RELAX DUDE, WE JUST PLAY FOR FUN! THE FLATLINING TRAJECTORY OF RECREATION SPECIALIZATION IN THE CONTEXT OF ULTIMATE FRISBEE

A Thesis

by

ANDREW JAMES KERINS

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

December 2005

Major Subject: Recreation, Park and Tourism Sciences

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Approved by:

Chair of Committee, David Scott
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ABSTRACT

Relax Dude, We Just Play for Fun! The Flatlining Trajectory of Recreation

Specialization in the Context of Ultimate Frisbee.

(December 2005)

Andrew James Kerins, B.S., North Carolina State University

Chair of Advisory Committee: Dr. David Scott

Many leisure researchers have examined the recreation specialization construct with the belief that recreationists progress along a specialization continuum, from low to high, the longer they participate in an activity. Building on other researchers' conclusions that recreationists do not necessarily progress over time, this study sought to better understand whether people truly desire to progress. Competition, sociability, and skill development variables were proposed as measures that would more accurately describe an intermediate career trajectory of specialization. This intermediate career trajectory of specialization was called flatlining, because recreationists progress to their desired level of specialization and then maintain a flat, or non-progressing, style of involvement on the specialization continuum. Behavior, skill and knowledge, and commitment variables were also used to measure recreation specialization. A three-level self-classification measure was used to predict group membership, and this classification was used to evaluate both groups of variables. The behavior, skill and knowledge, and commitment variables did a very good job of predicting level of specialization. The competition, sociability, and skill development variables did a good job of predicting the

high and low levels of specialization, but did a very poor job of predicting the flatlining level of specialization. Motivations to participate were also studied. This study's failure to accurately predict the flatlining career trajectory highlights the need for further research on the phenomenon.

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CHAPTER I

INTRODUCTION

In 2003, nearly 90% of Americans participated in at least one outdoor recreation activity (ORCA, 2004). The high number of people who participate in recreational activities shows that leisure time is important. People pursue recreation because of the many benefits it has to offer, including quality of life, overall happiness, family unity, health, improved educational opportunities and deterrence of crime and substance abuse (ORCA, 2004). While the average person participated in over five outdoor recreational activities in 2003, many individuals choose to devote their time, energy, and resources to one recreational activity.

People focus their participation to one activity for a multitude of reasons. Some people simply find an activity more enjoyable than any other available activities. Others participate in an activity to be with family or friends. Still others participate to get a reprieve from their family. Regardless of the reasons for participation, individuals enjoy the autonomy they have in developing a career in a recreational activity.

Specialization and Serious Leisure

Bryan (1977) first described the phenomenon whereby people increasingly devote time, energy, and resources to one recreational activity and called it recreational specialization. His study involved informal interviews with trout fishermen of varying

This thesis follows the style of *Journal of Leisure Research*.

levels of ability. Bryan (1977) hypothesized that over time the trout fishermen tended to progress from being a novice to an expert. While Bryan (1977) recognized that some people do not progress in this manner, he argued that most people do. Thus, more than two decades of specialization research has focused mostly on those people who are most specialized.

Stebbins (1982, 1992) described a similar concept to specialization, which he called serious leisure. Stebbins studied many different activities, including actors, baseball players, and stand-up comics, trying to understand what people did with their leisure time. His approach was different than Bryan's, however, in that he believed that people would need to find more meaningful recreational activities to compensate for lack of meaning at work. Stebbins (1997) also described a concept called casual leisure, which included everything that was not serious leisure, such as watching television or talking to friends.

Desire to Specialize

Scientists have studied specialization and serious leisure for nearly 30 years, yet several researchers insist only a small percentage of people ever specialize in an activity (McFarlane, 1996; Scott & Shafer, 2001a). One reason for people's inability to specialize is career contingencies, which includes social support, gender, and available opportunities and resources (Scott & Shafer, 2001a; Stebbins, 1982). However, few studies have examined reasons why people do not specialize. It is also important to recognize that some people may *not* desire to specialize.

One study identified a group of social bridge players who did not desire to specialize (Scott & Godbey, 1994). These social players resisted skill development for a more relaxed playing style. A playing style can also be called a career trajectory, which is the path that an individual takes while sustaining involvement in a recreational activity. Research is needed to determine what kinds of trajectories recreationists pursue. Career trajectories may be influenced by factors such as *orientation to competition*, *orientation to skill development*, and *orientation to sociability*.

Orientation to competition may be an important factor that influences desire to specialize. Some individuals may wish to become highly specialized in part because they enjoy the competition at the elite levels. Others may be highly competitive but are not able to progress due to one or several career contingencies. However, there are also individuals that wish to participate in an activity without maximizing the level of competition. These individuals may participate in an activity solely for the sake of enjoyment. This is not to say that one form of participation is more pure or authentic than the other; these are simply different styles of involvement.

Orientation to skill development may also be a factor that affects desire to specialize. Some recreationists may enjoy the process of skill development, whether it takes several weeks or several years to master. Others may not have the proper resources, time, or opportunities to develop skill in an activity. Some people may have enough time or money to develop skills in an activity, but they have no desire to do so. These individuals may be unwilling to invest the time or money to develop skill in an

activity because they would rather spend it elsewhere. Other people may simply enjoy participating at a certain skill or commitment level and not wish to change.

Sociability is another factor that may influence desire to specialize. Many leisure activities require two or more people to participate; examples include Ultimate Frisbee, softball, football, baseball, tennis, basketball, squash, rock climbing, cards, etc. Other activities can be performed individually but are often undertaken with others, such as golf, running, mountain biking, birdwatching, quilting, etc. It is logical to assume that with so many activities that require more than one person, a significant portion of the importance of leisure activities is in the people with whom one performs them.

New Style of Involvement

Different desires to specialize help explain why people take different career trajectories. Two people may begin an activity at the same time, but have drastically different ideas about how they envision their careers. For example, one golfer may spend countless hours improving his/her golf swing to improve his/her overall score; another golfer may practice only enough to grasp the basic skills in order to play with a group of friends. The second golfer may be just as committed as the first golfer, but he/she probably does not have the same orientation to skill development, orientation to competition, or desire for sociability.

Specialization and serious leisure research have tended to focus on the more highly specialized participants at the expense of the less specialized individuals. Even casual leisure has been defined too broadly as "all that is not specialized" (Stebbins, 1997). More appropriate measures need to be developed to help classify lower levels of

specialization. Therefore, I propose a group called flatliners, who progress to intermediate levels of specialization and then maintain, or flatline on, a relatively constant level of involvement (Figure 1).

Statement of the Problem and Objectives

I will examine multiple groups of recreationists in a specific activity to determine to what extent people desire to specialize. Specialization and serious leisure research has given short shrift to those that do not specialize, other than to list the reasons why individuals may not be able to specialize. I will seek to better understand lower to intermediate levels of specialization. I will create a typology of three distinct career trajectories called committed, active, and casual players, and I will use this typology to create a self-classification system. I will examine how desire to progress influences level of specialization. I will also examine how level of specialization can be used to predict motivations.

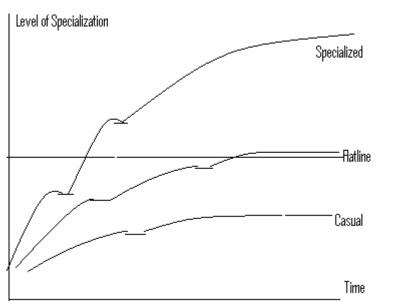


FIGURE 1 - Initial Career Trajectories

Justification for the Study

This study seeks to understand whether or not people desire to specialize and why. By understanding these desires, we will be able to offer programs that serve a wider range of styles of participation. Moderate or casual participants may not have the same desires as more serious participants, which may affect the way different programs are structured. This study will also attempt to show that less specialized styles of involvement can be just as beneficial as the most serious styles of involvement.

Showing that different styles of involvement can all be beneficial may help broaden the scope of activities that people deem worthwhile. Lastly, this study will help recreation managers understand how participants can differ within specific recreational activities. This segmentation will allow managers to further their understanding of the differences among recreational groups.

Definition of Terms

Specialization - "a continuum of behavior from the general to the particular, reflected by equipment and skills used in the sport and activity setting differences" (Bryan 1977, p. 175)

Serious Leisure – "the systematic pursuit of an amateur, a hobbyist, or a volunteer activity sufficiently substantial and interesting for the participant to find a career there in the acquisition and expression of a combination of its special skills, knowledge, and experience" (Stebbins, 1997, p. 17)

Casual Leisure – "immediately, intrinsically rewarding, relatively short-lived pleasurable activity requiring little or no special training to enjoy it" (Stebbins, 1997, p. 18)

Specialist – a person who develops highly progressed levels of behavior, skill, knowledge, and commitment to a specific activity

Style of Involvement – the activity and subactivities one chooses to participate in. For example, bicyclists must choose between road riding and mountain biking.

Mountain cyclists must further choose between downhill and cross country racing (Scott & Shafer, 2001b). Cross country cyclists could be further broken down into casual, intermediate, and serious participants.

Career Trajectory – the path one takes as he/she sustains involvement in an activity

Flatlining – progressing to a level where one is most comfortable and then maintaining a flat, or non-progressing, style of involvement on the specialization continuum.

CHAPTER II

LITERATURE REVIEW

Defining Specialization

Hobson Bryan first used the term recreational specialization to describe the range of trout fishermen he observed. He defined specialization as "a continuum of behavior from the general to the particular, reflected by equipment and skills used in the sport and activity setting differences" (Bryan, 1977, p. 175). Bryan argued that over time people tend to progress along a continuum of involvement, from novice to expert.

Bryan (1977) argued that along this continuum there existed four distinct groups of trout fishermen: occasional fishermen, generalists, technique specialists, and technique-setting specialists. Occasional fishermen were those who were new to the sport or those who participated so infrequently that fishing would not be considered a major life interest. Generalists were those who had begun a career in fishing and used a variety of techniques. Technique specialists concentrated their efforts on perfecting a single technique versus becoming experienced in several techniques. Technique-setting specialists perfect a certain technique and have a preference for fishing on certain types of water. These four ideal types represent the continuum of involvement that Bryan first characterized.

Bryan acknowledged socio-economic status as an intervening variable in the specialization process, but he only explained it in terms of free time. Support, gender, and income are intervening variables that will be discussed later.

Measuring Specialization

Measuring specialization has been a complicated and sometimes controversial task. Bryan (1977) was somewhat confusing on this matter. At first he advocated the use of behavioral indicators: "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). However, he also said, "[the] degree of specialization... is viewed as a product of time, money, skill, and psychic commitment" (p. 60). Bryan (2001) later advocated measuring specialization using both behavioral and attitudinal indicators, saying each provided a distinct dimension to specialization that was interrelated with the other. Subsequent research has focused on behavioral, attitudinal, and cognitive indicators to measure specialization.

