

TEST ANXIETY: THE PROBLEM AND POSSIBLE RESPONSES

JERRY L. DEFFENBACHER

Colorado State University

Abstract

This paper describes test anxiety as a significant psychological problem and outlines five possible responses that counselling can make to this problem. These options were evaluated against standards of professionalism, feasibility and empirical support. It was concluded that programs to develop self-control anxiety-management skills in the highly anxious had a great deal to offer in approaching this problem.

Résumé

Cet article décrit l'anxiété face à un test comme un problème psychologique important et esquisse cinq approches possibles que la consultation peut utiliser pour y remédier. Les standards de professionnalisme, la praticabilité et l'appui de recherches empiriques servent de critères pour évaluer ces approches. On conclut que les programmes visant à développer le contrôle de soi et à promouvoir les habiletés nécessaires pour contrôler l'anxiété dans les personnes très anxieuses peuvent contribuer énormément à la solution de ce problème.

Test Anxiety: The Problem

Tests and testing have become an integral part of Western society. Beginning with the first grade, a child repeatedly takes classroom exams and is periodically given standardized test batteries. As the youngster moves through school, the range, if not the frequency, of testing increases. By late high school, in addition to normal class tests, the student may take a number of tests for scholarships to and for entrance into college. If one chooses to go to college, the individual faces several more years of recurrent testing, only to encounter another set of entrance tests should graduate education be pursued.

Regardless of the point at which a person leaves the educational system, it is unlikely that he or she ever escapes testing completely. In government service as well as the business community tests abound. There are personnel tests, intelligence tests, civil service tests, aptitude tests, military qualification tests and the like. Progress in school and entrance into or promotion within a vocational field may be, in part, a function of the capacity to demonstrate abilities and aptitudes on a test or series of tests. Thus, tests can play a very important part in one's life, and any personal characteristic which interferes with opti-

mal test performance could handicap a person's development.

A high level of test anxiety is one source of interference or handicapping. Every teacher or test administrator has encountered persons who claim that they could have performed better on an exam had they not become so tense and anxious (test anxious). They report being so anxious that they "blocked" and were unable to read, recall, organize and solve problems with the speed and cognitive flexibility of which they are otherwise capable. Some of these complaints are readily dismissable on grounds of low aptitude or inadequate preparation. Others, however, seem justifiable in light of other information about the individual. Often, when the stress of the examination was gone, they could demonstrate an adequate mastery of an area. That is, highly anxious individuals performed more poorly than would have been predicted from other nontest samples of behavior. A high level of anxiety seems to have interfered with a full demonstration of skills and abilities.

A large body of research supports this observation. Studies have shown that highly test anxious individuals, when compared to low test anxious persons, perform poorer on a wide variety of test-related indices. For example,

highly anxious students score relatively poorer in classroom examinations (Alpert & Haber, 1960; Paul & Eriksen, 1964; Munz & Smouse, 1968) and have lower grade point averages (Allen, Lerner & Hinrichsen, 1972; Alpert & Haber, 1960; Desiderato & Koskinen, 1969; Sarason, 1957, 1959, 1961, 1963; Walsh, Engbretson & O'Brien, 1968) than low anxious students. A similar and often more pronounced discrepancy between high and low anxious individuals has been found on various scholastic aptitude and achievement tests (Alpert & Haber, 1960; Carlson & Ryan, 1969; Cotler & Palmer, 1970; Deffenbacher, 1975; Lunneborg, 1964; Sarason, 1957, 1959, 1961, 1963; Sarason, Davidson, Lighthall & Waite, 1958; Sarason & Mandler, 1952; Sassenrath, 1967; Walsh, et al., 1968) and on tests of intellectual functioning (Dunn, 1968; Lighthall, Ruebush, Sarason & Zweibelson, 1959; Mandler & Sarason, 1952; Sarason & Minard, 1962; Sarason, Davidson, Lighthall & Waite, 1958; Zweibelson, 1956). Reading also is inversely related to test anxiety level. Highly test anxious students have lower reading grades (Cotler & Palmer, 1970; Standford, Dember & Standford, 1963), slower reading rates (Cotler, 1969; Gifford & Marston, 1966), and reduced comprehension (Cotler, 1969; Cotler & Palmer, 1970; Gifford & Marston, 1966; Kestenbaum & Weiner, 1970; Lunneborg, 1964).

