smith²

Brown University Medical School

Jeff Greenberg

University of Kansas

Recent research on self-focused attention has indicated effects that parallel several cognitive and affective phenomena associated with depression. Specifically, discrepancies between perceived real and ideal self, increased affective response, self-attribution for negative events, and accurate self-reports occur both in depression and as a result of self-focused attention. A study is reported that investigated the relationship between depression and a measure of private self-consciousness, a dispositional measure of the tendency to attend to one's inner thoughts and feelings. As predicted, a reliable positive relationship was found. The potential role of self-focused attention in maintaining and exacerbating depression was discussed.

Cognitive factors associated with depression have been the subject of a considerable amount of recent research and theory. Beck's (1967) model of depression assigns primary importance to distorted patterns of thought. Recent learned helplessness models of depression (Abramson, Seligman, & Teasdale, 1978; Miller & Norman, 1979) also focus on cognitive variables (i.e., causal attributions) as important etiological and maintaining factors. A significant amount of research has accumulated to indicate that distorted thought (e.g., Krantz & Hammen, 1979; Blaney, Behar, & Head, 1980), irrational beliefs (Nelson, 1977; LaPointe & Crandell, 1980), and differences in causal attributions (e.g., Blaney et al., 1980; Rizley, 1978; Seligman, Abramson, Semmel, & Von Baeyer, 1979; Gong-Guy & Hammen, 1980) are associated with depression.

¹The order of authorship was determined randomly.

²Address all correspondence to Timothy W. Smith, Butler Hospital, 345 Blackstone Boulevard, Providence, Rhode Island 02906.

324 Smith and Greenberg

Although several cognitive variables have been studied extensively, the nature of attentional processes associated with depression has only recently become of theoretical interest (Rehm, 1977; Kanfer & Hagerman, 1981). In particular, the degree and nature of attention to the self in depression have been cited as potentially important factors in the maintenance and exacerbation of depression. The purpose of the present paper is twofold: first, to discuss parallels between findings concerning the effects of self-focused attention and phenomena associated with depression, and second, to examine the statistical association of depression and self-focused attention. An overview of the similarities between the effects of self-focused attention and depression suggests that depression may be associated with increases in self-focused attention. It is hoped that a comparison of recent social psychological theory and research on the effects of self-focused attention and research on affective and cognitive factors in depression will provide some heuristically valuable insights into the possible role of self-focused attention in depression.

The consequences of self-focused attention have been elaborated in objective self-awareness theory (Duval & Wicklund, 1972; Wicklund, 1975) and self-consciousness theory (Buss, 1980; Feningstein, Scheier, & Buss, 1975). Objective self-awareness theory is primarily concerned with transitory states of self-focused attention, while self-consciousness theory suggests individual differences (i.e., traits) in the tendency toward self-focused attention. Self-consciousness theory further distinguishes between private self-consciousness, the dispositional tendency to focus on one's inner thoughts and feelings, and public self-consciousness, the dispositional awareness of one's self as a social object that has an effect on others.

An important parallel between depressive phenomena and selffocused attention is in the area of self-esteem. Low self-esteem is an important factor in clinical descriptions of depression (e.g., Beck, 1967), and empirical evidence indicates that depression is associated with a discrepancy between the individual's ideal and perceived self (Laxer, 1964; Nadich, Gargan, & Michael, 1975). Self-focused attention has been suggested to cause individuals to become increasingly self-critical (Duval & Wicklund, 1972), and experimentally induced self-focused attention has been found to produce an increase in the discrepancy between ratings of the ideal self and the perceived self as well as reductions in self-esteem (Ickes, Wicklund, & Ferris, 1973). Similarly, the dispositional tendency toward self-focused attention (i.e., private self-consciousness) has been found to be reliably correlated with lower self-esteem (Turner, Scheier, Carver, & Ickes, 1978). These analogous observations and findings suggest that the low self-esteem associated with depression may be caused or maintained, in part, by selffocused attention.

