# Effective Coping Strategies in Stressful Outdoor Recreation Situations: Conflict on the Ocoee River

# Rudy Schuster William Hammitt

Abstract—This study was designed to identify conflict situations that cause stress, and predict appraisals of stress, coping strategies and outcomes of the coping process among private boaters on the Ocoee River in Tennessee. Results show that 72 percent of the respondents experienced conflict. Conflict was of moderate intensity and concern, boaters generally psychologically distanced themselves from it, exercised self-control, and in general, satisfaction with the experience was not adversely affected. However, additional statistical analyses failed to identify significant relationships.

Wilderness recreation settings, which receive diverse and high levels of use, often breed conflict among recreationists. Conflict management is becoming a formidable issue for wilderness resource managers as the popularity of resource-based activities increases impacts. Advances in technology have increased the diversity of recreational opportunities, resulting in new activities at sites previously managed for traditional uses. Information about social conflicts in wilderness recreation settings is necessary for managers, who must attempt to mitigate conflict and facilitate user satisfaction.

This study provides information on the nature of conflict experienced by private boaters at the Ocoee River in Tennessee. It should be noted that the Ocoee River is not part of the National Wilderness Preservation System.

Currently, commercial rafters and private boaters, predominantly kayakers, share the Ocoee River. Three separate dams control the water flow in the river. The upper section was the site of the 1996 Olympic whitewater competition; this section of the river has limited dam releases during the year. The middle section experiences dam releases on a frequent schedule throughout the year. There is heavy commercial raft and private boat use of the middle section. When the upper section schedules a release, a smaller number of permits are issued for commercial rafts. There is no limit for private boaters on either section. During 1998, 23,892 commercial rafters paddled the upper section, and 246,787 rafters paddled the middle section. During the same year, 2,823 private boaters paddled the upper section,

and 29,620 paddled the middle section. Due to high commercial raft use, the USDA Forest Service constructed a second take-out, exclusively for private boaters, at the end of the middle section, in an attempt to reduce the number of people using the original commercial take-out location. However, many private boaters still use the commercial take-out. The high volume of use on the river is a probable source of conflict.

# Conceptual Background \_\_\_\_

## **Stress and Coping**

This study used a modified stress-response model (Lazarus and Folkman 1984) to investigate recreationists' appraisal of stressful situations, coping methods and outcomes in the form of satisfaction. Psychological stress is defined as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well being" (Lazarus and Folkman 1984). Many forces, both physical and social, acting on an outdoor recreationist's psychological state and are perceived as potentially taxing and even threatening, causing increased stress or anxiety (Ewert 1988; Robinson and Stevens 1990).

The stress process conceptualized by Lazarus and Folkman's (1984) model is founded on three assertions. First, stress can result from conditions within the individual and from external situations. Second, there is a mediating appraisal process that includes a primary appraisal and a secondary appraisal. Third, the appraisal process has an effect on the way the individual decides to cope in response to the stress

The primary appraisal determines if, why and to what extent a particular transaction is stressful. If a situation is stressful, a second appraisal occurs to determine the availability and efficacy of coping options. These two appraisals together determine the type of response necessary. When options are generated, the coping process is initiated, and stress is relieved. If stress is not relieved, the situation is reappraised, and the process begins again. Finally, outcomes are produced as a result of the process. The exact short-term and long-term outcomes are determined by the coping option chosen. Short-term effects may include positive or negative feelings, psychological effects or diminished experiences. Short-term outcomes were measured as satisfaction in this study.

Schneider (1995) and Schneider and Hammitt (1995) used the Lazarus and Folkman (1984) model. They defined outdoor recreation conflict as "a disruptive stressful occurrence

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Rudy Schuster (corresponding author) is a Research Assistant in the Parks, Recreation and Tourism Management Department, Clemson University, South Carolina, 29634, U.S.A., e-mail: rschust@clemson.edu. William Hammitt is a Professor in the Parks, Recreation and Tourism Management Department, Clemson University, South Carolina, 29634, U.S.A., e-mail: hammitw@clemson.edu

in the visitor's recreation experience involving a personenvironment relationship that taxes a person's psychological resources" (Schneider and Hammitt 1995). Their model presumes that outdoor recreation conflict incidents are stressful or produce stress-related situations. Thus, response to conflict likely mirrors the response to stress.

