Recreational Specialization: A Critical Look at the Construct

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Recreational specialization has generally been treated by leisure researchers as a measure of intensity of involvement and has been used to explore variation among activity participants in terms of their preferences, motivations, attitudes, and the like. A close look at Bryan's (1977, 1979) original writings, however, reveals that he regarded specialization foremost as a developmental process that entails a progression in behavior, attitudes, and preferences. In this paper, we examine how researchers might go about examining recreational specialization as a developmental process. We envisage specialization as a progression in behaviors, skills, and commitment. We also describe progression in terms of stages of involvement, career changes, and turning points. Findings from various studies, however, suggest that progression is not a typical career path pursued by recreation participants. Indeed, progression may well be the least common trajectory among recreation participants. To better understand the dynamics of progression, we examine a variety of individual and socio-cultural factors and events that are likely to facilitate or impede people's movement along the specialization continuum over time. We conclude the paper with suggestions for future research.

KEYWORDS: Recreational specialization, progression, leisure careers, serious leisure

Few research agendas in leisure studies can trace their roots back to a beginning as clearly as research on recreational specialization. This research program was set in motion with two works published by Hobson Bryan in 1977 and 1979. The first of these was a journal article published in *Journal of Leisure Research*; the second was a 98-page monograph entitled, *Conflict in the Great Outdoors: Toward Understanding and Managing for Diverse Sportsmen Preferences*. Bryan's initial work (1977) focused on anglers and in 1979 he expanded the specialization framework to other outdoor recreation activities, including photography, hiking and backpacking, mountain climbing, skiing, canoeing, birdwatching, and hunting. In both works, Bryan's goal was to provide natural resource managers and researchers a conceptual framework for understanding and investigating diversity among outdoor recreationists engaged in the same activity.

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Since then, researchers have applied recreational specialization to many different types of recreation activities. The vast majority of studies have been oriented toward traditional outdoor recreation activities like boating, hiking, camping and the wildlife-based activities of birding, fishing and hunting (Table 1). In at least one case, the specialization framework has been used to explore variation among participants in an activity, in this case contract bridge, that typically takes place inside. Regardless of the activity examined, researchers have regarded specialization as an indicator of intensity of involvement, and have treated the construct as an independent variable (Table 2) to assess differences among participants in terms of their use of information to make trip decisions, motivations and expected rewards, attitudes toward resource management, preferences for physical and social settings attributes, and other aspects of involvement.

Bryan, however, regarded recreational specialization as more than just a variable that measured intensity of involvement—he believed specialization was fundamentally a developmental process whereby people *progressed* to higher stages of involvement the longer they participated in a leisure activity. Many, if not most, specialization researchers have acknowledged this idea. Donnelly, Vaske and Graefe (1986), for example, stated, "It is likely that individuals develop into racers after participating in other boating activities for a period of time" (p. 84). Similarly, Ditton, Loomis and Choi (1992) hypothesized, "Persons participating in a given recreation activity are likely to become more specialized in that activity over time" (p. 3). More recently,

TABLE 1
Types of Activities Examined By Specialization Researchers

Activity	Authors*
Canoeing and white water	Bricker & Kerstetter, 2000; Ewert & Hollenhorst,
activities	1994; Kuentzel & McDonald, 1992; McFarlane et al., 1998; Wellman et al., 1982
Hiking and backpacking	Shafer & Hammit, 1995; Virden & Schreyer, 1988; Watson et al., 1994
Boating and sailing	Donnelly, Vaske, & Graefe, 1986; Kuentzel & Heberlein, 1997
Fishing	Chipman & Helfrich, 1986; Choi et al., 1994; Curcione, 1980; Ditton et al., 1992
Camping	McIntyre, 1989; McIntyre & Pigram, 1992
Hunting	Kuentzel & Heberlein, 1992; Miller & Graefe, 2000
Rock climbing	Ewert & Hollenhorst, 1994
Birdwatching and wildlife watching	Cole & Scott, 1999; Martin, 1997; McFarlane, 1994, 1996; McFarlane & Boxall, 1996)
Wildland recreation activities	Schreyer & Beaulieu, 1986
Contract bridge	Scott & Godbey, 1994

^{*}Citations are for peer reviewed journal articles.

TABLE 2 Variables of Interest Among Specialization Researchers

Variables of Interest	Authors*
Attitudes toward depreciative behaviors	Kuentzel & Heberlein, 1992; Wellman et al., 1992
Perceptions about crowding	Kuentzel & McDonald, 1992
Attitudes toward other recreationists	Virden & Schreyer, 1988; Watson et al., 1994
Use of information to make trip decisions	Cole & Scott, 1999; Ditton et al., 1992; Martin, 1997
Motivations and expected rewards	Chipman & Helfrich, 1988; Ditton et al., 1992; Kuentzel & McDonald, 1992; McFarlane, 1994
Attitudes toward resource management	Chipman & Helfrich, 1988; Kuentzel & McDonald, 1992; McIntyre & Pigram, 1992; Virden & Schreyer, 1988
Preferences for physical and social settings attributes	Cole & Scott, 1999; Ditton et al., 1992; Ewert & Hollenhorst, 1994; Kuentzel & Heberlein, 1992; Martin, 1997; Scott & Godbey, 1994; Virden & Schreyer, 1988
Attitudes about wilderness conditions	Shafer & Hammit, 1995
Decisions about where to participate	McFarlane et al., 1997; McIntyre, 1989; Kuentzel & Heberlein, 1992
Attitudes about substitution decisions	Choi et al., 1994
Equipment preferences	Ewert & Hollenhorst, 1994
Wildlife conservation activities	McFarlane & Boxall, 1996
Types of wildlife observed on trips	Martin, 1997
Activity types	Donnelly et al., 1986; Miller & Graefe, 2000
Place attachment	Bricker & Kerstetter, 2000
Socialization influences	Kuentzel & Heberlein, 1997; McFarlane, 1996

^{*}Citations are for peer reviewed journal articles.

McFarlane, Boxall, and Watson (1998) noted, "As individuals gain experience in an activity they progress through stages of development accompanied by changes in setting preferences, social group affiliation, and attitudes" (p. 196).

Despite a recognition that specialization is a developmental process, studies have yet to be undertaken to test the extent to which recreationists progress to more advanced levels of involvement over time. Moreover, little has been written about the antecedents of progression. Recreational specialization continues to be used as a variable much in the way that the commitment and involvement constructs have been used, to explore variation among activity participants in terms of preferences, motivations, attitudes, and so on.