Behavioral Indicators

Researchers have sought to define specialization using a variety of behavioral dimensions. Past experience is the main behavioral measure that has been used to measure specialization, although it has been operationalized in numerous ways. Some researchers have used simple measures such as number of days or trips in the past year (Ditton, Loomis, & Choi, 1992; Martin, 1997). Others have examined number of years of experience and number of days participating in the activity in the past year/season (Donnelly, Vaske, & Graefe, 1986). Another study differentiated experience into number of years in the activity (hunting) as well as number of years in the subactivity

(goose hunting) (Kuentzel & Heberlein, 1992). While these measures were a good start to measuring past experience, they do not adequately define the entire specialization concept.

In order to measure experience more accurately, researchers began using more specific variables that assessed the breadth of an individual's experience. Some researchers added a site variable to number of years and days to determine how often the respondents had visited the specific study site (Bricker & Kerstetter, 2000; Chipman & Helfrich, 1988; McFarlane, Boxall, Watson, 1998) or how many different sites the respondents visited (Kuentzel & McDonald, 1992; McFarlane, Boxall, Watson 1998). A study reported by Virden & Schreyer (1988) broke experience down into two parts: general experience and recent experience. General experience was described as years of hiking experience and self-rated level of hiking experience. Recent experience was defined as the number of different places hiked in the past year, number of hiking trips taken in the past year, and longest distance hiked on one trip over the past two years.

These efforts to delineate experience using multiple measures helped researchers more effectively distinguish participants along the specialization continuum. It was previously assumed that individuals who had participated in an activity for a similar number of years would be similarly specialized in the activity. Multiple measures of experience, such as number of sites visited and frequency of participation, have allowed researchers to more fully understand the varying levels of intensity in which people participate.

Some researchers assessed regularity of participation over a number of years (Kuentzel & Heberlein 1997; McFarlane, Boxall, and Watson, 1998; McIntyre & Pigram, 1992). One study had participants assess their regularity of participation as (1) seldom since I started, (2) occasionally, (3) about half the years, (4) most years, (5) every year (Kuentzel & Heberlein, 1997). The second study examined visits in the last three and ten years in terms of trips to site, number of routes visited at the site, and trips to other sites in the region (McFarlane et al., 1998). The last study defined regularity of participation as the product of annual visitation and the number of years since the respondent's first visit to the study area (McIntyre & Pigram 1992).

Studies that highlight regularity of participation over time help us understand to what extent recreationists are participating in their respective activities. Frequent participation in one activity may mean that a recreationist does not have time for any other activities. Scott and Shafer (2001a) defined their behavioral dimension of specialization, a focusing of behavior, as the tendency to participate in an activity at the expense of others. Some researchers built upon Scott and Shafer's (2001a) a focusing of a behavior, operationalizing it as trips per year and days per year participating in an activity (Lee & Scott, 2004; Scott & Thigpen, 2003).

Attitudinal Indicators

Researchers have also measured specialization in terms of attitudinal dimensions, including commitment, centrality to lifestyle, and enduring involvement. Buchanan (1985) defined commitment as "the pledging or binding of an individual to behavioral acts which result in some degree of affective attachment to the behavior or to the role

associated with the behavior and which produce side bets as a result of that behavior" (p. 402). Commitment has also been conceived in terms of ownership of books, magazine subscriptions, and club memberships (Virden & Schreyer, 1988). These types of information reflect commitment to learning the norms, rules, and procedures associated with an activity. Commitment has also been variously defined in terms of frequency of participation, importance, percent of leisure time engaged in activity, desire to develop skill, and number of equipment items owned and replacement value of those items (Kuentzel & Heberlein, 1992; Kuentzel & McDonald, 1992; McFarlane 1996).

Kuentzel and Heberlein (1997) broke commitment down into two parts, intensive and extensive. Intensive commitment referred to feelings if one had to give up the activity, personal interest in the activity, rewards and costs of the activity, and how participation in the activity affected one's work, family, and other leisure pursuits. Extensive commitment looked at the number of friends and family who also participated in the activity.

Some researchers have examined commitment as importance, pleasure, personal dedication, and sidebets (Scott & Thigpen, 2003). Other researchers examined commitment in terms of personal and behavioral commitments (Lee & Scott, 2004). Personal commitments implied a rejection of alternative leisure pursuits. Behavioral commitments referred to the costs associated with discontinuing the activity.

Centrality to lifestyle is a related concept that has been used to study specialization. Centrality is often studied as the role an activity plays in one's lifestyle (Chipman & Helfrich, 1988; Dyck, Schneider, Thompson, & Virden 2003; Hvenegaard

2002; Kuentzel & McDonald, 1992; McIntyre, 1989; Miller & Graefe, 2000; Scott & Thigpen, 2003; Virden & Schreyer, 1988). This may include the percent of one's time spent on an activity and/or the importance of the activity compared to other leisure pursuits. Similarly, some studies have explored centrality in terms of social networks (McIntyre, 1989; McIntyre & Pigram, 1992). For example, ORV camping tends to be a social activity and thus most specialized ORV campers would exhibit a strong tendency towards this social element. Centrality has been further studied as books, magazine subscriptions, and club memberships (Bricker & Kerstetter, 2000; Kuentzel & McDonald, 1992; McFarlane, 1996; Wellman, Roggenbuck, & Smith, 1982).

McIntyre (1989) proposed enduring involvement as a measure of recreation specialization. He examined enduring involvement using three components: attraction, self-expression, and centrality. Attraction referred to the enjoyment and importance of participation. Self-expression included variables such as freedom from the role constraints of normal life, opportunities for self-affirmation, and the chance for individuals to be themselves. Centrality variables centered on the participant's leisure lifestyle as it related to camping. McIntyre (1989) found moderate success in predicting levels of specialization, but the results also highlighted the need to utilize behavioral and cognitive variables in addition to attitudinal variables.

Researchers believed attitudes might be associated with specialization for a variety of reasons. Commitment and centrality were seen as better measures of specialization than experience because they examined the dedication and intensity of involvement versus just the length of involvement. The enduring involvement concept

further explored attitudes with its attraction and self-expression variables that looked at the deeper meanings of participation. Although attitudinal variables are important, they probably should be used in conjunction with behavioral and cognitive measures.

Cognitive Indicators

Research has also been conducted using cognitive measures of specialization.

Many researchers have used a self-rated level of skill or experience as a dimension of specialization (Cole & Scott, 1999; Kuentzel & McDonald, 1992; McFarlane, 1996;

Virden & Schreyer, 1988). Other studies have included self-rated levels of skill as well as activity specific criteria, including number of birds one can identify by sight and sound (Lee & Scott, 2004; Scott & Thigpen, 2003), self-rated ability in mountaineering as well as number (out of 10) of local peaks climbed (Dyck, Schneider, Thompson, & Virden, 2003), class and number of rivers run with and without the services of a guide (Bricker & Kerstetter, 2000), past training course experience (Donnelly, et al., 1986), and number of game harvested (Miller & Graefe, 2000).

It makes sense to measure level of specialization in terms of skill and knowledge because it takes time to develop ability. In all likelihood, people must evince a commitment to develop those skills and knowledge if they are to progress to an advanced level. For example, a person that has mastered several skills in an activity is more specialized than a person who cannot complete the same skills but has more years of experience. However, skill and knowledge should not be used solely to measure specialization. Kuentzel and McDonald (1992) found that past experience, commitment, and centrality did not always covary, meaning a person is not necessarily specialized just

because he/she has advanced skill or knowledge. Following Scott and Shafer's (2001a) recommendation for measuring specialization, others have successfully used cognitive measures along with behavioral and commitment variables (Lee & Scott, 2004; Scott & Thigpen, 2003).

Classification

Researchers have attempted to use the different dimensions of specialization to create a classification system of participants. Some researchers used an additive index to measure participants along the specialization continuum (Virden & Schreyer, 1988; Wellman et al., 1982). The first study created an index using investment, past experience, and centrality to lifestyle (Wellman et al., 1982). A later study created an additive index used four dimensions: general experience, recent experience, equipment and economic commitment, and centrality to lifestyle (Virden & Schreyer, 1988). Researchers created indices to simplify measurement as well as to assist land managers in identifying different groups within an activity. Indices were supposed to simplify measurement because they assumed that all the dimensions increased in a linear fashion. This assumption made it easier for researchers to categorize the different levels of specialization. Indices were also supposed to be useful to managers because they allowed a manager to plan for distinct groups of participants. However, indices were not viable because they oversimplified the specialization construct. Researchers would later show that variables such as past experience, centrality to lifestyle, and commitment do not covary as was previously assumed (Kuentzel & McDonald, 1992).

Others utilized cluster analysis to classify participants (Chipman & Helfrich, 1988; McFarlane, 1996; McIntyre & Pigram, 1992; Scott & Thigpen, 2003). Cluster analysis was used because it took into account the multidimensionality of the specialization construct and thus was seen as a more appropriate tool for segmenting specialized populations. Chipman and Helfrich (1988) identified six specialization types of anglers that they called occasional, generalists, experienced generalists, committed generalists, specialists, and advanced specialists. McFarlane (1996) categorized four clusters of birders which she called casual, novice, intermediate, and advanced. McIntyre and Pigram (1992) identified four clusters of vehicle-based campers but did not name them. Scott and Thigpen (2003) identified four clusters of birders that they called casual, interested, active, and skilled. The number of stages or clusters may vary due to the specific activity studied or the variables used to measure specialization. Cluster analysis may well be a more effective way of segmenting populations than additive indices because clusters take the multidimensionality of specialization into account.

How the Specialization Construct Has Been Used

Specialization has been used to predict various aspects of participation, including attitudes towards depreciative behaviors (Kuentzel & Heberlein, 1992; Wellman et al., 1982), activity types (Donnelly et al., 1986; Miller & Graefe, 2000), attitudes towards resource management (Chipman & Helfrich 1988; Kuentzel & McDonald 1992;, McIntyre & Pigram, 1992; Virden & Schreyer, 1988), preferences for physical and social setting attributes (Cole & Scott, 1999; Ditton et al., 1992; Ewert & Hollenhorst,

1994; Kuentzel & Heberlein, 1992; Martin, 1997; Scott & Godbey, 1994; Virden & Schreyer, 1988), and place attachment (Bricker & Kerstetter, 2000).

Specialization has also been linked to a number of different attitudes and preferences, such as attitudes towards other recreationists (Virden & Schreyer, 1988; Watson et al., 1994), motivations and expected rewards (Chipman & Helfrich, 1988; Ditton et al., 1992; Martin, 1997), decisions about where to participate (McFarlane et al., 1998; McIntyre, 1989; Kuentzel & Heberlein, 1992), equipment preferences (Ewert & Hollenhorst, 1994), and socialization influences (Kuentzel & Heberlein, 1997; McFarlane, 1996)

Several studies have sought to measure wilderness attitudes or wildlife watching preferences, including use of information to make trip decisions (Cole & Scott, 1999; Ditton et al., 1992; Martin, 1997), attitudes about wilderness conditions (Shafer & Hammitt, 1995), wildlife conservation activities (McFarlane & Boxall, 1996); and types of wildlife observed on trips (Martin, 1997).

