The Dynamic Nature of Leisure Experience:
An Application of Affect Control Theory

BongKoo Lee
Tourism Management Department, DongEui University
C. Scott Shafer
Recreation, Park and Tourism Sciences Department, Texas A&M University

Leisure experiences are believed to be dynamic and to emerge through an interaction process. A lack of theoretically based research has kept leisure scholars from developing a systematic understanding of this process. Affect Control Theory provides one basis for understanding the emerging and dynamic nature of emotions experienced during recreation. We have adopted the theory and applied it to a behavioral setting where people interact with social and physical aspects of the environment. One hundred and eleven respondents were intercepted and surveyed on a multiple-use trail in an urban greenway. An analysis program developed by Heise (1991) INTERACT II was used to predict emotions based on respondents' evaluations of events they encountered on the trail. Examples are conveyed that suggest why and how emotions, as a part of a recreational trail experience, differ both within a respondent's experience and between respondents' experiences. Results suggest that Affect Control Theory has potential to help explain how an interaction process in recreation creates a dynamic experience.

KEYWORDS: *Dynamic leisure experience, Affect Control Theory, situated self-identity, affective meanings, emotions, multiple-use trail*

Introduction

Having an enjoyable experience during leisure is often the ultimate goal of leisure participants. On the other hand, providing an enjoyable leisure experience is the ultimate goal of leisure resource managers. Consequently, the question of what constitutes leisure experience has been of great interest in leisure research as reflected in a special issue of the *Journal of Leisure Research* (Vol. 30, No. 4). In the issue, leisure experience was conceptualized as focus of attention, perceptions of risk and competence (McIntyre & Roggenbuck, 1998); information use (Vogt & Stewart, 1998); meanings associated with the challenges of leisure environments (Patterson, Williams, Watson, & Roggenbuck, 1998); satisfaction (Hultsman, 1998); and absorption-in-the-moment (Walker, Hull, & Roggenbuck, 1998). Others have investigated the concept through personal growth and self-renewal, sense of community, and harmony with nature (Arnould & Price, 1993); and emo-

Address correspondence to: Scott Shafer, Department of Recreation, Park and Tourism Sciences, Texas A&M University, MS 2261, College Station, TX 77840-2261. Email: sshafer@rpts.tamu.edu

tions and/or moods (Hammitt, 1980; Hull, Stewart, & Yi, 1992). Thus, Stewart (1998) suggested, "'Leisure' or 'leisure experiences' are widely used terms whose meanings cover a wide-breadth of mentalistic states" (p. 392).

Whatever the conceptualization, an underlying perspective of these studies has been to examine leisure experience as an emerging state of mind resulting from interactions between a leisure participant and his/her surroundings (i.e., including both human and non-human elements); thus one dominant characteristic of leisure experience is that it is dynamic. This perspective has been based on two approaches conveyed in the leisure literature. One is Clawson and Knetsch's (1966) multi-phase model of recreational experience. They suggested that any recreational travel experience consisted of five phases (i.e., anticipation, travel to the site, on-site activity, travel from the site, and recollection of the trip) and that each phase had a different capability to produce unique experiences. The other is the immediate conscious experience approach (Mannell & Iso-Ahola, 1987) that attempts to capture "stream of consciousness" (Hormuth, 1990; Jackson, 1988; James cited in Mannell & Iso-Ahola, 1987; Mannell & Kleiber, 1997; Singer, 1975) or the texture of what leisure participants actually do or feel during their participation. These approaches have led researchers to investigate variability in experiential qualities assessed in different phases of recreational trips (e.g., Hammitt, 1980; Hultsman, 1998; McIntyre & Roggenbuck, 1998).

In investigating the emerging or dynamic nature of leisure experiences, researchers have frequently operationalized leisure experiences with emotion or mood. More and Payne (1978) found that the moods of their subjects shifted significantly from negative to positive between arriving at and departing from a wildlife sanctuary. Hammitt (1980) reported that mood states of field trip participants varied among the experience phases hypothesized by Clawson and Knetsch (1966). Other studies showed similar results in that leisure participants' emotions or moods changed depending on situations encountered (Hull & Harvey, 1989; Hull & Stewart, 1995; Lee, Dattilo, & Howard, 1994) and with the passing of time (Hull & Michael, 1995; Hull, Michael, Walker, & Roggenbuck, 1996; Kubey & Csikszentmihalyi, 1990; Lee at al., 1994; Stewart, 1992).

These studies support the notion that emotions are an important component of the leisure experience (Ajzen & Driver, 1992; Tinsley & Tinsley, 1986) or reflect the quality of leisure participants' experiences (Elias & Dunning, 1969; Hammitt, 1980; Hull, 1990; Hull et al., 1996; More & Payne, 1978) and leisure participants' experiences are dynamic. However, these studies have not investigated the interaction mechanism that might be creating the dynamic nature of participation-elicited emotions. Thus, many questions remain: why does a leisure participant experience variable emotions during leisure participation? What is happening in an event or encounter to produce an emotion? Do all participants exhibit changing emotions during a leisure experience? Do participants experience similar emotions given the same type of encounter or event? The answer to this last

question is likely "it depends." Leisure behavior scholars have limited information about the nature of why emotions occur or why they might change during a leisure experience.

This limitation is partly due to a lack of conceptual frameworks through which to examine the interaction process between participants and environmental elements (social and physical) in the leisure setting. Stewart (1998) noted that most theoretical perspectives applied in a leisure context have excluded process while favoring trait like qualities. The purpose of this study was to apply Affect Control Theory (ACT) to investigate the interaction process between leisure participants and their environment to better understand how a leisure experience may fluctuate. More specifically, we wanted to contribute to understanding what types of interactions or encounters during an experience may trigger emotional responses that influence leisure.