Our goal in this paper is to explore how leisure researchers might go about examining recreational specialization as a developmental process. We begin by providing a summary of Bryan's ideas about specialization. We follow this up by exploring what it means that people *progress*. Here we identify

those salient dimensions of specialization in which progression is likely to occur. Next, we examine progression in terms of stages of involvement and career movement. These ideas provide a temporal frame of reference for understanding the challenges and experiences that recreationists are likely to face over time. We then summarize findings from different studies that give clues about whether or not people truly progress. The prevailing evidence shows that while some people do progress, most people probably do not. We then examine those individual and socio-cultural factors and events that are likely to facilitate or impede people's movement along the specialization continuum over time. We conclude this paper with some suggested areas of future inquiry.

Bryan's ideas about recreational specialization have previously been framed in terms of their application to outdoor recreation activities and natural resource management. We feel the framework is robust enough that it can be applied to leisure activities in general. Indeed, sport sociologists have used the term specialization to describe a tendency among athletes to intensely participate in a single sport to the exclusion of others (Hill & Hansen, 1988). Our focus is thus on the application of specialization to a range of leisure activities and not just outdoor recreation activities.

What can be gained by examining recreational specialization as a developmental process? First, we believe that researchers will gain fresh insight into the meaning of progression, which could aid them in their efforts to conceive specialization and understand how specialization is related to other facets of leisure behavior. Second, we believe researchers will be in a better position to understand the dynamics of leisure activity and the factors underlying progression. A related contribution is that we will gain sensitivity to a range of career trajectories that attend people's involvement in leisure activity. Progression may well be the least common trajectory among recreation participants.

Summary of Bryan's Ideas

The word *specialization*, in everyday language, variously connotes a specific occupation, a branch of study, or a field of research to which people dedicate themselves. The word *specialist* describes an individual who devotes him or herself to a specific occupation, area of expertise, and so on. Finally, the word *specialize* means to "train in or devote oneself to a particular area of study" (Hanks, 1979, p. 1397). In his writings about trout anglers and outdoor recreationists, Bryan used each of these three words—specialization, specialist, and specialize—and their meaning conforms, more or less, to their everyday usage.

Before proceeding, it is worth noting how Bryan came to use the term recreational specialization, as opposed to some other term, to describe people's interest and involvement in specific leisure activities. Bryan (2000), a devoted member in the "angling fraternity," recognized that fishermen displayed vast differences in orientations and behaviors, which seemed to be

related to how long and intensely they had been involved in the activity (p. 18). During his summer fishing trips to Montana, Idaho and Wyoming, Bryan came to appreciate the degree of devotion and skill used by some fly-fishermen. He was struck by the sophisticated techniques and equipment they used and how these anglers adapted their techniques to stream conditions. Bryan said that the word *specialized* effectively described the technical mastery and commitment displayed by these fly-fishermen (personal communication, October, 24, 2000). In Bryan's writings, specialization would subsequently come to have two meanings. One would be the range of orientations and behaviors displayed by individuals in an outdoor recreation activity. The other would be a process whereby individuals became increasingly skilled and committed to the leisure activity over time.

Bryan (1977) wrote, "A major weakness of past research efforts has been the assumption of sportsmen homogeneity, with variations among individual sportsmen remaining largely unexplored" (p. 175). He introduced the recreational specialization construct to help researchers and practitioners understand and explore what he called "within-sport" variability. He defined recreational specialization as "a continuum of behavior from the general to the particular, reflected by equipment and skills used in the sport, and activity setting preferences" (p. 175). According to Bryan, the high end of the continuum includes individuals who are extremely committed to the activity and who use sophisticated techniques and equipment; the low end includes newcomers and individuals who participate infrequently, do not regard the activity as important, and do not show a strong preference for equipment and technique.

Bryan (1977) added that along the continuum there are characteristic styles of participation that can be represented in the form of a typology (a system of classification). Bryan's typology of trout fishing is organized around four classes of participants: occasional fishermen, generalists, technique specialists, and technique setting specialists. These classes of anglers are ideal types in the sense they are analytic constructions that provide researchers and practitioners a comparative tool for examining typical behaviors and attitudes along a "continuum of fishing specialization" (p. 184). Bryan's notion of a *specialist* is worth highlighting because it was one of the first ideal types of its kind for describing an intense style of leisure involvement. Other researchers had noted that leisure can become a central life interest (e.g., Roberts, 1970) but little had been done to actually describe this status in any detail. Bryan characterized the specialist as being highly skilled and knowledgeable; using advanced equipment and techniques; being highly committed to the activity; having distinctive orientations with regard to social and setting characteristics; and possessing a strong sense of group identification with other members of the leisure social world.

The continuum of behavior and typology of trout fishermen were more than just analytic tools for distinguishing among different angler types—together they constituted a framework for understanding the typical stages of involvement through which individuals were likely to progress during

their fishing careers. Indeed, Bryan regarded specialization first and foremost as a developmental process whereby recreationists increasingly devoted themselves to a particular activity to the exclusion of others. Although Bryan (1979) recognized that "the number of individuals at various levels of specialization is skewed toward the low end of the continuum" (p. 91), he believed that there was a tendency for recreationists to move into more specialized stages the longer they participated in the activity. He noted that anglers "typically start with simple, easily mastered techniques which maximize chances of a catch, then move to more involved and demanding methods the longer they engage in the sport" (Bryan, 1977, p. 182).

Bryan (1977) believed that as people progressed from one stage of involvement to another, their motivations, resource preferences, attitudes about management practices, and reactions to factors that might lead to dissatisfaction or conflict would change as well. He observed that as anglers moved toward the high end of the specialization continuum, their focus shifted from catching any fish to catching fish under exacting conditions; fishing on any water to fishing on limestone springs; and fishing with family to fishing with fellow specialists. Simultaneously, there was a movement from a management philosophy that encourages ease of access and stocking to one that encourages preservation of the natural setting. In sum, Bryan believed that there was a general change, over time, from consumption to preservation, doing the activity for its own sake, and an accentuation of the quality of experience.

Finally, Bryan (1979) believed that recreational specialization was likely to exist in all activities, although the length of a continuum would vary from one activity to another. He reasoned that activities differ in their level of complexity and "certain activities, by their very nature, lend themselves more easily than others to high or low specialization, or to wider or narrower ranges" (p. 88). By implication, it was possible to examine specialization within and between activities. Bryan used hunting to illustrate his point. He argued that within most hunting activities, there is a tendency toward progression in methods (e.g., from using rifle to bow and arrow), and the types of experiences sought (e.g., making a kill to bagging a trophy to the challenge of knowing and looking for animals). Between activity differences could be examined by assessing the degree of difficulty associated with tracking and shooting different types of game. Thus, he hypothesized, "In the Southeast the progression of hunting experiences seems to be from small game, to deer, then to birds—with the turkey being recognized as the ultimate challenge" (p. 82).