Progression as a Career Path

Specialization has been researched and discussed in terms of a linear continuum. The idea is that as individuals spend more time in an activity, they tend to become increasingly specialized. Progression has been used to define a movement from lower levels of specialization to higher levels. Some researchers have argued that progression does not always occur in a linear fashion and that the different dimensions cannot be summed because they may be uncorrelated with one another (Kuentzel & McDonald, 1992; Scott & Shafer, 2001a).

Scott and Shafer (2001a) wrote a summary article of the specialization literature. Their main goal was to explore recreation specialization as a developmental process. Developmental processes can also be understood in terms of progression. Thus, Scott and Shafer sought to understand the underlying processes of progression and how it has been characterized in the specialization literature. First, they summarized Bryan's (1977; 1979) work on specialization and drew out the developmental aspects form this seminal work. Next, Scott and Shafer discussed what it meant that people progress. In discussing progression, they described three dimensions that they thought best described specialization: a focusing of behavior, skill development and knowledge acquisition, and commitment. Importantly, they detailed the various factors that impeded or facilitated progression.

What Does It Mean to Progress?

Scott and Shafer (2001a) defined specialization as "a process that entailed a progression in how recreationists participate in and view an activity over time" (p. 324). They note that others have defined specialization in terms of progression (Little, 1976; Williams & Huffman, 1986). They also noted that there exists an underlying assumption that progression leads to an authentic level of participation. Bryan (1977) believed that anglers were directed toward the authentic level of fly-fishing. Some researchers mentioned that novices have not yet adopted the appropriate attitudes toward the activity (Wellman, et al., 1982). Others have proposed that the most specialized individuals strictly enforce what they believe to be authentic rules, norms, and procedures because they have the most to lose if there are infractions from these standards (Ditton, et al.,

1992). While many researchers have noted that progression is toward the authentic, this last point illustrates how the authentic viewpoints are perpetuated.

Individually none of the dimensions are adequate measures of specialization in and of themselves. For example, a person could fish for years but never become a specialist. Similarly, an individual may purchase all the latest fishing equipment, but that alone does not make him/her a specialist. Researchers have argued that people buying expensive equipment may be trying to make a fashion statement (McIntyre & Pigram, 1992), compensating for lack of skill or knowledge (Bryan, 1979), and attracting to a perceived lifestyle and identity image (Haggard & Williams, 1992).

Scott and Shafer address stages of involvement as one method for describing progression (2001a). They note that stages of involvement are abstractions only and that one should not mistake them for periods with precise beginning and ends. The authors discuss three generic stages that they developed from Bryan's work (1977, 1979). First, there is a novice or beginning stage. This stage includes newcomers to an activity as well as those who participate infrequently. Second, there is an establishment stage in which "recreationists have developed a level of competence and seek to validate their skill through greater challenges" (Scott & Shafer, 2001a, p. 331). Finally, there is the specialization stage. This last stage includes individuals that exhibit high degrees of Scott and Shafer's (2001a) three dimensions of specialization: a focusing of behavior, skill development and knowledge acquisition, and commitment.

Serious Leisure

Robert Stebbins (1982) coined the term serious leisure shortly after Bryan (1977) introduced recreational specialization. He originally envisioned serious leisure as an important component of everyday life as individuals sought to express themselves outside of their work environments. He defined serious leisure as "the systematic pursuit of an amateur, a hobbyist, or a volunteer activity sufficiently substantial and interesting for the participant to find a career there in the acquisition and expression of a combination of its special skills, knowledge, and experience" (Stebbins, 1997, p. 17). Stebbins categorized serious leisure participants as amateurs, hobbyists, or career volunteers. He details six qualities of serious leisure that help define the construct. Finally, Stebbins (1992) identified five stages that recreationists go through in the serious leisure process.

Stebbins (1982) described three types of serious leisure participants: amateurs, hobbyists, and career volunteers. Amateurism exists when an activity has a professional counterpart, such as soccer or basketball. Amateurs are not paid like professionals are, but amateurs can be just as serious and committed as their professional equivalents. Rules and norms are shared between amateurs and professionals, and many professionals rise from the amateur ranks.

Hobbyists are similar to amateurs except that they do not have professional counterparts. Stebbins defined a hobby as "a specialized pursuit beyond one's occupation, a pursuit one finds particularly interesting and enjoys doing because of its

durable benefits" (1982, p. 260). Hobbyist pursuits include collectors, makers and tinkerers, activity participants, and as players of sports or games.

The last type of serious leisure is career volunteering. Stebbins (1982) noted that while all leisure is inherently voluntary, "[volunteering] is undertaken for reasons other than economic benefit, self-preservation, physical coercion, physiological need, or psychic or social compulsion" (p. 264). The two distinguishing characteristics of career volunteering are altruism. Career volunteers are more likely to be motivated by altruism than amateurs or hobbyists. The second characteristic of career volunteering is delegated tasks. Career volunteers perform delegated tasks in the sense that their help makes an organization more efficient, but their help is not essential for the organization to run.

The six qualities that define the serious leisure construct are perseverance; careers; effort based on knowledge, training, or skill; durable benefits; an ethos; and identity (Stebbins, 1982). Recreationists may need to persevere at their activity when experiencing a difficult period (Stebbins, 1982). The knowledge that the activity will again provide positive feelings helps individuals continue on in the face of adversity. Amateurs, hobbyists, and volunteers also have careers in their respective activities. These careers include "[recreationists] own histories of turning points, stages of achievement or involvement, and background contingencies" (Stebbins, 1982, p. 256). Similar to careers, people engaged in serious leisure initiate significant personal efforts based on specialized knowledge, training, or skill (Stebbins, 1982). People who engage in serious leisure also experience eight durable benefits: self-actualization, self-

enrichment, recreation or renewal of self, feelings of accomplishment, enhancement of self-image, self-expression, social interaction and belongingness, and lasting physical products of the activity (Stebbins, 1982). Another quality of serious leisure is the unique ethos within an activity and its sub-activities (Stebbins 1982). Groups develop their own values, norms, and behaviors that may differ at the activity and sub-activity level.

Lastly, recreationists who participate in a serious leisure activity tend to identify with their respective activities.

Stebbins (1992) identified five stages in his framework: beginning, development, establishment, maintenance, and decline. The beginning stage "lasts as long as it is necessary for interest in the activity to take root" (p. 71). The development stage is characterized by growth in knowledge and ability as individuals develop an interest in the activity. In the establishment stage, individuals have progressed beyond "the status of learner of the basics" and now find new challenges in developing their "place in the amateur or professional world" (p. 82). Professionals are those who have a career in an activity and earn their living as a result of their participation in that activity. Amateurs have careers in their activities and some may even aspire to be a professional, but they do not earn a living through participating in that activity. The maintenance stage involves a "career [which] is in full bloom, in the sense that practitioners are now able to enjoy the pursuit to its utmost" (p. 88). Lastly, the decline stage is when individuals are no longer able to physically perform due to injury or age, or a lack of available opportunities.

Both Bryan and Stebbins noted that recreationists have careers. Bryan (1977) discussed careers in terms of progression and how people progress from lower to higher levels of specialization. Stebbins (1992) described careers in reference to his five stages of serious leisure. The stages outlined by Stebbins (1992) are similar to those described by Bryan (1977), with the exception of the last stage, decline. While Bryan (1977) acknowledged that some participants discontinue the activity, he did not include this in his initial framework. Stebbins (1992) was much clearer insofar individuals do in fact decline in their ability and eventually retire.

Whereas the specialization literature has struggled with finding reliable variables to measure its construct, serious leisure has been more exploratory and used to study a wide variety of activities, including male and female barbershop singers (Stebbins, 1992), youth sports (Siegenthaler & Gonzalez, 1997), a uniformed youth organization (Raisborough, 1999), soccer fan groups (Jones, 2000), Civil War re-enactors (Hunt, 2004; Mittelstaedt, 1995) and others. The differences between specialization and serious leisure may be due to the different environments in which the two constructs were developed. Bryan (1977, 1979) outlined the specialization framework, but never followed up with further analysis. This lack of research attention has resulted in conflict over the best ways to measure specialization. Stebbins, on the other hand, laid out a more thorough outline of his construct and followed it up with decades of research. Other researchers have used serious leisure in much the same way that Stebbins has since the beginning. However, even Stebbins admits that serious leisure is not without its faults. Raisborough (1999) explained that serious leisure is largely an adult male

pursuit that lacks a critical analysis of women's role in serious leisure (Tomlinson, 1993). Jones offered a seventh characteristic of leisure to emphasize the importance of group membership.

Career Contingencies

Scott and Shafer (2001a) also discussed the mechanisms underlying progression. They discussed three theories that assume a natural progression of involvement over time: reinforcement theory, identification theory, and cognitive theory. Scott and Shafer went into the greatest detail on a fourth theory, career contingencies, which they adapted from Stebbins (1992) to explain why people do not progress. The three career contingencies that they identified were (1) support individuals receive from significant others and social world members, (2) the gender of the recreationist, and (3) available opportunities and resources.

Support from significant others may come from parents, siblings, relatives, coaches, teachers, or other mentors. It can be as simple as a parent's suggestion to try a new activity or as complicated as driving a child to practice six days a week. Support from social world members includes encouragement, socialization, and identity affirmation (Donnelly & Young, 1988; Haggard & Williams, 1992; McFarlane, 1996). Scott and Shafer (2001a) noted support from social world members is especially important in group leisure because "involvement is highly dependant on other people's actions" (p. 336).

Gender is the second career contingency outlined by Scott and Shafer (2001a).

Stebbins (1992) notes "[Gender] acts as a sieve, filtering out males and females from

activities culturally defined as appropriate for one sex only" (p. 73). Gender is related to support in that the amount of support one receives is likely linked to the cultural appropriateness of a certain sex for such an activity. This can be especially troubling for women, who are often taught to put others' needs above their own (Henderson & Allen, 1991) or who do not feel they are entitled to spend time on their own leisure activities (Deem, 1986; Henderson & Bialeschki, 1991).

Available opportunities and personal resources represent a third career contingency (Scott & Shafer, 2001a). Available opportunities refer to the practicality of participating in an activity given one's geographic location. For example, it is difficult to learn to surf if one does not live near a lake or ocean. Opportunities can also be interpreted as the tolerance, or lack thereof, for certain individuals and/or their activities in a community. For instance, skateboarding and its participants have been stereotyped as disrespectful and destructive and as a result many communities have outlawed them (Owens, 1999). Finally, opportunities may also refer to performance related standards in an activity. Some individuals are simply faster, strong, and taller than others and this precludes many people from every attaining the level of specialist. Personal resources involve one's socio-economic status and how it affects specialization. Individuals who are poor and who have lower levels of education are not privy to the same activities as more affluent, more educated individuals.

Some Might Not Progress

Scott and Shafer (2001a) explained that no one has actually studied whether or not people progress over time. One study showed that the style and social context of

participation did not vary according to years of involvement (Donnelly et al., 1986).