Literature Review

Affect Control Theory (ACT)

Affect Control Theory (ACT), developed by Heise and his colleagues (Heise, 1979, 1985, 1987, 1989, 1991, 1992, 1999; Heise & Weir, 1999; MacKinnon, 1994; Robinson & Smith-Lovin, 1992; Robinson, Smith-Lovin, & Tsoudis, 1994; Smith-Lovin, 1990), investigates social interactions. It is based on symbolic interactionism, balance theory, and linguistic principles (for a more detailed description of the theory development, refer to McKinnon, 1994).

Two perspectives were rooted in the development of ACT. First, it has been suggested that in order for people to interact meaningfully in a situation, they must have a plausible interpretation of what is going on in a given place at a given time (Heise, 1979; McKinnon, 1994). In other words, each interactant defines the situation (i.e., identifies the constituents within the institutional context where they are assembled). Usually the situational definitions are organized in terms of grammatical structures, consisting minimally of an actor (i.e., subject) performing an act (i.e., verb) on another (i.e., person or object) in a setting. This is because, as symbolic interactionists suggest, language is a unique mechanism leading to the symmetry of response from interactants. Second, it has been suggested that the various constituents used to define the situation (i.e., all social cognitions represented by language) evoke culturally specific affective meanings (Kemper, 1978; Mehrabian, 1976, 1980; Osgood, May, & Miron, 1975; Osgood, Suci, & Tannenbaum, 1957; Russell, 1980). Osgood et al. (1975) pointed out that "the names with which we designate all kinds of social stimuli evoke affective associations such that language functions as a linguistic warehouse, so to speak, for storing affective meaning" (p. 3). ACT posits that these affective associations (or meanings) can be represented by Evaluation (e.g., good-bad, nice-awful), Potency (e.g., powerful-powerless, big-little), and Activity (e.g., lively-tranquil, fast-slow, young-old). These have been termed EPA dimensions. These affective meanings are the basis of our social life as they evoke the symmetry of responses among people within a culture (Heise, 1979; Os-

good et al., 1975). It is at the level of the affective associations evoked by cognitions that ACT is formulated.

Based on this perspective, ACT proposes that an individual enters a given situation with a construction of that setting, based on their "plausible interpretation," and that the person has established affective meanings about who they are within the setting as well. The initial affective meanings about who they are in the setting are called "fundamental sentiments." When an event (e.g., an interaction with others) occurs in the setting, temporary affective meanings (or "transient sentiments") result and these sentiments may differ from the fundamental sentiments that existed at the outset. If the difference (or "deflection") is large enough, people may initiate restorative actions or cognitive revisions to bring sentiments caused by the disturbing event back into line with their fundamental sentiments. Based on this logic, it is suggested that ACT can be used to investigate impression formation, event construction, event likelihood judgment, and reidentification (i.e., attribution and labeling) (Heise, 1991). Figure 1 depicts this basic tenet of ACT.

Emotions in Affect Control Theory (ACT)

In general, emotions are defined as a type of affect resulting from reactions to specific events in the environment and are thus, ephemeral in nature (Batson, Shaw, & Oleson, 1992; Thayer, 1989). ACT proposes that
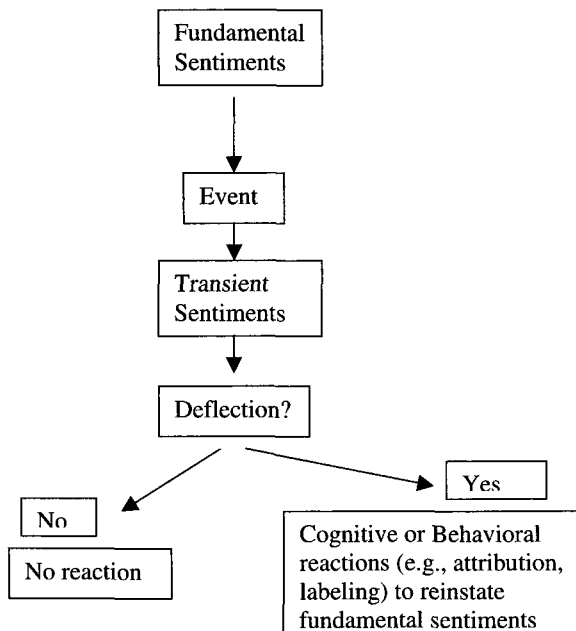

Figure 1. A Basic Tenet of Affect Control Theory

emotions are an outcome of social interaction: that is, our emotional reactions are affected by how the events around us impact our self-perception (Averett & Heise, 1987; Heise, 1987, 1999; MacKinnon, 1994; Smith-Lovin, 1990). With these statements in mind, we will describe how ACT treats emotions in more detail.

ACT suggests that when a person enters a situation she or he establishes a situated self-identity (SSI) (i.e., a person's self-perception at any particular time in a particular space) as well as identities of others. In this process, the situation itself provides a crucial cue in identifying who she or he is. For example, if a person is ill and must go to the hospital for treatment, she/he may situationally identify her/himself as a "patient." In ACT, situated self-identity is a beginning point in explaining emotions. The person then associates affective meanings (in terms of EPA dimensions) toward his/her situated self. These meanings are the *fundamental sentiments*: how good, how powerful, and how active the individual is in the present situation. An event (e.g., nurse on duty snaps at me) may change the affective meanings of the situated self, making him/her feel worse (E), weaker (P), and less active (A) than before. That is, as a result of the event, the person may associate different affective meanings with his/her situated identity. These meanings are called *transient sentiments*. The difference between transient sentiments and fundamental sentiments is a *deflection*. ACT posits that an emotion is a function of two factors: the transient sentiments of a situated self-identity created by an event and any deflection that occurs. When the deflection is large, the transient sentiments determine the resulting emotion; whereas, when the deflection is small, the fundamental sentiments determine the resulting emotion because the transient and fundamental sentiments remain similar.