A second parallel between depression and self-focused attention involves causal attributions. Research has indicated that as compared to nondepressed individuals, depressed subjects tend to attribute negative events to internal factors (Blaney et al., 1980; Gong-Guy & Hammen, 1980; Kuiper, 1978; Rizley, 1978; Seligman et al., 1979). Similarly, self-focused attention has been found to lead to increased attribution to internal factors. This has been demonstrated with self-focused attention operationalized as an experimentally induced transitory state (Duval & Wicklund, 1973) and as the personality trait known as private self-consciousness (Buss & Scheier, 1976). Thus, the tendency of depressed individuals to attribute failures to internal factors more than do nondepressed individuals may result, in part, from greater private self-consciousness or self-focused attention in depressed people.

A third parallel between depression and self-focused attention deals with affective response. Pronounced negative affect is a major characteristic of depression. Several experiments have demonstrated that self-focused attention produces increased expression of affect. High levels of private self-consciousness have been found to be associated with increased aggression following provocation, as has experimentally induced self-focused attention (Scheier, 1976). Furthermore, high levels of private self-consciousness and experimentally induced self-focused attention have been demonstrated to produce more extreme depression or elation, following Velten (1968) mood-induction procedures (Scheier & Carver, 1977). Experimentally induced self-focused attention has also been found to produce increased self-reported negative affect in psychiatric patients (Gibbons, Smith, Brehm, & Schroeder, 1980). Thus, self-focused attention may contribute to the dysphoric affect in depression.

Finally, the accuracy of certain self-reports has been found to be associated with both depression and self-focused attention. As compared to nondepressed individuals, depressed subjects have been found to more accurately estimate the contingency between their behaviors and environmental stimuli (Alloy & Abramson, 1979). Similarly, depressed individuals' self-ratings of social competence have been found to be in greater agreement with ratings by independent observers than the self-ratings of nondepressed individuals (Lewinsohn, Mischel, Chapil, & Barton, 1980). Depressed persons have also been found to be more accurate than nondepressed individuals in their recall of negative feedback (Nelson &

³Federoff and Harvey (1976) found decreased attribution of a negative outcome to internal factors using a camera as a self-focus manipulation to invoke public self-consciousness. However, this manipulation was likely to have aroused self-presentational concerns and thereby may have elicited defensive attribution.

326 Smith and Greenberg

Craighead, 1977). Research has indicated that experimentally induced self-awareness produces a greater correlation between self-reported sociability and actual social behavior (Pryor, Gibbons, Wicklund, Fazio, & Hood, 1977), and increased accuracy in self-reports of frequency of hospitalizations in mental hospital patients (Gibbons et al., 1980). In addition, private self-consciousness has been found to be associated with a higher correlation between self-reported usual aggresiveness and actual aggressive behavior (Scheier, Buss, & Buss, 1978). Thus, the increased accuracy of self-reports in depression may be due, in part, to increased self-focused attention. This result of self-focused attention may render depressed persons "sadder but wiser" (Alloy & Abramson, 1979).

The similarities in self-esteem, causal attribution, affective response, and accuracy of self-reports between depressed and self-focused individuals suggest that depression may be associated with private self-consciousness.⁴

PRESENT STUDY

To assess the extent to which depression is associated with self-focused attention, the scores of male and female college students on a self-report measure of depression and a measure of self-focused attention were correlated. The similarities between self-focused attention and depression discussed above led to the hypothesis that self-reported depression is reliably correlated with private self-consciousness.

Subjects and Procedure

Four hundred and fifteen male and female college students completed the measures in a large, group testing setting. To assess self-reported depression, subjects responded to the Dempsey (1964) D 30 scale, a 30-item factoranalytically derived subscale of the MMPI depression scale. Despite halving

⁴Most of the research on objective self-awareness discussed above used manipulations that evoke private self-awareness, which is the state that corresponds to the trait known as private self-consciousness (Buss, 1980).

the number of items, this scale has improved split-half and test-retest reliability over the original MMPI scale, as well as having improved discrimination of severity of depression. To assess dispositional focus of attention, subjects completed the self-consciousness scale (Fenigstein et al., 1975). This scale has 23 items in a Likert-type format. The scale generates three factor-analytically derived scale scores: private self-consciousness (i.e., attending to one's inner thoughts and feelings), public self-consciousness (i.e., awareness of oneself as a social object), and social anxiety (i.e., discomfort in groups). These scales are moderately correlated. Research has demonstrated the reliability, construct validity, and discriminant validity of these subscales (Fenigstein et al., 1975; Carver & Glass, 1976; Turner et al., 1978).