Another study showed that experience, commitment, and lifestyle choices do not increase together in a linear fashion over time (Kuentzel & McDonald, 1992).

Furthermore, Kuentzel and McDonald (1992) found that even specialists sometimes reach a ceiling or plateau beyond which they may not wish to progress. Scott and Shafer (2001a) agreed with Kuentzel and McDonald that a time series study must be completed in order to better understand progression.

Progression can be understood in terms of style of involvement. Some have discussed styles of involvement in terms of career trajectories (Kuentzel, 2001; Scott & Shafer, 2001b). Scott and Shafer (2001b) note that an activity may have several distinct subworlds in which an individual may specialize. For example, a cyclist may choose mountain biking over road biking; within mountain biking, this person may choose cross-country racing over downhill racing (Scott & Shafer, 2001b). Each of these different career trajectories represents a unique style of involvement.

Buchanan (1985) first discussed styles of involvement as it related to commitment. He said, "We would contend that an individual who has accrued many side bets as a result of fishing, who has accepted the role of a fisherman, and who has exhibited consistent fishing behavior for a number of years is committed to fishing even if he drinks beer, fishes from a boat, and uses worms" (p. 415). The angler that Buchanan described has a distinct style of involvement that is committed but probably not specialized. Scott and Godbey (1994) found two distinct styles of involvement in their study of contract bridge players: serious and social. Serious players exhibited the

usual characteristics of specialists, but social players were an anomaly in the sense they participated frequently and exhibited a high degree of commitment but were not oriented to skill development. Similar to Buchanan's angler, these social bridge players also had a distinct style of involvement that is committed but not specialized.

Casual leisure is a style of involvement that has not received much attention in the literature (Stebbins, 1997). Stebbins (1982, 1992) first used the term casual leisure to help define the serious leisure concept. As work lives became dull, Stebbins (1982) said, people would pursue activities that allowed for personal expression, self-identity enhancement, and self-fulfillment. Serious leisure pursuits were believed to be the best use of one's time because they provided the greatest payoff for the amount of leisure time one had to spend. Stebbins (1997) later admited that he unfairly cast casual leisure in a residual role and that casual leisure should be studied as its own concept, especially since the many more people participate in casual leisure than serious leisure.

Stebbins (1997) defined casual leisure as "immediately, intrinsically rewarding, relatively short-lived pleasurable activity requiring little or no special training to enjoy it" (p. 18). He identified five benefits of participating in casual leisure. First, casual leisure stimulates creativity and discovery (Stebbins, 2001). Casual recreationists dabble in activities such as science or music that may allow them to discover something new. Second, casual leisure is a form of edutainment in which people are both educated and informed as a result of participating. Third, casual leisure allows for rejuvenation. Many people are rejuvenated by their participation in less-intense forms of casual leisure. Fourth, participants of casual leisure develop and maintain interpersonal

relationships. Lastly, well-being and quality of life are benefits of casual leisure.

Stebbins (2001) explains that a mix of serious and casual leisure is the best formula for people to enhance their quality of life and well-being.

Stebbins (1997) categorized casual leisure into six types: play, relaxation, passive entertainment, active entertainment, sociable conversation, and sensory stimulation. Play can be described as the carefree attitude in pursuit of an activity. Play can include many activities that are also pursued as serious leisure, such as golfing, running, and fishing. Relaxation includes "sitting, strolling, napping, lying down...idly driving around town" (p. 19). Passive entertainment is entertainment in which the participant does not have to devote his/her full attention to the activity, including reading, watching television, or listening to music. Active entertainment includes puzzles, board games, games of chance, and other activities that require the participant to be fully engaged in the activity. Sociable conversation "is a democratic activity in that the pleasure of one person is dependent on that of the other people in the exchange" (p. 20). Stebbins noted that sociable conversation can take place in almost any public place, but many private events are held for the purpose of fostering sociable conversation. The last type of casual leisure is sensory stimulation. Sensory stimulation is defined as the arousal by things or activities such as "creature pleasures, displays of beauty, satisfying curiosity, thrills of movement, and thrills of deviant activity" and includes eating, drinking, having sex, or doing drugs (p. 20).

Stebbins (1997) also defined casual leisure as all leisure that is not serious leisure. While this definition of casual leisure may have seemed acceptable more than

20 years ago, this is a flawed definition by today's standards because not all styles of involvement can explained by just the ends of the spectrum. For example, Scott and Godbey's (1994) study of bridge players highlighted two committed groups of players that had distinctly different attitudes about seriousness. Scott and Godbey's (1994) less serious group of players were called social players because they were very committed to their activity, but they enjoyed the social orientation of their games and had no interest in playing in a more serious manner. Serious leisure, unlike recreational specialization, does not recognize a middle ground of participation in which recreationists are neither casual nor serious.

The studies that have observed these committed but not specialized styles of involvement suggest that there are participants who do not aspire to attain the level of a specialist. In McFarlane's (1994, 1996) study of birdwatchers, she reported that only 7% of participants were advanced" and only 12% were intermediate birders. The rest, 81%, were categorized as either casual or novice. Indeed, Scott and Shafer (2001a) noted that "progression is not a typical career path pursued by leisure participants" (p. 337). While there has been considerable research on specialists and specializing, Scott and Shafer (2001a) acknowledged that only a small percentage of people ever become specialized.

Flatlining

Stebbins (1992) began to address why some people do not specialize with his discussion of career contingencies. Scott and Shafer (2001a) built on Stebbins' career contingencies to include gender, social support from friends and family, and available

opportunities and personal resources. Besides career contingencies, other factors may play a role in why people do or do not progress.

Desire to progress is one concept that has not been thoroughly discussed in the literature. In their examination of skills and knowledge, Scott and Shafer (2001a) recognize that individuals may vary in terms of their desire to progress to an elite or specialized level. One study found two distinct groups of contract bridge players, serious and social, where the social players were highly committed to the activity and played regularly but had no desire to advance their skill (Scott & Godbey, 1994).

Another study discovered that specialists tended to reach a plateau in terms of skill development and participation (Kuentzel & McDonald, 1992). This plateau effect is likely the same as Stebbins' previously mentioned maintenance stage (1992). Individuals progress to a level where they are comfortable, and then they maintain relatively constant degrees of behavior, skill, and commitment. The plateau effect is in opposition to some elements of the specialization construct because it does not assume that all participants in an activity wish to progress to the elite level.

If some individuals do not desire to progress, then a generic number of stages of involvement are most likely inappropriate. It may be more appropriate to study the different styles of involvement that participants choose to take. For example, in their study of contract bridge, Scott and Godbey (1994) identified two distinct styles of involvement, social and serious. Other studies have tried to fit participants into distinct stages, which may result in mis-classification of many individuals.

Squeezing participants into the casual or serious leisure category would be a mistake if they were neither casual nor serious. Stebbins (1997) noted that those undertaking casual leisure tend to view the experience as pleasurable and enjoyable while serious leisure participants tend to view their experiences as satisfying and rewarding. Such a dichotomy leaves out those who seek both pleasurable and satisfying experiences, such as Scott and Godbey's (1994) social bridge players.

Therefore, in order to better understand all levels of participants it is necessary to identify those recreationists who are neither casual nor serious. These individuals, who tend to fall on the intermediate sections of the specialization continuum, may exhibit similar levels of commitment, skill, knowledge, behavior, and experience as specialists. However, individuals in this intermediate group have no desire to progress to the elite level and are content in maintaining a flatline level of involvement. A flatline level of involvement implies progressing to a level where one is most comfortable and then maintaining a flat, or non-progressing, style of involvement on the specialization continuum.

CHAPTER III

METHODOLOGY

This chapter is comprised of four major sections. The first section describes the study context from which the data will be collected. The second section discusses the sampling frame and method of data collection. The third section describes the independent and dependent variables used in this study. The last section discusses the analysis used in this study.

Sampling Frames

The sampling frame in this study consists of over thirty Ultimate Frisbee groups in the Southwest.

Basics

Ultimate Frisbee was developed by a group of New Jersey high school students in the late 1960's and has grown into an international sport (UPAa, 2005). The organizing body for Ultimate Frisbee (Ultimate) in the United States and Canada is the Ultimate Players Association, or UPA. The UPA, which has over 19,000 members, sanctions tournaments and games across the country at the high school, college, club, and master's level.

Ultimate is played on a rectangular field, seventy yards long by forty yards wide, with end zones on either end of the field that are twenty-five yards long by forty yards wide. Official games are played with two teams of seven people each, but the numbers vary for informal games. The game of Ultimate is very simple in terms of equipment,

requiring only a Frisbee and a field to play on; cones can be used to mark the playing field and many players where cleats, but these items are not essential.

Sportsmanship

Ultimate has a unique sportsmanship code called Spirit of the Game. Spirit of the Game is a system whereby players self-referee. Things such as "taunting, dangerous aggression, intentional fouling, and 'win at all costs' behavior" go against the Spirit of the Game philosophy (UPA, 2005b). It is embodied in this creed:

Spirit of the Game is a spirit of sportsmanship that places the responsibility for fair play on the player himself. Highly competitive play is encouraged, but never at the expense of the bond of mutual respect between players, adherence to the agreed-upon rules of the game, and the basic joy of play. For many players, Spirit of the Game is as important as who wins the game.

The Spirit of the Game philosophy sets Ultimate apart from many other organized sporting activities. The culture that has developed around Ultimate is one of fair play and friendliness. This culture presents an opportunity for researchers to better understand a group that places a different sort of emphasis on competition and sociability.

While Ultimate has reached highly competitive levels, the principles of the Spirit of the Game are just as evident at national tournaments as they are a neighborhood pick-up game. The UPA has placed such importance on the Spirit of the Game that two spirit awards are given each year, one for males and one for females. These spirit awards are named after two individuals who competed on the highest levels of Ultimate, were instrumental in the early stages of development of the game, but most importantly they

exemplified the Spirit of the Game (UPA, 2005b). These awards are highly coveted accolades in the world of Ultimate Frisbee.

Method of Data Collection

The survey instrument was distributed during the months of April and May, 2005. The author was a member of the Nerd Frisbee League (NFL) at Texas A&M for nearly two years before beginning this study. The author used his contacts through the Nerd Frisbee League to contact other collegiate and adult teams around the state of Texas. The Nerd Frisbee League participants were contacted on their regular playing field and asked to complete the questionnaire on site. The Nerd Frisbee League participants were asked to complete a questionnaire before beginning play, and on average it took about ten minutes to complete the questionnaire.

Players from other Ultimate Frisbee groups were contacted via email and asked to fill out the questionnaire online. The author contacted the captains of ten college teams directly, asking the captains to encourage their teammates to complete the online questionnaire. The author emailed his cover letter and link to questionnaire to the email listservs of two popular adult leagues in Texas, Austin Ultimate and Houston Ultimate Club (HUC). Players from dozens of different Ultimate Frisbee teams subscribe to these adult league email listservs, therefore a wide variety of players were reached.

