FEAR IN THE OUTDOOR ENVIRONMENT: DESCRIPTION AND MODIFICATION THROUGH RECREATION PROGRAMS

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Using the Situational Fear Inventory, outdoor course participants identified the degree to which they experienced social-based and physical-based anxieties at the beginning, middle, end of their course. Levels of social-based fears were higher and more resistant to modification. Females expressed higher levels of fears. Most fears were reduced significantly through program participation.

Introduction

One interesting aspect of recreational activities taking place in a natural environment is the "push and pull" attributes of the experience. Similar to the dialectical view of leisure behavior (Iso-Ahola 1980:135), for some of the outdoor recreation experience provides a number of appealing attributes while also presenting some challenging and anxiety-producing situations. Bass (1989) reports that this dualism in the outdoor recreation experience epitomizes a coming to terms with the subjective feelings experienced through situations that are challenging and with unexpected outcomes. For many, these outdoor recreation experiences are first experienced through a structured educational program taking place in a natural environment (Kaplan and Kaplan 1989:121).

In an earlier study, Ewert (1988) identified situational fears before, immediately after, and one year following participation in Outward Bound, a wilderness challenge program. In addition, he found that individuals reported reduced levels of situational anxieties following participation in the program.

The purpose of this study was to identify and measure the levels of situational fears and anxieties held by participants of a different type of outdoor program and to measure fears during as well as before and after the course. Because gender was identified as an intervening variable in the previous study (Ewert 1988), this study was also designed to determine if males and females report different levels of anxieties at the beginning, the middle, and end of the course. Based on the literature and past findings (Leary 1982; Gray 1987) it was expected that the items representing social-based fears (e.g., fear of confrontation in the group) would be rated more anxiety-producing than those representing physical fears (e.g., falling or becoming injured). It was also hypothesized that females would report higher levels of fear than males. Finally, based on the cognitive restructuring model (Beck 1976), it was hypothesized that levels of anxiety would decrease significantly throughout the course.

Methods

Subjects in the study were college recreation and physical education majors completing separate, but similar Outdoor Education Practicum (OEP) courses at the Cortland College Outdoor Education Center in the Adirondacks. As mentioned, the OEP courses are notably different from the Outward Bound courses of the earlier study. The course, which runs for 13 days, includes a 5 or 6 day "pretrip" period at the Center and a 5 or 6 day extended canoe and/or backpacking trip in various wild forest areas of the Adirondack Park. The pretrip period at the Center is operated on a schedule that emulates life in a traditional, centralized summer camp. Activity periods are devoted to teaching camping skills and environmental awareness that will enhance students' readiness for and enjoyment of the subsequent trip. The trips take place in remote areas and require primitive camping and traveling skills. Although involving physical and emotional stress, neither the trips nor the in-camp, pretrip experiences center around the systematic progression of challenges associated with the "Outward Bound" formula. The purpose of the OEP is to improve students' appreciation of the natural environment and to complement their professional preparation with knowledge and skills related to centralized camping, trip camping, and outdoor pursuits. Although differing programmatically and objectively from Outward Bound, the OEP, like Outward Bound, has been found to effect significant changes in self-concept (Young and Steele 1989).

Subjects completed a version of the Situational Fear Inventory (Ewert 1988) (1) upon arrival at the Center, (2) after completing the in-camp pretrip phase, and (3) following their backcountry trip. In completing the instrument, students responded to 33 potentially fearful situations by placing a slash (/) across a 10 cm. line ranging from "not at all anxious" to "very anxious." The measured distance from a zero point to a slash mark provided a numerical expression of the level of fear. A number of research questions were addressed in this study including the effects of pretesting. This report, however, is designed to provide a description of the type and level of fears expressed and the influence of gender. To determine any significant differences between the data, one-way ANOVAs with post-hoc Scheffe tests were utilized.

Findings

Across two summer seasons (1989-1990), individuals from eight courses consisting of 42 different trip groups were queried. From this sample, 380 usable questionnaires were obtained. Based on these data, the first hypothesis (social fears would be more anxiety-producing than physical-based fears) was supported. Figure 1 depicts the consistently higher average level of all social fears compared with physical fears at each point of measurement. A similar pattern is apparent when one compares the number of elevated mean scores (e.g., above 40.0) in Table 1 (social) with those of Table 2 (physical). The frequency of elevated social fears (26) is greater than that of physical fears (11) $\chi 2$ (1, N = 168) = 10.844, p <.001.