RESULTS

Zero-order correlations between scores on the D 30 scale and the three subscales from the self-consciousness scale are presented in Table I. As can be seen, all three subscales are reliably correlated with the depression scale. As mentioned above, the subscales exhibit a moderate degree of intercorrelation (i.e., in the present sample - private with public, .44, p < .001; public with social anxiety, .34, p < .001; private with social anxiety, .24, p < .001). In order to assess the unique association of each of these subscales with the depression scale, partial correlations eliminating the other two subscales were performed for each subscale. These partial correlations are also

Table I. Zero-Order and Partial Correlations of Private Self-Consciousness, Publ	iic
Self-Consciousness, and Social Anxiety with Depression	

CI	Zero order			Partials		
	Private	Public	Social anxiety	Private	Public	Social anxiety
Total sample $(N = 415)$	28°	.18°	.42°	.20°	04	.37°
Less depressed D30 = less than 10 ($N = 329$)	.25°	.15 ^b	.35°	.21°	01	.33°
More depressed D 30 = 10 or more ($N = 86$)	.31 ^b	.14	.24ª	.26°	12	.14

 $^{^{}a}p < .05$.

 $^{^{}b}p < .01.$

 $^{^{}c}p < .001.$

328 Smith and Greenberg

presented in Table I. As can be seen, private self-consciousness and social anxiety are reliably correlated with the depression scale, while the zero-order correlation between public self-consciousness and depression appears to be a result of correlations with the other subscales.

Since the sample in the present study consisted mainly of nondepressed individuals, the sample was divided in order to examine correlations among the variables for a subsample (N = 87) of the more depressed individuals. A sample of individuals reporting at least mild depression provided a test of the hypothesized relationship between self-focused attention and depression where the level of depression was more likely to approximate a clinically meaningful one. The sample was divided so that the more depressed subsample consisted of the highest 20% of the scores on the D 30 (score = 10 and above, T = 60, Dempsey's 1964 norms). The zero-order and partial correlations for these samples also appear in Table I. As can be seen, the relationship between private self-consciousness and depression is reliable and slightly stronger for the depressed group. While the partial correlations between depression and social anxiety for the total sample and the nondepressed subsample are significant, the partial correlation between social anxiety and depression for the more depressed subsample is not. Thus, it may be that for the more depressed individuals, the relationship between depression and social anxiety may result from the association between self-consciousness and both depression and social anxiety. Indeed, this possibility is consistent with the finding that the correlation between self-consciousness and social anxiety for the more depressed group is .51, p < .001, while for the less depressed group it is only .12, p < .02.

DISCUSSION

These results supported the hypothesis that there is a reliable positive relationship between depression and private self-consciousness. Of course, given the correlational design of the present study, the nature of the causal relationship between depression and the tendency to attend to one's inner thoughts and feelings cannot be specified. Several other qualifications are also in order. The magnitude of the correlation between depression and private self-consciousness obtained in the present study is not large. However, it is comparable to correlations reported in other research on cognitive factors in depression (e.g., Blaney et al., 1980; Krantz & Hammen, 1979; Seligman et al., 1979). Also, the nature of the sample population used in the present study may suggest limitations on generalizability to clinical populations. However, previous research has suggested that meaningful generalization from the self-reports of depression in college students to established psychiatric criterion can be made (Bumberry, Oliver, & McClure, 1978;

Hammen, 1980). Furthermore, the partial correlation between private selfconsciousness and depression was actually somewhat larger in the more depressed sample. Thus, the use of an only moderately depressed sample may have actually reduced the size of the relationship. It should be recognized that depression is not a homogeneous entity (DePue & Monroe, 1978; Overall & Zissok, 1980). Therefore, self-focused attention may be a factor only in certain types of depression. Alternately the effects of self-focused attention may vary as a function of the predominant affective states, cognitions, and precipitating events associated with particular categories of depression. Finally, it should be noted that other findings have not been entirely consistent with the present results. In a briefly reported, peripheral analysis, Sacco and Hokanson (1978) compared scores on the selfconsciousness scale for depressed and nondepressed groups. Of the three subscales, only social anxiety was reliably different between groups. However, the investigators did not correct for intercorrelation of the scales and did not report means of the subscales or correlations between the subscales and depression.

