

The Relationship Among Major Depression, Depressive Symptoms, and Self-Preoccupation

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The present study investigates whether highly self-preoccupied people (exhibiting a tendency to focus primarily on the self and to maintain self-focused attention) were more likely to experience major depressive episodes (MDEs) than those without such tendencies. One hundred nineteen young community residents, aged 18 to 21, took part in semistructured interviews, during which we investigated their past and present history of mental illness, including MDEs, as delineated by the Diagnostic and Statistical Manual of Mental Disorders (3rd ed. rev.; DSM-III-R). Self-preoccupation was measured by the Self-Preoccupation Scale (SPS). Of the 119 participants interviewed, the lowest and highest quarters in the SPS scores formed the low- and high-self-preoccupation (SP) groups. The lifetime prevalence of the DSM-III-R MDE was significantly greater among those high in SP than in the low SP group. Moreover, the high-SP group had significantly more depressive symptoms than the low-SP group. The contributory role of self-preoccupation to suicide ideation and the interpersonal aspects of self-preoccupation were discussed.

KEY WORDS: depression; self-consciousness; self-focus; diagnostic criteria; community residents.

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INTRODUCTION

It has been reported that self-focused attention and private self-consciousness are significant to the development and continuance of depression (e.g., Ingram, 1990; Lewinsohn, Hoberman, Teri, & Hautzinger, 1985; Pyszczynski and Greenberg, 1987). A tendency to focus attention on private aspects of the self can be assessed by the Private Self-Consciousness Scale (PSCS; Fenigstein, Scheier, & Buss, 1975). The PSCS is a 10-item subscale that is factor analytically derived from the Self-Consciousness Scale (Fenigstein *et al.*, 1975) and measures the tendency to attend to inner feelings and thoughts. Significant but weak correlations between private self-consciousness scale scores and depression scale scores have been reported (e.g., Ingram & Smith, 1984; Smith & Greenberg, 1981; Smith, Ingram, & Roth, 1985). For example, Ingram and Smith (1984, Expt 1) administered the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and the PSCS to three undergraduate subjects and found significant but weak correlations between the BDI scores and the PSCS scores [$r(166) = .23, p < .003$, to $r(213) = .32, p < .001$].

Recent studies indicate that *prolonged self-focusing* (a state) and *self-preoccupation* (a trait) have been more important in the development and continuance of depression (Greenberg & Pyszczynski, 1986; Sakamoto, 1993, 1998, 1999; cf., Ingram, 1990; Nolen-Hoeksema, 1991). Greenberg and Pyszczynski (1986) demonstrated that depressed students prolonged their duration of self-focusing after experiencing failures, when compared with their nondepressed counterparts. Sakamoto (1993) demonstrated that, after their self-focusing was elevated, depressed students were more likely to remain in that state and less likely to turn their attention to a task that required concentration. Sakamoto (1998) recognized the tendency for persistent self-focusing and coined the term "self-preoccupation," defined as a tendency to focus more on the self than on external objects and to *maintain* this self-focused attention, and developed the Self-Preoccupation Scale (SPS), which consists of 11 items. The SPS differs from the PSCS in that the latter does not consider the tendency to prolong self-focusing. For example, while one of the PSCS items is "I'm alert to changes in my mood," a comparable item in the SPS is "Whenever I experience different emotions (e.g., depression, happiness, etc.), I continuously wonder why I feel that way."

Previous studies (Sakamoto, 1998, 1999) have indicated the usefulness of the SPS in explaining and predicting depression. Sakamoto (1998) administered the BDI, the Zung (1965) Self-Rating Depression Scale (SDS), the PSCS, and the SPS to Japanese undergraduates. He found that the correlations between the SPS and the BDI and SDS were moderate

[$r(225) = .44$, and $r(340) = .41$, respectively] and were significantly larger than the correlations between the PSCS and the BDI and SDS [$\chi^2(1) = 6.45$, $p < .05$, and $\chi^2(1) = 13.13$, $p < .001$, respectively]; the correlations between the PSCS and the BDI and SDS were .20 and .13.

