

The Efficacy of Cognitive-Behavior Therapy and Writing Process Training for Alleviating Writing Anxiety¹

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Fifty-one individuals were assigned to one of three treatments for writing anxiety (a fear and avoidance of writing). The three treatment conditions were (a) cognitive-behavior therapy in the form of stress inoculation training plus writing process instruction ("combination" group), (b) writing process instruction plus an attention control ("process only" group), and (c) a no-treatment control. Two therapists each conducted one combination group and one process only group. There were eight or nine subjects in each treatment group, and each group met for eight 90-min sessions. Subjects were assessed at pre-treatment and post-treatment using eight writing anxiety self-report measures and two writing performance measures. Both the combination and the writing process only treatments resulted in improvement on several self-report measures as compared with the no-treatment control group. However, only the combination treatment produced significant improvement on a performance measure, writing quality. Significantly more subjects in the combination treatment were able to pass a college freshman English equivalency examination after treatment than in either of the other two groups.

KEY WORDS: writing anxiety; stress inoculation; skills training.

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Writing anxiety is an impediment to effective writing for many people. These individuals report that they are afraid of writing and that they avoid writing, even though such behavior means poorer performance at school and at work. Writing anxiety and apprehension have been described in the psychological and educational literature for some time (L. Z. Bloom, 1980, 1985; M. Bloom, 1980; Brand & Powell, 1986; Daly, 1985; Daly & Miller, 1975a, 1975b; Daly & Wilson, 1983; Federn, 1930/1957; Grundy, 1985; Rose, 1979, 1984; Rosenberg, 1976; Selfe, 1985). A large group of people feel apprehensive about committing words to paper, experience intense anxiety while writing, and try to avoid writing at all costs. These anxious writers have inordinately rigid rules about writing, procrastinate starting on writing projects, and tend to be perfectionistic in their evaluations of written products. Daly and his colleagues (e.g., Daly & Miller, 1975b) have labeled such individuals as "writing apprehensive."

Surprisingly, there have been few attempts to apply well-researched treatment techniques to writing anxiety, although both writing and behavioral researchers have recommended doing so (for exceptions see Biran, Augusto, & Wilson, 1981; Boice, 1982, 1983, 1985). Writing researchers and teachers recommend writing process instruction as the most effective means of alleviating writing anxiety (Flower & Hayes, 1977, 1981). However, cognitive-behavioral interventions have been successful in the reduction of some performance anxieties, particularly when combined with skills training (Denney, 1980).

The most rigorous research by teachers of writing has been focused on writing process — *how* people write rather than *what* they write. Flower and Hayes (1977, 1981) and Nold (1980) described writing as a highly goal-oriented, demanding task that requires complex cognitive skills and strategic management of cognitive resources. Without effective strategies to "juggle" the simultaneous constraints by which writers are bound, they can be overwhelmed by cognitive demands and become frustrated (Flower & Hayes, 1980). Flower (1978) hypothesized that writing anxiety is the result of an inefficient composing method—the consequence of unworkable writing strategies (see also Rose, 1984). What is necessary in order to alleviate writing anxiety, then, is to implement a strategic and heuristic approach to writing (Flower & Hayes, 1977). Once writers adopt a flexible writing strategy, their performance anxiety may be reduced.

Because cognitive-behavior therapy has proven to be an effective treatment in alleviating some performance anxieties, it too may be effective in treating writing anxiety. Cognitive-behavior therapy has helped subjects cope with evaluation anxieties such as test anxiety (Goldfried, Linehan, & Smith, 1978; Holroyd, 1976; Meichenbaum & Butler, 1980), speech anxiety (Fremouw & Hartz, 1975; Fremouw & Zitter, 1978), mathematics anxiety (Genshaft & Hirt, 1980), and social anxiety (Elder, 1978; Kanter & Goldfried, 1979).

Recently, Boice (1985) described a cognitive-behavioral program for treating anxious writers among a college faculty. Participants were taught to identify counterproductive thoughts and then to substitute appropriate coping thoughts for them. This program was fairly successful, although Boice noted that the addition of contingency management techniques ultimately might have improved efficacy.