To investigate this process mathematically, Averett and Heise (1987) and Heise and Thomas (1989) asked respondents (largely undergraduate students) in laboratory settings to rate hundreds of emotions (e.g., angry, sad, happy, etc.), identities (e.g., father, mother, professor, etc.), and emotion-identity combinations (e.g., an angry father, etc.) separately, using EPA dimensions. Then they developed emotion-identity combination equations by regressing the ratings of the emotion-identity combinations obtained on ratings of emotions and identities. The emotion-identity combination equations were also known as transient sentiments since they were the sentiments about the person which had been generated in recent events. From these equations, the following equation was developed to predict emotions for the given fundamental sentiments and transient sentiments related to a person's situated self-identity:

$$P_\varepsilon = (P + F_{se}Q_e)^{-1}(\tau_s - Ff_s - d)$$

where P: a matrix of coefficients for the emotion profile
      F: a matrix of estimated coefficients for the fundamental self-identity
      Q: a matrix containing scalar coefficients for the interaction between emotion and identity

τ_s: the transient impression self-profile
f_s: the fundamental self-profile
d: a vector of equation constants

In sum, ACT is based on the notion that emotions embellish ongoing activity in a way that transforms our view of the individual from someone who's feelings about self remain constant to someone who's feelings are continually adjusted through interactions that occur in an experience.

Applying Affect Control Theory to the Leisure Experience

ACT's conceptualization of emotions is applicable to the investigation of leisure experiences. When one arrives in a recreational setting (e.g., a multiple-use trail), he/she may define the setting by situationally identifying self as a "bicyclist," and others as "walkers," "runners," or "skaters." This person assigns affective meanings toward him/herself (i.e., fundamental sentiments). One may have relatively high affective evaluations of self as a bicyclist (Evaluation), see one's self as relatively potent (Potency), and highly active (Activity) in the setting and a "characteristic" emotion is established at the outset. Suppose the bicyclist encounters three people walking side by side on a narrow trail. As a result of meeting the walkers, affective meanings related to evaluation, potency and/or activeness of self might change. If the change or "deflection" from fundamental sentiments is small the characteristic emotion held before the encounter persists. But if the change or "deflection" from fundamental sentiments is large, a different emotion results in response. Five minutes later, a bicyclist riding a different style of bike may be encountered. This event may evoke new transient sentiments toward one's situated self-identity that would again be referenced against the fundamental sentiments. Any resulting deflection due to this second event creates the potential for yet another emotion. When these events are independent of each other, deflections represent the differences between fundamental sentiments and transient sentiments. When the events are dependent on each other (i.e., one event causes another event), affective meanings related to the precedent setting event become fundamental sentiments in a subsequent event (personal correspondence with Heise, 1998). Presumably, this process continues until the individual leaves the setting. As long as a person encounters a series of events while on-site and these events lead to different transient sentiments toward one's situated self-identity, the person may also experience a series of emotions. Measuring these emotions, may reveal an "ebb and flow" (Hull et al., 1996) that contributes to a dynamic leisure experience. However, in spite of events, if they do not create a different perception of self (i.e., if fundamental sentiments about one's situated self-identity do not change), a constant emotion persists throughout the experience. For example, if a person walking along the trail brings a strong emotion of joy to the situation then virtually any event they encounter would not create enough "deflection" to shake them from feeling joyful. This process is shown in Figure 2.
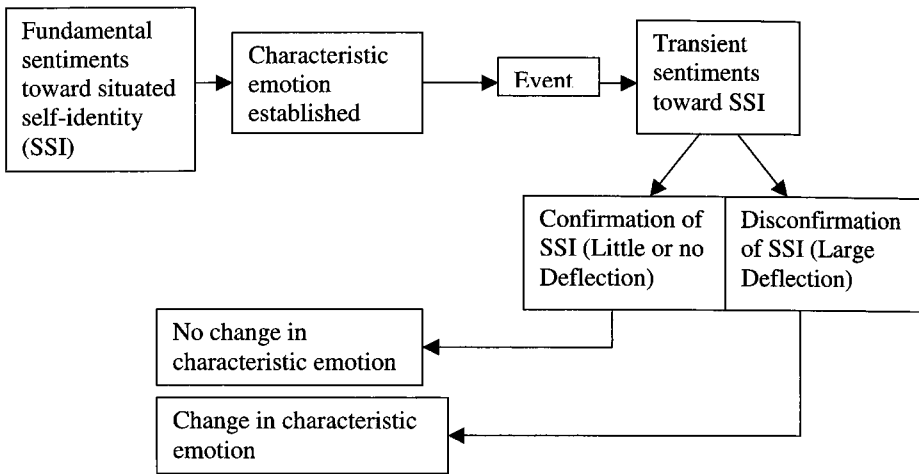
Figure 2. An Application of the Affect Control Theory to a Leisure Experience

To investigate this process empirically, an urban multiple-use trail was selected as the setting for this study because of its relatively high level of use and the variety of activities that took place there. Furthermore, movement along a trail corridor causes change in the participant's immediate environment, creating a potential for multiple events to occur during a relatively short period of time.