Dimensions of Progression

From the summary above, we believe that Bryan regarded recreation specialization foremost as a process that entailed a progression in how recreationists participate in and view an activity over time. Other researchers have taken up the notion that specialization involves progression as well.

Little (1976), for example, defined specialization as a process that entails the "selective channeling of dispositions and abilities" (pp. 84-85). Similarly, Williams and Huffman (1986) noted that specialization represents "a preference for and a way of thinking about the objects, events, or ideas of a domain that is comparatively advanced" (p. 343).

When specialization is conceived as a process, there is an underlying assumption that progression is directed toward an "authentic" level of involvement and that the end product of progression is an elite or privileged status within the leisure social world. Bryan himself (1977) believed that fly-fishing for trout was such a status: "[It] represents the end-product of a progression of angling experience leading to a more and more 'mature' or specialized state" (p. 177). Simultaneously, researchers have supposed that specialists' style of participation provides non-specialists a model for correct behavior. Wellman, Roggenbuck and Smith (1982), for example, made the point that "newcomers . . . [to canoeing] likely have not assimilated all the appropriate attitudes of experts toward the activity" (p. 339). In sum, researchers have assumed that progression entails "an evolution [italics added] of preferences and style of participation" (Williams, 1985, p. 33).

To better understand what specialization means as a developmental process, it is important to come to terms with how progression is likely to manifest itself. To this end, we can turn to how researchers have sought to conceive specialization in terms of its underlying dimensions. Unfortunately, there is little agreement among researchers about how best to assess specialization. Bryan himself was not straightforward on this point. At one point, he emphasized that specialization research should focus on behavior: "Good sociology can provide the basis for 'good' management policy if the focus of research centers primarily on the behavior of individuals, rather than internal motivational states" (Bryan, 1979, p. vii). Elsewhere, he noted that the "degree of specialization . . . is viewed as a product of time, money, skill, and psychic commitment" (p. 60). Recently, Bryan (2000) acknowledged that there was some confusion in the way he defined recreational specialization and he advocated that specialization be understood in terms of both behavior (i.e., length and degree of involvement) and attitudes and values (i.e., it's centrality to an individual's identity).

Studies, in fact, have varied considerably in terms of their inclusion of behavioral and attitudinal measures. Some studies have followed Bryan's lead and characterized recreational specialization solely in terms of behavior (e.g., Choi, Loomis and Ditton, 1994; Ditton et al., 1992; Donnelly et al., 1986; Martin, 1997). In a few cases, researchers have measured specialization exclusively in terms of attitudes and values (e.g., McIntyre, 1989; Shafer & Hammit, 1995). Most studies have employed both behavioral and attitudinal measures, although there has been a tendency to favor the former over the latter (e.g., Bricker & Kerstetter, 2000; Chipman, 1988; Kuentzel & Heberlein, 1997; McFarlane, 1994; Virden & Schreyer, 1988; Wellman, et al., 1982).

Beyond the recognition that recreational specialization includes a set of behaviors and attitudes, there remains little agreement about how precisely

to characterize and measure the construct. Thus, researchers collectively have identified, empirically and a priori, a wealth of overlapping dimensions. Many studies have characterized specialization, in part, by experience (e.g., Chipman & Helfrich, 1988; Kuentzel & Heberlein, 1992; McFarlane, 1996. Wellman, et al., 1982). At least one study, however, distinguished between "general" experience and "recent experience" (Virden & Schreyer, 1988). Other dimensions appearing in the literature include commitment (Kuentzel & Heberlein, 1997), economic commitment (McFarlane, 1996), media involvement (Kuentzel & Heberlein, 1992), investments (e.g., Chipman & Helfrich, 1988; Wellman, et al., 1982), centrality to lifestyle (McIntyre, 1989: Kuentzel & McDonald, 1982; Wellman, et al., 1982), skill (Donnelly et al., 1986), resource use (Chipman & Helfrich, 1988), and enduring involvement (McIntyre, 1989; McIntyre & Pigram, 1992). Kuentzel and McDonald (1992) noted that a lack of conceptual clarity is aggravated by uncertainty among researchers about whether or not a specific measure is an indicator of one dimension of specialization or another.

We propose that the progression can be understood in terms of (a) a focusing of behavior, (b) the acquiring of skills and knowledge, and (c) a tendency to become committed to the activity such that it becomes a central life interest. These dimensions look somewhat like the three components of recreational specialization put forth by McIntyre and Pigram (1992). Their conceptual scheme, which was based on a model of specialization developed by Little (1976), included a behavioral dimension (e.g., prior experience and familiarity), a cognitive dimension (e.g., skills, knowledge, and setting attributes), and an affective system (e.g., enduring involvement or importance, enjoyment, self-expression, and centrality). Our dimensions differ from the ones identified by McIntyre and Pigram to the extent that we place greater emphases on an orientation to skill development, rather than on simply advanced knowledge, and commitment processes, rather than enduring involvement. We also focus more on the processes underlying progression. We agree, however, with McIntyre and Pigram that the three components are interrelated and mutually reinforcing.

A Focusing of Behavior

Progression entails, first, a focusing of behavior. By this we mean the tendency for individuals to intensely participate in one leisure activity at the *expense of others*. Researchers have employed a variety of behavioral indicators to measure recreational specialization, including years of experience, frequency of participation, the number of sites (e.g., rivers) visited, the types of equipment used, amount of equipment purchased and owned, the number of activity-related books and magazines purchased and owned, monetary investments, and distance traveled to participate in an activity.

Of course, none of the above indicators are perfect measures of progression in and of themselves. Some newcomers or dabblers, for example, who purchase high-priced equipment or gear may do so because they are

hoping to make a fashion statement (McIntyre & Pigram, 1992) or because the equipment may help compensate for a lack of skill or knowledge (Bryan, 1979). Likewise, some newcomers may plunge enthusiastically into a leisure social world—or what Irwin (1977) referred to as a "scene"—because they are attracted to a perceived lifestyle and identity image (Haggard & Williams, 1992). For a time, such individuals may evince a great deal of behavioral involvement via regular participation and the purchase of activity-related accoutrements. Insiders (Unruh, 1979), however, may regard these individuals with contempt, or at the very least indifference, until they have demonstrated appropriate skill and role performance (Brannigan & McDougall, 1983; Donnelly & Young, 1988).

