MOTIVES AND LEVELS OF FLOW EXPERIENCE FOUND
IN RESIDENT VERSUS NON-RESIDENT PARTICIPANTS IN
THE 2011 WAIKIKI ROUGHWATER SWIM

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This work is dedicated to my parents, Linda and Jim Adams for their unending love, support, wisdom, and humor. I also dedicate this work to my sister, Rachel, whose courage and confidence inspire me to strive for greatness.

In loving memory of Jacob Lyons.
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ABSTRACT

Demand for travel related to sport has become one of the fastest growing segments of the tourism industry, inspiring scholarly research to better understand this emerging niche market. Research to date has focused upon those traveling to participate in multi-day, multi-sport events, largely ignoring participation in single-day, single-sport events. This study surveyed 419 resident and non-resident participants in the Waikīkī Roughwater Swim, a 2.38-mile swimming competition held annually on the island of O‘ahu, Hawai‘i. Motives, goals, training regimens, levels of athletic identity, levels of flow experienced, and demographic and socioeconomic characteristics were measured to better understand participants’ backgrounds and behaviors and provide marketing information to Hawaii’s sports tourism sector. Compared to residents, non-residents on average were more athletically inclined and efficient swimmers. Results suggest that the nature of the event and the destination significantly influence non-resident sports tourists’ propensity to travel. Marketing implications and suggestions for further research are advanced.
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Chapter I

Introduction

Incorporation of physical activity while on holiday is not a new idea, as the motivation to travel itself developed from the human desire to get away and participate in a form of recreation. “Throughout history, man has been impelled to travel because of sport—the motive, the drive, or the concern” (Kurtzman & Zauhar, 2003). This historic concept of sport and travel has developed into a respected and popular lifestyle (Kurtzman & Zauhar, 2003; Urry, 2002; Weed, 2009b). This desire has become magnified not only with respect to the length and distance of trips but also in the type and level of recreational activity in which travelers seek to engage.

Urry (2002) describes tourism as being a characteristic of the “modern” experience. Not to “go away” is like not possessing a car or a nice house. It has become a marker of status in modern societies and is also thought to be necessary for good health. Associations between sport and tourism are gaining global significance, and as attention to media grows, the public is becoming increasingly aware of the health and recreational benefits provided by sport and tourism (De Knop, 2006). Because of the increased popularity and accessibility of tourism as well as the growing awareness of health concerns, studies regarding the economic, social, and psychological aspects of sports tourism have grown in number, heightening the importance of this field of study.

The demand for travel related to sport has been increasing in the past few decades, becoming one of the fastest growing segments of the tourism industry (Gibson, 1998). The Olympics may be the most famous and internationally anticipated example
of this fusion of sport and tourism. However, many professional, amateur, and small-scale community-based events also contribute to this growing segment, drawing travelers from around the world to visit communities and participate as a volunteers, athletes, operators, or spectators. This study examines participants in one of these small-scale community-based competitions held annually on the island of O‘ahu, Hawai‘i.

History of the Sports Tourism Field

Sports tourism is broadly defined as tourism that includes travel away from one’s primary residence to participate in a sport activity for recreation or competition, travel to observe sports at the grassroots or elite level, and travel to visit a sporting attraction such as a sports hall of fame (Gibson, Attle, & Yinnakis, 1997). The study of sports tourism and surrounding influences has developed into an established field of study. In his assessment of current global trends in sports tourism, Weed (2009a) describes the markers of maturation within the field of sports tourism as being: a strong conceptualization of the field, empirical work relating to appropriate theory, a community of scholars interested in the area, and an academic journal devoted to furthering research in the field.

Although this field has become established, much research remains to be done. A meta-evaluation of research on sports tourism (Weed, 2006) showed that in the five years from 2000 through 2004, 38% of sports tourism research published in peer-reviewed journals in the sport, tourism and leisure areas focused on the behaviors, motives and profiles of sports tourists. However, much such research profiled sports tourists rather than explained their behavior (Weed, 2006), and focused on “what sports tourists do,
rather than on why they do it” (Gibson, 2004). The current study focuses on the motives of participants to help meet the need for explanatory research. Studies investigating motives are necessary to understand why travelers act as they do, and is essential to effective marketing and predicting future trends in tourism.

**Implications of Sports Tourism**

Much debate has surrounded sports tourism and its role in difficult economic times. Some argue that it should be one of the first activities to be eliminated to save money (both private and public); others believe that trying economic times make sports tourism increasingly valuable as it serves as a “respite from economic pressures” (Weed, 2009a). Research has also been conducted on the development of policy, infrastructure, and promotion as it relates to sports tourism in developing nations, small islands (Bull & Weed, 1999; Elcok, 2005; Lim & Patterson, 2008), and large-scale events (Trauer, Ryan, & Lockyer, 2003). Most of this research has focused on the marketing, economic benefits and policy related side of sports tourism, overlooking the behavior of the tourists who attend sports events in these destinations. Research into the motives of sports tourism participants will provide a better understanding of needs fulfilled by participation in these competitions and help guide marketing and policy decisions.