The conceptual foundation of the Ocoee River project is based on the original model of stress and coping developed by Lazarus and Folkman (1984). In the 1995 research, Schneider adapted the stress appraisal and coping process, developed a modified ways-of-coping checklist and used the process in a recreation setting. The methodological operationalization of this research is heavily influenced by the introductory work of Schneider (1995). The definition of stress used in this study is borrowed from that study and recreational conflict is considered synonymous with stress.

## **Social Support**

The general definition of social support, "the resources that are provided by other persons," was used by Cohen and others (1985) and Cohen and Syme (1985). Social support has been conceptualized in two broad categories. Objective support refers to the actual amount of emotional or tangible support provided to an individual. Subjective social support is the extent to which people believe that support will be available should a crisis occur (Coleman and Iso-Ahola 1993).

Two different measures of social support are defined by Cohen and Wills (1985), Coleman and Iso-Ahola (1993) and Iso-Ahola and Park (1996). Structural measures assess the existence or number of relationships. These measures quantify the actual structure of an individual's support network. Structural measures do not provide information about the functions provided by the relationships. Global functional measures assess an individual's perception of the availability of resources. Sarason and others (1990) refer to structural measures as available support. Global functional measures, perceptions or appraisal of available support are more likely to provide a better measure of stress (Coleman 1993; Coleman and Iso-Ahola 1993; Cohen and Wills 1985; Sarason and others 1990). "This is so because the appraisal of stress is based on a person's beliefs about available support as opposed to its actual availability" (Cohen and others1985). This study operationalized social support in terms of appraised support, which is an individual's perception that support is available if necessary.

Social support as it relates to leisure was introduced by Coleman and Iso-Ahola (1993) in a stress-buffering model. The authors state that, "participation in leisure activities provides resources that assist people either to resist the onset of stress reactions or cope with stress before stress has an impact on health." Two methods of coping strategies are listed: (1) Beliefs and dispositions may lead to an appraisal of life problems as non-threatening, and (2) enhancement of people's ability and efforts may alleviate the stress from problematical life events (Coleman and Iso-Ahola 1993).

Coleman and Iso-Ahola (1993) theorized that as companionships are built while participating in leisure activities, an individual's perception of available social support increases. Participation in leisure activities is generally social. One motivation for participation in leisure activities

is to establish new friendships or strengthen existing relationships. This rationale is used to hypothesize that participation in leisure activities may produce friendships and contacts that lead people to perceive that they will receive social support when necessary: "Companionships and friendships developed and fostered through leisure engagement help people cope with excessive life stress and thereby help maintain or improve health" (Coleman and Iso-Ahola 1993).

Cohen and others (1985) tested the functional components of social support by operationalizing individual scales measuring appraisal support, belonging support, tangible support and self-esteem support. The authors developed the Interpersonal Support Evaluation List (ISEL) consisting of 40 statements that measure the availability of these four components of social support from a subjects point of view. "Items were developed on theoretical grounds to cover the domain of supportive social resources that could potentially facilitate coping with stressful events" (Cohen and others 1985).

The social support appraisal scale was designed to measure an individual's perception that they have someone to talk to about their problems. The issue of choosing a social support measure for any study is a complex and controversial one. Cohen and others (1985) emphasize that the instrument must provide specific information necessary to answer the question being posed.

#### Commitment

Buchanan (1985) presents a starting point for the use of commitment in recreation activities. Commitment is defined "as the pledging or binding of an individual to behavior or to the role associated with the behavior and which produce side bets as a results of that behavior...commitment is presented as a process best viewed along a continuum." Buchanan (1985) discusses three components of commitment.

