

EMOTIONAL COPING RESPONSE TO HASSLES AND STRESS EXPERIENCED IN WILDERNESS SETTINGS

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Abstract: Stress/coping theory was used to understand recreationists' appraisal of stressful situations, coping processes, and the outcomes of the process. Specifically, stress was conceptualized as hassles in recreation settings. Specifically, the objective of this paper was to discuss the emotion focused coping response of visitors to stress encountered while on a Wilderness recreation experience. A mail back survey of visitors was used to collect data. Results were analyzed using confirmatory factor analysis and structural equation modeling. Eighty-seven percent of respondents indicated that some sort of hassle was experienced at the study site. The most frequently reported hassle sources were associated with interactions with other people or the result of human use of the resource. Emotion focused coping did not have a strong influence on the outcomes of the stress process. Specifically, emotion focused coping did less to reduce detractor from the recreation experience that occurred as a result of stress and more to reduce the antecedent processes that gave rise to conditions resulting in detractor.

Conceptual Background: Stress and Coping

Stress/coping theory (Kaplan, 1996; Lazarus & Folkman, 1984) was used to understand recreationists' appraisal of stressful situations, coping processes, response to stress, and the outcomes of the process. Specifically, stress was conceptualized as hassles in recreation settings; hassles are a form of stress. Seminal work in developing the daily hassles construct was conducted by DeLongis (1985), DeLongis, Folkman, and Lazarus (1988), Kanner, Coyne, Schaefer, and Lazarus (1981), and Lazarus, DeLongis, Folkman, and Gruen (1985). Hassle variables measure the immediate (and multiple) pressures that occur during the recreation experience, the appraisals, and disruption associated with them. The hassles concept posits that the every day demands on a person have a greater effect than larger life events (e.g. death of a loved one or divorce). Life events are believed to affect the individual by establishing the conditions for additional daily hassles to occur. Hassles measures can provide a more direct and broad

estimate of stress than major event measures by measuring a larger spectrum of possible sources of stress (Kanner et al., 1981).

A modified hassle definition was based on Kanner et al. (1981); hassles were defined as the irritating, frustrating, demands or situations that occur during recreation experiences; they can range from minor annoyances to fairly major pressures, problems, or difficulties. Daily hassles in everyday life are regular events such as feeding the dog, computer crashes, or going to the grocery store. A second type of hassle is considered to be micro-events; these include bad weather, losing things, traffic, disappointments, and arguments (Kanner et al., 1981; Kaplan, 1996).

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. As a result of the secondary appraisal the individual determines what might or can be done. The appraisal process is a complex evaluative process that takes into account which coping options are available, the likelihood that a given coping option will accomplish what it is supposed to, and that the individual can apply the strategy effectively (Lazarus & Folkman, 1984).

As coping strategies are initiated, and the person-environment relationship changes, the individual reappraises the situation. The coping process is continuously altered by the reappraisals. This process continues until the condition is deemed not stressful or at least tolerable. In addition, the process varies from one individual to another as the personal and environmental factors vary. The coping resources that are available to the individual also contribute to the variation in strategies employed. A coping resource is something one uses to mediate the problem. These resources may be available physical resources (money or tools) or the competency to find helpful resources. In many stressful situations "human beings are somehow already situated in such a way that what they need in order to cope with things is distributed around them where they need it" (Kaplan & Kaplan, 1982).

Coping research has identified two basic coping strategies, emotion and problem focused coping (Lazarus & Folkman, 1984; Taylor & Schneider,

1989). This paper is concerned with emotion focused coping. Emotion-focused coping occurs when there has been an appraisal that nothing can be done to modify harmful, threatening, or challenging environment-person transactions. This strategy is directed toward lessening emotional distress through avoidance, distancing, selective attention, positive comparisons and finding positive value in negative events. The individual ameliorates distress and emotional conflict by changing the meaning of the situation. Kaplan and Kaplan (1982) described this coping process as an interpretation strategy. Interpretation strategies include changes in one's conception of things rather than changes in the things themselves.

Schneider (1995) and Schneider and Hammitt (1995) used the Lazarus and Folkman (1984) model in outdoor recreation (an investigation of coping response of visitors at Cumberland Island National Seashore, Georgia and H. Moses Cone Memorial Park, North Carolina). They defined outdoor recreation conflict as "a disruptive stressful occurrence in the visitor's recreation experience involving a person-environment relationship that taxes a person's psychological resources" (Schneider & 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. Miller (1997) used stress theory to study visitors' response to stress related conflict at Glacier National Park, Montana. Previous studies used the stress/coping model to investigate recreation conflict; according to stress theory, recreation conflict was methodically treated a stressful major life event. The work reported here expands upon these previous studies by conceptualizing stress as hassles.