**Sports Tourism in Hawai‘i**

Many places around the world have become known as destinations for sports tourism events, including the Boston Marathon in the U.S.A., Wimbledon in England,
and the Adelaide Grand Prix in Australia. Hawai‘i is also well known as a sports tourism destination with the famed Kona Ironman in October, multiple PGA tour events, the Honolulu Marathon in December, and occasionally Pro Bowl NFL games. In the most recent marketing surveys conducted by the Hawai‘i Tourism Authority (HTA), Hawai‘i rated highest compared to six similar destinations for “unique scenery unlike anywhere else” and a close second to California for “lots to do for visitors with an active lifestyle” (Hawai‘i Tourism Authority [HTA], 2010b). While Hawai‘i has historically been known as a ‘3-s’ destination—sun, sand, and sea, because of the active lifestyle and numerous sporting events hosted, Hawai‘i in many ways is a ‘4-s’ destination—sun, sand, sea, and sports.

Because Hawai‘i has average temperatures that rarely dip below 70 degrees, and the water temperature maintains an average of 74 degrees, it has a unique advantage as a sports tourism destination—especially for ocean sports. Despite the climatic and scenic appeal, most promotion and academic research related to Hawaiian sports tourism pertains to sports that are not water related (Agrusa, Lema, Kim, & Botto, 2009, HTA, 2011).

The HTA visitor research reports show a decrease in travel to O‘ahu for sport since 2007 (HTA, 2008; HTA, 2009; HTA, 2011). Information gathered from this study provides insight into the motives of participants, providing a basis for more effective marketing of sports tourism in O‘ahu. A better understanding of the motives of event participants will enable local event marketers to base promotional appeals on the predominant motives of prospective event participants, leading to more effective
promotion of such events and giving O‘ahu a competitive advantage in terms of sports tourism events.

**Motives and Sports Tourism**

Recent studies addressing the motives\(^1\) of active sports travelers describe the motives of non-residents traveling to compete in various Masters Games, a multi-day multi-sport competition similar to the Olympics but on a smaller scale. The current study investigates the motives of sports tourism participants in an environment very different than that of a Masters Games and therefore will use caution in making generalizations about sports tourists. This difference in event environment will allow for greater insight into the effect of the event environment on the motives of participants.

The behavior of sports tourists traveling to established tourist destinations such as O‘ahu to participate in small-scale sporting competitions has yet to be systematically studied. The current study examines participants in the Waikīkī Roughwater Swim (WRS)—an open water swimming competition held annually on O‘ahu since 1970. This event was initially planned to attract local community participation. However, it now attracts hundreds of competitors from throughout the world, especially California, Australia, and Japan. The year after the study was conducted, Kosuke Kitajima, who at one point held the world record in both the 100 and 200-meter breaststroke events, came to participate from his country of Japan. Despite the immense difference in a 2.38-

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\(^1\) The word ‘motive’ is used versus ‘motivation’ due to the slight difference in meaning. “Whereas motivation research addresses why behavior is initiated, the term motive refers to the dispositions or categorization of energy that moves people to act” (Gillett and Kelly, 2006:242).
mile open water swim and his specialty event, the breaststroke, he was motivated to come to Hawai‘i and participate in the WRS.

**Flow**

An additional element of the current research involves the psychological element of “flow”. Csikszentmihalyi (1990) was the first to conceptualize what he referred to as the “optimal experience”. He presented flow as a state of total absorption in a task such that a person is so involved in it that nothing else seems to matter; the experience itself is so intrinsically enjoyable that people will engage in it for the sheer sake of doing it, without any sort of external reward. This phenomenon has been studied in many activities within the realms of work and play, aiming to better understand elements that contribute to the flow experience. It has not, however, been studied in relation to the element of travel, and therefore was included in the study to determine if experienced levels of flow could be associated with a participant’s status as a traveler or non-traveler.

**Research Questions**

The research questions sought to be answered by the study were:

1. What are the motives of those who travel to O‘ahu to participate in the WRS?
2. How do these motives compare to those of resident participants?
3. Does the element of travel affect the level of flow experienced by participants?
4. What are the characteristics and behavior patterns of those who participate in the WRS?
Purpose and Objectives

The purpose of the study was to provide sports marketers in Hawai‘i with the information they need to market small-scale niche events such as the studied WRS. It was also to gain insight into the participants’ motives for traveling to compete in this particular event and to address flow within tourism.