The first component is that the participant must have constant or focused behavior and be willing to reject alternative behaviors. This implies behavioral consistency, responsibility to perform or live up to expectations and the binding of the individual to the activity. The second component is the existence of side bets. A side bet "occurs when something of value (originally unrelated to the present behavior) is staked on maintaining behavioral consistency" (Buchanan 1985). Behavioral inconsistency will result in the loss of a side bet; the threat of loss maintains the consistent behavior. The third component states that there is an affective attachment to an activity or organization through shared goals and values.

Kim and others (1997) cite the work of Johnson (1973), conceptualizing commitment as having two components. Personal commitment, which is similar to affective attachment, is the continued participation in an activity because of moral imperative, inner conviction, hedonistic reasons or intuitive worth. Behavioral commitment is also the result of external constraints placed on the individual. These constraints may be monetary cost or social. Social constraints are a product of sociological phenomena. Cost constraints are associated with the losses that may be incurred due to cessation of participation. These concepts are similar to Buchanan's (1985) conceptualization of commitment.

The process of becoming committed to a recreational activity is associated with the development of the activity as a central life interest (CLI). A CLI is a source of personal reward and a method for developing self-definition. The more often an individual participates in a recreation activity, the more reward they receive. The receipt of reward contributes to the reinforcement of the activity as a CLI. A CLI emphasizes increased personal value for all aspects of the activity (social interaction, skill level, codes of conduct, and equipment). As an activity becomes more of a CLI for participants, they become more susceptible to conflict associated with that activity.

#### Satisfaction

Level of satisfaction with the recreation experience is an outcome of the stress coping model. Buchanan (1983) stresses that understanding and indetifying the specific psychological benefits that recrationists perceive they are receiving from recreation activities is important for managing and evaluating recreation services. "An understanding of why variation in satisfactions exists between recreation users might ultimately be used to mitigate the potential for conflict" (Buchanan 1983). The quality of outdoor recreation experiences has also been equated with user satisfaction (Manning1986).

Overall measures of satisfaction are often used in recreation research. However, overall measures of satisfaction may not provide the specificity necessary for management decisions. Satisfaction with a recreation experience results from the visitors' perceptions of the actual resource conditions, the managerial conditions and the social conditions (Manning 1986). In order to use satisfaction as an outcome of conflict, satisfaction must be addressed as a multidimensional construct. In addition, the dimensions of satisfaction should be linked to management concerns or the factors that are probable sources of conflict.

#### Methods

This study was a pilot-test for a future research project. The objective of the survey was to pilot-test the commitment and social support scales for use as components of the stress-coping model.

The present study adopted the appraisal support scale used and validated by Cohen and others (1985). The scale was altered to fit the activity of kayaking.

The commitment scale used in the Ocoee River project was adapted from Kim and others (1997). In the 1997 study, Kim and others designed a nine-item scale designed to integrate the three dimensions of commitment. The scale used at the Ocoee included four additional variables. One variable was designed to measure how serious the individual was about the activity. Another was an additional side-bet measure. The third was a measure of participation consistency. A final addition was a variable measuring amount of time spent thinking about boating.

Satisfaction with the boating experience at the Ocoee River was measured with a scale comprised of variables directly associated with issues identified as probable sources of conflict. The variables were developed after conversations with United States Forest Service managers from the river and boaters who were familiar with the Ocoee River.

Private boaters (predominantly kayakers) were surveyed during a limited dam release of the upper section. The pilottest sampling was conducted during three weekends in the months of August and September 1998. A convenience sampling method was used. Participants were given a brief introduction and justification for the study, then asked to complete an on-site questionnaire. The three sampling points were the take-out for the upper section, which is also the putin for the middle section and the private boater take-out for the middle section

A total of 252 private boaters were asked to complete an on-site questionnaire. An adjusted response rate of 73 percent produced a total of 185 useable surveys. Commercial raft clients and raft guides were not surveyed in this phase of the study since conflict was anticipated to be greatest for the private boaters.

Simple linear regression was used to determine if (1) level of commitment could predict secondary appraisal, (2) perceived social support could predict secondary appraisal, (3) secondary appraisal could predict coping response, and (4) if coping response could predict satisfaction. Alpha was set at 0.05 for all analyses. Cronbach's alpha split-half reliability coefficient was used to determine the reliability of the scales. A scale was considered reliable with a coefficient of 0.6 or greater. Analyses were conducted using the SPSS 8.0 for Windows statistical software package.