Methods

Data Collection Procedure

The location of this study was the Brays Bayou Trail (BBT), a multiple-use trail in Houston, Texas. The BBT runs approximately 22 miles along the Brays Bayou located in the southern part of the Houston Metropolitan Area. Most of the surface of the trail was asphalt. The trail tread varied intermittently in width and quality but all types of non-motorized recreationists with the exception of equestrians were regular users.

An on-site sampling method was used to collect data at one access point on the BBT during two weekend days in November and December 1998. Trail users were intercepted on the trail, the study purpose was explained, and if the person agreed she or he was asked to complete a short survey, which included recalling and evaluating up to five events that had occurred during that outing. The survey also included measurements of affective meanings associated with situated self-identity. Incentives were used in an attempt to increase the rate of participation. Respondents were rewarded with a bottle of cold water and were told about two $25 prizes that were to be awarded by lottery to those who completed the on-site survey.

Some of the research that has attempted to examine the nature of leisure has employed experience sampling, asking participants to evaluate feelings at specified places (e.g., Hull et al., 1992; McIntyre & Roggenbuck, 1998,) or times (e.g., Samdahl 1988) during an experience. This study obtained evaluations shortly after encounters occurred (generally the most recent event would have occurred within the past few minutes while the most distant event would have been within the hour). From an experience sampling standpoint, ACT is less clean in that one must recall over a longer time creating more potential for memory decay and error among event evaluations. However, the time period was relatively short and the method employed here allowed respondents to select which events were influential and worthy of evaluation. Allowing respondents to determine what events to evaluate was important to better understand what they felt influenced their experience.

Of the 217 people who approached the intercept 145 (67%) agreed to participate. Of this 145, 34 did not complete the form rendering them unusable. This left 111 useable surveys that included a total of 420 events that respondents recalled and evaluated. Most of the respondents (48.6%) recalled five events while on the trail, followed by four events (18%), three events (13%), two events (11%), and one event (10%). On average respondents provided 3.8 events. To provide a more detailed examination of the data only a few respondents have been included along with a subset of events and resulting emotions.

Operationalization of Constructs

Situated Self-identity.   In this study, "situated self-identity" (SSI) was defined as a person's self-perception while engaging in an activity on a multiple-use trail. To measure this concept, participants were asked to answer an open-ended question: "Please provide a word(s) that best describes who you are on this trail today." Respondents were then asked to reference this "situated self-identity" as they responded to subsequent items.

Events Encountered.   The interaction processes between an individual and the environment were investigated by questioning respondents about events encountered. Participants were first asked to think about events encountered while they were on the trail and to list the events (up to five) chronologically from earliest to latest. For the purpose of this study, it was assumed that the events were independent of one another.

Affective Meanings Associated with Situated Self-Identity.   In this study, affective meanings associated with situated self-identities (i.e., fundamental and transient sentiments) were measured through semantic differentials on each of the three EPA dimensions. The task involved judging the concept on nine adjective pairs, three each representing Evaluation, Potency and Activity respectively. Fundamental sentiments were measured once, before encountering (recalling) any event, and then transient sentiments were measured for each event they recalled. For the fundamental sentiments, respondents were

given a list of nine-point adjective scales related to the item "Thinking about
yourself as a (the self-identity descriptor they used) on this trail, do you see
yourself as:" (one example of each type)

Evaluation—good	:— :— :— :— :— :— :— :— :—	bad
Potency—pleasant	:— :— :— :— :— :— :— :— :—	unpleasant
Activity—active	:— :— :— :— :— :— :— :— :—	inactive

For the transient sentiments, the questions read: "You described yourself
as (*put your identity descriptor here*) while you are on the trail today. How did
you feel about yourself after this event?" Respondents again scored nine
adjective pairs that represented the EPA dimensions. The presentation of the
nine adjective pairs and the orientation of each scale (i.e., positive and neg-
ative adjectives) were randomly ordered to reduce the potential for response
sets.

Each EPA dimension was operationalized with three items. However,
results of reliability tests revealed that the item pair "calm-excitable" was an
inappropriate as a measure of the Active dimension. Thus, this item was
excluded from further analysis. The mean scores of the Evaluation and Po-
tency dimension were calculated from the three intended items. The mean
score of the Active dimension was calculated using the two remaining items.

Data Analysis

Data was analyzed using INTERACT II software developed by Heise
(1991). This program can be used to investigate impression formation, event
construction, event likelihood judgment, and reidentification (i.e., attribu-
tion and labeling). It is also used to predict what emotions are likely to be
experienced after an event (Heise, 1991). Suppose we know fundamental
sentiments that a person maintains at a given point in time, and transient
sentiments about the person that have been generated in recent events. En-
tering the EPA scores that depict fundamental sentiments into the INTER-
ACT II analysis program will, based on the equation described earlier, pro-
duce a base emotion profile for one's SSI. Then, for each event, transient
sentiments are scored via EPA and entered into INTERACT II where they
are compared to fundamental sentiments. These comparisons result in a
profile that is referenced against a large "dictionary" of emotions developed
by Averett and Heise (1987) and Heise and Thomas (1989). The program
then lists emotions that have the appropriate dictionary profile (numeric
value). For example, in this study a female respondent (there are separate
female and male dictionaries) had fundamental sentiments of +1.33 (E),
+1.00 (P), and +2.50 (A) when starting on the trail. When these scores were
submitted for analysis in INTERACT II, the dictionary of scores and related
emotions revealed that her EPA profile was aligned with the emotions of
enthusiastic, excited, and carefree as she began her trail experience. She
recalled five events encountered while on the trail. The first event involved
"seeing fish swimming in the bayou." Scores regarding how this made her

feel produced transient sentiments of +3.67, +2.00, and +2.50. This event
made her feel better and more potent, and left her about the same in terms
of activity. According to the analysis, this event created slightly different emo-
tions i.e., friendly and cheerful.