A target goal of 200 surveys was set before initial data collection, and ultimately 250 usable surveys were collected. It was estimated that about half of regular Nerd Frisbee League players were sampled, where a regular player would be someone who on averaged played at least once a week per semester. Predicting a response rate for the

other Ultimate Frisbee teams was nearly impossible because there was no way to track how many people received the email regarding the online questionnaire. It would be faulty to count the number of subscribers to each email listserv because some people may no longer play Ultimate Frisbee, many people are probably subscribed to multiple listservs that were queried, and others may have emails that are defunct.

All Ultimate Frisbee players who played with the selected Ultimate Frisbee groups during April and May were asked to participate. Each individual who agreed to complete a questionnaire was also required to fill out a consent form. Consent forms followed the guidelines of the Institutional Review Board (IRB) at Texas A&M University.

Instrumentation

The survey instrument was designed on the basis of past work on recreational specialization (Lee and Scott, 2004; Scott, Baker, & Kim, 1999; Scott, Ditton, Stoll, & Eubanks, 2005, Scott & Godbey, 1994). The questions were adapted to ensure relevance to the Ultimate Frisbee population.

Variables of Interest

Level of specialization was measured first by asking participants to self-identify as one of three types of participant: a Committed Ultimate Frisbee player, an Active Ultimate Frisbee player, or a Casual Ultimate Frisbee player. Active players represent the Flatliner group that was mentioned in the previous chapters. The Committed, Active, and Casual distinctions reflect unique styles of involvement within recreation

specialization. The self-classification measure was first used by Scott et al. (2005) in a study of birdwatchers. The self-classification measured was presented to Ultimate Frisbee players as follows:

Please read each of statements below and circle the number that best describes you. (please circle only one)

- 1 Committed Ultimate player: in general, a person who travels out of town frequently to participate in Ultimate tournaments, who subscribes to Ultimate related magazines, websites, email lists, who is a member of local, state, and national Ultimate organizations, who keeps track of lifetime achievements (i.e. remember high tournament finishes), who owns lots of Ultimate specific equipment, for who Ultimate is the primary activity that you participate in, and who is constantly trying to develop Ultimate skills.
- Active Ultimate player: in general, a person who travels out of town infrequently to participate in Ultimate tournaments, who may subscribe to Ultimate magazines, websites, or emails lists, who may be a member of local, state, or national Ultimate organizations, who is not as concerned with lifetime achievements (may remember a tournament, but not necessarily the final results), who may own a little to a lot of Ultimate specific equipment, and who is content with maintaining current Ultimate skill level.
- 3 Casual Ultimate player: in general, a person who rarely if ever travels out of town to participate in Ultimate tournaments, who does not subscribe to Ultimate magazines, websites, or email lists but once in a while may read an article related to Ultimate, who is not a member of local, state, or national Ultimate organizations, who is not at all concerned with lifetime Ultimate achievements, who owns little if any Ultimate specific equipment, for who Ultimate is not a primary activity in terms of participation, and who has little if any inclination to develop Ultimate skills.

Second, a participant's level of specialization was measured in terms of skill, behavior, and commitment (see Table 1). Questions about the skill dimension had participants rate their overall skill as well as their skill compared to Ultimate players with whom they play. Five response categories were used (e.g., 1 = far less skilled to 5 = far more skilled).

Questions relating to the behavior dimension asked participants about frequency of participation. The behavioral questionnaire items included, (1) How many Ultimate Frisbee trips did you take in the last 12 months, (2) How many days did you spend on Ultimate Frisbee trips in past 12 months, (3) How many total days did you spend playing Ultimate in the past 12 months. Response categories were open-ended.

Questions on the commitment dimension first asked the participant to compare the importance of Ultimate with other free-time activities. Four response categories were included: 1 = your most important free-time activity, 2 = your second most important free-time activity, 3 = your third most important free-time activity, and 4 = only one of many free-time activities. Commitment was also measured by asking respondents about personal and behavioral investments they have accumulated as a result of participating in Ultimate Frisbee (e.g., Other leisure activities don't interest me as much as ultimate Frisbee). Five response categories were provided and these ranged from 1 = strongly disagree to 5 = strongly agree. These dimensions of specialization are similar to ones used by Lee and Scott (2004) in their study of birdwatching.

Table 1 - Summary of Variables of Interest

Skill and Knowledge

- *In general, how would you rate your Ultimate skills?
- *Compared to other Ultimate players on your team/group, how would you rate your Ultimate skill?
 - *Overall, how would you rate your Ultimate knowledge?

Behavior

- *Trips in the past 12 months
- *Days spent on trips in the past 12 months
- *Total days spent playing in past 12 months

Commitment

- *Importance of Ultimate in comparison to other free-time activities
- *If I couldn't play Ultimate, I am not sure what I would do
- *Other leisure activities don't interest me as much as playing Ultimate
- *I would rather play Ultimate than do most anything else
- *If I stopped playing Ultimate, I would probably lose touch with a lot of my friends

Orientations to Specialization

This study examined orientations in terms of skill development, competition and sociability (see Table 2). The skill development orientation was aimed at understanding whether or not individuals desired to improve their skills (e.g., "Skill development is necessary for my continued participation in Ultimate Frisbee"). Competition as an orientation refers to an individual's competitive preferences as well as the competitive atmosphere while playing Ultimate Frisbee (e.g., "I am very competitive when it comes to playing Ultimate Frisbee"). Sociability as an orientation examined one's social preferences as well as the desired social atmosphere while playing Ultimate Frisbee (e.g., "I regularly spend time with my Ultimate friends outside of our regular playing field").

Table 2 - Summary of Setting and Competition Preferences

Skill Development

- *I have a strong desire to develop my Ultimate skills in the future
- *I would be very unlikely to continue playing Ultimate if I could no longer develop my Ultimate skills
- *I want to be the best at what I do when I play Ultimate
- *Skill development is necessary for my continued participation in Ultimate *Competition*
 - *I am very competitive when it comes to playing Ultimate
 - *I enjoy the competitive aspects of playing Ultimate more than the social aspects
- *I desire a high level of competition when I play Ultimate *Sociability*
 - *I regularly spend time with my Ultimate friends outside of our regular playing field
 - *When I play Ultimate, I usually do it with friends and family
 - *People that I play Ultimate with are mostly close friends
 - *People that I play Ultimate with are mostly acquaintances
 - *People that I play Ultimate with are mostly just fellow participants

Motivations to Participate

Motivations to participate (see Table 3) were examined in this study and include three main dimensions: identity (e.g., "I play Ultimate because it helps me define who I am"), competition ("I play Ultimate because I like to be challenged"), and sociability ("I play Ultimate to be with my friends"). These dimensions were used previously in a study by Scott et al. (1999). Several questions relating to exercise, escape, and relaxation were also included. Questions about motivations to participate utilized a 5-point Likert scale, ranging from 1 (not at all important) to 5 (extremely important).

Table 3 - Summary of Motivation Items

Identity

- *I play Ultimate because it helps me define who I am
- *I play Ultimate because I enjoy being identified as an Ultimate player
- *I play Ultimate because it helps me create an impression of who I am
- *I play Ultimate because Ultimate helps me get in touch with who I am
- *I relate to other Ultimate players because they are like me

Competition

- *I play Ultimate because I enjoy the competition
- *I play Ultimate because I like to be challenged
- *I play Ultimate to show others I am good at Ultimate
- *I play Ultimate to increase my reputation as an Ultimate player *Sociability*
 - *I play Ultimate to be with my friends
 - *I play Ultimate to have social interaction with other Ultimate players
 - *I play Ultimate to share ideas with other Ultimate players

Other

- *I play Ultimate because it helps me escape my regular life
- *I play Ultimate for exercise
- *I play Ultimate for relaxation

Demographic Factors

Several questions regarding demographics were asked, including sex, employment, marital status, education, race, zip code, and year of birth. These questions were included to help analyze the data for differences between various demographic groups.

Analysis

Discriminant analysis was used to determine how well the skill, behavior and commitment measures predicted responses to the self-classification measure. These results helped determine whether or not the self-classification measure is a valid indicator of level of specialization.

Discriminant analysis was also used to predict level of specialization based on one's orientations to skill development, competition, and sociability. These results were used to determine how accurately one could predict level of specialization based on one's orientation to skill development, competition, and/or sociability.

One-way analysis of variance was used to predict motivations to participate in Ultimate Frisbee.

CHAPTER IV

RESULTS

The purpose of this chapter will be to summarize the results of the study. This chapter is organized into four sections: (1) characteristics of respondents, (2) specialization level of participants, (3) predicting level of specialization among Ultimate Frisbee players, and (4) predicting motivations to participate in Ultimate Frisbee.

Characteristics of Respondents

Survey respondents represented more than 30 different Ultimate Frisbee groups (Table 4). A large proportion of respondents were affiliated with a college or university team, such as the University of Texas at Austin (12.4%), the Nerd Frisbee League and Texas A&M (11.6%), and Oklahoma University (11.2%). There was also a large number of respondents from independent adult leagues, such as Austin Ultimate (8.4%) and Houston Ultimate (5.2%).

The overwhelming majority of survey participants was male (78.8%) (Table 5). The high school and college age group, 17 to 25 year olds, comprised 60.6% percent of the sample. This was expected because of the large number of respondents playing on a college or university affiliated team. Almost all of the respondents were White or European-American (87.6%).

Survey participants were fairly evenly distributed in terms of employment status: 39.2% were employed full-time, 33.2% were full-time students with no employment, and 20.8% were students who also held a part-time job. Single individuals made up

75.6% of the sample, while those married or living with a partner constituted 22.4%. Participant education level was heavily skewed towards higher levels of education. Individuals with a graduate degree comprised 24.8% of the sample, while those who had completed an undergraduate degree or taken some college made up 31.2% and 36.0%, respectively.