## Results

#### **Boater Profile**

The average age of the respondents was 34 years; the median was 29. Twenty four percent of the respondents were female, and 71% were male. Seventy-four percent of the respondents had some form of higher education; of these, 21% had some college (respondents were still in college), 39% had graduated from a four-year college, and 14% had graduate degrees. Most respondents were single-not married (46%). The second highest category was married (40%); 1% were separated, and 7% were divorced. The levels of income were: less than \$19,000 (15%), \$20,000 to \$39,000 (19%), \$40,000 to \$59,000 (20%), \$60,000 to \$79,000 (11%), \$80,000 to \$99,000 (5%) and more than \$100,000 (20%).

The average group size was four, with three modes of two, three and four (43% of respondents). The average years of experience was 7.62; 49% of the respondents had between two and five years of experience. The average ability level was 3.76 (self reported on a 5 point Likert-type scale, 1 = beginner and 5 = expert), with a mode of 4 (43% of respondents). The average number of days each respondent boated a year was 62, with three modes of 30 days, 50 days and 100 days (a total of 34% of respondents). Ninety-three percent of the respondents had boated on the Ocoee River in the past.

#### **Social Support**

Ten variables, rated on a five-point Likert-type scale, anchored with strongly disagree and strongly agree, were

used to measure social support. Table 1 illustrates the scale as it appeared on the survey. Table 2 lists the individual social support variables, their means and standard deviations. The reliability coefficient for the scale was 0.86. The sample mean for the scale was 4.41. In general, the population appears to have a high level of perceived social support.

#### Commitment

Commitment was measured using the 12 variables shown in table 3. The same scale formatting shown in table 1 was used. The variable, *I consider myself somewhat expert at boating*, was dropped from the original scale. Ability level was measured in a separate variable (five-point Likert-type scale, 1 = beginner and 5 = expert) and would have been included in the analysis twice if retained in the commitment scale. The reliability coefficient (0.90) did not change when the variable "I consider myself somewhat expert at boating" was removed.

Table 3 lists the individual variables, their means and standard deviations. The overall scale mean for the population was 3.39, with a standard deviation of 0.83. A mean of 3.39 indicates that the population was slightly committed to the activity of boating.

## **Stress and Coping**

Primary Appraisal, Intensity, and Concern—Two separate variables were used to measure primary appraisal of stress. One asked if boaters experienced conflict the day of the questionnaire survey; 39% of the respondents experienced conflict that day. The second asked if the boaters had experienced conflict on the river in the past, 69% had. Combining both responses, while accounting for

respondents answering yes to both questions, indicated that 72% (n = 34) of the respondents experienced conflict on the Ocoee River. The respondents who experienced conflict were asked if they expected conflict to occur; 54% of these respondents did expect some sort of conflict.

Respondents were asked the level of intensity at the beginning and the end of the conflict experience on a five-point Likert-type scale (1 = very low, 2 = low, 3 = moderate, 4 = high, and 5 = very high). Both questions were combined, yielding an average intensity score of 2.96, with a standard deviation of 1.10. In general, the conflict was of moderate intensity.

Concern for the incident at the beginning and end was measured using separate variables on a five-point Likert-type scale (1 = very minor, 2 = minor, 3 = moderate, 4 = major, and 5 = very major). The two measures were combined, for an average concern score of 2.59, with a standard deviation of 0.88. The respondents' concern about the conflict appears to be minor to moderate.

Secondary Appraisal—Secondary appraisal was measured using four variables designed by Lazarus and Folkman (1984). The variables were measured on a five-point Likert-type scale, as illustrated in table 1. Table 4 shows the means and standard deviations for the secondary appraisal variables. The data indicate that the most frequently used secondary appraisal item was "I had to accept it." Accepting the situation suggests that the respondents felt they could not affect the conditions or did not want to affect the conditions.