Given the EPA profile submitted for this woman, INTERACT II provided
three to five emotions that were likely to be ascribed to her. To select emo-
tions that were appropriate to each situation two rules were applied. First, if
all the emotional lexicons appeared relevant to the situation, the first emo-
tion in the list (i.e., *enthusiastic* in the above example) was selected and used
as the reference point for subsequent events. Second, if lexicons were not
all relevant the emotion judged most appropriate was selected from the list.
For example, the EPA profile for an event like "saw water flowing down the
creek" would produce emotional lexicons like generous, compassionate and
peaceful. Given that all three emotions were relatively close, the emotion
"peaceful" would have been chosen to represent that event because it was
interpreted as most appropriate to the situation. Such interpretation was
judged necessary given that INTERACT II was developed in a laboratory
setting, leaving a less than perfect fit between its dictionary and the real
world of felt emotions in a recreation setting. Our interpretive "fitting" was
used to assist in applying this analytical technique to data collected on-site.

Results

Sample Characteristics

Fifty-four percent of respondents were male. The most frequent activity
was bicycling (46%), followed by walking (22%), running/jogging (21%),
in-line skating (4%) and seven percent reported participating in more than
one activity. On average, respondents indicated that they had been partici-
pating in the activity for 8 years and that they used the trail about 15 times
per month. Respondents also indicated that most (80%) of their participa-
tion in the activity occurred on the BBT. They spent an average of 77 minutes
on the trail and traveled and average of 10 miles when they participated in
the activity.

Respondents provided 47 different situated self-identities (descriptive
nouns) as users of the BBT. These situated self-identities are presented as
categories in Table 1. More than 50% of the trail users identified themselves
with descriptors that were judged to fit a traditional trail use category (e.g.,
athlete, cyclist, runner, jogger, competitor, etc.). The second most frequent
situated self-identities were categorized as relating to thinking or contempla-
tion (thinker, meditator, 18%), followed by identity categories related to
one's social role (e.g., mother, husband, friend, etc., 10%), free person (e.g.,
daydreamer, free soul, relaxer, 7%), and gender (e.g., man, woman, 4%).

Trail Events

The events reported were broken into seven broad categories. An *en-
counter with other trail users* was the largest event category and included 176

TABLE 1
Situated Self-Identities Listed by Brays Bayou Trail User

Categories	n	%
Recreation (athlete, biker/cyclist, runner/jogger, walker/treader, jock, sportster, worker outer, active person, adventurer, fat/out-of-shape, expeditioner, fast-lover, outdoorsman, competitor, player)	57	51.4
Contemplation (thinker, semi-thinker, meditator)	20	18.0
Social Role (mother, grandmother, friend, planner, sweet-monster, veteran, participant, observer)	12	10.8
Free Person (free soul, care free, relaxer, stress-reliever, day-dreamer)	8	7.2
Gender Role (man, woman)	4	3.6
Other (aggressor, bird-watcher, bird, lion, panther, survivor, shark, slug, wind)	10	9.0

(42%) of the 420 events reported. *Nature and wildlife* related events were the next most frequent making up 106 (25%) of the total. Ten percent of the events related to the *condition of the trail's tread* and another 9% dealt with *motorized traffic* adjacent to or intersecting the trail. Issues related to *maintenance of trail related amenities* (non-tread) represented 6% of all events. The remaining 8% of events did not appear to fit a particular category.

Intrasubject Emotional Experiences

Emotions derived from event encounters were treated as effect agents in this study. The number of effects varied across respondents because their interactional experiences (i.e., events encountered and the influences on situated self-identity) were not identical. The cases introduced here, as examples, reveal some of these differences and are included in Table 2.

Emotional experiences of trail users suggested a dynamic pattern in most cases. The fundamental sentiments of respondent # 049 (a male) were +2.00, +3.00, and +3.00. INTERACT II predicted his characteristic (situated self) emotion as "enthusiastic." Four of the events he recalled ("had to stop and wait for traffic"; "had to repeat 'on your left' to pass walkers"; "passed slower bikers who then passed me"; and "had to slam on brakes for people in cars turning without signaling") decreased affective meanings associated with his situated self-identity. Due to large deflections, between his fundamental and transient sentiments, he was predicted to have experienced emotions like depressed, depressed, remorseful, and depressed, in that order, across the four events. The fifth event (stopped to complete a survey) aided some in a recovery of his transient sentiments back to the level of his fundamental sentiments, although the Activity dimension was still lower. This last event "stopped for a survey," led to a predicted emotion of "peaceful."