A focusing of behavior must be assessed vis-à-vis involvement in other activities. As noted, progression ultimately entails choosing one activity at the expense of others. Bryan (1979) made the point that artist photographers may choose among a variety of subjects in which they may specialize, including "photo realism (the visual expression of things in the environment), photo journalism (the visual expression of the social environment), experimental photography (dealing in special effects), and photo geometry (dealing with the geometrical aspects of visualization in photography)" (pp. 64-65). Performance-related standards in some activities (e.g. sports, music, and art) may pressure participants to concentrate their energies in activities in which they believe there is potential for success (Colson, 1990; Hill & Simons, 1989; Stevenson, 1990). Specialization in sports, for example, may occur as early as high school and entails youth limiting "their athletic participation to one sport which is practiced, trained for, and competed in throughout the year" (Hill & Hansen, 1988, p. 76). Specialists, thus, focus their behavior in such a way that they do not have the time and resources to participate in competing activities.

Skill Development and the Acquisition of Knowledge

The development and acquisition of skills and knowledge is an equally excellent indicator of progression. Many researchers have recognized that the types of skills, knowledge, and information recreationists possess are related to past experience. Birdwatchers' ability to identify birds has been found to be related to the number of trips they had taken over the past year and how far they had traveled to go birding (Kim, Scott, & Crompton, 1997; McFarlane, 1994, 1996). Likewise, perceived skill among river runners is related to years of participation and number of different rivers run (Kuentzel & McDonald, 1992). Recreationists with a history of involvement have been shown to have elaborate cognitive structures and more information about setting attributes and the environment in general (Williams, Schreyer, & Knopf, 1990). Moreover, experience may lead to greater specificity of preferred outcomes (McFarlane et al., 1998).

Implied here is that individuals naturally acquire knowledge and skills the longer they participate in a leisure activity. This has led some researchers to actually use past experience as a surrogate measure for knowledge and familiarity of recreation environments (McIntyre, 1991; Schreyer, Lime, & Williams, 1984). We argue that such an approach tends to ignore the fact that individuals are likely to vary markedly in their *desire* to develop their abilities and acquire knowledge. In fact, some individuals may participate in activities on a regular basis but demonstrate little skill or knowledge of advanced techniques (Buchanan, 1985; Scott & Godbey, 1994). Other individuals, in contrast, may participate infrequently but show evidence of a high degree of skill and knowledge.

For these reasons, we believe that it is important to conceive skill development and knowledge as being a unique dimension of progression and conceptually distinct from past experience. Furthermore, we believe that it is important for researchers to conceive progression not just in terms of the acquisition of skills and knowledge but also in terms of the desire to develop skills and knowledge. This is consistent with Stebbins' (1999) conceptualization of serious leisure. He noted, "serious leisure participants make a significant personal effort based on specially acquired knowledge, training, or skill" (p. 71). Progression is thus likely to entail continually putting forth effort to develop and refine one's skills and knowledge. Individuals inclined to skill development may spend their time (off site) reading and studying about the activity, trying out new equipment and techniques, and talking about the activity with other devotees (Bloch, Black, & Lichtenstein, 1989; Scott & Godbey, 1994).

An orientation to skill development and the acquisition of knowledge is likely to be expressed in very different ways depending on the activity. In some activities, advanced skill and knowledge may result in a decreased dependence on equipment. The first author knows a birdwatcher who has a keen ear, a detailed knowledge of subtle field marks, and a sophisticated knowledge of bird behavior (e.g., habitat preferences and migration patterns). This individual has, in effect, memorized most standardized field guides and is not dependent on binoculars or a spotting scope for making positive identification of birds in the field. An orientation to skill development and the acquisition of knowledge may also find expression in a concern for authenticity or historical accuracy. Olmstead (1993) found that among dollhouse makers and model railroad builders there was much effort spent acquiring materials and building models that are realistic replicas of the original. Likewise, Mittelstaedt (1995) reported that historical accuracy is a central concern among Civil War re-enactors. Serious re-enactors have detailed information about their units, their characters, and how they lived. Historical authenticity may lead re-enactors to endure extremes in hot and cold temperatures.

Commitment Processes

Progression may also be assessed in terms of the kinds of commitments recreationists accrue over time. A number of studies have conceived recre-

ational specialization in terms of commitment and related constructs such as enduring involvement and centrality to lifestyle. McIntyre (1989) regarded commitment and involvement as being essentially the same, and that centrality was a dimension of involvement. Other researchers have tended to treat commitment and centrality as distinct dimensions of specialization. In these cases, commitment has most often been measured in terms of expenditures and the amount of equipment owned, while centrality has been measured in terms of importance of the activity compared with other leisure pursuits, number of magazine subscriptions and books owned, club memberships, the percent of one's leisure time devoted to the activity, and desire to develop one's skills and abilities (Bricker & Kerstetter, 2000; Kuentzel & McDonald, 1992; McFarlane, 1994, 1996; Virden & Schreyer, 1988).

We do not have the space to sort out the differences among the commitment, involvement, and centrality constructs. Other researchers have made an effort to do just that (e.g., Iwasaki & Havitz, 1998; Kim et al., 1997). For our purposes, we will use commitment as an umbrella term for characterizing the types of personal and behavioral investments that recreationists may develop over time. We will argue that individuals who evince a high degree of personal and behavioral commitment are likely to regard the activity as a central life interest.

Personal commitment entails the development of a self-identity whereby one begins to define one self in terms of the leisure activity (Yair, 1990). This entails a strong affective attachment (Buchanan, 1985) and inner conviction that the activity is worth doing for its own sake. Stebbins (1992a) made this point with regard to people who are serious leisure participants. He noted that they "are inclined to speak proudly, excitedly, and frequently about them to other people, and to present themselves in terms of these pursuits when conversing with new acquaintances" (p. 7). Personal commitment goes beyond simply regarding a leisure activity as enjoyable and important—it entails becoming dedicated to the values and norms of the social world in which one is engaged (Buchanan, 1985). For example, committed wilderness users tend to embrace strong "purism" values—an attitudinal orientation that indicates a basic agreement with the wilderness ideal (Shafer & Hammit, 1995). Likewise, some devoted birdwatchers have evinced such a high distain for introduced (non-native) bird species that they have lobbied (unsuccessfully) the American Birding Association to ban these birds from all official lists (Kaufman, 1997). Personal commitment is likely to be expressed by engaging in behaviors that promote the interests of the activity. Thus, a large fraction of advanced birders tend to engage in behaviors that contribute to wildlife conservation (McFarlane & Boxall, 1996). Similarly, many serious bridge players willingly and gladly help recruit new participants and organize social world activity (Scott & Godbey, 1994).