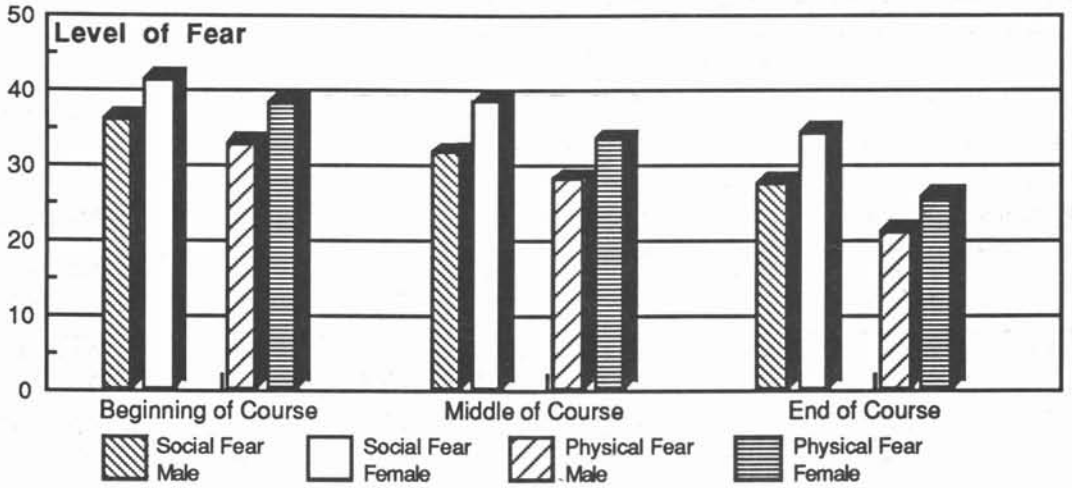

Figure 1. Average levels of social based and physical fears of males and females at the beginning, middle and end of course.

Table 1. Changes in social-based fears of outdoor program participants.

Expressed Fear	Gender	Means Pre-Course	Means Mid-Course	Means End of Course	F Value	P	Difference
Unable to Control Social Environment	Male	37.9	32.8	25.7	12.8	.00	Pre/Middle-Post
	Female	38.9	35.9	30.4	5.1	.01	Pre-Post
Exposure to Un-expected Situations	Male	42.3	38.5	29.6	11.9	.00	Pre/Middle-Post
	Female	46.4	45.9	33.8	14.0	.00	Pre/Middle-Post
Making Wrong Decisions	Male	43.0	38.1	31.6	9.7	.00	Pre-Middle-Post
	Female	49.0	47.7	40.1	5.8	.00	Pre-Middle-Post
Letting Self Down	Male	40.3	35.5	31.7	4.5	.01	Pre-Post
	Female	49.4	47.3	43.7	1.5	.22	No Difference
Letting Others Down	Male	49.9	44.2	39.9	5.6	.00	Pre-Post
	Female	57.4	56.2	53.3	0.8	.44	No Difference
Task Too Demanding	Male	42.5	35.1	26.3	20.2	.00	Pre-Middle-Post
	Female	46.4	43.6	33.3	12.5	.00	Pre/Middle-Post
Confrontation With Others	Male	32.0	28.7	26.3	2.4	.09	No Difference
	Female	35.1	31.0	30.6	1.3	.29	No Difference
Going Unrecog-nized in Group	Male	31.1	26.1	25.0	3.4	.04	No Difference
	Female	34.7	29.7	29.4	1.8	.17	No Difference
Not Performing Up to Group Expectations	Male	39.0	33.0	31.2	4.1	.02	Pre-Post
	Female	50.0	45.6	40.6	4.5	.01	Pre-Post
Not Fitting in With Group	Male	35.2	31.1	28.8	2.8	.06	No Difference
	Female	41.3	36.7	35.0	2.0	.14	No Difference
Not Performing Up to Leader Expectations	Male	38.7	35.1	31.5	3.3	.04	No Difference
	Female	45.6	44.5	40.9	1.2	.31	No Difference
Being Sexually Harassed	Male	18.0	14.0	13.7	2.1	.12	No Difference
	Female	28.6	23.1	23.0	1.5	.22	No Difference
Not Getting Money's Worth	Male	28.9	26.4	22.0	3.5	.03	No Difference
	Female	27.3	21.7	21.1	2.3	.10	No Difference
Course Not Meeting Expectations	Male	26.5	23.7	22.5	1.3	.27	No Difference
	Female	29.9	27.7	24.2	1.9	.15	No Difference

Table 2. Changes in physical-based fears of outdoor program participants.