Methods

A mail-back survey of visitors to the Shining Rock Wilderness Area, North Carolina, USA (SRWA) and surrounding buffer zone was conducted from July to November of 1999. The five-month sampling was designed to increase the diversity of users in the area (e.g. summer hikers, fall hikers, berry-pickers, and hunters). Sampling was conducted at four different trailheads. Commercial groups requiring special use permits or who had leaders/facilitators were not included in the sample. A modified Total Design Method (Dillman, 2000) was used to administer the mail survey, involving a total of four mailings. A total of 713 surveys were mailed, 486 surveys were completed and returned for an adjusted response rate of 68%. Of the 486 total respondents, 424 (87.2%) indicated that some sort of hassle was experienced at the study site. Results reported in this article are based on a screened sample (n=388), consisting only of respondents that perceived a hassle during the wilderness recreation experience. Results were

analyzed using confirmatory factor analysis and structural equation modeling.

Study Area

The SWRA studied consists of 18,700 acres and is located in the Blue Ridge Mountains of western North Carolina. The SWRA is typical of many eastern wilderness areas in the U.S.; it is located within one to four hours driving distance from multiple urban centers, has private land near by, shows signs of previous human activity, and receives a high amount of use. The dominant uses within the Wilderness boundaries include day hiking, backpacking (short and extended trips), berry picking, and hunting. Mountain bike and horse use are permitted on the trails surrounding the Wilderness.

Recreationist Description

Females composed 28% of the sample and males composed 72%. The respondents' ages ranged from a minimum of 18 to a maximum of 80. The majority of respondents were still in college or had attended college (80.4%). Approximately one-sixth of respondents earned less than \$19,999 and one-fourth had a \$20,000 to \$39,999 annual income. About two-fifths earned \$40,000 or more.

The three most frequently engaged in activities at the SWRA were weekend back packing, day hiking, and backpacking trips longer than one night. Most of the respondents recreated with friends; recreating with a spouse or partner was also common. The categories representing activities and group type were not mutually exclusive.

Hassle Sources

To help respondents recall stress sources a checklist of 21 possible sources was included on the survey; the category 'other' with an option to handwrite a source was also included. The single greatest source of hassle was litter (Table 1). The most frequently reported hassle sources were associated with interactions with other people or the result of human use of the resource. These frequent sources of hassles are associated with the level of use at the SWRA. Route finding and navigation may have been a frequent source due to the fact that trail markings and signs are not provided within the Wilderness Area.

Level of intensity was measured on a five-point scale ranging from very low to very high. The average level of intensity was 3.1 with a standard deviation of 1.0. Slightly more than one-third (35.6%) thought the hassles were of high to very high intensity. Approximately four-tenths of respondents indicated that hassles were of moderate intensity (40.8%). Less than one-quarter appraised the hassles as low to very low intensity (23.6%).

Table 1 Most popular sources of hassles in wilderness, as indicated by respondents to hassle checklist

Source of Hassle	n ^a
Litter	181
Noise from other people	172
Damage to the resource (plants, trails...)	140
Too many people at campsites	139
Vehicles near the Wilderness Area	102
Too many people on the trail	100
Dogs or other pets	98
Route finding/navigation	94
Behavior of other people	89

^aCategories were not mutually exclusive, respondents indicated that multiple sources of hassles were experienced.

Table 2 Goodness of fit criteria for the tested models from the on-site stress situations

Model	χ^2	DF	P	Robust CFI	SRMR
1	1488	781	<.05	0.89	0.075
2	1622	869	<.05	0.85	0.076
3	1122	735	<.05	0.92	0.061

Analysis & Results

A two-step approach to Structural Equation Modeling (confirmatory factor analysis than testing a structural equation model) was used (Hatcher, 1998; Schumacker & Lomax, 1996). Robust Maximum Likelihood estimation was used with a covariance matrix developed from raw data. The comparative fit index (CFI) and standardized root mean square residual (SRMR) were used to evaluate model fit. An acceptable fitting model was found as indicated in Table 2. A CFI value of 0.9 represents an acceptable fit and a value of 0.95 or higher is considered an excellent fit of the data. A small SRMR is desired an SRMR of 0.1 or higher represents a poor fit, 0.1 to 0.05 indicates an acceptable fit of the data, and 0.05 or less indicates an excellent fit of the data.

Bold-faced arrows in Figure 1 indicate relationships that will be discussed herein. Emotion focused coping was weakly and negatively influenced by level of intensity of the situation. As intensity increased the use of emotion focused coping decreased.