Behavioral commitment, in contrast, is best understood as those expectations and costs that make withdrawal from the leisure activity problematic (Scott, Baker, & Kim, 1999). Behavioral commitment has been variously termed side bets (Becker, 1960), external commitment (Shamir, 1988), struc-

tural commitment (Yair, 1990), and continuance commitment (Kantor, 1968). The underlying idea here is that individuals sometimes knowingly make heavy investments when they engage in leisure activities and that cessation is likely to result in severe "penalties" (Stebbins, 1992). Some of these investments include money spent on skill development and equipment, and time and energy spent developing a self-image and nurturing friendships within the social world. Penalties, thus, associated with ceasing participation include the loss of a strongly held identity, the loss of friends, and the lack of skills, knowledge and financial resources to effectively pursue alternative interests (Buchanan, 1985).

People who develop strong personal and behavioral commitment to a leisure activity probably regard the activity as a central life interest. Dubin (1992) defined a central life interest as "that portion of a person's total life in which energies are invested in both physical/intellectual activities and in positive emotional states" (p. 41). A leisure activity is a central life interest to the extent that a person's lifestyle, personal identity, and social networks are constructed around the leisure activity (Kim et al., 1997). Centrality would imply, first, a rejection of alternative leisure activities, and, second, making family and career decisions in light of one's interest in the activity. Not only are other leisure activities "squeezed out" but also the individual may choose jobs that facilitate opportunities to participate in the activity. Bryan (1977) noted, for example, that some "techniques setting specialists" had chosen jobs that maximized opportunities to pursue the activity. In this case, jobs were chosen that provided flexible work schedules and/or were located in close proximity to "exceptional fishing opportunities" (p. 184). Participants may also choose jobs that contribute to their activity in other ways. The second author is acquainted with rock climbers who sought and held jobs constructing brick homes to develop upper body strength that would aid them in the sport. Popular and scholarly accounts of birdwatchers (Kaufman, 1997) and Civil War re-enactors (Mittelstaedt, 1995) suggest that devotees in other activities make similar lifestyle decisions.

Stages of Involvement

Another way of visualizing progression is to think in terms of stages of involvement, career changes, and turning points. Together, these ideas provide a temporal framework for understanding the typical challenges and experiences recreationists are likely to face the longer they participate in an activity. Before proceeding, some preliminary remarks are warranted. First, stages of involvement are abstractions only and reflect developmental issues recreationists are likely to confront at different occasions during their leisure careers. A second and related point is that it is not always possible to assign a precise beginning or end to a given stage. Finally, people's involvement may become foreclosed, abruptly or gradually, at any given stage of involvement.

Researchers and laypeople accept that people go through various stages of development during their life and that there are characteristic ways of

thinking and behaving at different ages (Kleiber, 1999). Using the stages of involvement metaphor, Bryan (1977, 1979) sought to identify characteristic styles of involvement that recreationists were likely to manifest over time. Bryan did not, however, attempt to describe generic stages of involvement that were likely to be applicable to all leisure activities. This, perhaps, is consistent with his belief that activities varied greatly in terms of their degree of complexity. Nevertheless, three general stages of involvement can be gleaned from Bryan's writing. The first of these includes a novice or beginning stage. According to Bryan, individuals during this stage are likely to participate infrequently and "are intent on getting results, any results" (p. 87). A second stage includes individuals for whom the activity has become an established behavior. Bryan noted that during this establishment stage, recreationists have developed a level of competence and seek to validate their skill through greater challenges: "Hikers and backpackers emphasize distance and endurance; birdwatchers accumulate long lists of birds sighted; skiers want to master the more difficult slopes; canoeists seek the white water; and photographers attempt to duplicate the results of professionals" (Bryan, 1979, p. 87). The third stage of involvement entails *specialization*. It is during the specialization stage that recreationists evince a high degree of commitment, activityrelated knowledge, and a focus in behavior. According to Bryan: "They sometimes center much of their lives and identities around their sports or hobbies" (p. 88).

Stebbins' (1992a) research on amateurs, professionals, and serious leisure participants provides a more detailed and systematic characterization of the typical career stages through which people are likely to progress. Stebbins' framework included five career stages, including a beginning, development, establishment, maintenance, and decline. The beginning stage, according to Stebbins, has imprecise boundaries and "lasts as long as it is necessary for interest in the activity to take root" (p. 71). The development stage begins when individuals have cultivated an interest in the activity and participation "becomes systematic and routine" (p. 74). According to Stebbins, progress during this stage is marked by growth of knowledge and ability. Individuals in the establishment stage "have moved beyond the status of learner of the basics" and are now faced with finding their "place in the amateur or professional world" (p. 82). Stebbins noted that "getting established" entails cultivating opportunities to ensure regular involvement in a chosen activity. The maintenance stage is one in which the "career is in full bloom, in the sense that practitioners are now able to enjoy the pursuit to its utmost" (p. 88). Finally, decline occurs as a result of injury, loss of physical power associated with aging, erosion of creative abilities, or a lack of available opportunities.

Career changes can also be understood in terms of "turning points," which Stebbins (1992a) defined as those "junction[s] at which the nature or direction of an amateur-professional career is seen by the practitioner as having changed significantly" (p. 70). Turning points, thus, give us insight into those critical events and decisions that are likely to precipitate progression or movement to a different stage or level of involvement. Turning points

among hang-gliders, for example, include a successful first flight, a first soaring experience, a first 360 degree turn, a first cliff launch, and so on (Brannigan & McDougall, 1983). These achievements, according to Brannigan and McDougall, provide participants "reference points" for evaluating their position among hang-gliders in general. In an autobiography written by one of North America' best known birdwatchers, Kenn Kaufman (1997) identified two key turning points that impacted his birdwatching career. First, he came to the realization that birders constituted a community and that he could rely on other birders for friendship and information. Second, he realized that his passion for listing as many birds as he could in a given year had kept him from truly understanding birds. Kaufman noted, "The lure of running up a big list made it all too tempting to simply check off a bird and run on to the next, without taking time to really get to know them" (p. 306). Elsewhere he added, "My list for the year was up to 650 species, but the larger it grew the less important or even interesting it seemed. I was more concerned with getting to know more about these birds I had already checked off" (p. 284).