Ways of Coping Scales—Ways of coping scales were originally organized according to four domains designed by Lazarus and Folkman (1984): confrontive coping, self control, distancing, and planful problem solving (creating plans to actively solve the problem). These variables were

Table 1—Example of survey scale.

disagree		agree	
2 3	4	5	

Table 2—Social support scale, means, and standard deviations.

Variable		Standard deviation	
There are people I can trust to give me good advice about rivers to paddle.	4.48	0.72	
There are people I can trust to give me good advice about difficult situations while boating.	4.47	.80	
There are people I can trust to give me good advice about boating techniques.	4.40	.74	
My friends and family support my desire to boat.	4.40	.96	
I discuss my boating experiences with friends and they discuss theirs with me.	4.34	.82	
There is at least one person I know whose advice about boating equipment I really trust.	4.29	.98	
If a crisis arose while boating my friends would be able to give me good advice about handling it	4.16	.85	
There is someone I could turn to for advice about how to change boating trips while they are in progress.	3.91	1.01	
There is someone I can turn to for advice about handling hassles over responsibilities concerning boating trips.	3.67	1.15	
There is someone who I feel comfortable going to for advice about stress resulting from boating trips.	3.36	1.20	

Note—1 = strongly disagree, 5 = strongly agree, mean = 0.41, sd = 0.63.

Table 3—Commitment variables, means, and standard deviations.

Variable	Mean	Standard deviation
I take boating seriously.*	4.10	1.02
I go boating on a consistent basis.*	3.95	1.10
When I am not boating I am often thinking about boating.*	3.70	1.14
I would rather go boating than do most anything else.	3.69	1.22
Other recreation activities don't interest me as much as boating.	3.49	1.33
I find that a lot of my life is organized around boating.	3.28	1.23
I have put too much into boating to stop now.*	3.14	1.35
If I stop boating, I would probably lose touch with a lot of my friends.	3.02	1.37
Most of my friends are connected to boating.	2.96	1.20
Because of boating, I don't have time to spend participating in other recreation activities.	2.95	1.33
Others would probably say that I spend too much time boating.	2.86	1.38
If I couldn't go boating I am not sure what I would do.	2.77	1.40

Note: alpha =0.90

Table 4—Secondary appraisal variables, means, and standard deviations.

Variable	Mean	Standard deviation
I had to accept it as it was.	3.64	1.35
I could change it or do something about it.	2.71	1.44
I needed to know more about it before I could act.	2.11	1.12
I had to hold myself back from doing something about it.	1.79	1.16

Note—1 = strongly disagree, 5 = trongly agree.

measured on a four-point Likert-type scale, with 1 = did not use, 2 = used somewhat, 3 = used quiet a bit and 4 = used a great deal.

The reliability coefficient for the distancing scale was 0.80. Variables in the distancing scale are shown in table 5. The sample mean for the distancing scale was 2.54, with a standard deviation of 0.95. Respondents chose to psychologically distance themselves from the conflict somewhat to quite often.

A reliability coefficient of 0.6 was not achieved for the confrontive coping, self-control and planful problem solving scales in their original state. However, when three items were added to the self-control scale an alpha of 0.72 was achieved. These items are listed in table 6. The combination of variables still appears to be measuring self-control. It also includes variables from the planful problem solving scale and a variable concerning river etiquette.

**Table 5**—Ways of coping, distancing scale, means, and standard deviations.

Variable	Mean	
Didn't let it get to me	2.83	1.21
Went on as if nothing had happened.	2.45	1.23
Tried to forget the whole thing.	2.16	1.20
Decided it was not as bad as I thought.	2.27	1.11
Refused to get too serious about it.	2.66	1.21

Note—1 = did not use and 4 = used quite a bit.

With the method of coping implied by this combination of variables, the individual makes a plan to solve the problem; the plan consists of exercising self-control and following established codes of conduct on the river. The sample population mean for this scale was 2.50, with a standard deviation of 0.70. A mean of 2.50, on a four-point scale, indicates that this coping strategy was used somewhat to quite a bit of the time.