TABLE 2
Examples of Emotional Experiences Based on Events Encountered

ID	Sex	Fundamental Sentiments	Characteristic Emotion (Related to Situated Self)		Transient	Emotion
				1st Event	Sentiments After 1st Event	Resulted From the 1st Event
				2nd Event	Transient Sentiments After 2nd Event	Emotion Resulted From the 2nd Event
				3rd Event	Transient Sentiments After 3rd Event	Emotion Resulted From the
				4th Event	Transient Sentiments After 4th Event	Emotion Resulted From the 3rd Event
				5th Event	Transient Sentiments After 5th Event	Emotion Resulted From the 4th Event Emotion Resulted From the 5th Event
019	F	3.67 2.67 1.50	Cheerful	Passed Buffalo street	−3.67, −0.67, 2.50	Desperate
				Smelt something bad from bayou	−1.33, 0.33, 0.00	Depressed
				Gnats hit my face	−0.33, 0.00, 0.50	Crushed
				Saw lovely scenery	4.00, 1.00, 0.50	Serene
				Heard traffic noisy	−0.33, 1.00, 3.00	Panicked

TABLE 2
(*Continued*)

038	F	-1.67	Grouchy	Waited long time to get walk signal	-1.00, -1.33, -1.50	Letdown
		0.67		Spent time at stretch station	1.33, 2.67, -1.00	Forgiving
		-1.00		Passed by friendly people	3.33, 2.33, -1.50	Friendly
				Saw lots of traffic	0.33, -2.33, 0.00	Afraid
				Passed cracked part of trail	-0.33, 0.00, -0.50	Relieved
049	M	2.00	Enthusiastic	Had to stop and waited for traffic	-0.67, -1.33, -2.00	Depressed
		3.00		Had to repeat "on your left" to pass me	-2.67, -0.33, -.150	Depressed
		3.00				
				Passed slower biker who then pass me	1.00, 1.00, 1.00	Remorseful
				Had *to slam on brakes for people in* cars turning without signaling	-3.33, -4.00, -4.00	Depressed
				Stopped for a survey		
					3.33, 0.33, -4.00	Peaceful
097	F	2.00	Cheerful	Stopped at railroad crossing to look for trains before crissing	2.00, 2.00, 1.00	Cheerful
		2.00				
		1.00		Looked at bikers	2.00, 2.00, 1.00	Cheerful
				Looked for fish	2.00, 2.00, 1.00	Cheerful
				Looked at dog	2.00, 2.00, 1.00	Cheerful
				Passed friends and waved	2.00, 2.00, 1.00	Cheerful

Respondent # 019 (a female) had a characteristic emotion of "cheerful." The first three events ("passed Buffalo Speedway"; "smelt something bad from the bayou"; and "gnats hit my face") decreased affective sentiments associated with her situated self-identity dramatically (i.e., deflections were large). Due to these large deflections she was predicted to have felt emotions like "desperate," "depressed," and "crushed." The fourth event ("saw lovely scenery") made her slightly better, somewhat less potent, and somewhat less active than her fundamental sentiment; as a result of this event, she was predicted to feel "serene." With the fifth event ("heard noisy traffic") affective meanings associated with her situated self-identity again became worse, somewhat less potent, and somewhat more active than her fundamental sentiments. The emotion resulting from this final event was "panicked."

A third respondent, ID# 038 (a female), rated herself as −1.67, 0.67, and −1.50 resulting in a predicted characteristic emotion of "grouchy." The first event she encountered was "waited a long time to get a walk signal" which resulted in a "letdown" emotion. The second event ("spent time at stretch station") helped her to feel better and somewhat more potent than before. The third event ("passed by friendly people") also helped her feel better, and somewhat more potent. Based on her scores for these two events emotions of "forgiving" and "friendly" resulted from each respectively. However, as a result of the fourth event, ("saw lots of traffic") her perception of potency decreased leading to the emotion "afraid." Transient sentiments associated with her situated self-identity were somewhat better and slightly more active, but slightly less potent than her fundamental sentiments as a result of the final event ("passed a cracked part of the trail"). These deflections made her feel "relieved."

Not all trail users experienced a dynamic pattern in their predicted emotions. ID# 097 (a female) shows a somewhat typical example. Although she recalled five events (i.e., "stopped at rail road crossing to look for trains before crossing," "looked at bikers," "looked at some fish," "saw a dog," and "passed friends and waved"), affective meanings associated with her situated self-identity remained the same (i.e., +2.00, +2.00, and +1.00 in terms of EPA dimensions). Since affective meanings associated with her situated self-identity did not change at all, her emotional experience was consistently "cheerful" from the time she started on the trail until she stopped to complete the survey. Most trail experiences, including those not related in examples here, showed a clear "ebb and flow" phenomenon regarding emotions. However it should be noted that some trail users' experiences were very similar from an emotional standpoint. In some cases this appeared to be related to similar (e.g., positive) events but in others event type seemed to have less bearing on the outcome.

Intersubject Emotional Experiences

We wondered whether people's emotions would be similar or different when they encountered the same event. A content analysis of events revealed

that a few were common to several respondents. Table 3 lists three of these common events and provides information about how their transient sentiment scores compared to fundamental sentiments leading to predicted emotions. When encountering the same event, trail users' emotional experiences varied depending upon the affective meanings associated with situated self-identity. More specifically, "saying hello and smiling at another trail user" was an event reported by fourteen users. In 9 of the 14 cases "friendly" was the emotion predicted to result from the interaction. Some of the other emotions predicted for this event were "cheerful," "warm" and "affectionate."

In a similar vain, the event "saw lots of fish," was reported by 14 trail users resulting in positive emotions like "serenity," "peacefulness," "cheerful," "pleased," or "warm." However, emotions experienced after users had passed people on a narrow part of the trail were less consistent. Among the eight people who reported this type of encounter, all were predicted to have experienced somewhat different emotions. More definitive differences were apparent in the fact that four of the eight were predicted to have experienced what would be considered positive emotions like "cheerful," and "satisfied," while the other four experienced more negative emotions like "crushed" and "petrified." These results reflect assumptions in ACT that emotions are dependent on events interacting with self-identity. In some cases events (like seeing fish and saying hello) appear to be consistent in their meaning, leading to positive emotions across individuals regardless of one's feelings about situated self. On the other hand there are events like passing on a narrow trail that may have more complex meanings and which may be more sensitive to feelings about situated self. In this case such an event predicted very different emotional responses in people.