Taken together these studies demonstrate that individuals characterized by high levels of test anxiety, when compared to persons reporting lower levels of test anxiety, tend to perform poorer. This was established in a great variety of tasks and tests, sampling a rich diversity of behavioral domains across populations ranging from elementary school to graduate school. Thus, with some considerable assurance, it is safe to conclude that under evaluative stress, high anxious persons tend to perform at lower levels than their low anxious counterparts.

At the very least, such test anxiety leads to underestimation of the person's abilities and to temporary personal discomfort. At the worst, it can result in profound personal despair and a truncation of educational and vocational development, to the extent that it interferes with adequate or maximal performance on some important tests. The range is thus from temporary discomfort to the loss of personal and national manpower resources.

The prevalence and importance of tests in our society and the value of individual freedom in educational and vocational development neces-

sitates a serious consideration of the possible responses to the problem of test anxiety.

Test Anxiety: Possible Responses

The remainder of this paper outlines and evaluates five possible responses that the counselling profession might make to test anxiety. Each alternative is evaluated against ethical issues, practical constraints, and empirical support.

Response 1: "Ignore it, it's not our problem."

One possibility is to deny any need to respond to the problem. In its simplest terms this is a "if you can't cope, that's tough; it's your problem" philosophy. Test anxiety is equated with some sort of personality defect for which the person is to blame and for which counselling has no responsibility.

This position is misplaced both psychologically and ethically. In the first place it is very difficult to see why, or how for that matter, any child would deliberately set out to become test anxious. On the contrary, empirical studies show that high levels of test anxiety are more a function of family and school environments which set and reward only high performance standards; which punish behavior falling below these high standards; and which fail to provide alternative models or coping strategies when performance does not match high standards (Sarason, Davidson, Lighthall, Waite & Ruebush, 1960). Test anxiety thus is likely due to a constellation of familial-social-educational factors impinging on the youngster over time. Blaming the individual for his learning history does nothing to reduce the problem but rather only adds guilt and isolation to it.

To ignore the problem of test anxiety is to reject many of the humanistic values underlying the counselling profession. Counselling is committed to help reduce personal suffering and psychological problems, to assist in the development of coping skills to handle recurrent life stress, and to encourage maximal, self-determined development. On all counts, test anxiety is a problem. The highly anxious suffer psychologically while preparing for and taking tests and often afterwards as a function of their inferior performance. For most people tests and evaluation are recurrent life stressors. Finally, test anxiety can function to lower self-esteem and seriously affect self-chosen educational-vocational development. Thus, to disown responsibility to the highly anxious is to reject a large number

of people and a significant set of professional values.

Response 2: "Test anxiety is a false issue; focus on skills and abilities."

Test anxiety is not an illusory problem but a natural reflection of ability. Specifically, if the highly anxious were intellectually less prepared and capable, then they would perform poorer, suffer more negative consequences, and, therefore, report greater fear of test situations. That is, they would report greater anxiety because they would have more realistic reason to do so. If this explanation is valid, a high level of test anxiety is but a natural byproduct of lower ability which suggests that resources should be directed to educational programs in an attempt to improve abilities and increase preparatory skills in reading and study skills programs.