Table 4 - Ultimate Frisbee Group

| Group Name | N | % |
|--|----|------|
| University of Texas – Austin | 31 | 12.4 |
| Nerd Frisbee League, Texas A&M Men and Women | 29 | 11.6 |
| Oklahoma | 28 | 11.2 |
| Austin Ultimate | 21 | 8.4 |
| Stephen F. Austin | 15 | 6.0 |
| Rice / Cloud 9 | 14 | 5.6 |
| Houston Ultimate (HUC) | 13 | 5.2 |
| Riverside (Austin) | 12 | 4.8 |
| Texas State | 11 | 4.4 |
| University of Houston Shockers | 11 | 4.4 |
| Texas Tech / Hzyer Soze | 10 | 4.0 |
| Black Angus | 7 | 2.8 |
| Sam Houston State | 6 | 2.4 |
| Doublewide | 5 | 2.0 |
| University of Texas – San Antonio | 5 | 2.0 |
| Beaumont | 3 | 1.2 |
| Dallas Ultimate & University of North Texas | 3 | 1.2 |
| Spin (Houston co-ed) | 2 | .8 |
| Penultimate | 2 | .8 |
| Zanzara (women's team) | 2 | .8 |
| SAULT (San Antonio) | 1 | .4 |
| LBJ High School | 1 | .4 |
| Vortex / Hodown | 1 | .4 |
| Hang time | 1 | .4 |
| University of Texas – Austin (Melee) | 1 | .4 |
| Santa Crucial, CA | 1 | .4 |
| Other | 14 | 5.6 |

Table 5 - Characteristics of Respondents

| | N | % |
|-------------------------------------|-----|------|
| Sex | | |
| Male | 197 | 78.8 |
| Female | 53 | 21.2 |
| Age | | |
| 17 – 25 | 151 | 60.6 |
| 26 - 32 | 46 | 18.5 |
| 33 - 39 | 34 | 13.7 |
| 40 - 52 | 18 | 7.2 |
| Race | | |
| White or European-American | 219 | 87.6 |
| Hispanic | 13 | 5.2 |
| Asian | 10 | 4.0 |
| Other | 8 | 3.2 |
| Work Status | | |
| Employed full-time | 98 | 39.2 |
| Student | 83 | 33.2 |
| Student and Part-Time | 52 | 20.8 |
| Student and Full-Time | 9 | 3.6 |
| Other | 8 | 3.2 |
| Marital Status | | |
| Never married | 189 | 75.6 |
| Married or living with partner | 56 | 22.4 |
| Divorced or separated | 5 | 2.0 |
| Level of Education | | |
| Did not graduate from high school | 2 | 0.8 |
| Completed high school or equivalent | 18 | 7.2 |
| Some college or vocational school | 90 | 36.0 |
| Completed degree | 78 | 31.2 |
| Graduate degree | 62 | 24.8 |

Specialization Level of Respondents

The average of total days spent playing Ultimate in the past 12 months was 88.03. On average, respondents reported they took 6.4 trips that involved Ultimate in the past 12 months (Table 6). Participants reported an average of 15.16 days spent playing Ultimate on trips during the same period. Survey participants reported an average skill level of 3.77 and an average knowledge level of 3.76. Average skill level was taken from the question "In general, how would you rate your Ultimate skills?" The knowledge level question was phrased: "Overall, how would you rate your knowledge about Ultimate?" Response categories for the skill questions fell along five-point scales ranging from very low (1) to very high (5).

Respondents reported a mean level of importance of 3.14 and a mean level of commitment of 2.99. Importance was measured using the question: "Compared to your free-time activities, how would you rate Ultimate Frisbee?" Response categories ranged from Your most important free-time activity (4) to Only one of my many free time activities (1). The commitment item combined responses from four questionnaire items: (1) If I couldn't play Ultimate, I am not sure what I would do with my free time, (2) Other leisure activities don't interest me as much as playing Ultimate, (3) I would rather play Ultimate than do most anything else, and (4) If I stopped playing Ultimate, I would probably lose touch with a lot of my friends.

Level of recreational specialization was also measured by asking respondents to self-identify themselves as either a committed player, an active player, or a casual player. The majority of respondents described themselves as either Committed Ultimate

Frisbee players (46.4%) or Active Ultimate Frisbee players (41.6%) (Table 7). Only 12% of players classified themselves as Casual Ultimate Frisbee players.

Table 6 - Recreational Specialization Dimensions and Variables

| Dimensions and Variables | N | Mean | SD |
|---|-----|-------|-------|
| Behavior ^I | | | |
| Trips in past 12 months | 250 | 6.38 | 5.71 |
| Days on trips in past 12 months | 250 | 15.16 | 13.79 |
| Total days spent playing Ultimate | 250 | 88.03 | 61.15 |
| in past 12 months | | | |
| Skill and Knowledge | | | |
| General skill level ² | 236 | 3.77 | 0.74 |
| Skill compared to others ³ | 250 | 3.36 | 0.77 |
| Ultimate Frisbee knowledge ⁴ | 250 | 3.76 | 0.88 |
| Level of Commitment | | | |
| Importance ⁵ | 249 | 3.14 | 1.02 |
| Commitment ⁶ | 250 | 2.99 | 0.84 |

¹Behavior variables were measured using open ended questions

²General skill level was measured on a 1-5 scale with 1=Very low and 5=Very high

³Skill compared to others was measured on a 1-5 scale with 1=Far less skilled and 5=Far more skilled

⁴Ultimate Frisbee knowledge was measured on a 1-5 scale with 1=Very low and 5=Very high

⁵Importance was measured on a 1-4 scale with 1=Only one of many free-time activities and 4=Most important free-time activity

⁶Commitment consisted of four questionnaire items, each measured on a five point scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree)

Table 7 - Results of the Self-Classification Measure

| Typology | N | % |
|------------------|-----|------|
| Committed Player | 116 | 46.4 |
| Active Player | 104 | 41.6 |
| Casual Player | 30 | 12.0 |
| , | | |

Table 8 - Results of Discriminant Analysis

| | | Relative | Canonical | Wilks' | | | |
|------------------------|-----------------|--------------|--------------|-----------|------------|----------|------------|
| Function | Eigen-value | percent | correlation | Lambda | Chi-square | DF Sig | nificance |
| 1 | 1.65 | 94.0 | .789 | .341 | 244.98 | 16 | .000 |
| 2 | 0.06 | 6.0 | .310 | .904 | 23.00 | 7 | .002 |
| | |] | Function 1 S | tatistics | | | |
| Discrimin | ant Variables | | | | Standar | dized Co | efficients |
| | trips in past 1 | 2 months | | | Sicirca | .584 | ejjieienis |
| Importa | | 2 months | | | | .575 | |
| - | e Frisbee know | ledge | | | | .227 | |
| Omman | e i fisoce know | leage | | | | .221 | |
| Days sn | ent playing Ul | timate in th | ne past 12 m | onths | .202 | | |
| | mpared to othe | | re past 12 m | | | .190 | |
| | inpured to our | 10 | | | | .170 | |
| Commit | ment | | | | | .097 | |
| | skill level | | | | | .039 | |
| | past 12 month | s | | | | 091 | |
| Tilps in | pust 12 month | 5 | | | | .071 | |
| | | | | | | | |
| Ultimate Frisbee Group | | | | Gr | oup Cent | roids | |
| Commit | tted players | | | | | 1.176 | |
| Active p | - · | | | | | 703 | |
| Casual 1 | • | | | | | -2.614 | |
| | | | | | | | |

Discriminant analysis was used to determine whether or not the proposed typology was an effective measure of recreational specialization. Behavior, skill, and

commitment variables did a good job of predicting how respondents self-classified themselves (Table 8). While both functions were statistically significant, only Function 1 was used because it explained 94.0% of the total variance. The square of the canonical correlation (0.789) was 0.622, meaning 62.2% of the variation in the self-classification variable was explained by the discriminating variables. There were several standardized coefficients that were relatively important. These were days on trips in past 12 months (.584), importance (.575), Ultimate Frisbee knowledge (.227), and total days spent playing Ultimate in the past 12 months (.202). The group centroids were relatively far (1.176, -0.703, -2.614) from each other which indicates three relatively distinct groups. The behavior, skill, and commitment variables were very strong in terms of predicting group membership. Committed Ultimate Frisbee players were predicted with 80.7% accuracy, Active players at 71.3%, and Casual players at 84.6%. This means that the behavior, skill, and commitment variables did a good job of predicting all three levels of the self-classification measure, suggesting the typology is an effective tool for measuring recreation specialization.

Predicting Level of Specialization among Ultimate Frisbee Players

The purpose of this section is to determine the extent to which orientations to sociability, competition, and skill development predicted level of specialization.

Orientation to sociability was measured by combining responses from the following five questionnaire items: (1) I regularly spend time with my Ultimate friends outside of our regular playing field, (2) When I play Ultimate, I usually do it when friends or family, (3) People that I play Ultimate with are mostly close friends, (4) People that I play

Ultimate with are mostly acquaintances (reverse coded), and (5) People that I play Ultimate with are mostly just fellow participants (reverse coded). The sociability alpha was 0.79, the mean was 3.29, and the standard deviation was 0.80 (Table 9).

Orientation to competition (Table 9) was measured by combining responses from three questionnaire items: (1) I am very competitive when it comes to playing Ultimate, (2) I enjoy the competitive aspects of playing Ultimate more than the social aspects, and (3) I desire a high level of competition when I play Ultimate. The competition alpha was 0.78, the mean was 3.39, and there was a standard deviation of 0.88.

Orientation to skill development was measured by combining these four questionnaire items: (1) I have a strong desire to develop my Ultimate Frisbee skill in the future, (2) I would be very unlikely to continue playing Ultimate Frisbee if I could no longer develop my Ultimate Frisbee skills, (3) I want to be the best at what I do when I play Ultimate Frisbee, and (4) Skill development is necessary for my continued participation in Ultimate Frisbee. The skill development alpha was 0.62, the mean was 3.42, and the standard deviation was 0.68.

Table 9 - Descriptive Statistics for Variables of Interest

| | Alpha | Mean | SD |
|-----------------------------|-------|------|------|
| Orientations | _ | | |
| Sociability (5 items) | 0.790 | 3.29 | 0.80 |
| Competition (3 items) | 0.783 | 3.39 | 0.88 |
| Skill development (4 items) | 0.623 | 3.42 | 0.68 |

The competition, skill, and sociability orientation measures did a fair job of predicting how respondents classified themselves along the specialization continuum (Table 10). For this analysis, only Function 1 was used because it explained 98.1% of the variance among the typologies. The square of the canonical correlation (0.601) was 0.361, meaning 36.1% of the variation in the typology variable was explained by the discriminating variables. All three of the discriminating variables had relatively high standardized coefficients: competition (0.637), skill (0.438), and sociability (0.659). The group centroids were relatively far apart but much closer to each other than they were in the previous analysis: committed players (0.754), active players (-0.441), and casual players (-1.388). Similarly, the orientation to competition, skill, and sociability measures were not as strong as the behavior, skill, and commitment indicators in predicting group membership. Committed Ultimate Frisbee players were predicted with 74.1% accuracy, Active players only 26.9%, and Casual players 76.7%. In sum, the competition, skill, and sociability orientation measures did a relatively good job of predicting group

membership among Committed and Active players, but did a very poor job of predicting group membership among Active players.