While the correlational design of the present study limits the conclusions that can be drawn, the finding that self-focused attention and depression are reliably correlated as well as the parallel phenomena discussed above, indicates that the consideration of the role of self-focused attention may be heuristically valuable in the understanding and treatment of depression. Research on the effects of self-focused attention has demonstrated that self-focused attention can exacerbate existing negative affect, increase the individual's perceived discrepancy between the real and ideal self, increase the accuracy of self-reports, and increase the tendency to attribute negative outcomes to oneself. These factors could obviously contribute to the extreme affect, self-criticism, and pessimism associated with depression.

Self-focused attention may contribute to the occurrence of these depressive features in response to stressful life events or to the maintenance and exacerbation of these depressive features in more lasting depressions. Several causal pathways are possible. For example, depressive experiences may cause chronic self-focused attention, which may in turn maintain or exacerbate disphoric affect and altered cognitive processes (i.e., self-evaluation, causal attributions). Alternately, depressive experiences incurred by individuals predisposed to self-focused attention may result in more pronounced affective and self-evaluative responses.

Additional evidence concerning the role of private self-consciousness in depression along with further research on the nature of the mechanisms that cause high levels of private self-consciousness may eventually lead to inclusion of this variable as a target in therapies based on cognitive models of depression. Recent research has demonstrated that manipulations designed to reduce self-focused attention improve the task performances of

individuals with low self-esteem (Brockner 1979a, 1979b; Brockner & Hulton, 1978). This suggests that modification of attentional focus may indeed be relevant to the treatment of depression. By attenuating the likely negative effects of chronic self-focus on depressed individuals, it is possible that the effectiveness of cognitive therapies for depresseion (e.g., Beck, Rush, Shaw, & Emery, 1979) may be enhanced.

REFERENCES

- Abramson, L., Seligman, M., & Teasdale, J. Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, 1978, 87, 47-74.
- Alloy, L., & Abramson, L. Judgment of contingency in depressed and nondepressed students: Sadder but wiser? *Journal of Experimental Psychology, General*, 1979, 108, 441-485.
- Beck, A. T. Depression: Clinical, experimental and theoretical aspects. New York: Hoeber, 1967.
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. Cognitive therapy of depression. New York: Guilford Press, 1979.
- Blaney, P., Behar, V., & Head, R. Two measures of depressive cognitions: Their association with depression and with each other. *Journal of Abnormal Psychology*, 1980, 89, 678-682.
- Brockner, J. Self-esteem, self-consciousness, and task performance: Replications, extensions, and possible explanations. *Journal of Personality and Social Psychology*, 1979, 37, 447-461. (a)
- Brockner, J. The effects of self-esteem, success-failure, and self-consciousness on task performance. *Journal of Personality and Social Psychology*, 1979, 37, 1732-1741. (b)
- Brockner, J., & Hulton, A. J. B. How to reverse the vicious cycle of low self-esteem: The importance of attentional focus. *Journal of Experimental Social Psychology*, 1978, 14, 564-578.
- Bumberry, W., Oliver, J., & McClure, J. Validation of the Beck Depression Inventory in a university population using psychiatric estimate as the criterion. *Journal of Consulting* and Clinical Psychology, 1978, 46, 150-155.
- Buss, A. Self-consciousness and social anxiety. San Francisco: W. H. Freeman, 1980.
- Buss, D., & Scheier, M. Self-consciousness, self-awareness and self-attribution. Journal of Research in Personality, 1976, 10, 463-468.
- Carver, C., & Glass, D. The self-consciousness scale: A discriminant validity study. *Journal of Personality Assessment*, 1976, 40, 169-172.
- Dempsey, P. An unidimentional depression scale for the MMPI. *Journal of Consulting Psychology*, 1964, 28, 364-370.
- DePue, R., & Monroe, S. Learned helplessness in the perspective of the depressive disorders: Conceptual and definitional issues. *Journal of Abnormal Psychology*, 1978, 87, 3-20.
- Duval, S., & Wicklund, R. A theory of objective self-awareness. New York: Academic Press, 1972.
- Duval, S., & Wicklund, R. Effects of objective self-awareness on attribution of causality. Journal of Experimental Social Psychology, 1973, 9, 17-31.
- Federoff, N., & Harvey, J. Focus of attention, self-esteem, and the attribution of causality. Journal of Research in Personality, 1976, 10, 336-345.
- Fenigstein, A., Scheier, M., & Buss, A. Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology*, 1975, 43, 522-527.
- Gibbons, F., Smith, T., Brehm, S., & Schroeder, D. Self-awareness and self-confrontation: The role of focus of attention in the process of psychotherapy. Unpublished manuscript, University of Kansas, 1980.
- Gong-Guy, E., & Hammen, C. Causal perceptions of stressful events in depressed and non-depressed outpatients. *Journal of Abnormal Psychology*, 1980, 89, 662-669.