The highly anxious, however, are not demonstrably less capable than their less anxious peers (Deffenbacher, 1975). Several laboratory studies (Sarason, 1961, 1972, 1973; Sarason, Kestenbaum & Smith, 1972; Sarason & Mandler, 1952) have shown that the highly test anxious perform as well as or better than the less anxious when evaluative stress is reduced. Similar results have been demonstrated in nonlaboratory settings. For example, Dunn (1968) found no correlation between test anxiety and Wechsler Adult Intelligence Scale (WAIS) Information scores under nonevaluative testing conditions, but found a significant negative correlation under stressful conditions. Paul and Eriksen (1964) found that highly anxious students performed poorer on a regular class test, but not in a low stress administration of the same exam. Smith, Ascough, Ettinger and Nelson (1971) found that the highly anxious did poorer on a regular test, but not when one-third of the items were written in a humorous format. The highly anxious were also found to perform better on less stressful exam formats (Gaudry & Bradshaw, 1970; Zweibelson, 1956). Thus, the highly anxious are just as capable as their less anxious counterparts, but something about evaluative stress elicits a source of interference for them.

Certainly ability is a most important contributor to test performance, and educational and study skills programs are both needed and in need of support. Many highly anxious individuals, however, are capable, but vulnerable to evaluative stress. Test anxiety is a real phenomenon and cannot be explained away as an artifact of ability.

Response 3: "Abolish testing."

The logic of this proposal is simple: If there are no tests, there can be no test anxiety. Remove tests and you have removed the stimulus for anxiety. Thus, if testing and evaluation were removed from our social and educational systems, no one would suffer debilitating test anxiety.

Though this argument has a certain appeal, it is neither realistic nor practical. Testing has arisen to meet a basic need, the need for information. Decision-making in our educational and vocational systems requires a tremendous amount of information about human performance. Has this youngster acquired the basic skills to move on to a more advanced program? Who of these fifty applicants are most qualified for these three positions? Does this individual possess the ability to justify enrollment in a costly, limited training program? These and countless other decisions must be made daily on the basis of some evaluative samples of behavior. Since this need for information seems unlikely to abate, some form of testing and evaluation are likely to continue for some time to come.

This is not to imply that tests are perfect, or even a good means of sampling behavior. Serious problems of test reliability, validity and use abound (Hoffman, 1962). These problems, however, are not likely to deter their use; the need for information, even of imperfect variety, is simply too great. Problems of test construction should be addressed, researched and remedied. Cautious, ethical use of test materials and interpretations should be strongly supported. However, vast informational needs make the abolishment of testing an improbable and infeasible means of preventing test anxiety.

Response 4: "Make tests less threatening."

This proposal is a logical extension of the previous analysis. If the highly anxious are vulnerable to evaluative stress, then remove the stress and their performance will not suffer. The implication for educational psychology is to study testing conditions that are low in evaluative stress. The implication for counselling is to act in a preventive counselling modality assisting teachers and other users of tests to implement such nonstressful conditions.

There are, however, several distinct problems with this suggestion:

(a) When there are clear consequences for test performance, e.g., grades, admission to a program, it may not be possible to lower stress. The

person may perceive the situation as highly evaluative no matter what we do or say to the contrary.

(b) Even if we are successful in reducing evaluative stress in one situation, the individual is vulnerable to the next evaluative situation. We have not assisted the individual's long term development unless we consult in every testing situation.

(c) Since the focus of change is in the environment and the behavior of the tester, counsellors would have to consult successfully in every testing environment to be truly preventive. Such consultation is likely to be very costly and time consuming. While efforts at producing less stressful systems should be encouraged and researched, it must be recognized that the results of such system change programs are often slow and uncertain for a given individual.

(d) Another, and sometimes overlooked issue, is the effects of such changes on the less anxious. Some studies (Longenecker, 1962; Sarason, 1958) have shown the performance of low anxious to deteriorate under reassuring, less stressful conditions. It is as if these conditions reduced stress for the highly anxious, but reduced motivation to perform for the less anxious. Care must be taken so that efforts to reduce stress for one group do not inadvertently penalize others who perform best under stress. A step in this direction is Sarason's (1972) "motivating task-oriented" instructions which maximized performance of low and highly anxious alike. However, these promising results await further validation, especially in natural settings, before they can be extrapolated into environmentally-oriented prevention programs.

(e) Finally, it must be shown that information generated under less stressful conditions proves to be as reliable, as valid, and as useful as that collected under other testing conditions. That is, we have the responsibility to produce quality information while reducing stress. Thus, while programs directed at making tests less threatening have merit and should be undertaken, they are plagued by several serious problems at the present time.

