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## MOODS OF OUTDOOR SHORT COURSE PARTICIPANTS

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### Background

With an increase in participation in outdoor courses for challenge and adventure, leaders may overlook preparing participants for the psychological aspects of an extended outdoor experience. Many outdoor programs have found that short courses (7-12 days) fit schedules, finances, and less skilled enthusiasts. These trips may include backpacking, horsepacking, dogsledding, and canoeing.

There has been little research completed on the psychological aspects of outdoor trips of any length. Psychological aspects of an extended outdoor trip are usually associated with group process skills. When a group is together for more than a few days, a variety of dynamics begin. As group dynamics emerge, they influence morale, participation, conflict, competition, and cooperation. Every group is different because of the dynamics of people involved and the conditions under which they are asked to perform. Participants must adjust to new sets of behaviors in a relatively short length of time. It is understandable that the psychological stresses would affect the mood states of participants.

A review of the literature led to a significant amount of research on the psychological aspects of sports, especially using the Profile of Mood States (POMS; LeUnes, Hayward, & Daiss, 1988). Since the introduction of POMS research to sports, over 60 papers have been published. These papers have involved many different sport areas, including running, football, swimming, wrestling, bicycling, gymnastics, soccer, and volleyball (LeUnes, Hayward, & Daiss, 1988).

### Related Research

In the majority of sport studies, the POMS has been applied at a single evalua-

tion point rather than over a period of time. Most studies mark an individual participant's mood state at a single point in time. Very few studies have focused on a series of points to indicate a cycle of moods that may accompany sports and recreation participation. In an outdoor recreation program, this cycle of moods is important due to the extended period of time and the isolation of participants during the activity.

Leon, McNally, and Ben-Porath (1989) studied the 1985 North Pole expedition consisting of seven men and one woman. The overall findings were that participants were found to exhibit low stress reactivity, depression, anxiety, and somatic concerns (Leon, McNally, & Ben-Porath, 1989). The POMS was administered seven times over the course of the expedition. The small sample size and selectivity of participants made it difficult to formulate a cycle of moods and unreliable to apply to other outdoor expeditions. Another study investigated altitude symptomatology and mood states during a high altitude climb (Shukitt-Hale, Rauch, & Foutch, 1990). Self-rated symptoms and moods were determined with seven males over seven days during a climb to 3,630 meters. Both symptomatology and moods changed negatively as the climbers went higher. This study suggests that factors other than altitude can adversely affect participants.

In other studies, the influence of time of day on responses to the POMS was measured. Greater mood disturbances were found in the morning than in the afternoon among office workers (Hill & Hill, 1991). The results suggested a circadian rhythm in perception of mood states. Mood states were linked to soldier performance following a strenuous road march. Knapik et al. (1991) found that physical abilities such as marks

manship and throwing decreased. Fatigue increased 82%, with a 38% decrease in vigor. The results indicate that mood changes should be expected following a strenuous hike.

Finally, mood states were studied among chronic exercisers. Male and female distance runners possessed low means on the scales of tension, depression, fatigue, and confusion and a high mean on vigor. A significant gender difference was noted on confusion (Frazier, 1988).

### **Purpose**

A purpose of this study was to demonstrate the cycle of mood states displayed by outdoor short course participants. It was hypothesized that participants on short courses experience fluctuations of mood states. Moods would follow a predictable cycle and will complete a range of moods. Mood states were assessed using the POMS (McNair, Lorr, & Droppleman, 1971).

### **Method**

Data were collected from nine groups over three years. Eight groups were co-ed participant groups, and one group was comprised of instructors. The POMS was administered each day, beginning with the first day in the field. Data were usually collected in the late afternoon. An assistant instructor from each group was given the task of collecting data during each course. Each subject was assigned an identification number with each group coded. The instructors were coded so that they could be looked at independently. A demographic inventory was given to participants prior to entering the field. Ninety-seven students and 14 instructors participated in the study. All subjects experienced essentially the same terrain and the same weather and comfort. This controlled some of the otherwise intervening factors which might affect some groups and not others. Data were analyzed first by examining each group's means and standard deviations for each day for each scale. Second, participants were grouped by gender and data were analyzed accordingly.

It was hypothesized that the beginning stages of the expedition would be character-

ized by individuals who displayed low levels of anger/hostility and depression/dejection and high levels of confusion/bewilderment, fatigue, vigor and tension/anxiety. Confusion/bewilderment, vigor, and fatigue should have decreased during the middle stages of the expedition. The final stages of the expedition should have included decreases in anger/hostility, depression/dejection, and tension/anxiety. Vigor and fatigue should have increased slightly and confusion/bewilderment should have remained at the level achieved during the middle stage of the expedition.

### **Findings**

Findings appear to indicate that there is a predictable range of moods during a 10-day outdoor experience. By examining subjects by gender, patterns of moods are evident. The patterns indicate low levels of anger and depression during the first third of the course. Confusion and fatigue were moderate in range, and vigor and tension were high. Day four indicated a high level of confusion, fatigue, anger, depression, and tension. All scales showed a steady decline after day four, with slight increases in fatigue, depression, and anger at day eight. Vigor remained fairly constant throughout the courses.

When compared to means of adults ages 18-65, it was found that on every scale (tension, depression, anger, fatigue, and confusion), the outdoor course participants averaged considerably lower ratings. Vigor was higher among outdoor course participants.

When results were compared to a similar study conducted at the University of Northern Arizona on participants of three and five week courses, several similarities appeared. The trends followed a similar pattern during the first third, middle third, and final third of an outdoor course (Foti & Daiss, 1990).

### **Conclusions**

Day 4 seems to be a pivotal day on short courses. It is not apparent whether it is physical demands or group dynamics that trigger dramatic changes in moods at this point. With three years of data, however, the

fact that this particular day shows that fluctuations in moods by participants alerts leaders to a time in the course when participants may be experiencing distress. Further analysis of day by day changes in individuals would further define the noted phenomenon.

Leadership training for handling variations of mood states and/or group dynamics seems desirable for outdoor leaders. Leaders must recognize that moods do vary during an outdoor experience. Knowing when groups escalate in general will help leaders be aware of and prepared for shifts in individuals and in the group. For safety and group interaction purposes, the question is, at what level of mood disturbance should a leader be concerned? The levels of mood indicated in this study are below those of normative samples and would indicate that, while their moods were elevated, people were not different than a group of adults in everyday circumstances.

This study is a first step in discovering what happens to participants during an outdoor experience. There are many research directions in which to go from this study. The excitement is in the fact that patterns have been demonstrated longitudinally, and patterns indicate specific points of time during a 10-day course when moods change considerably. This research will continue, and it is hoped that others will join in the discovery of the psychological impacts of a group experience in the outdoors.

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