- Hammen, C. Depression in college students: Beyond the Beck Depression Inventory. *Journal of Consulting and Clinical Psychology*, 1980, 48, 126-128.
- Ickes, J., Wicklund, A., & Ferris, C. Objective self-awareness and self-esteem. *Journal of Experimental Social Psychology*, 1973, 9, 202-219.
- Kanfer, F. J., & Hagerman, S. The role of self-regulation. In L. P. Rehm (Ed.), Behavior therapy for depression: Present status and future directions, New York: Academic Press, 1981.
- Krantz, S., & Hammen, C. Assessment of cognitive bias in depression. *Journal of Abnormal Psychology*, 1979, 88, 611-619.
- Kuiper, N. Depression and causal attributions for success and failure. *Journal of Personality and Social Psychology*, 1978, 36, 236-246.
- LaPointe, K., & Crandell, C. Relationship of irrational beliefs to self-reported depression. Cognitive Therapy and Research, 1980, 4, 247-250.
- Laxer, R. Self-concept changes of depressive patients in general hospital treatment. *Journal of Consulting Psychology*, 1964, 28, 214-219.
- Lewsinson, P., Mischel, W., Chaplin, W., & Barton, R. Social competence and depression: The role of illusory self-perceptions. *Journal of Abnormal Psychology*, 1980, 89, 203-212.
- Miller, I. W., & Norman, W. H. Learned helplessness in humans: A review and attribution theory model. *Psychological Bulletin*, 1979, 86, 93-118.
- Nadich, M., Gargan, M., & Michael, L. Denial, anxiety, locus of control, and the discrepancy between aspirations and achievements as components of depression. *Journal of Ab*normal Psychology, 1975, 84, 1-9.
- Nelson, R. E. Irrational beliefs and depression. Journal of Consulting and Clinical Psychology, 1977, 45, 1190-1191.
- Nelson, R. E., & Craighead, W. E. Selective recall of positive and negative feedback, self-control behaviors, and depression. *Journal of Abnormal Psychology*, 1977, 86, 379-388.
- Overall, J., & Zisook, S. Diagnosis and the phenomenology of depressive disorders. *Journal of Consulting and Clinical Psychology*, 1980, 48, 626-634.
- Pryor, J., Gibbons, F., Wicklund, R., Fazio, R., & Hood, R. Self-focused attention and self-report validity. *Journal of Personality*, 1977, 45, 513-527.
- Rehm, L. P. A Self-control model of depression. Behavior Therapy, 1977, 8, 787-804.
- Rizley, R. Depression and distortion in the attribution of causality. *Journal of Abnormal Psychology*, 1978, 87, 32-48.
- Sacco, W., & Hokanson, J. Expectations of success and anagram performance of depressives in a public and private setting. *Journal of Abnormal Psychology*, 1978, 87, 122-130.
- Scheier, M. Self-awareness, self-consciousness, and angry aggression. *Journal of Personality*, 1976, 44, 627-644.
- Scheier, M., Buss, A., & Buss, D. Self-consciousness, self-report of aggressiveness, and aggression. *Journal of Research in Personality*, 1978, 12, 133-140.
- Scheier, M. F., & Carver, C. Self-focused attention and the experience of emotion: Attraction, repulsion, elation, and depression. *Journal of Personality and Social Psychology*, 1977, 35, 625-636.
- Seligman, M., Abramson, L., Semmel, A., & Von Baeyer, C. Depressive attribution style. Journal of Abnormal Psychology, 1979, 88, 242-248.
- Turner, R., Scheier, M., Carver, C., & Ickes, W. Correlates of self-consciousness. *Journal of Personality Assessment*, 1978, 42, 285-289.
- Velten, E. A laboratory task for induction of mood states. Behavior Research and Therapy, 1968, 6, 473-482.
- Wicklund, R. Objective self-awareness. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 8). New York: Academic Press, 1975.