In a longitudinal study using undergraduates, Sakamoto (1999) demonstrated that self-preoccupation predicted the elevation of the SDS scores after three months. At Time 1, both self-preoccupation and depressive symptoms measured by the SDS were assessed. At Time 2, three months later, life events experienced from Time 1 to Time 2 and depressive symptoms at that time were assessed. Data from 169 undergraduates who scored less than 50 on the SDS in Time 1 were analyzed. After experiencing a greater number of negative events, those high in self-preoccupation became more depressed than those who scored low, though this difference disappeared when there was a smaller number of negative events. Therefore, self-preoccupation, which includes both the degree and the duration of self-focusing, may be more significant in explaining depression than self-consciousness, which does not reflect the duration of self-focusing.

Previous studies on depression in the field of personality and social psychology mainly used college students and relied on self-report inventories, such as the BDI (Beck *et al.*, 1961), the SDS (Zung, 1965), and the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). However, these studies have been criticized (Kendall, Hollon, Beck, Hammen, & Ingram, 1987; Tennen, Hall, & Affleck, 1995) because college students who scored high on self-report depression inventories could not be used as analogues for diagnosable clinical depression, and because these inventories typically show a high sensitivity but a low specificity. Individuals that meet interview criteria for depression usually score in the depressed range on questionnaires, but many who do not meet the diagnostic criteria for depression also score in the depressed range. The use of diagnostic interviews is recommended to solve this problem (Kendall *et al.*, 1987; Kendall and Ingram, 1989; Tennen *et al.*, 1995). The interviews provide sufficient necessary criteria to classify a participant as depressed; the interviews (1) require either depressed mood or loss of interest for an individual to meet the criteria and (2) distinguish mood changes associated with physical illness and medication or alcohol from changes due to depressive illness. Therefore, diagnostic clinical interviews are more useful in depression research than self-report questionnaires.

Studies that use depressive patients (inpatients and outpatients) who meet diagnostic criteria might not always be suitable for investigating psychosocial factors relating to depression because only a small portion of depressed people consults a mental health professional (Dew, Dunn, Bromet, & Schulberg, 1988; Fujihara, 1995; Shapiro *et al.*, 1984). For example,

Dew *et al.* (1988) reported that, of 96 females who met the Research Diagnostic Criteria (RDC; Spitzer, Endicott, & Robins, 1978) for either definite or probable major depression over a course of 12 months, only 16 (16.7%) consulted a mental health professional. Fujihara (1995) found that only 10% of Japanese community residents who had met the 10th Revision of the International Classification of Disease (ICD-10; World Health Organization, 1989) for major depression consulted a physician (not necessarily a psychiatrist). Those patients who meet diagnostic criteria for depression and consult a psychiatrist might be qualitatively different from those who meet the criteria but do not seek professional help (Goodman *et al.*, 1997). Therefore, patient samples might not be sufficient to study the psychosocial aspects of depression.

One possible solution is to investigate depression in community subjects using structured interviews. In the present study, we conducted structured interviews with adolescent community subjects aged 18 to 21 and investigated the relationships among diagnosable depression, depressive symptoms, and self-preoccupation. This is the purpose of the present study.

METHOD

Participants

The initial participants were 304 community residents who had attended two public junior high schools in Gotemba, a provincial town in Shizuoka Prefecture. The town is midway between two large cities, Tokyo and Shizuoka, and is a typical suburban-rural area.

A number of questionnaires were administered to the subjects. We sent them a letter requesting an interview; 119 (45 men and 74 women) agreed and were successfully interviewed in 1994. The participants' ages ranged from 18 to 21 years; the mean age was 19.3 (SD = 0.9). Of those participants, 87 (73.1%) were continuing their education, 30 (25.2%) were employed, 1 (0.8%) was a homemaker, and 1 (0.8%) was unemployed. Interviews were conducted in either their former junior high schools, public halls, or in their own houses.