Is there Evidence for Progression?

It is important to note that no study, to our knowledge, has actually been undertaken to test systematically whether or not people progress over time. Moreover, only a handful of researchers have included a temporal indicator of experience, in the form of number of years of involvement, in their efforts to measure specialization (Chipman & Helfrich, 1988; Donnelly et al., 1988; Hammit & McDonald, 1983; Kuentzel & Heberlein, 1992, 1997; Kuentzel & McDonald, 1992; McIntyre & Pigram, 1992; Virden, 1988). We can look to a handful of studies, however, to assess the extent to which years of experience is related to various indicators of progression. Here we find the results are mixed.

Two studies show that the number of years people have been involved in boating is not strongly related to the style and social context of participation. Donnelly et al. (1986) found that individuals involved in three styles of sailing (day boating, overnight cruising, and racing) did not differ significantly in terms of years of experience. Among individuals participating in motorboat activities, on the other hand, years of participation was related to style of boating, although not in the hypothesized direction. In this case, racers, a group believed to be at the apex of the specialization continuum, averaged 5.7 years less experience than overnight cruisers. In the other study, Kuentzel and Heberlein (1998) reported that individuals who belonged to yacht clubs, a group thought to be advanced and expert in skill, averaged eight more years of sailing experience than individuals who boated with friends. Yacht club members did not, however, differ significantly from other groups who sailed (e.g., individuals who own sail boats but do not belong to a yacht club).

A few studies allow us to look at the extent to which number of years of experience is associated with skill, level of commitment, and other indi-

cators of progression. In a study of backcountry hikers, Virden and Schreyer (1988) reported that years of experience hiking was moderately correlated with a measure of self-rated experience (r=.43) and very strongly correlated with a measure of the importance of hiking activity in one's life (r=.81). However, years of hiking experience had the lowest item-to-index correlation (r=.45) among the 11 indicators used to create a composite index of recreation specialization. The other item-to-index correlations ranged from .53 to .77. In a study of participants of serious leisure activities, Shamir (1992) found that the number of years of experience was related, but not strongly, to a measure of social commitment (r=.15), the number of hours spent weekly participating in the activity (r=.16), the extent to which participants felt the activity required special skills or knowledge (r=.26), and the amount of money invested in the activity (r=.34). Number of years of experience, however, was not significantly correlated with a measure of leisure identity salience (r=.04).

Two other studies may well provide the best evidence about whether or not recreationists progress over time. One of these is a study of paddlers (canoeists and kayakers) reported by Kuentzel and McDonald (1992). Using factor analysis, they found that three variables loaded strongly on a past experience dimension: years of experience, number of rivers run, and level of skill. They also found that this experience dimension was correlated with a commitment dimension and a lifestyle dimension, but only to a point. Kuentzel and McDonald divided their sample into two groups: those with below average experience scores and those with above average scores. Among the former, experience was indeed associated with commitment and lifestyle choices. Among experienced paddlers, however, there was virtually no relationship among the experience, commitment, and lifestyle dimensions. These results led Kuentzel and McDonald to observe that experience, commitment, and lifestyle choices do not increase in a linear fashion over time. Stated differently, their results suggest many paddlers reach a plateau in terms of how far they progress along the specialization continuum. The authors reasoned that changes in residence, work and family commitments, and opportunities likely account for fluctuations in lifestyle and commitment scores over time.

The other study is an ethnographic analysis of contract bridge groups and players reported by Scott and Godbey (1992, 1994). They found that many bridge players were highly committed to what they called "social" bridge—a style of bridge in which players emphasized loose adherence to rules, getting along with one another, and sociability. The vast majority of social players actually eschewed skill development and showed little inclination to adopt the attitudes and behaviors of serious players. Many of these social players had been playing bridge habitually for years (some for over 50 years) with a regular group of friends. Social bridge players had, in effect, followed a very different career trajectory than tournament players, who were highly oriented to competition and skill development. A conclusion that Scott and Godbey (1994) gleaned from this study was that many, if not most bridge players, do not seek to progress toward an elite status over time.

Mechanisms Underlying Progression

Although some people certainly progress (and some to an elite status), most probably either maintain involvement at a relatively fixed level or actually decrease their participation over time. It is also likely that many people have little inclination to progress toward the so-called elite end of the specialization continuum, and, in some cases, may actually resist skill development and mimicking the attitudes and behaviors of so-called specialists.

To better understand why some people advance along the specialization continuum, and why others do not, it is important to understand the antecedents or mechanisms underlying progression. In this section, we examine how researchers have sought to explain why people progress to higher stages of involvement over time. Three of these explanations, reinforcement theory, identification theory, cognitive theory, are framed in terms of psychological or developmental models of leisure, which tend to assume a natural, if not inevitable, progression of involvement over time (Storrs, 1999). A fourth perspective, career contingencies, examines progression in terms of those interpersonal and structural events that recreationists invariably face during their leisure careers.

Bryan (1979) used principles of social learning or reinforcement theory to explain why people might progress in their respective avocations over time. According to this perspective, a person's involvement in a given leisure activity is shaped by the rewards he or she has attained over time. Rewards could be extrinsic (e.g., praise or admiration) or intrinsic (e.g., feeling competent), although Bryan, like many leisure researchers today (e.g., Iso-Ahola, 1999), viewed intrinsic motives as the stronger of the two because they provided evidence of self-determination: "[Intrinsic motives] tend to be less subject to intervening influences and therefore, more directly related to 'good performance'" (p. 50). Significantly, Bryan recognized that the nature of rewards is likely to change as the person acquires skills and experience in the activity. He noted that should rewards come too easily, they may cease to be satisfying which can lead to a seeking out of new rewards within the particular leisure social world: "The generalist, tiring of numbers of game and fish, turns to the size or 'quality' of the catch or kill" (p. 53). The parallel here to Csikszentmihalyi's (1990) ideas about optimal experiences (i.e., flow) is plain. According to Csikszentmihalyi one way individuals achieve optimal experiences in an activity over time is to seek out new and invigorating challenges.