The formation of this scale was based on the face value of the variables, intuitive logic and information received during conversations with boaters at the time the survey was distributed. The coping scheme represented by these variables, and discussed above, is plausible and even probable, based on information from boaters at the River. Boaters at the Ocoee indicated that stress and/or conflict is often experienced on the Ocoee as a result of interaction with commercial rafts. The situations they encounter on the river are often perceived as unavoidable. They suggested that self-control was the only option and that it was important to maintain river etiquette, regardless of rafters' behavior. Given that this is a pilot-test, the ad-hoc formation of this scale is justified.

#### Satisfaction

Nine variables were used to measure satisfaction. The variables, mean ratings and standard deviations are listed in table 7. The variables were measured on a five-point Likert-type scale, as shown in table 1. The reliability coefficient for the scale was 0.88. The sample mean was 3.75, with a standard deviation of 0.77. On a five-point scale, a mean of 3.75 indicates that, in general, the population was satisfied with their experience.

<sup>\*</sup>Variables not included in the original Kim, Scott, and Crompton (1997) scale.

**Table 6**—Ways of coping, enhanced self-control scale, means, and standard deviations.

Variable	Mean	Standard deviation
Followed established river etiquette.	3.30	0.94
Tried not to damage future boating opportunities with my actions.*	2.81	1.23
I knew what had to be done so I doubled my efforts to make things work.	2.42	1.22
Made a plan of action and followed it.	2.29	1.20
Tried to keep my feelings to myself.*	2.18	1.09
Kept others from knowing how bad things were.*	1.83	1.00

Note—1=did not use and 4=used quite a bit.

Table 7—Satisfaction scale, means, and standard deviations.

Variable	Mean	Standard deviation
I was satisfied with my interaction with other boaters.	4.18	0.89
I was satisfied with the level of safety maintained on the river today.	3.99	.95
I was satisfied with the number of contacts I had with other people today.	3.98	1.01
I was satisfied with the level of river etiquette excised by other people today.	3.81	1.02
I was satisfied with my interaction with raft clients.	3.78	1.03
I was satisfied with my interaction with raft guides.	3.74	1.10
I was satisfied with the amount of time I waited to access parts of the river.	3.65	1.16
I was satisfied with the amount of space I had to boat in today.	3.50	1.22
I was satisfied with the level of use on the river today.	3.43	1.24

Note—1 = strongly disagree, 5 = strongly agree.

Based on the multidimensional satisfaction scale, the mean satisfaction score for respondents who experienced conflict was 3.70 (standard deviation = 0.68). The mean satisfaction for those who did not experience conflict was 3.88 (standard deviation = 0.80). An independent sample t-test was conducted to determine if the satisfaction levels for each group were significantly different. Levene's test for equal variances indicated that the variances were not equal. The results of the t-test (equal variances not assumed) indicate that p is greater than alpha (alpha = 0.05, p = 0.17, t = 1.36, df = 78), therefore the null hypothesis cannot be rejected. There is no significant difference between the satisfaction levels for boaters who experienced conflict and those who did not.

# **Inferential Statistics**

Standard multiple regression was used to determine if (1) level of commitment could predict secondary appraisal, (2) perceived social support could predict secondary appraisal, (3) secondary appraisal could predict coping response, and (4) if coping response could predict satisfaction. A total of 12 simple linear regression models were tested. Results of the regression analyses revealed that none of the models was significant at the 0.05 level.

# Discussion

Despite evidence of conflict in the descriptive data, additional statistical analyses failed to identify significant relationships at the .05 level. Since there were no significant

relationships, the stress-coping theoretical models originally proposed could not be supported. Previous research using these instruments and theories in recreation research (Miller 1997; Schneider 1995) and research in other disciplines have produced significant results. The lack of variability in the data, and the inability to find statistically significant results, do not refute the fact that conflict occurred. The high presence of conflict and high level of satisfaction suggest that a number of psychological and coping phenomena may be occurring.