Table 10 - Discriminant Analysis

| | | Relative | Canonical | Wilks' | | | |
|---|------------------|-----------|--------------|-----------|--------------|------|-------------|
| Function | Eigen-value | percent | correlation | Lambda | Chi-square | DF S | ignificance |
| 1 | .566 | 98.1 | .601 | .632 | 113.00 | 6 | .000 |
| 2 | .011 | 1.9 | .104 | .989 | 2.68 | 2 | .262 |
| | | | | | | | |
| | |] | Function 1 S | tatistics | | | |
| Discriminant Variables Standardized Coefficient | | | | | Coefficients | | |
| Orientation to Sociability | | | .661 | | | | |
| Orientation to Competition | | | | .534 | | | |
| Orientat | tion to Skill de | velopment | | | .441 | | |
| | | | | | | | |
| Ultimate Frisbee Group Group Centroids | | | | | ıtroids | | |
| Committed players | | | | .754 | | 1 | |
| Active players | | | | 441 | | | |
| Casual players | | | | -1.388 | | | |

Predicting Motivations to Participate in Ultimate Frisbee

This last section discusses survey respondent's motivations for playing Ultimate
Frisbee. Four dimensions of motivations were identified using factor analysis (Table 11).
The first factor was defined as Self-identity motivation and consisted of four
questionnaire items: (1) I play Ultimate because it helps define who I am, (2) I play
Ultimate because I enjoy being identified as an Ultimate player, (3) I play Ultimate
because it helps me create an impression of who I am, and (4) I play Ultimate because
Ultimate helps me get in touch with who I am. A fifth self-identity motivation, I related

to other Ultimate players because they are like me, was not significant and therefore was not included in the final analysis. The second factor included four questionnaire items that connoted Challenge and Competition motives: (1) I play Ultimate because I enjoy the competition, (2) I play Ultimate because I like to be challenged, (3) I play Ultimate to show others I am good at Ultimate, and (4) I play Ultimate to increase my reputation as an Ultimate player. The third factor included three items that highlighted the importance of Friendship and Social Interaction motives: (1) I play Ultimate to be with my friends, (2) I play Ultimate to have social interaction with other Ultimate players, (3) I play Ultimate to share ideas with other Ultimate players. The last factor included items that emphasized the importance of Escape, Exercise, and Relaxation motives: (1) I play Ultimate because it helps me escape my regular life, (2) I play Ultimate for exercise, (3) I play Ultimate for relaxation. The reliability of the first three factors were all quite high: self-identity (0.861), challenge and competition (0.789), and friendship and social interaction (0.759). The escape, exercise, and relaxation factor only had a reliability of only 0.559 but retaining this factor made intuitive sense.

As mentioned above, the self-identity motive included questionnaire items that underscored the importance of defining and identifying oneself as an Ultimate player. The self-identity scale mean was 2.38 and had a standard deviation of 0.97 (Table 12). The challenge and competition scale mean was 3.03 and had a standard deviation of 0.80. The friendship and social interaction scale mean was 3.55 and the standard deviation of 0.90. The escape, exercise, and relaxation scale mean was 3.84 and the standard deviation was 0.73.

The self-classification measure was significantly related to three motivations: self-identity, challenge and competition, and friendships and social interaction, at the 0.001 level (Table 13). The fourth motivation, escape, exercise, and relaxation, was not significantly related to the specialization indicator. The self-identity motivation significantly differed among all three types of participants. Committed Ultimate Frisbee players reported a self-identity mean of 2.61, while Active players had a mean of 2.36 and Casual players had a mean of 1.55. Committed Ultimate Frisbee players had a significantly higher challenge and competition mean score (3.27) than Active players (2.87) and Casual players (2.71). Active and Casual players did not differ significantly in terms of challenge and competition motives. Committed and Active Ultimate players did not differ significantly from one another in terms of friendship and social interaction motives (3.70 and 3.54 respectively). Committed and Active players, however, had significantly higher mean scores for the friendship and social interaction motive than Casual players (3.02).

Table 11 - Factor Analysis of Motivations

| | Factor | V | ariance |
|--|----------|------------|---------|
| Motivation Scales and Items ¹ | Loadings | Eigenvalue | |
| Explained | | | |
| Self-Identity | | 4.98 | 35.6 |
| I play Ultimate because it helps define who I am | 0.863 | | |
| I play Ultimate because it helps me create | | | |
| an impression of who I am | 0.856 | | |
| I play Ultimate because I enjoy being | | | |
| identified as an Ultimate player | 0.784 | | |
| I play Ultimate because Ultimate helps me | 0.650 | | |
| get in touch with who I am | 0.658 | | |
| Challenge and Competition | | 1.69 | 12.1 |
| I play Ultimate because I enjoy the competition | 0.753 | | |
| I play Ultimate to show others I am good at Ultimate I play Ultimate to increase my reputation | 0.745 | | |
| as an Ultimate player I play Ultimate because I like to be | 0.727 | | |
| challenged | 0.687 | | |
| Friendship and Social Interaction | | 1.42 | 10.2 |
| I play Ultimate to have social interaction | | | |
| with other Ultimate players | 0.874 | | |
| I play Ultimate to be with my friends | 0.799 | | |
| I play Ultimate to share ideas with other | 0.40.5 | | |
| Ultimate players | 0.695 | | |
| Escape, Exercise, and Relaxation | | 1.29 | 9.2 |
| I play Ultimate for exercise | 0.750 | | |
| I play Ultimate for relaxation | 0.672 | | |
| I play Ultimate because it helps me escape | | | |
| my regular life | 0.579 | | |

¹Motivations were measured using a 1-5 scale ranging from Not at all important (1) to Extremely important (5)

Table 12 - Descriptive Statistics for Variables of Interests

| Motivations | Alpha | Mean | SD |
|-----------------------------------|-------|------|------|
| Self-Identity | 0.861 | 2.38 | 0.97 |
| Challenge & Competition | 0.789 | 3.03 | 0.80 |
| Friendship and Social Interaction | 0.759 | 3.55 | 0.90 |
| Escape, Exercise, and Relaxation | 0.559 | 3.84 | 0.73 |

Table 13 - Motivations of Committed, Active, and Casual Ultimate Frisbee Players

| | Committed | Active | Casual | F |
|-----------------------------------|---------------------|-------------------|------------|-----------|
| Self Identity | | | | |
| Mean | 2.61 a | 2.36_{b} | 1.55 c | 15.94 *** |
| Standard Deviation | 1.00 | 0.88 | 0.69 | |
| Challenge and Competition | | | | |
| Mean | 3.27_{a} | $2.87_{\rm b}$ | 2.71_{b} | 10.35 *** |
| Standard Deviation | 0.76 | 0.77 | 0.85 | |
| Friendship and Social Interaction | | | | |
| Mean | 3.70_{a} | 3.54 _a | 3.02_{b} | 7.24 *** |
| Standard Deviation | 0.82 | 0.94 | 0.88 | |
| Escape, Exercise, and Relaxation | | | | |
| Mean | 3.88 | 3.83 | 3.68 | 0.924 |
| Standard Deviation | 0.75 | 0.73 | 0.64 | |

 $_{abc}Groups$ with different subscripts are significantly different at .05 level of confidence. *** p<.001

Summary

This chapter describes several different measures of recreation specialization. First, participants were asked to self-classify themselves as Committed, Active, or Casual Ultimate Frisbee players. Unlike other studies of specialization in which the majority of participants are either Active or Casual, Ultimate Frisbee players in this study mostly identified themselves as either Committed (46.4%) or Active (41.6%). Only 12% of participants classified themselves as Casual Ultimate Frisbee players. Next, behavior, skill and knowledge, and commitment variables were used to measure level of specialization. These variables did a good job of predicting how players classified themselves: Committed (80.7%), Active (71.3%), and Casual (84.6%). This would suggest the typology is an effective tool for measuring recreation specialization style. Next, competition, sociability, and skill development variables were used to predict level of specialization. These variables did a relatively good job of predicting Committed (74.1%) and Casual (76.7%) players in the self-classification measure, but a very poor job of predicting Active (26.9%) players. Finally, I assessed the relationship between level of specialization and players' motives for participation. In general, Committed players were more likely than Active and Casual players to be motivated by self-identity and challenge motives. Committed and Active players reported were more likely than Casual players to be motivated by friendship and social interaction. All three groups reported were equally motivated by escape, relaxation and exercise.

CHAPTER V

CONCLUSION

The main goal of this study was to better understand the extent to which individuals truly desire to specialize. This was examined in the context of college and adult Ultimate Frisbee players in the Southwestern United States. Results showed that a three level self-classification measure did a very good job of predicting level of specialization. Results also showed that competition, sociability, and skill development variables did a good job of predicting the highest and lowest self-classification levels but a poor job of predicting the middle level of specialization. I will further discuss these ideas in this chapter, provide recommendations for future research, and list the limitations of this study.

Discussion of Results

Results of the study show that behavior, skill and knowledge, and commitment indicators measure effectively an individual's level of recreation specialization. These findings support Scott and Shafer's (2001a) assertion that the specialization construct is multi-dimensional and that it can be best measured using behavior, skill and knowledge, and commitment. Predictive values for the Committed (80.7%), Active (71.3%), and Casual (84.6%) players were particularly strong. These results, similar to Scott, Ditton, et al's (2005) findings, suggest that researchers should begin to use an activity-specific typology in addition to continuing to use behavior, skill and knowledge, and commitment variables to measure specialization. However, the self-classification tool

may not have been the best tool for differentiating participants in this study because it did not look at desire.

Competition, Sociability, Skill Development

The main goal of this study was to understand whether individuals truly desire to specialize. This study was aimed at better understanding the competition, sociability, and skill development variables in the hope of classifying flatliners, or those individuals who are in the middle ground of the specialization continuum. It was predicted that these variables would differentiate flatliners (Active players) from individuals on the high (Committed) and low (Casual) end of the specialization spectrum. Results showed that the competition, sociability, and skill development variables were poor predictors for the middle or flatlining category of specialization. Predictions for Committed (74.1%) and Casual (76.6%) players were relatively strong, but predictions for Active (26.9%) players were worse than random chance. This suggests that Active players are not easily classified using the three aforementioned variables.

There are several reasons why the competition, sociability, and skill development variables did not adequately predict the active participants (or flatliners). Based on discussions with several Ultimate players as well as comments included on the questionnaire, it appears that many older players who previously considered themselves Committed players now only view themselves as Active players. Work and family obligations have placed a greater burden on their time, and the older players' deteriorating physical abilities make it hard to play at the same level they once did. Therefore, many of these older players still have high levels of skill and knowledge,

moderate levels of commitment, but only small levels of actual playing time (behavior) due to time and age constraints.

Second, this study often discussed competition and sociability as two opposite ends of a spectrum. For example, one questionnaire item asked participants to rate the following statement: "I enjoy the competitive aspects of playing Ultimate more than the social aspects." Questions such as these did a good job of differentiating high (Committed) and low (Casual) ends of specialization, but the middle ground was not quite as clear. Many respondents reported equal interest in both competition and sociability. It is clearer now that these two dimensions can co-exist, but this study was designed on the concept that sociability and competition were diametrically opposed.

We can draw several conclusions from the results of this study. It is important to remember that flatlining is proposed as a new career trajectory in recreation specialization. In other words, flatliners (Active players) and specialists (Committed players) are on distinctly different career paths. For example, in the above description of Ultimate players who are aging I note that many of these players still have high levels of skill and knowledge, moderate levels of commitment, and low levels of behavior. While many of these aging participants self-classified themselves as Active players, I would argue that their career paths are in fact that of Committed players who are in the decline stage of specialization. It is plausible that some players made a major shift in their career trajectories, but it is more likely that they were affected by time and age constraints. Future studies of specialization should attempt to better differentiate people

who flatline over a career from Committed players who are in the declining stages of their career.