Interviewers

Twenty-six interviewers participated in the study, consisting of four psychiatrists, one physician, two clinical psychologists, four public health researchers. Fifteen master and doctorate course students in psychology

and medicine were trained for this study. All of them had participated in other epidemiological studies (e.g., Kitamura *et al.*, 1995, 1998; Sugawara *et al.*, 1999) as interviewers and possessed sufficient knowledge and skills for diagnostic interviews. For the present study, they were trained to conduct diagnostic interviews for two weeks based on the DSM-III-R. Various training methods were used to ensure the quality and reliability of the interviews; the case vignettes method (cf. Sugiura *et al.*, 1998), role playing, lectures, and assessment by a psychiatrist (T.K.). For a total of 20 interviews, another rater was also present to investigate the interrater agreement; the κ value for the interrater agreement was .78 for the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed. rev.) (DSM-III-R; American Psychiatric Association, 1987) major depressive episode (Tomoda, Mori, Kimura, Takahashi, & Kitamura, 1998).

Questionnaires

A number of questionnaires, including the SPS, were distributed to the participants before the interviews. The SPS consisted of 11 items. For example, "I often analyze myself for long periods of time," "Once I start thinking about myself, I find it difficult to stop." Each item is rated on 5-point scale, from "does not apply to me at all" (1) to "applies to me very well" (5). The SPS measures both self-focused attention and its continuance. The aspect of self that is focused on is limited to private aspects, such as character, memory, emotions, ability, and the ideal self (Fenigstein *et al.*, 1975). The test-retest reliability was .87 with a 3-week interval (Sakamoto, 1998), and Cronbach's alpha coefficient of the SPS was .88 (Sakamoto, 1999).

Interviews

The interview procedure, the Time-Ordered Stress and Health Interview (TOSHI; Kitamura, 1992), was originally developed for special use in the present study. The TOSHI included diagnostic clinical interviews by which the following disorders of the DSM-III-R could be diagnosed: generalized anxiety disorder, panic disorder, major depressive episode (MDE), dysthymia, manic episode, phobic disorder (agoraphobia, social phobia, and simple phobia), and obsessive-compulsive disorder. The diagnostic clinical interview of the TOSHI is comparable to the Structured Clinical Interview for DSM-III-R (SCID; Spitzer, Williams, Gibbon, & First, 1990) and the Diagnostic Interview Schedule (DIS; Robins, Helzer,

Croughan, & Ratcliff, 1981); however, it contains a wider range of psychiatric symptoms and psychosocial information. The diagnostic interview part of the TOSHI has been used in other research (Kitamura *et al.*, 1995, 1998). The lifetime prevalence and 12-month incidence of the seven disorders listed above were reported elsewhere (Tomoda *et al.*, 1997).

In the interviews about depressive episodes and symptoms, interviewers first asked whether the participant had ever experienced an episode of depressive symptoms, such as a depressive mood, loss of interest or pleasure, and fatigability continuing for 4 days. If the participant recalled at least one of the three symptoms that had continued for 4 or more days, he/she was asked the onset age and the duration of the episode and then was asked whether, during the episode, he/she had experienced each depressive symptom listed in Table I (i.e., symptoms from “Low self-esteem or self-confidence” to “Impairment in social, occupational, or other functioning”). Since one of our project’s purposes was to investigate how prevalent mild depressive episodes were in the community, we examined the details of the depressive episode when a participant recalled a depressive mood, loss of interest or pleasure, and fatigability continuing for 4 days, although the criterion “4 or more days” was tentative. We asked if the depressive episodes continued for 2 weeks or longer, and we exactly followed the duration criteria of the DSM-III-R (i.e., 2 weeks or longer) in diagnosing the MDE.