Bryan (1979) also believed that progression was fueled by an underlying need for humans to find meaning or identity in life. Bryan's ideas here were influenced greatly by Ernest Becker's (1973) work, *The Denial of Death*. Citing Becker, Bryan noted that a person's "ultimate anxiety is the knowledge of his own mortality," and this anxiety inspires the individual to become "special" (p. 54). Bryan noted that although many individuals may seek to find meaning through more established pathways (e.g., work), some individuals "find their 'specialness' in the high degree of manipulation and control they

bring to . . . [a leisure] activity and the status from their leisure world reference group that such performance brings" (p. 55). Bryan regarded reinforcement theory and identification theory as complementary rather than competing. He noted, "Reinforcement theory certainly deals with the mechanics of how behavior is shaped, but other perspectives . . . enable one to understand and predict what areas are likely to be rewarding" (p. 55).

Drawing upon cognitive psychology, a number of other researchers have explained progression in terms of the way recreationists mentally organize and structure information (Schreyer & Beaulieu, 1986; Schreyer et al., 1984; Williams, 1985; Williams et al., 1990). These researchers argue that as people gain experience in an activity, their cognitions become increasingly complex and they have more information they can use to evaluate participation. This, according to Williams (1985) can actually lead to a change in the types of decisions and choices recreationists make.

Career Contingencies

Although the above perspectives provide insight into the psychological dynamics of change, they fail to explain why some people progress while others do not. They also fail to account for the fact that recreationists' careers are continually influenced by factors not entirely under their control (Lindesmith, Strauss, & Denzin, 1988). To more fully understand the dynamics of progression, it is important to understand the various interpersonal and structural events that recreationists inevitably face during their leisure careers. Stebbins (1992a) referred to these events as *career contingencies*. He noted that they may "emanate from changes in leisure or work environments or personal circumstances, or both" (p. 70).

Contingencies may facilitate or constrain people's ability to progress along the specialization continuum. In some instances they are likely to result in "retrogressive" movement (Stebbins, 1992a). Contingencies, however, influence career trajectories in two other important ways. First, they influence the extent to which people are likely to put forth the time and effort required to develop and sustain the persona of a recreation specialist or serious leisure participant. Far from occurring naturally, specialization is one career trajectory that people may pursue. Other participants may pursue a trajectory that is more casual or social in nature (Scott & Godbey, 1994). Still others may develop stronger attachments to specific places or social groups than they do to activities (Williams, 1985, 1986). Second, contingencies influence the branches (subworlds) within a leisure social world toward which individuals are likely to gravitate and specialize. For example, the kinds of equipment and types of fishing that anglers are likely to pursue during their leisure careers may be influenced by available opportunities, financial resources, and a mentor's influence (Curcione, 1980).

Although there are many possible career contingencies that can influence progression, we will limit our discussion here to the (1) support individuals receive from significant others and social world members, (2) the

gender of the recreationist, and (3) available opportunities and personal resources. Stebbins (1992a) observed that in the beginning stages of a career. parents provide critical support for their youngsters by signing consent forms and providing money for lessons and equipment. Parents may also encourage their youngsters to develop their skills by organizing outings, providing instruction, and driving them to and from practice, rehearsals, and events. Support and encouragement may also come from one or more mentors—a coach or teacher, a respected master, or influential member within the social world. Mentors may provide individuals the confidence to persevere (Stebbins, 1992a), advanced instruction, and inside information about social world activity. They may also sponsor individuals as they seek to penetrate existing clubs or social circles. A related source of support comes from social world members. These individuals validate or confirm a participant's identity (Donnelly & Young, 1988) and serve as gatekeepers to would-be participants (Scott, 1991; Stebbins, 1992a). Scott noted that support from social world members is particularly important in "group leisure" activities because involvement is highly dependent on other people's actions. He reported that some people within serious bridge clubs, despite having the motivation and time to play, participated less often than they desired because they were regarded by members as having poor skills or an abusive "bridge personality." Stebbins made a similar point in regard to what he called "collectivistic undertakings." Individuals judged to be unskilled, lacking knowledge, unreliable or unfriendly may "find others being hired or invited into a group before themselves" (pp. 82-83).

Social support during the initial stages of involvement may be particularly important in influencing what trajectory a leisure career is likely to take. Two decades ago, Curcione (1980) speculated that "initiation rites" in fishing are likely to have an enduring impact on recreationists' preferences and styles of involvement. He argued that these "initiation rites can be such as to immediately involve anglers in highly specialized techniques which they follow through their angling careers" (p. 102). More recently, McFarlane (1996) provided evidence that suggests that degree of specialization is indeed related to the kinds of support individuals receive during the initial stages of involvement. She reported that advanced birders were more likely than casual birders and novices to have taken up the activity within the context of organized clubs (e.g., the Audubon Society). Club members, according to McFarlane, may serve "as role models that transmit the behavior and attitudes associated with the activity to new participants from the outset of the birding career" (p. 47).

Another important contingency is the person's gender. Stebbins (1992a) noted that early in a career, "[Gender] acts as sort of a sieve, filtering out males and females from activities culturally defined as appropriate for one sex only" (p. 73). Gender is likely to interact with the support people can expect to receive as they seek to develop their skills and participate in an activity at an advanced level. Many females, in particular, may find such support lacking because they have been taught, from early in life, to put other

people's needs ahead of their own (Henderson & Allen 1991). There is evidence that married women often do not feel they are entitled to spend time practicing and developing their abilities and knowledge in leisure activities (Deem, 1986; Henderson & Bialeschki, 1991). Efforts to do so may well be regarded as selfish. Married women who choose to participate in activities at an advanced level may go to great lengths to ensure that time spent in the activity does not interfere with family obligations (Olmstead, 1993; Stebbins, 1992b).

A third career contingency is available opportunities and personal resources. Opportunities may be more or less available within geographical regions. Individuals growing up in cold weather regions have an obvious advantage when it comes to participating and progressing in sports like skiing. Communities may also vary in the extent to which opportunities for specific activities are made available. McQuarrie and Jackson (1996) showed that adults who sought to progress in figure skating were often stymied by a lack of available rink time. Opportunities may take the form of status group barriers and performance-related criteria. Fear of overt and subtle discrimination keeps many African-Americans from traveling to unfamiliar territories (West, 1993) and this can deflate individuals' desire to progress in specific activities. Performance-related standards in many activities (sports are an excellent example) often prevent all but the best athletes from progressing to an elite level of involvement. Personal resources, in the way of one's socioeconomic status, is related, in varying degrees, to people's ability to access leisure opportunities. Both participation and progression in a range of activities may be problematic for individuals who are poor and who have lower levels of education. In contrast, individuals who are affluent and who have higher levels of education are in an advantageous position to try out different leisure activities and to progress in one or more of these.