Discussion and Conclusion

Stewart (1998) enumerated several challenges to traditional ways of studying leisure as a dynamic and multi-phase experience. He suggested that two challenges are to conceptualize and measure leisure in ways that contrast with "the still life photograph depiction" (p. 392) and to focus more on the process of leisure and less on its trait like qualities. This study was intended to, at least partially, meet these challenges by employing theory and methodology that could help to determine how a leisure experience unfolded and why. The research framework that guided this study was based on Affect Control Theory (ACT), which suggests that emotions emerge from the process of interactions between a leisure participant's situated self and other people or things in the environment. To illustrate the usefulness of ACT in answering questions about a leisure experience, we attempted to both analyze and report the data in a way which allowed a degree of richness based on individual data points. By examining a few respondents and individual events reported we attempted to convey specifics about how the experience might change over a short time and about how an individual's situated self-identity, in relation to events, helps to create emotions along the way.

TABLE 3
Fundamental Sentiments, Transient Sentiments, and Predicted Emotions for Three Specific Shared Events on the Brays Bayou Trail

Trail Event	ID No.	Fundamental Sentiments			Transient Sentiments			Predicted Emotions
Saw a lot of fish	002	1.33,	1.00,	2.50	3.67,	2.00,	2.50	Cheerful
	005	2.67,	2.33,	2.50	2.33,	2.00,	2.00	Pleased
	027	3.33,	2.67,	−0.50	4.00,	1.67,	−1.50	Peaceful
	034	3.67,	1.67,	0.50	4.00,	2.00,	−2.00	Serene
	035	3.00,	2.00,	2.50	4.00,	1.00,	3.50	Cheerful
	042	4.00,	2.67,	3.50	4.00,	3.33,	1.00	Generous
	045	3.33,	3.00,	3.00	4.00,	2.00,	1.00	Warm
	050	4.00,	4.00,	0.00	3.00,	3.33,	1.50	Enthusiastic
	058	1.67,	1.00,	1.00	3.00,	−0.33,	−0.50	Serene
	071	4.00,	4.00,	4.00	4.00,	4.00,	4.00	Cheerful
	073	1.67,	2.00,	1.50	2.33,	1.00,	−2.50	Serene
	079	1.33,	0.33,	1.50	1.33,	0.00,	0.50	Relaxed
	081	3.33,	3.00,	3.50	3.00,	2.67,	0.00	Peaceful
	090	3.00,	0.33,	2.50	2.67,	0.00,	0.00	Serene
	092	3.00,	1.00,	1.50	2.33,	1.33,	1.50	Pleased
	097	2.00,	2.00,	1.00	2.00,	2.00,	1.00	Cheerful
	100	4.00,	2.67,	−0.50	4.00,	1.00,	0.00	Warm
	110	2.33,	2.33,	2.50	3.00,	3.00,	3.00	Cheerful
Passed on narrow part of trail	003	4.00,	2.33,	2.00	0.00,	−0.33,	−1.00	Crushed
	009	3.00,	2.33,	3.00	3.00,	3.00,	3.00	Friendly
	039	3.00,	2.33,	3.50	3.67,	3.00,	3.00	Proud
	047	2.00,	1.00,	2.50	−4.00,	−4.00,	−4.00	Depressed
	056	2.33,	1.67,	2.50	−0.67,	0.33,	0.50	Gloomy
	057	3.00,	3.00,	3.00	2.00,	2.33,	2.00	Satisfied
	106	2.67,	3.67,	3.50	3.00,	3.00,	3.00	Cheerful
	111	2.67,	3.00,	2.00	−2.00,	0.00,	2.00	Petrified
Someone said hello and smiled	003	4.00,	2.33,	2.00	4.00,	2.67,	3.00	Friendly
	004	0.67,	0.00,	2.00	1.33,	0.00,	2.00	Lighthearted
	007	1.33,	1.33,	2.00	3.67,	2.33,	2.00	Friendly
	025	3.00,	3.33,	3.00	4.00,	2.67,	3.00	Friendly
	030	2.67,	2.00,	1.50	3.00,	2.00,	2.50	Friendly
	051	1.67,	0.00,	1.50	3.00,	1.33,	1.50	Friendly
	072	1.00,	−1.67,	−1.50	3.33,	0.67,	2.00	Friendly
	078	2.67,	2.00,	2.00	3.00,	2.00,	2.50	Friendly
	087	1.67,	−0.33,	0.50	1.33,	0.67,	2.00	Ecstatic
	091	2.33,	0.67,	0.50	4.00,	0.00,	2.00	Cheerful
	096	3.33,	1.33,	2.50	4.00,	1.33,	0.50	Warm
	100	4.00,	2.67,	−0.50	4.00,	2.00,	−0.50	Affectionate
	102	1.67,	1.33,	1.00	2.00,	2.00,	1.00	Friendly
	103	2.00,	2.00,	2.00	3.33,	3.67,	3.00	Friendly