Procedure

The participants were first asked to complete a series of questionnaires before being interviewed by one of the interviewers. Both oral and written consent were obtained from each participant prior to their interview. The interviewer then asked for permission to use a tape recorder to record the interview session. If the participant refused to be recorded on tape, the interview was conducted without tape recording. About 10% of the subjects refused tape recording; however, this did not affect the interrater reliability (κ). Each interview lasted approximately 120 min.

RESULTS

Of 304 participants, 296 completed the SPS. The mean score of the SPS was 33.3 ($SD = 8.6$), which was similar to other samples (Sakamoto, 1998, 1999). There was no significant gender difference in the SPS scores (men, $M = 32.7$, $SD = 9.8$; women, $M = 33.8$, $SD = 7.9$; $t(294) = 1.05$, n.s.). There were also no significant differences in demographic variables

Table I. Percentages of Participants Endorsing Depressive Symptoms by High- and Low-Self-Preoccupation Groups

Symptom	Self-preoccupation	
	High (<i>n</i> = 34)	Low (<i>n</i> = 32)
1. Depressed mood	35.3	25.0
2. Loss of interest or pleasure	44.1	12.5*
3. Fatigability	52.9	18.8*
At least one of the three symptoms stated above		
	High (<i>n</i> = 19)	Low (<i>n</i> = 11)
4. Low self-esteem or self-confidence	73.7	27.3*
5. Feelings of self-reproach or guilt	57.9	54.5
6. Ideas or acts of self-harm or suicide	42.1	0.0*
7. Reduced concentration	89.5	63.6
8. Psychomotor agitation or retardation	57.9	36.4
9. Insomnia or hypersomnia	89.5	45.5*
10. Poor appetite or weight loss or increased appetite or weight gain	63.2	45.5
11. Decrease in activity	63.2	45.5
12. Social withdrawal	68.4	27.3
13. Reduced amount of speech	84.2	36.4*
14. Brooding about past unpleasant events	57.9	54.5
15. Hopelessness	57.9	18.2*
16. Tearfulness	36.8	36.4
17. Feelings of worthlessness	57.9	36.4
18. Dissatisfaction	63.2	36.4
19. Dependency	42.1	36.4
20. Self-pity	36.8	36.4
21. Hypochondriacal concern	31.6	27.3
22. Impairment in social, occupational, or other functioning	57.9	36.4

Note. Values are percentages.

**p* < .05.

or the SPS scores between those who participated in the interview (*n* = 119) and those who did not (*n* = 177).

Relation Between Self-Preoccupation and Major Depressive Episode (MDE). Of 119 participants interviewed, 28 (23.5%), including 10 men (22.2%) and 18 women (24.0%), had experienced at least one episode of major depression that met the DSM-III-R criteria. Only one met the DSM-III-R criteria for the MDE at the time of the interview, therefore we excluded this one from the following analyses and examined the relationship between past depressive episodes and self-preoccupation.

At least three methods of data analysis can be used to examine the relationship between self-preoccupation and the MDE and depressive

symptoms: (1) examining correlations between the SPS scores and the MDE and depressive symptoms, (2) conducting discriminate analyses, and (3) comparing the number of cases and noncases between the highest and lowest quarters of the SPS scores.⁵ We selected the third approach, because it reports the exact rate of prevalence and enables comparisons with other research.

Of the 119 participants interviewed, the lowest and highest quarters in the SPS scores formed the low- and high-self-preoccupation groups: 32 participants (26.9%; 20 women and 12 men) who scored 29 or less formed the low-self-preoccupation (low-SP) group and 34 (28.6%; 20 women and 14 men) participants who scored 37 or above formed the high-self-preoccupation (high-SP) group. The means (SD) of the low- and high-self-preoccupation groups were 22.8 (5.1) and 43.6 (4.8). The rate of those who met the DSM-III-R criteria for the MDE was larger in the high-SP group than in the low-SP group ($p < .04$, Fisher's exact test), 9.4% (3/32) in the low-SP group and 32.4% (11/34) in the high-SP group.