Summary and Implications for Future Research

Recreational specialization has typically been conceived in terms of intensity of involvement and has been used as a variable to explore variation among outdoor recreation participants in terms of preferences, motivations, attitudes, and so on. A close look at Bryan's (1977, 1979) original works reveals that he believed specialization was foremost a process that entailed a progression in how recreationists participate in and view the activity over time. In this paper, we have examined how recreational specialization can be conceived in terms of a developmental process. We conceived specialization as a progression in behaviors, skills, and commitment. We also described specialization in terms of stages of involvement, career changes, and turning points. We then examined results from various studies that provide indications about whether or not people progress over time. The prevailing evidence suggests that progression is not a typical career path pursued by leisure participants. To better understand the dynamics of progression, we examined a variety of individual and socio-cultural factors and events that are likely to

facilitate or impede people's movement along the specialization continuum over time. In this final section, we explore areas of future inquiry.

Specialization researchers have assumed that people progress to higher stages of involvement the longer they participate in an activity (e.g., Ditton et al., 1994). More systematic research is needed to examine the *conditions* that foster and stymie progression. A particularly fruitful area of inquiry is to explore those support structures and opportunities that make progression possible or problematic. A related area of study is to determine whether or not certain groups of people are more (or less) likely to progress in leisure activities over time. As noted, women face many barriers to leisure and may progress in leisure activities less than their male counterparts. Similarly, status group barriers and discrimination may limit progression among African-Americans and other ethnic and racial groups.

We do not suppose that people progress in behavior, skills, and commitment in a lock step fashion. Progression is multi-dimensional and people's involvement can be expected to change in a variety of ways. Over time, some individuals may continue to participate in activities on a regular basis and accrue commitments but exhibit little evidence of skill development (Scott & Godbey, 1992, 1994). Other individuals may participate in leisure activities infrequently but demonstrate a high level of skill development and personal commitment. Kuentzel and McDonald (1992) made the same point in their study of paddlers. They noted that commitment and lifestyle involvement did not keep pace with experience (i.e., skill and years of participation). They observed that this might be due to ceiling effects in commitment or changes in lifestyle patterns. We tend to believe that various contingencies, which may include lifestyle changes, are likely to influence some components of progression more than others. However, we agree with Kuentzel and McDonald (1992) that we cannot begin to answer this sort of question without the use of time series data.

Research is also necessary to determine the extent to which people progress to an elite or advanced level of involvement. This stage of involvement includes those individuals described by Bryan as specialists. In all likelihood, few people within any given leisure social world reach this stage of involvement. Individuals who do are likely to manifest high degrees of behavioral involvement, skill development, and personal and behavioral commitment. Only one study, to our knowledge, has attempted to survey a broad range of activity participants within a given social world and to classify participants into distinct groups. This was McFarlane's (1994, 1996) study of birdwatchers in Alberta, Canada. Significantly, she found that just seven percent of the people she surveyed could be classified as "advanced" birdwatchers. Another 12% were categorized as "intermediate" birders. The rest (81%) were classified as either casual or novice birders. These results suggest that only a small fraction of participants (at least among birdwatchers) can truly be called "specialized" in the sense of achieving an elite status.

A related area of inquiry is to examine whether or not people desire to progress to an elite status within a social world. Specialization may well entail

a deliberate decision to develop skills and focus behavior in one activity system over another (Scott & Godbey, 1994). Many individuals, in contrast, may choose to participate in a wide range of activities. Williams and Huffman (1986) noted the traditional approach to recreational specialization research too narrowly focuses on a single activity. They argued correctly that people might specialize in outdoor recreation generally. In this regard, individuals may demonstrate a keen interest in paddling, camping, rock climbing, backpacking, birdwatching, and fishing.

Another avenue for future research is to compare the dynamics of progression across different leisure activities. Social worlds are likely to vary markedly in the extent to which people may progress to more advanced stages of involvement. As noted earlier, Bryan (1979) believed that activities differ in their level of complexity and that some activities, by their very nature, offer greater room for progression. Makers of electronic games have understood this principle for years and have earned huge profits by creating video games that sustain interest by challenging users to advance to higher levels. Other factors may also be more or less important in how they impact progression. The contingencies discussed (e.g., support) may have varying impacts on individuals' ability to progress in some activities but not others. It makes sense that support and encouragement from social world insiders may be far more important in determining whether or not people progress in group activities (e.g., team sports) than in individual-based activities.

Additional research should be pursued to examine the relationship among different indicators of progression. One such relationship is that between skill development and equipment use. Typically, researchers have assumed that level of specialization is positively related to the importance people assign to equipment (e.g., Ditton et al., 1992) and the amount of equipment owned (e.g., McFarlane, 1994, 1996; Virden & Schreyer, 1988). Results from a study reported by Bloch et al., (1989) however, suggest that it is novices or newcomers who are most likely to ascribe importance to equipment. Bloch and his colleagues also reported that there was virtually no relationship between knowledge of equipment and actual spending levels. Findings from this study suggest that the importance newcomers assign to equipment may be a tangible way for them to express their interest in the activity.

These findings lend support to our belief that progress in acquiring skills and knowledge may result in decreased dependence and involvement with equipment. As we noted earlier, highly skilled birdwatchers rely a great deal on listening skills and knowledge of habitat and birding behavior to make positive bird identifications. In some cases, reliance on equipment may actually prevent individuals from achieving intrinsic rewards and optimal experiences (see Csikszentmihalyi, 1990) because they believe it gives them an unfair advantage. Recall that Bryan (1979) believed that the stimulus to progress occurred when people achieved rewards too easily—a lack of fulfillment may motivate individuals to seek out new challenges. One way recreationists may do this is to scale back on the types of equipment they use. Many elite

rock climbers, for example, climb faster because they have made a conscious decision to reduce their dependence on equipment. In fact, many of these individuals climb extremely long and difficult routes without relying on any of the specialized safety equipment that would have been deemed absolutely necessary in the past.

One last area of suggested research is to examine the relative benefits and costs associated with progressing to an advanced stage of involvement. Stebbins (1992a, 1999) has argued persuasively that serious leisure participants accrue durable benefits and rewards from their involvement, including self-actualization, feelings of self-accomplishment, and so on. Stebbins (1992a) also argues that there are costs to becoming serious. He noted that family members, friends, and others often misunderstand serious leisure participants. Progression, thus, may have a "dark side" (Bryan, 2000) to the extent that involvement creates discord among family members and pre-existing friendship networks.

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