Table 3 lists the four questions used to measure secondary appraisal; questions were measured on a four-point scale (1=strongly disagree to 5=strongly agree). The standardized parameter coefficients, in figure 2, indicate that the variable "I had to hold myself back from acting was the primary contributing variable in the secondary appraisal factor. "I needed to know more about it before I could act" was a weak contributor and the final two variables did not contribute significantly. An increase in secondary appraisal reflected an increase in the need to hold back from acting. Holding back from acting could be a reflection of a lack of control of the situation or the feeling that it was inappropriate to directly address the situation or source of stress. Emotion focused coping was moderately and positively influenced by secondary appraisal (Figure 1). Thus, as the individual perceived increased uncontrollability or the perception that it was inappropriate to address the situation the use of emotion focused coping increased. Emotion focused coping was a second-order factor consisting of the two first-order factors of self control and psychological distancing (Figure 1). Standardized parameter estimates for this factor indicate that self control was the primary contributing first-order factor to emotion focused coping. The mean and standard deviation for the variables used to measure self control are listed in Table 4.

Figure 2 illustrates the general emotion focused coping scheme. The individual appraised the situation as one that was not appropriate to address or was out of their control. He/she employed emotion focused coping, which consisted primarily of keeping feelings to his or herself. The second and third contributors to the coping response were following trail etiquette and not allowing others to know how bad things were. Finally, not damaging future recreation opportunities with today's actions was the weakest contributor to the factor. These specific coping mechanisms are consistent with the secondary appraisal of needing to hold back from acting to address the situation. People

Table 3 Secondary appraisal questions

Question	Standard Coefficient	Mean	Sd
I had to hold myself back from doing something about it	3.17	1.98	1.3
I needed to know more about it before I could act	-.103	2.24	1.4
I had to accept it as it was		3.73	1.3
I could change it or do something about it		2.60	1.2

Table 4 Self-Control Coping Mechanism

Ways of Coping Items	Mean	SD
Followed established trail etiquette	2.65	1.21
*Thought about why the incident happened	1.32	1.18
Tried not to damage future opportunities to be in wilderness areas with my actions	1.26	1.31
Tried to keep my feelings to myself	1.09	1.05
Kept others from knowing how bad things were	0.55	0.83

^a Based on four point scale, 0=did not use/not applicable, 1=used somewhat, 2=used quite a bit, 3=used a great deal

* removed from model due to high residual correlations.

used emotion focused coping instead of attending to the problem or to avoid the problem (avoidant coping). Emotion focused coping was used as an adaptive response to a situation that could not be altered.

However, Figure 2 indicates that the relationship between emotion focused coping and detraction is weak. Thus, the use of emotion focused coping did not function well to reduce the level of stress. This finding is not surprising, previous research has found avoidant forms of coping neither directly or indirectly related to psychological distress or outcomes of the stress process (DeJong, von Sonderen, & Emmelkamp, 1999). In addition, "avoidant coping is mostly considered an inadequate way of coping for it has been directly (positively) related to both physical and mental dysfunction" (DeJong et al., 1999, p.291). We can conclude that in the current model, emotion focused coping does not have a strong influence on the outcomes of the stress process. This conclusion is further illustrated when the parameter estimate for the relationship between problem focused coping and detraction is compared.

The preceding discussion has focused on the coping process in relation to the latter half of the stress model. Problem focused coping appears to have more and stronger relationships in the latter half of the model when compared to emotion focused coping. The final point to be made is based on an observation of the antecedent processes in the model. Specifically, antecedent processes include direct and indirect relationships among the two coping mechanisms and the influencing factors (experience use history, social support, education, income, age) and intensity. Problem focused coping has two direct relationships with these variables and factors (Figure 1). On the other hand, emotion focused coping has five direct relationships and two indirect relationships with the antecedent processes in the model. The distribution of relationships suggests that problem focused coping is more directed at the latter half of the stress process (the outcomes) and reducing the level of detraction. Emotion focused coping does not directly reduce

outcomes of the process. Instead, it has an indirect influence on the process by minimizing the evaluation of stress. Pearlin, Lieberman, Menaghan, and Mullan (1981) identified similar indirect influences when assessing the influence of coping and social supports on depression. These authors found that coping did not reduce the amount of depression after it occurred. However, it did have an influence on the antecedent process by dampening the evaluation of the situation. A similar conclusion can be drawn for recreationists at the Shining Rock Wilderness Area; emotion focused coping does less to reduce the detraction that occurs as a result of stress and more to reduce the antecedent processes that give rise to conditions resulting in detraction.