Expressed Fear	Gender	Means Pre-Course	Means Mid-Course	Means End of Course	F Value	P	Difference
Unable to Control Physical Environment	Male	39.6	37.9	25.4	17.9	.00	Pre/Middle-Post
	Female	42.5	40.4	32.3	6.9	.00	Pre/Middle-Post
Bad Weather	Male	35.0	33.7	21.3	15.89	.00	Pre/Middle-Post
	Female	42.6	38.6	23.0	23.4	.00	Pre/Middle-Post
Poisonous Plants	Male	29.6	21.7	15.9	15.3	.00	Pre-Middle/Post
	Female	33.9	27.3	18.0	15.7	.00	Pre/Middle-Post
Poisonous Snakes	Male	36.2	26.9	21.6	11.4	.00	Pre-Middle/Post
	Female	48.4	38.6	31.3	9.5	.00	Pre-Post
Darkness	Male	27.7	23.1	17.9	7.2	.00	Pre-Post
	Female	31.3	27.8	22.6	4.3	.01	Pre-Post
Dangerous Animals	Male	38.6	33.7	22.7	16.1	.00	Pre/Middle-Post
	Female	47.1	41.0	29.6	14.9	.00	Pre/Middle-Post
Insects	Male	42.7	38.7	29.8	9.4	.00	Pre/Middle-Post
	Female	46.1	44.3	37.3	3.5	.03	No Difference
Becoming Sick	Male	31.0	26.1	22.3	6.0	.00	Pre-Post
	Female	35.6	32.1	25.3	6.0	.00	Pre-Post
Fast or Deep Water	Male	30.1	26.2	20.0	8.0	.00	Pre-Post
	Female	37.9	31.4	26.7	5.9	.00	Pre-Post
Becoming Lost	Male	35.7	29.3	20.7	17.0	.00	Pre/Middle-Post
	Female	41.9	37.1	30.1	7.2	.00	Pre-Post
Getting Dirty	Male	21.3	17.7	12.5	8.0	.00	Pre-Post
	Female	19.4	16.4	11.4	6.5	.00	Pre-Post
Inadequate Clothing	Male	30.0	28.3	21.5	6.4	.00	Pre/Middle-Post
	Female	36.3	35.9	24.7	10.4	.00	Pre/Middle-Post
Not Enough Training	Male	29.8	22.9	21.5	6.4	.00	Pre-Middle/Post
	Female	40.9	30.7	26.8	11.8	.00	Pre-Middle/Post
Insufficient Food	Male	31.4	27.4	23.8	4.1	.02	Pre-Post
	Female	34.7	28.0	22.7	7.7	.00	Pre-Post
Cold/Hot Temperatures	Male	31.6	27.3	19.6	12.7	.00	Pre/Middle-Post
	Female	32.9	31.2	23.6	5.7	.00	Pre-Post

The data indicated that gender was an important mediating variable in all three levels of measurement (beginning, middle, and end of course), with females consistently reporting higher levels of anxiety (see Tables 1 and 2). These findings were particularly pronounced in the items of "letting others down," "not performing up to group expectations," and "letting myself down." In these cases and particularly for females, the level of fear remained relatively high. Comparing the occurrences of elevated (i.e., <40.0) fears of women and men in Table 3, the differences were significant $\chi 2$ (1, N = 174) = 18.16, p <.001.

Table 3. Frequency of elevated fears levels of males and females.

	Fear Level		
Gender	> 40	< 40	Total
Females	30	57	87
Males	7	80	87
Total	37	137	174

a/χ^2 (1, N = 174) = 18.16, p <.001.

The data also supported Hypothesis 3 with levels of anxiety consistently lessening with later measurements. All fear levels were reduced; 71.6% were reduced significantly (p <.05). In most instances, the degree and significance of fear reductions were similar for men and women. The timing of the significant change (pre- to mid- and mid- to post-course) varied more widely.

As indicated in Table 4, the social fears, found earlier to be higher, were also more difficult to change. All physical fears, except the female's anxiety about insects, changed significantly. In contrast, only 12 (42.9%) of the social anxieties were reduced significantly.

Table 4. Frequency of significant change in levels of social and physical fears.

	Significance		
Fear	<.05	>.05	Total
Social	12	16	28
Physical	29	1	30
Total	41	17	58

a/χ^2 (1, N = 58) = 20.24, p <.001.

Implications

There are two sets of implications relative to the findings of this study. From a marketing and programmatic perspective, useful information can be gained by knowing what participants of structured natural environment and wilderness-challenge programs fear. As has been reported in past research, the findings of this study suggest that the social-based fears such as not meeting the expectations of others are more anxiety-producing than the physical-based fears. Further, this study found that the social-based fears are more resistant to change. It would seem that learning facts and skills and completing the experience alleviate most physical fears. The persistence of some social fears (e.g., not fitting in with the group) may stem from the students' doubts about their acceptance by their group in the course. Or, it may stem from the knowledge that acceptance by their course group does not necessarily assure them of acceptance by the next group with which they travel or work. These points and the item-specific findings may suggest ways some providers of these courses can market and deliver wilderness-challenge and similar programs (Goodale 1985:359).

From a sociological perspective, the findings support past work that suggested that females report higher levels of fear in outdoor programs such as the one studied than do males. These differences were particularly evident in the "letting down" variables. While reassuring in the sense that the data are in line with past research, the findings are disturbing in another sense. Despite the common belief that attitudes about leisure and recreation were becoming less differentiated based on gender (Ibrahim 1991), the differences reported in this study suggest that with respect to fear in outdoor programs, there may be persistent and widespread differences between men and women. Although this trend was first ascribed to more honest responses on the part of females (Ewert 1988), the strength of these differences suggest that a powerful phenomenon may be in play-perhaps social learning. If social learning is an influencing factor in the development of fears, particularly among females, programs such as the one studied can play an important role in reducing those fears. From the broader context of society, the true value in programs such as this one may lie more in the modification of fear and feelings of inability and less in the learning of any particular skill or technique.

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