Relation Between Symptoms and Self-Preoccupation. The percentages of participants who had experienced depressive symptoms are shown in Table I. "Low self-esteem or self-confidence" and subsequent symptoms were investigated only when a participant had experienced a depressive mood, loss of interest or pleasure, or fatigability that continued for 4 or more days. Therefore, the number of participants was reduced to 11 in the low-SP group and 19 in the high-SP group. Significant differences were found in 7 of 22 symptoms. The seven symptoms were loss of interest or pleasure, fatigability, low self-esteem or self-confidence, thoughts or acts of self-harm or suicide, insomnia or hypersomnia, reduced amount of speech, and hopelessness. The high-SP group was more likely to experience these seven symptoms than the low-SP group. Significant differences were found not only in affective (e.g., loss of interest or pleasure) and cognitive (e.g., low self-esteem or self-confidence) symptoms but also somatic (e.g., insomnia or hypersomnia) and behavioral (e.g., reduced amount of speech) symptoms.⁶ It is of interest that a large difference was found in "thoughts or acts of self-harm or suicide"; while

⁵We also examined the correlation between the SPS scores and the MDE and depressive symptoms using the data from all interviewees ($n = 119$) and obtained results similar to those reported in the Results session.

⁶The purpose of the analysis was to examine what types of symptoms are related to self-preoccupation. The preferable method was to compare the two groups using a cluster of depressive symptoms (e.g., cognitive symptoms and somatic symptoms). However, there is no standard for dividing the depressive symptoms into clusters. Moreover, due to the small number of DSM-III-R MDE cases, we could not administer a factor analysis to depressive symptoms. Future research is needed to study what kinds of symptoms are related to self-preoccupation.

no one in the low-SP group had experienced the symptom, about half of the high-SP group had.

The total number of depressive symptoms experienced during the episode was then compared between the two groups. We asked whether a participant had each depressive symptom listed in Table I (symptoms from "Low self-esteem or self-confidence" to "Impairment in social, occupational, or other functioning") only when he/she reported experiencing the symptoms of depressed mood, loss of interest or pleasure, or fatigability that continued for 4 or more days. According to the DSM-III-R criteria, it is essential that the subject exhibit at least one of the former two symptoms continuing for 2 weeks when diagnosing the MDE. Therefore, even if one has, for example, the symptom of "Reduced concentration," the symptom is not thought to be associated with the MDE unless he/she has either of the two symptoms of depressed mood or loss of interest or pleasure.

The total number of symptoms experienced during a depressive episode was greater in the high-SP group ($M = 7.9$, $SD = 7.4$) than in the low-SP group ($M = 3.0$, $SD = 5.0$) [$t(64) = 3.16$, $p < .01$]. The high-SP group had more symptoms ($M = 4.0$, $SD = 3.5$) than the low-SP group ($M = 1.6$, $SD = 2.4$) [$t(64) = 3.27$, $p < .01$] of the nine depressive symptoms delineating a Major Depressive Episode in the DSM-III-R. When data were limited from the participants who had experienced at least one of the three symptoms (i.e., depressive mood, loss of interest or pleasure, and fatigability) continuing for 4 or more days, similar patterns were found; the high-SP group had more depressive symptoms ($n = 19$; $M = 6.8$, $SD = 1.8$) listed in the DSM-III-R than the low-SP group ($n = 11$; $M = 4.4$, $SD = 2.0$) [$t(28) = 3.44$, $p < .01$]. Thus, highly self-preoccupied people were more likely to experience depressive symptoms than those exhibiting less self-preoccupation.

DISCUSSION

The present study demonstrates that the rate of people who met the DSM-III-R criteria for the MDE was significantly larger in the high-SP group (32.4%) than in the low-SP group (9.4%). This result is consistent with previous findings that reported the relationship between persistent self-focusing and depression (Greenberg and Pyszczynski, 1986; Sakamoto, 1993, 1998). However, in the current study, we used community-based subjects as participants (not college students) and conducted structured interviews to select people with past episodes of DSM-III-R MDE. Therefore, the present study adds a new finding that enduring self-focus is related

to diagnosable depression (i.e., major depressive episode) in nonundergraduate youths.