Response 5: "Develop coping skills in the highly anxious."

If the locus of change were within the individual, many of the problems outlined in Response 4 would be circumvented. If the highly anxious possessed a set of cognitive-behavioral coping skills with which to handle evaluative stress, they could move freely from one testing situation to another. If a test were perceived as stressful, they could apply their coping skills and reduce the stress. In addition, the coping ability does not alter the environmental demand characteristics which may facilitate performance in the less anxious. Thus, a very fruitful approach may be to develop programs which give individuals the skills to cope with stress.

Several good treatment options are available. Systematic desensitization is thoroughly documented and has reduced test anxiety in students from elementary to graduate school (Allen, 1971; Cohen, 1969; Deffenbacher & Kemper, 1974a & b; Katahn, Strenger & Cherry, 1966). Recent modifications in desensitization procedures (Goldfried, 1971) suggest that desensitization may be employed as a coping or self-control strategy for test anxiety reduction (Spiegler, Cooley, Marshall, Prince, Puckett & Skenazy, 1976; Zemore, 1975). Relaxation as self-management programs also have proven very effective (Chang-Liang & Denney, 1976; Deffenbacher, 1976; Deffenbacher & Snyder, 1976; Denney, 1974; Russell, Miller & June, 1975). Cognitive restructuring and task attention focusing interventions likewise are effective (Hahnloser, 1974; Little & Jackson, 1974; Meichenbaum, 1972). Though the methodologies differ, all of these approaches reduce test anxiety and most tend to provide clients with active coping skills with which to reduce future stress. Thus, the availability of good treatment models should not prevent counselling from responding to test anxious individuals.

In addition, these approaches have several practical advantages:

(a) Most can be taught by trained counsellors in a relatively short period of time. For example, training in systematic desensitization can be accomplished in approximately 20 classroom hours (Deffenbacher & Kemper, 1974b). Intensive workshops or training seminars could train counsellors unfamiliar with these skills.

(b) These procedures are not terribly time consuming or costly. Most can be done in small groups within a six to twelve hour time frame, representing approximately one counsellor hour per client. Furthermore, some programs have been successfully presented by videotape (Mann, 1972) and audiotape (Donner & Guerny, 1969) reducing expenditure even more. Such automated programs could be administered by trained paraprofessionals.

(c) No elaborate facilities or equipment are needed; a group counselling room or vacant classroom is sufficient.

Though practical and supported empirically such counselling strategies are not without their critics. Authors such as Carr (1976) argue that such approaches are misplaced ethically and professionally. Carr (1976) sees testing and evaluation as a political extension of the *status quo*, a means of allocating power by oppressing the powerless student. To focus on assisting individuals to cope with evaluative stress is but a "cop out" which serves to support and increase this oppression.

While this argument has serious merit, it seems flawed in two essential ways. First, the distinction between tests and their use is blurred. Tests *per se* do not allocate power — their use does. Like nuclear power, man's use of tests, not their existence, leads to oppression or freedom of development. More relevant to this paper, however, is the issue of control. The development of self-control skills with which to reduce present and . . . future stresses gives freedom and control to the highly anxious. These individuals are then no longer vulnerable to the stresses of testing; they have the skills to cope, i.e., they are no longer oppressed. Rather than abetting oppression as Carr (1976) suggests, self-management programs could increase the degrees of freedom and reduce oppression because the highly anxious will be able to neutralize stress. As London (1971) suggests, one of the safest ways to deal with the issue of control is to foster self-controlling skills in our clients. The above procedures place control in the client's hands by providing him with self-management skills to reduce test anxiety and its crippling effects on development.

In summary, counselling programs which provide clients with stress reduction skills appear to hold the greatest promise in reducing test anxiety. Such approaches are well developed and empirically validated; they can be administered efficiently and effectively with but minimal demands on most systems; and they do not, contrary to Carr (1976), add to the oppression of those being tested.

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