Research on the treatment of evaluation anxieties has demonstrated that combination of cognitive-behavioral interventions and skills training are more effective than either component alone, both in reducing anxiety and in increasing desired performance. Combination treatments of different behavioral interventions together with training to improve basic skills are effective in alleviating test anxiety (Allen, 1971; Doctor, Aponte, Burry, & Welch, 1970; Katakahn, Strenger, & Cherry, 1966; Mitchell & Ng, 1972), public speaking phobia (Fremouw & Zitter, 1978; Marshall, Presse, & Andrews, 1976), and mathematics anxiety (Hendel & Davis, 1978; Genshaft & Hirt, 1980; Richardson & Woolfolk, 1980).

The present study assessed the efficacy of combining a cognitive-behavioral intervention with writing process instruction for the treatment of writing anxiety. Three questions were addressed: (a) Does writing process instruction alone significantly reduce writing anxiety? (b) Does the combination of a cognitive-behavioral treatment and writing process instruction significantly reduce writing anxiety? (c) Does adding the cognitive-behavioral component to the writing process instruction reduce writing anxiety more effectively than writing process alone?

Three treatment conditions were compared by means of self-report measures of performance anxiety and assessments of performance on a laboratory writing task: (a) a "combination" treatment involving a cognitive-behavioral regimen (stress inoculation) and writing process instruction, (b) a treatment consisting of writing process instruction and an attention control, and (c) a no-treatment control.

METHOD

Subjects

One hundred seven individuals, all aged 18 and over, responded to an advertisement asking those who "avoid writing" to "be a part of our study to help you cope more effectively with your writing anxiety." The advertisement appeared in local public and university newspapers and was posted throughout the community. Of the 91 subjects who returned their initial questionnaires, 64 qualified for the study either by scoring in the upper quadrant on the Writing

Apprehension Test (Daly & Miller, 1975a) or by scoring at least 1 standard deviation above the mean on the Writing Anxiety and the Writing Block subscales of the Writing Problem Profile (Holland, 1978). Fifty-four qualified subjects agreed to participate in the study. Four subjects withdrew from the study prior to the initial assessment session. Six subjects withdrew after attending fewer than two sessions, and one subject withdrew after the fourth session. The dropout rate was approximately equal across all conditions.

Measures

Self-Report Instruments. The following self-report instruments were used at the pre- and post-treatment assessments: (a) the Writing Apprehension Test (WAT) (Daly & Miller, 1975a), a 20-item Likert scale that measures attitudes toward and apprehension about writing, particularly regarding evaluation of one's written work; (b) the Writing Problem Profile (WPP), developed by Holland (1978), a 46-item profile organized around seven subscales: Writing Depression, Writing Anxiety, Writing Block, Audience Evaluation, Cognitive Interference, Writing Avoidance, and Time Pressure; (c) the Facilitating/Debilitating Writing Anxiety Test (FDWAT), our adaptation of the Academic Achievement Test developed by Alpert and Haber (1960) and containing two subscales, a Facilitating Anxiety Scale FACIL ("anxiety helps me perform better") and a Debilitating Anxiety Scale DEBIL ("anxiety interferes with my performance"); (d) the state form of the State-Trait Anxiety Inventory (STAI), developed by Spielberger, Gorsuch, and Lushene (1970), a widely used 20-item instrument for measuring trait or situation-specific anxiety; (e) the Writing Thought Inventory (WTI), a listing of 30 positive and negative thoughts that an individual may have while writing (the WTI was developed by the authors following the procedure described by Kendall *et al.*, 1979, and contains a positive thought subscale [POSTHT] and a negative thought subscale [NEGHT]); and (f) the Writing Self-Efficacy Scale (WSE), which measures the level and strength of an individual's perceived ability to complete writing tasks. Modeled after Bandura (1977), it contains 20 items describing various writing tasks (e.g., a short business letter in 20 min) for which subjects indicated the confidence (from 0 to 100%) with which they could complete each.³

Performance Measures. Subjects were administered a standardized writing task in a laboratory setting. The writing tasks, used in this investigation were two essay questions developed for the 1977 and 1979 California State University and Colleges Freshman English Equivalency Examination (White, 1977, 1980). The questions were designed to be completed in 45 min by college

³The internal consistency for each of these scales was computed. Cronbach's alpha exceeded .70 for all published and newly created measures, assuring adequate reliability in the present study.

freshmen. Comparison of the results of both Equivalency Examinations showed both topics to be of essentially equal difficulty. (The two exams will be referred to as Topic A and Topic B, respectively.)