As shown in Table I, in a depressive episode, highly self-preoccupied people experienced more symptoms than people less self-preoccupied. The symptoms experienced more by people in the high-SP group ranged from affective and cognitive to behavioral and somatic. If the severity of a depressive episode is defined as the number of symptoms experienced (DSM-IV; American Psychiatric Association, 1994), those in the high-SP group suffered from more severe depression than those in the low-SP group. This result indicates that self-preoccupation is a factor that may worsen depression.

It is noteworthy that about half the people in the high-SP group had experienced thoughts or acts of self-harm or suicide in a depressive episode. Suicide is thought to be an escape from self (Baumeister, 1990). People think more negatively about the self (Pyszczynski and Greenberg, 1987) when self-focusing in a depressed mood. For example, when people turn their attention to the self in a depressed mood, they become conscious of the negative aspects of the self, attribute negative qualities to the self, and criticize themselves (Pyszczynski and Greenberg, 1987). This preoccupation with negative thoughts about the self may stimulate a depressed mood, and the depressed mood makes them self-focus (Carr, Teasdale, & Broadbent, 1991; Sedikides, 1992; Wood, Saltzberg, & Goldsamt, 1990). In order to escape from the vicious cycle of self-preoccupation and depression, people sometimes contemplate killing themselves (Baumeister, 1990). Thus, highly self-preoccupied people may be more likely to commit suicide. In Japan, suicide is the second greatest cause of mortality in youths (15–24 years old) (Japanese Ministry of Health and Welfare, 1995). Since the severity of depression is not related to suicide attempts (Malone, Haas, Sweeney, & Mann, 1995), it is important to detect the predictors of such action. Self-preoccupation might predict suicide; further studies are needed to clarify the predictability.

People high in self-preoccupation may lack interpersonal skills (Lyubomirsky and Nolen-Hoeksema, 1995). When depressed, highly self-preoccupied persons continuously turn attention to the self instead of turning attention to the environment and to others. Consequently, they are likely to withdraw socially (Table I), and even if they interact with others, they cannot perceive positive feedback and they negatively distort feedback from others (Lyubomirsky & Nolen-Hoeksema, 1995). Moreover, highly self-preoccupied persons may refer excessively to negative aspects of the self, which brings rejection from others (Coyne, 1976). Therefore, highly self-preoccupied people's inadequate interpersonal skills may prolong the duration of depression.

The present study has some limitations. First, the sample size was small,

and the dropout rate was high. The high dropout rate (i.e., participating in the questionnaire survey but not in an interview) in Japan is not limited to the present study (Kitamura *et al.*, 1995; Sugawara *et al.*, 1999). One reason may be the negative attitudes toward "mental illness" in Japan (Sakamoto, Kurihara, Kato, & Kitamura, 1998). The name of our institute, the "National Center of Neurology and Psychiatry," may convey negative images to the subjects and make them reluctant to participate in interviews. Possibly those who answered the questionnaire but did not participate in the interviews were qualitatively different from the interviewees, although the two groups were not different in their SPS scores and demographic variables. Further studies with a large number of participants are necessary. Second, we intended to study the relationship between self-preoccupation and depression in youths; whether the same results would be obtained in other age groups is not clear. Third, as stated earlier, the retrospective nature of the current study could not exclude the possibility that self-preoccupation is a result of a depressive episode. Prospective studies are needed to clarify that self-preoccupation is a precedent of a depressive episode and contributes to the onset of a depressive episode. Fourth, the current and previous studies examined the specific relation between self-preoccupation and depression. Although Ingram (1990) stated that internal, sustained, and inflexible attention to the self is a common psychopathological feature, further studies are required before considering self-preoccupation to be a general feature of psychiatric illness.

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