Future specialization studies should focus on finding better measures for predicting flatlining orientation. In the context of this study, competition, sociability, and skill development variables failed to predict people who self-classified as Active players. These three variables should be used along with other variables to help better predict flatlining. It is likely that a combination of variables will be the key to differentiating among flatliners, much the same way behavior, skill and knowledge, and commitment are used in combination to measure the specialization construct.

Motivations

Results of this study showed that self-identity, challenge and competition, and friendship and social interaction were all significant motivations to participate in Ultimate Frisbee. In terms of understanding a possible flatlining group in specialization, the motivations provided mixed results. The self-identity motivation was significantly different between the Committed, Active, and Casual Ultimate Frisbee players. This makes intuitive sense because it suggests that the more specialized an individual is the more that person identifies himself/herself as an Ultimate Frisbee player.

The challenge and competition motivation was not significantly different among all three groups. Active and Casual players reported similar levels of challenge and competition, but both were different from the Committed players. This means that Committed players were significantly more competitive than Active players, but Active players were no different from Casual players in terms of challenge and competition.

The friendship and social interaction motivation was the third significant motivation. Committed and Active players reported similar levels of friendship and social interaction, and both were different from the Casual players. This implies that both Committed and Active players highly valued the friendships and social interactions they had through Ultimate Frisbee. At the same time, Casual players were less motivated by the friendships and social interactions associated with Ultimate Frisbee. These results imply that a person is more and more interested in friendship and social interaction as he/she becomes more specialized.

There are several practical implications that natural resource managers and recreation programmers can gain from this study. First, it is important to note that all Ultimate Frisbee players do not share the same characteristics. Some players may be highly specialized, while others are more casual participants. As a result, recreation managers must be careful to accommodate for different styles of participation. Second, recreation programmers must plan for intermediate participants who share characteristics with both specialized and casual participants. This diversity of participants styles means that programs for just beginners and experts may only capture a small percentage of Ultimate Frisbee players.

Future Research

The results of this study point to several areas for future research. First, there is a need to find better measures for assessing the middle or flatlining group in specialization. Second, researchers need to better explore the effect that career contingencies have on one's ability to specialize. Third, more research needs to be done

on the factors that affect women's ability to specialize. Fourth, more studies should be conducted that focus on minorities and their ability to specialize. Fifth, researchers need to begin studying activity cultures and how they affect specialization levels. Lastly, a specialization study over time would greatly benefit the specialization construct.

The combination of competition, sociability, and skill development variables provided an inadequate measure for classifying flatliners. Researchers need to continue to examine the best measures for classifying the middle ground of specialization. While the author believes desire to specialize is a key factor to classifying flatliners, there are other dimensions that may help differentiate flatliners from the high and low ends of the specialization spectrum.

In addition to these dimensions, researchers also need to focus on the career contingencies that keep people from specializing. Career contingencies are often considered external forces beyond one's control, including gender and ethnicity.

However, other career contingencies, such as available opportunities and personal resources, are external forces that ultimately are within one's locus of control. There is a gray area around such career contingencies because they affect an individual's ability to specialize, but ultimately the individual has the ability to change his/her opportunities and resources. Researchers need to continue to study how career contingencies affect one's ability to specialize as well as his/her desire to specialize.

As others have suggested (Raisborough, 1999; Scott & Shafer, 2001a), the specialization and serious leisure constructs needs to be examined through a feminist perspective. Research on women's serious leisure has been limited, but the few studies

have shown that women have more constraints than men due to traditional gender roles (Stebbins, 1997). In Stebbins' (1997) study of barbershop singers, he found that many women felt obligated to cook for their family before they could pursue their own leisure activities.

Specialization research also needs to do a better job of studying activities that have a diverse racial and ethnic makeup. This study, where nearly 88% of participants were White or European-American, is certainly no exception. Researchers need to focus future studies on specific activities that cater to minority groups, such as basketball for African-Americans and soccer for Hispanics and Latinos. This may seem highly stereotypical, but it may be the best means of establishing a baseline of data on specialization by minorities. Most the specialization research to date has focused on outdoor recreation activities, which have not yielded significant percentages of minorities (Scott & Shafer, 2001a).

Researchers need to begin studying the different cultures within each activity to better understand specialization as a whole. Bryan and others (1977) have acknowledged the difficulty of making comparisons between different activities; but perhaps these activity culture differences are what draw some individuals in and pushes others out. Indeed, the friendly and controlled-competitive culture of Ultimate Frisbee is most likely different from pick-up basketball games at a university recreation center, where competition is fierce as players battle for bragging rights and the opportunity to continue playing. The author began this study believing competition and sociability

differentiated each activity, but now believes the activity culture is what separates social activities from competitive activities.

As others have often stated (Kuentzel & McDonald, 1992; Scott & Shafer, 2001a), the specialization construct would greatly benefit from a study of the specialization process over time. The goal of specialization researchers is often to understand how people specialize or the process individuals go through as they specialize. However, almost all of the studies have used a cross-sectional approach to studying specialization.

Two diagrams were developed to help conceptualize what the entire career trajectory of specialists, flatliners, and casuals would look like. The first figure (Figure 2) was an ideal type in which the three trajectories start and finish at the same time. This ideal type provided an easier comparison between the progression and decline stages of specialization. Specialists have a rapid increase in level of specialization and then a rapid decrease in specialization. At the same time, flatliners slowly progress to a moderate stage and then slowly decline. Casual participants never truly progress, thus maintaining a low level of specialization.

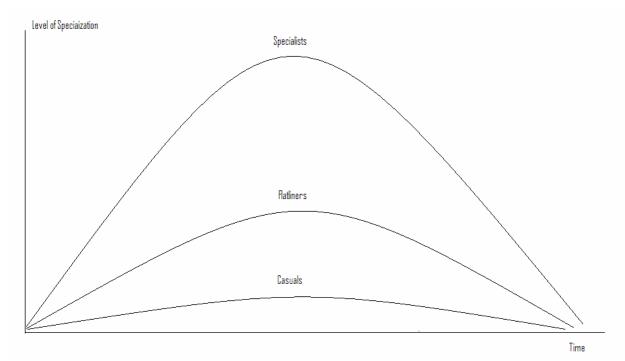


FIGURE 2 - Career Trajectories

The second diagram (Figure 3) displays the three career trajectories broken up into four stages: progression, establishment, maintenance, and decline. The design and names used in this diagram were heavily influenced by Stebbins' (1992) five stages of serious leisure. Specialists again show a rapid increase in level of specialization which then slows down a bit as they become more specialized. Specialists then hit a plateau where there specialization level remains constant before declining as more time passes. Specialists in this diagram do not decline past the level of specialists because it is assumed that specialists attain skill, knowledge, and levels of commitment that are beyond the scope of a flatliner. Flatliners show a somewhat slower progression than specialists, and flatliners level of specialization flattens out much quicker than

specialists. Flatliners then go through the maintenance and decline stages, but not declining further than a casual participant because it is assumed that flatliners possess more skill, knowledge, and commitment than most casual participants. Finally, casual participants show little progression before hitting a plateau and eventually declining. Casual participants quit or retire from an activity before they ever even reach the maintenance or decline stages.

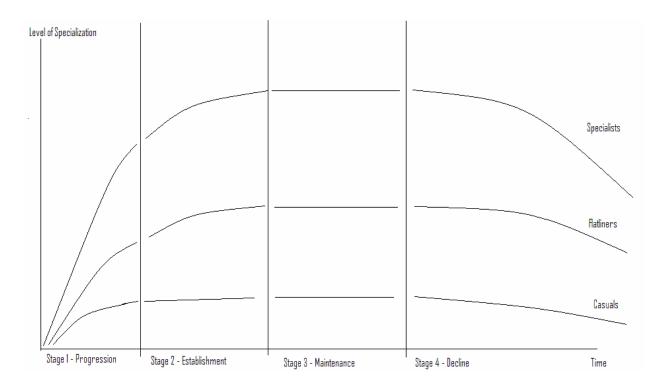


FIGURE 3 - Career Trajectories with Stages

Limitations

There are several limitations within this study. First, the sample was limited to individuals who participated with an Ultimate Frisbee team, were on an Ultimate Frisbee

email listsery, or both. Participants who did not belong to an Ultimate Frisbee team or email listsery had little to no chance of being contacted. This probably means that a lot of causal participants were overlooked for this study. A related limitation is that we do not know our overall response rate. It would be nearly impossible to determine how many people received the online portion of the questionnaire, so we cannot accurately report how many people chose not to respond. As a result of only sampling organized Ultimate Frisbee groups, the sample represents a large proportion of recreation specialists and a small proportion of casual leisure participants. This breakdown of participants is different from most other specialization studies, in which the largest percentages of participants are in the middle and lower ends of the specialization scale.

A second study limitation concerns the Ultimate Frisbee culture. Ultimate Frisbee is most likely qualitatively different from other group sport activities because it has a unique culture. The culture surrounding Ultimate Frisbee is a highly social one, and fair play is not only emphasized but institutionalized in the rulebook. As previously discussed in Chapter III, the principles of Spirit of the Game demand sociability as well as a high level of integrity on the field. This socially-oriented culture may allow participants a high degree of sociability that is not present in other highly competitive activities. The manifestation of seriousness, or competitiveness, may be extremely different in Ultimate Frisbee because participants learn that strictly competitive behavior is unacceptable on the playing field. More importantly, this controlled competitive behavior often extends beyond the playing field, where Ultimate Frisbee teams do cheers

for their opponents and engage in sociable conversation with other players while also maintaining a high level of spirit for their own team.

Third, one must question whether the sociability measures truly captured the full range of sociability items (or sociability dimension). The five sociability items were: (1) I regularly spend time with my Ultimate friends outside of our regular playing field, (2) When I play Ultimate, I usually do it with friends and family, (3) I enjoy the social aspects of Ultimate more than the competitive aspects, (4) People who take Ultimate more seriously than I do tend to bother me, and (5) Sharing ideas and conversing with other Ultimate players is important to me. These five items may not have completely captured the social atmosphere of all of the Ultimate Frisbee groups. These items will certainly need to be adapted to any future study of specialization.

Fourth, the specialization typology does not account for individuals who can no longer perform at their peak level, either due to injury or age. This decline stage is different from those who cannot participate because of time and family commitments. Many individuals who are injured or aging still desire to compete on the highest level, but their physical status does not allow them to. Activities that involve lots of running and cutting can be difficult for participants as they age, but skill is also an integral part of Ultimate Frisbee. Many older Ultimate Frisbee players have advanced levels of skill that mitigate the differences between them and their younger counterparts on the playing field.

Another limitation is that the author was a regular participant with the Nerd Frisbee League at Texas A&M for nearly two years before conducting this study. The

author only discussed his research plans with one individual from the Nerd Frisbee

League, and this individual was not surveyed to cut down on bias. Having the author

present probably helped the response rate, but the author did not communicate with

participants while they were completing the questionnaire.

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