Two aspects of the subjects' writing sample were evaluated by two blind and independent raters: how much of the task was completed and how well subjects wrote. A completion (COMPLET) score was devised by the authors in consultation with writing instructors and researchers. The essays were scored for completeness as follows: Writers must have (a) submitted that they were indeed finished, (b) written a minimum of 250 words, (c) written on the assigned topic, (d) written in the required form (an essay rather than a personal narrative, poem, etc.), (e) written in a coherent and at least minimally organized fashion, and (f) written appropriately for the task (refrained from off-task comments, wrote with appropriate persona and tone). The first four criteria, designated A-level (submission, length, content, and form), were considered more fundamental and more important than the last two, designated B-level (coherence and appropriateness). Three points were given for each minimally satisfied A-level criterion; two points were given for each minimally satisfied B-level criterion. Completeness scores, then, could range from 0 to 16 points.

The quality (QUALITY) score was determined by the published standards of the writing task. Each essay was independently evaluated by the two judges and given a writing quality score of 0 (low) to 6 (high) according to the scoring procedures developed by the California State Universities and Colleges Freshman English Equivalency Examination (White, 1977, 1980). Completion and Quality are reported as the *sum* of the two judges' ratings on these measures, and thus can range from 0 to 32 and 0 to 12, respectively. Interrater reliability was .97 for the completion rating and .88 for the quality score.

Therapists. Two therapists each conducted a combination group and a process training only group. Both therapists were graduate students in clinical psychology with course work in group and behavior therapy. Each had at least 2 years of experience conducting group treatments. Moreover, the therapists completed a course in writing tutoring offered by Stanford University. This course emphasized writing process instruction and effective coaching of problem writers. The instructor was a nationally known teacher of writing skills. Some of the treatment sessions were observed by this instructor in order to provide feedback to the therapists about the quality of their writing process instruction.

Treatments

"Combination" Treatment: Cognitive-Behavior Therapy and Writing Process Instruction. Two groups met for 1-1/2 hours twice a week for 4 weeks (total of eight sessions for each group). Cognitive-behavior therapy was deliv-

ered in the form of stress inoculation training based on the work of Meichenbaum and his colleagues (Meichenbaum & Turk, 1976; Novaco, 1976; Turk, 1978; Meichenbaum, & Genest, 1983). It was presented to subjects in three distinct phases. In the educational phase, subjects were provided a rationale that interpreted their writing anxiety as a function of their self-statements. Subjects learned that their anxiety could best be understood by considering different stressful aspects of the writing task such as preparing for, confronting, feeling overwhelmed by, and evaluating their writing. In the rehearsal stage, subjects were encouraged to identify, elaborate on, and articulate their negative self-statements (i.e., those cognitions that hindered coping behavior). After becoming familiar with their statements, subjects were directed to generate and develop new coping self-statements that directed their attention back to task-relevant writing behaviors. The therapist used modeling to demonstrate coping self-statements and behaviors. In the application phase, subjects worked on problem writing tasks within the group and at home in order to practice their cognitive coping skills. Subjects were encouraged throughout to identify negative self-statements, generate coping self-statements, and practice using coping self-statements at home as well as in the group. Emphasis was placed on positive and negative statements about the self (e.g., "I know I can do this" or "I hate to write") rather than the writing process itself (e.g., "Now I should revise") in order to avoid providing writing process instruction as part of the stress inoculation intervention.

Writing process instruction was based on the work of Flower and Hayes (1977, 1981). Subjects were introduced to a writing strategy that has been developed to counteract the often debilitating strategies of anxious writers. Emphasis was placed on suspending editorial constraints until late in the writing task and on encouraging the generation of text with minimal constraints at the beginning. Subjects were encouraged to break the writing task down into smaller subtasks, to spend time brainstorming before evaluating the quality of their ideas, and to avoid criticizing their own work too early in the writing process. Subjects were taught to "freewrite" (write unconstrainedly and without pause) and were asked to practice freewriting for 10 min daily throughout the treatment. Subjects were asked to practice all of the writing strategies that were taught on increasingly more difficult writing tasks at home and, later in the treatment, in the group.