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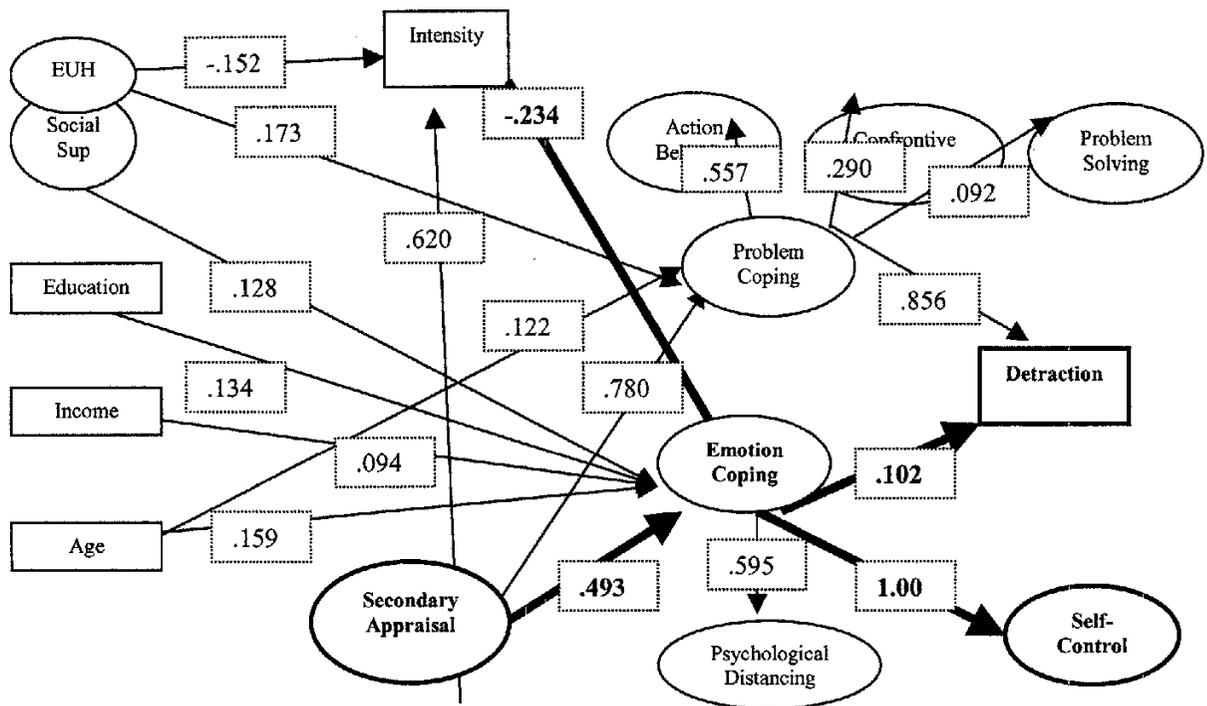


Figure 1 Final structural equation model of recreationists' stress/coping process. Only significant parameters shown, standardized parameter coefficients indicated in dashed boxes.

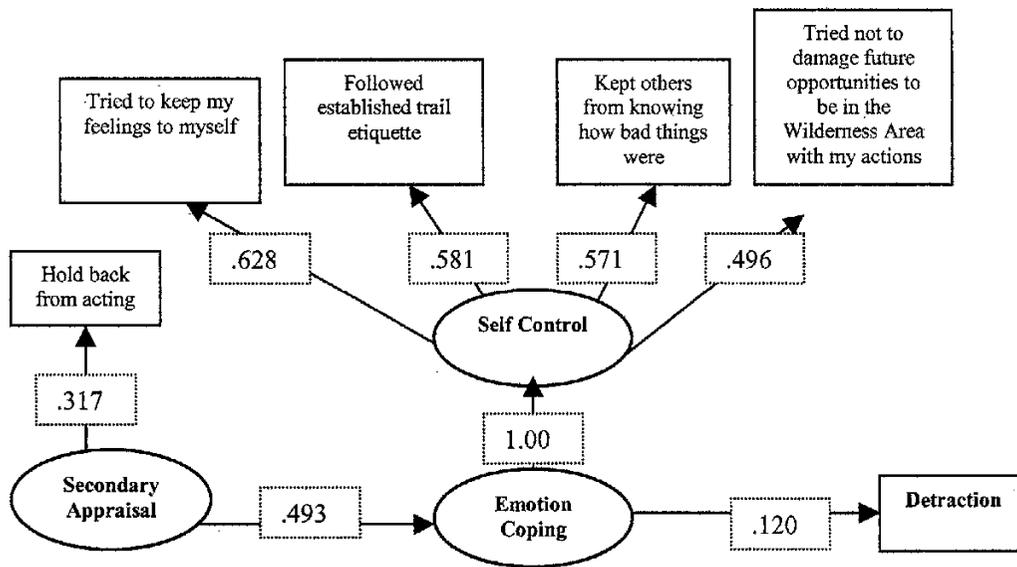


Figure 2. Significant parameter estimates for the specific variables and factors to be discussed. Standardized parameter coefficients are indicated in dashed boxes