The Dynamic Experience

In general, Brays Bayou Trail users exhibited a dynamic emotional ex-
perience even though most were in the setting a short time (less than one
hour). Though only a few respondents were included here, the trend for
trail users to exhibit different emotions across events was prevalent among
the 111 people who participated. This dynamic runs parallel to the results
of previous research (Arnould & Price, 1993; Borrie, 1995; Celsi, Rose, &
Leigh, 1993; Hammitt, 1980; Hull et al., 1992; Hull et al., 1996; McIntyre &
Roggenbuck, 1998; More & Payne, 1980; Staats, Gatersleben, & Hartig,
1997). However, we also found that the specific emotions of some trail users
were the same throughout their experience regardless of events encoun-
tered. One respondent, included here, stayed "cheerful" across all five events
that she reported, indicating an emotional state that appeared to be un-
shakable from the one she brought to the situation. She may have been
exhibiting an emotional high that was strong enough to withstand most in-
teractions (e.g., a "wow I feel good today" sense of self that originated off-
site) or she may simply not have had interactions (e.g., a near miss with a
car) that were likely to alter her cheerful feeling. At a macro level it would
be possible to examine general positive and negative emotions experienced
to determine if and how an emotional tone might be established across the
experience and to what extent that tone might influence overall experience
quality. For example, of five events that might occur over an hour how would
combinations of different positive (e.g., warm, cheerful, peaceful) and neg-
ative (e.g., afraid, depressed, crushed) emotions influence an overall sense
of the experience that is "taken" from the recreation site back to one's home
or office? Are there single events that might dominate the emotional tone
regardless of changes along the way?

A closer examination of the situated self variable and specifically how it
might change from the beginning to the end of a leisure experience may
have implications for understanding leisure identity. Haggard and Williams
(1992) indicated that people choose activities in leisure to affirm personal
identities. Affect Control Theory suggests that people's situational identities
are, in essence, constantly being tested as interactions occur. ACT may pro-
vide a way to measure how a situated leisure identity performs on such tests
over time and through different experiences. For example, over multiple
experiences in which high levels of "negative" deflection produce negative
emotions, one's situated self may eventually become emotionally unrestora-
ble leading to a shift in basic leisure identity. On a multiple-use trail an older
trail walker may begin to perceive her/himself as less potent and active as
use shifts toward, for example, younger in-line skaters resulting in negative
emotions on repeated outings. The negative emotional tone could result in
a reevaluation of situated self, creating one of two scenarios. The first might
be that the older person comes to grips with the change and now generally
sees situated self as weaker and slower at the trail. Subsequent judgments of
interactions with others could once again result in a more positive tone based

on this new self-perception. This process may provide a different way to examine the concept of "product shift" as a coping mechanism (for example see, Shelby, Bregenzer and Johnson, 1988). Second, the interactive process could create emotions that lead to a loss of the situated identity, resulting in the discontinuation of an activity or use of a place. The negative emotional tone may lead to a change in the person's situated identity, from trail walker toward, perhaps, mall walker.

Reactions to Specific Types of Events

Examining specific events that were common to many individuals provided some understanding of similarities and differences between trail users. In some instances this part of the analysis was reassuring because of the face validity evident in the fact that many people who experienced an event like "I said hello to someone and smiled" were also predicted to have experienced the same emotion, "friendly." Seeing fish in the bayou was among the most common of all events listed and while predicted emotions for individuals differed, they all shared a positive tone. Another event, and one often associated with user conflict, "passed someone on a narrow part of the trail," elicited an array of predicted emotions running the gamut from friendly, proud, satisfied and cheerful to crushed depressed, gloomy and petrified. The variability in predicted emotions for this type of event could be attributed to differences in trail user's situated selves and/or differences in the specific trail characteristics where the passing took place.

In conclusion, an effort was made here to apply Affect Control Theory in order to advance the study of leisure experience. The theory was useful in examining within and between subject variations and provided reasons why some of these differences might occur through the interaction process. The interaction process at the heart of ACT could be applied to any leisure situation, helping to contribute to an understanding of complex and subtle aspects of emotion in leisure. However, this study has several limitations that should be addressed in future research. First, data analyses and discussions were based on an assumption of a sequential connection. In other words, affective meanings associated with situated self-identity are changed by events encountered; and such changes result in a variety of emotions. Although these relations were supported by data, there may be "reciprocal connections." That is, affective meanings associated with situated self-identity may be changed during the experience by emotions resulting from a previous event as well as by any event that follows. In this study, it was assumed that events were independent of each other. Scholars (Cohen & Areni, 1991; MacKinnon, 1994) have suggested that emotions act as a motivation for subsequent behavior. ACT, in particular, includes the idea that when events strain fundamental sentiments, people initiate restorative actions or cognitive revisions to bring these affective meanings back into line with established sentiments. By capturing events encountered in a retrospective way this study was unable to capture what restorative actions, if any, trail users were em-

ploying when affective meanings associated with their situated self-identities were disconfirmed, or deflected, by an event. Finally, in this study, emotions were predicted with INTERACT II, which is based on emotion prediction equations. These emotion prediction equations were developed based on affective ratings of undergraduate students. In this study, based on the fact that affective meanings are shared within the same culture (Heise, 1979; Osgood et al., 1975), along with the fact that base emotional data obtained from trail users do not exist as a benchmark, those equations were deemed reasonable to use. Nonetheless, the shared-culture assumption was likely a source of error in predicting recreational trail based emotions. Thus some predicted emotions appeared to be irrelevant to the situational context. In the future similarities in affective meanings between university students and trail users should be examined. In order to advance our knowledge of the emerging nature of leisure experience in ecologically valid environments, it would be helpful to take steps that reduce these limitations in the future.

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