"Writing Process Only" Treatment: Writing Process Instruction with Attention Control. The two groups met for 1-1/2 hours twice a week for 4 weeks (a total of eight sessions for each group). The writing process instruction in these groups was identical to that in the combination groups. All writing strategy constructs were introduced at the same time; times devoted to writing process instruction were of equal length. Homework assignments and practice with

problem tasks within the process training only groups were matched with the combination group.

To control for the effects of amount of attention received, a procedure similar to Novaco's (1975) was used to isolate the cognitive-behavior therapy procedures of the combination group. In the process training only groups, subjects were directed to monitor their behaviors before, during, and after completing writing tasks and to describe their reactions, thoughts and feelings in detail to the group. They were encouraged to become very familiar with their activities and experiences and to report everything that they experienced and did when writing or avoiding writing. The therapist focused discussion on the subject's writing experiences and not on suggestions for more functional alternatives.⁴

No-Treatment Control. Subjects in this group were told that because the investigation required a stable profile of their writing behavior over time, they would be assessed twice before the treatment began. The interval between the two assessments was the same as the interval between the pre-treatment and post-treatment assessments of the other treatment groups. After the second assessment, these subjects were then given the full combination treatment.

Procedure

Assessment. Subjects were assessed individually in the 5 days before treatment began and in the 4 days after treatment ended. At post-test, each assessment was administered by the therapist *not* leading that individual's treatment group. Each assessment lasted about 1-1/2 hours.

At the pre-test assessment, the assessor informed the subject of the confidentiality of the study and then asked him or her to read and sign a participant's consent form. The subject then filled out the FDWAT and the WSE. (They had already completed the WTI and the WPP by mail.) After both tests were completed, the assessor told the subject that because the study needed to assess how (s)he wrote, a writing task had been provided. The assessor then directed the subject to a table containing writing materials and the instructions for the writing task. The assessor then left the room, explaining to the subject that he or she would return in 45 min. After the writing period ended, the assessor returned to the room and collected all of the subject's writing. The assessor asked the subject whether (s)he had completed the essay. He or she also asked the subject to distinguish between the final copy and any notes or

⁴One might worry that the attention control might have tended to get subjects off-task (focusing on themselves rather than the writing). Subjects were explicitly taught to monitor their thoughts and feelings during writing as an exercise in order to generate material to discuss in the group. However, they were not encouraged to engage in this monitoring process before undertaking "normal" writing projects.

Table I. Summary of Posttreatment Means and Main Effects on the Analyses of Covariance^{a,b}

Measure	Combination, <i>n</i> = 13	Process only, <i>n</i> = 15	No treatment, <i>n</i> = 15	<i>F</i>	<i>df</i>	<i>p</i>
WAT (max = 100)	56.3 _a (10.2)	55.4 _a (13.6)	63.8 _b (8.2)	9.88	2, 39	< .001
WPP (max = 230)	134.3 _a (20.3)	127.4 _a (36.3)	163.0 _b (17.8)	12.96	2, 39	< .001
FACIL (max = 45)	24.7 _a (3.9)	23.2 _{a,b} (5.1)	21.4 _b (5.0)	3.64	2, 39	< .05
DEBIL (max = 50)	30.6 _{a,b} (4.5)	29.6 _a (6.9)	34.0 _b (4.2)	4.66	2, 39	< .05
STAI (max = 80)	44.6 _{a,b} (11.0)	39.6 _a (9.9)	50.7 _b (13.0)	3.41	2, 37	< .05
WSE (max = 100)	64.0 (21.4)	62.3 (21.5)	55.2 (22.6)	1.87	2, 38	n.s.
NEGHTH (max = 75)	28.9 _a (12.4)	24.8 _a (14.6)	39.8 _b (10.5)	6.75	2, 34	< .01
POSTHT (max = 75)	37.6 (11.6)	40.9 (9.0)	38.3 (8.0)	0.58	2, 37	n.s.
QUALITY (max = 12)	7.0 _a (2.4)	4.4 _b (2.6)	5.4 _{a,b} (2.9)	3.45	2, 39	< .05
COMPLET (max = 32)	23.3 (5.3)	17.3 (9.6)	20.4 (9.1)	2.06	2, 39	n.s.

^aSubscripts refer to the results of a Scheffé Multiple Comparison Procedure. Means sharing the same subscript do not differ according to this test.

Means have been adjusted to eliminate the effect of the covariate (i.e., pretreatment scores).

On NEGHTH, means have also been adjusted to eliminate the effect of Topic Set.