The boater profile indicates that the population consists of experienced boaters (mean = 7.6 years of experience) with a moderate to high ability levels. They participate in the activity on a frequent basis (average of 62 days a year). In addition, 93% of the sample had boated on the Ocoee River in the past. The commitment scale indicated that the participants had a moderate to high level of commitment to the activity of boating. The profile supports this level of commitment by illustrating the high ability levels and frequency of participation. Combined, these measures represent the three dimensions of commitment described previously (behavioral consistency, affective attachment and side bets). However, the measure of commitment was not an effective component of the stress coping model.

The measure of perceived social support was high (mean = 4.41 on a five-point scale). This should be interpreted with caution. The respondents completed the survey in an environment that provided very high levels of social support. They were sitting on the riverbank surrounded by equipment and hundreds of other kayakers and rafters. In this social context, responses may have been biased by the

<sup>\*</sup>Original self-control variables.

immediate surroundings. Responses to these measures might be different if the survey were administered in a non-river setting. Statistical analysis indicated that the measure of social support was not an effective component of the stress coping model.

The descriptive data suggest the following coping scheme was generally applied by boaters at the Ocoee. The situation was appraised as stressful. The secondary coping scale indicated that most people accepted the situation as it was. The coping methods chosen were either to psychologically distance one's self from the situation and/or to exercise self-control. The coping strategy worked, and satisfaction with the recreation experience was not adversely affected by the stress.

Despite the high level of conflict incidents reported, the boaters' satisfaction did not suffer. This suggests that the coping responses were effective. One possible explanation may be found in the expectancy measure. Most of the respondents who experienced conflict expected incidents. In addition, 93% of the respondents had been on the Ocoee in the past. This expectation and prior use history may have prepared the respondents for the social, managerial and resource conditions on the river.

Prior knowledge of conditions enhances the predictability of the stress. When a stressful situation is predictable, "functioning [in that environment] is enhanced because one knows what to expect" (Kaplan and Kaplan 1982). By having prior knowledge of the situation, one can be prepared to respond in the most effective manner in order to relieve the stress. In effect, they coped with the anticipated conflict before arriving on-site. In this case, a model attempting to explain coping strategies that occur on-site, and in response to a situation, cannot account for pre-incident coping. This antecedent coping hypothesis is supported, in part, by a second possible explanation.

If past experience contributes to the definition of the setting and recreation experience available at the Ocoee River, and most of the boaters share that definition, it can be considered a shared belief or social norm (Roggenbuck and others 1991). In addition, one of the specific coping methods employed was "followed established river etiquette" (mean = 3.30, sd = 0.94, four-point scale). A mean of 3.30 indicates that respondents employed this coping mechanism frequently. The use of established river etiquette suggests that codes of conduct do exist. Etiquette implies that there are unspoken rules governing appropriate and inappropriate behaviors. Adhering to rules of etiquette is also indicative of normative behavior.

The shared definition and social norm for the experience at the Ocoee River may include stress or conflict. Therefore, if the user adheres to the social norm, conflict will be an acceptable state of affairs. Understanding that conflict will occur and accepting conflict as part of the normal situation support the antecedent coping hypothesis noted above.

Another possible explanation for the high levels of satisfaction, in light of the high conflict, may be found in the concept of cognitive dissonance (Festinger 1957). When cognitive dissonance occurs, the individual makes cognitive adjustments in order to relieve inconsistencies between expected and actual events. While a stressful event may have occurred on the river, the highly hedonistic qualities of the boating may have contributed to the process

of dissonance. As a result, the boater may have made adjustments in perception of the experience in order to justify having a difficult time during stressful situations and an enjoyable time while kayaking.

## Conclusion\_

A majority of the boaters who surveyed had experienced conflict on the Ocoee River. This data failed to produce statistically significant results based on the Lazarus and Folkman (1984) stress coping model. However, based on descriptive data, the model did produce a coping scheme that was consistent with reports from boaters on the Ocoee River. Possible explanations for the lack of statistical significance are based on an antecedent coping process rooted in expectation of the conflict and normative beliefs. Methodological adjustments are necessary to account for (1) bias associated with the social support scale, and (2) the use of the Lazarus and Folkman (1984) model to measure antecedent coping, compared with coping after the occurrence of an onsite, stress-causing incident.

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