^bStandard deviations for each cell are given in parentheses.

preliminary drafts that had been written. The subject was then given the two remaining self-report measures, the STAI and the WTI. Subjects were expected to have greatest access to their feelings and thoughts while writing immediately after having worked on such a task for 45 min. The instructions for both of these tasks asked subjects to report on the feelings and thoughts that they had experienced during the just-completed writing session.

The post-treatment assessment involved no introductory interview. Instead, the subject was asked to complete the WAT and the WPP before completing the FDWAT and the WSE. The assessment then paralleled the procedure for the pre-treatment assessment.

At pre-treatment, half the subjects within each treatment were randomly assigned to write on Topic A and half on Topic B. At post-treatment, each subject was given the other topic.⁵

After post-treatment assessment, all essays written at both assessments were typed, coded, and given to the raters, who then independently scored them for task completion and writing quality.

⁵Except as noted in Table I, there were no effects for topic set.

RESULTS

Treatment Effects

Since the dependent measures of this study tended to be intercorrelated, in order to control for Type-I experimentwise error, a one-way multivariate analysis of covariance (MANCOVA) was conducted on the post-treatment scores across all dependent measures with all pre-treatment scores treated as covariates. This analysis revealed that, across all measures, the three treatment conditions were significantly different after treatment, controlling for any differences prior to treatment (Wilks' lambda = 0.22, $F(20, 36) = 2.05$, $p < .03$). Specific treatment effects were assessed using one-way analyses of covariance (ANCOVAs) with post-treatment score as the dependent measure and pre-treatment score as the covariate. Scheffé tests were used to contrast group means when significant effects were found. The results of these analyses are depicted in Table I.

Self-Report Measures. As can be seen in Table I, the combination group was significantly more improved than the no-treatment group on four self-report measures: the WAT, the WPP, the FACIL of the FDWAT, and the NEGTHT of the WTI.

The process training only group reported significantly more improvement than the no-treatment group on the following scales: the WAT, the WPP, the Debilitative Anxiety Subscale DEBIL of the FDWAT, the STAI, and the NEGTHT. The combination group did not appear to be significantly improved over the process training only group on any self-report measure.

Performance Measures. On measures of writing completion and writing quality, the process training only group did not show enhanced performance on the laboratory writing task. On the writing task completion measure, the combination group showed no improvement as compared with either the no-treatment group or the process training only group. However, the combination treatment showed significantly more enhanced writing quality on the laboratory writing task than the process training only treatment. The difference in writing quality between the combination group compared to the no-treatment control did not quite reach statistical significance using the conservative Scheffé criterion. The trend was in the predicted direction, however, and the difference was significant using Tukey's Multiple Comparison Procedure.

Further examination of the data revealed some marked differences between the writing quality scores of the combination treatment and no-treatment control. Table 2 summarizes the pretest and post-test mean scores for both performance measures. On a scale of 0 to 12, the mean improvement for the combination group (summed across the two judges) was 2.4, the process training only group was unchanged, and the mean improvement for the no-treatment group was 0.4. Within-group t tests, reported in Table II, showed the combi-

Table II. Pretreatment and Posttreatment Means on the Performance Measures

Treatment group	Pretreatment	Posttreatment	<i>t</i>	<i>df</i>	<i>p</i>
Quality					
Combination	4.6	7.0	2.44	12	< .05
Process only	4.4	4.4	0.08	14	n.s.
No treatment	5.0	5.4	0.37	14	n.s.
Completion					
Combination	19.8	23.6	1.69	12	n.s.
Process only	17.2	16.4	0.43	14	n.s.
No treatment	20.6	21.2	0.23	14	n.s.

nation group significantly improved and both other groups unchanged. Furthermore, the writing quality of the combination group was significantly enhanced when compared to the writing quality of the other two groups combined, $t(41) = 2.41$, $p < .05$, two-tailed.

The difference in writing quality between the combination treatment and no-treatment control is particularly meaningful when standards are applied. From a writing teacher's perspective, a 2.4-point improvement from pre-test to post-test by subjects in the combination group is a recognizable and substantial improvement in writing performance; the 0.4-point improvement by the no-treatment group is not. The mean judges' score of 3.5 (i.e., half the summed score reported in Table II) in the combination group is a "C" grade level score that passes the college freshman English equivalency examination; the 2.7 mean judges' score in the no-treatment control is a "D" grade level score that fails the examination and implies some future remedial writing instruction (White 1977, 1980). (Recall that scores reported in Table II are the sums of the two judges' ratings.)

Table III shows how many subjects in each treatment achieved the necessary writing quality score (a combined score of 7.0 over the two raters) to have passed the equivalency examination. Although the proportions of subjects passing the examination did not differ at pre-test, the proportion passing at post-test was significantly higher for the combination group in comparison to both the process training only group ($z = 2.65$, $p < .01$) and the no-treatment control ($z = 2.27$, $p < .05$).

DISCUSSION

The effect of the process training only treatment appears to be a consistently strong reduction of reports of negative, debilitating feelings, thoughts, and attributions, without any corresponding change in writing performance or reports of positive, coping feelings, thoughts, and attributions. Relative to the

Table III. Equivalency Examination Results

Treatment group	Pretreatment		Posttreatment	
	Pass	%	Pass	%
Combination	3	23%	8	62%
Process only	2	13%	2	13%
No treatment	3	20%	3	20%

no-treatment control, a treatment of writing process instruction coupled with an attention control reduces various self-reports of writing anxiety but does not alter performance on a laboratory writing task.

The combination treatment, adding cognitive-behavior therapy to the writing process instruction, yielded no significant change in self-report relative to the process training only group. Unlike the process training only group, the combination group, in comparison to the no-treatment control, did not consistently improve on all self-reports of writing dysfunction but changed on a measure of positive writing function (FACIL). The two treatments significantly differed on *performance* measures. On measures of writing quality, the combination treatment significantly enhanced writing performance relative to the process training only group. In effect, the process training only group yielded no treatment benefit on performance measures; the combination group (i.e., adding cognitive-behavior therapy) altered and enhanced writing quality.

These results suggest that a cognitive-behavioral intervention that goes beyond skills training is necessary to change subjects' writing performance. What seems to be required are some behavioral skills and cognitive strategies that anxious writers can mobilize at the time of the writing itself. The combination treatment afforded such skills and strategies; the process training only treatment did not. In fact, unlike the "false mastery" (i.e., reduction in negative thoughts and feelings with no corresponding behavioral change) self-reports of the process training only group, subjects in our combination group displayed a greater coping orientation in their self-reports. That is, they still reported some negative thoughts but performed better in the face of them and reported more positive thoughts as well.

The presence of a coping orientation is not surprising: By design, cognitive-behavior therapy (and stress inoculation in particular) fosters a coping rather than mastery orientation. Although there was no behavioral intervention with a mastery orientation with which to compare cognitive-behavior therapy in this investigation, the coping orientation seems quite important, if not essential, to improving writing performance. Subjects commented throughout the combination treatment about the curative effect of treating their anxiety and writing as stressors with which to cope. Not only must anxious writers address their anxiety and avoidance, they must also manage the difficult cognitive demands inherent in any writing task. Coping skills that are learned in order to

deal with the former may also be useful in managing the latter and thus prevent writers from becoming overwhelmed.

Our 45 min laboratory writing task was more like a college examination than the kinds of writing required in most occupational settings. Further, its time limited nature may not have allowed subjects to take full advantage of the writing process skills learned through either of the treatments provided. The combination group's superior performance on this task may be attributable to their having learned coping skills that were especially suited to this situation. Those subjects who received writing process instruction only might have shown some improvement, however, had a less constrained performance task been provided. Moreover, actual writing process (rather than just the final product) could be assessed (by, for example, videotaping) as well. Perhaps some subjects demonstrate improvement in the way they approach writing tasks that are not reflected in the quality of their written documents.

It is striking that writing anxiety, as compared to other performance anxieties like test anxiety or the fear of public speaking, has had little research attention paid to it, and yet it is quite prevalent and dominates so many aspects of the sufferer's life (e.g., L. Z. Bloom, 1985). Victims of writing anxiety must deal with their affliction daily. Advancement in the professional world is difficult for the person who cannot commit words to paper; many high-ranking positions demand demonstrated communication skills. Because people often study phenomena that have personal meaning and application to themselves, there may be anxious writers studying writing anxiety (e.g., Herman, 1984; Malloy, 1983; Upper, 1974). Perhaps the development of successful treatments for writing anxiety will lead to a wealth of published research from heretofore silent investigators.

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