The objectives of the study were as follows:

1. Review the literature on tourism related to sporting competitions, especially tourism related to open water swimming competitions.
2. Collect primary data on the motives, goals, training regimens, level of athletic identity, level of flow experienced, and demographic, socioeconomic, and trip characteristics of participants in the WRS.
3. Report on the above characteristics for the sample as a whole.
4. Compare the above characteristics of resident versus non-resident participants in the WRS.
5. Draw conclusions and make recommendations for more effective marketing of the event and further research in this area.

Study Justification

The study addresses many gaps in the sports tourism literature. First, the lack of research involving local residents and their involvement in sports tourism. This study addresses the local population (herein termed ‘residents’) to create a benchmark against which to compare non-residents and to gain insight into the sports event and ocean sports culture in Hawai‘i. Second, the lack of research in sports tourism addressing small-scale events. Third, the lack of research on flow as related to travel heretofore has been an unexplored frontier. Filling these information voids will advance knowledge in
the areas of sports tourism, flow, Hawaiian tourism, open water swimming, and small-scale event tourism.

The following chapter reviews literature pertinent to this study.
Chapter II

Literature Review

Sports Tourism: Development of the Segment

Sport has always been, to some degree, an element of tourism. Tourism began with the human desire to get away—to create an escape from the monotony of everyday life and engage in leisure and recreational activities (Urry, 2002). It became a lifestyle component among those with the time and money to pay for the exclusive and rare opportunity to travel to a distant place. Development of forms of mass transportation changed the industry, as travel became more accessible to a larger number of people. This transformation of the industry and attraction of the masses initiated a significant era for the tourism industry, subsequently termed “mass tourism”. This term is used to describe travel in which masses of people engage in similar types of holidays in destinations highly developed to accommodate large influxes of tourists.

In the last few decades, primarily due to significant technological developments, trends in the travel industry began to move from mass tourism to niche tourism (Gretzel, Fesenmaier, & O’Leary, 2006; Urry, 2002). People were now able to act as their own travel agents, researching, customizing and ultimately booking their own trips via the Internet. Niche tours became popularized to cater to the special interests of modern travelers. Sports tourism is one outcome of this trend toward more specialized trips, catering to those with the desire to incorporate active or passive participation in a sporting competition or event while on holiday (Chalip, 2006). The opportunity to be involved in a sporting event, in any of its diverse forms, is increasingly becoming a
common reason for travel (Higham, 2005; Weed & Bull, 2009).

In response to the growing popularity of this tourism sector, academics began investigating behaviors of those choosing to engage in sports tourism. Scholars found that sports tourists were not a homogenous group, and using methods originally developed to define different tourist roles, thereby developed roles for the sports tourist (Gibson 2004). The research resulted in the existing subcategories of sports tourism: nostalgic sports tourism—visiting famous sports related attractions, passive/event sports tourism—traveling as a spectator to a sports event, and active sports tourism—involving tourists who travel to participate in a sporting event or competition (Gibson, 1998). In order to clarify the particular subcategory at hand, active sports tourism has been further categorized into non-event active sports tourism (recreational sports participation such as scuba diving or golf) and event based active sports tourism (participation in organized competitions) (Kaplanidou & Gibson, 2010). The current research focuses on the latter of the two: event based, or competitive, active sports tourism.

**Trends Affecting Sports Tourism**

Sports tourism is no different from other tourism sectors in many regards. The trends affecting tourism as a whole are affecting sports tourism as well: economic, environmental, demographic, and security issues are areas that come to the forefront within current tourism, and sports tourism, industry research (Collins, Jones, & Munday, 2009; Weed, 2009a).

During recessions, both the public and private sectors look to cut programs deemed unnecessary or expendable. Just as the public school systems have begun
cutting physical education, so follows the tourism industry, inclined to cut funds for
the health-based sector. Arguments opposing elimination of this particular travel
sector suggest participation in sports becomes even more necessary in times of
economic downturn as sports can serve as an outlet for stress.

Our nation has also increasingly become aware of health issues, which are many
times related to stress. Sports, nutrition and health as outlets for stress have become
increasingly important with messages for fitness as a lifestyle being regularly and
publicly promoted, such as the First Lady’s “Let’s Move” campaign, which aims to
fight child obesity. Increased health awareness has contributed to an increase in both
recreational and competitive sporting activities sought by tourists while on vacation
(Walker, Hinch, & Higham, 2010).

Environmental trends are affecting nearly every industry, including tourism.
Resident perception of tourism has been cited as negative, often due to residents’
proximity to highly concentrated sports tourism activity where event-related
construction occurs. These concerns stem from possible negative outcomes such as
environmental pollution and congestion associated with sport event-related
developments (Konstantaki & Wickens, 2010; Tatoglu & Erdal, 2002).

Demographic trends are currently affected by increases in life expectancy. The
baby boomer generation is arriving at the age of retirement. The emergence of this trend
can push sports tourism researchers and planners to promote events and offer activities
that appeal to this demographic, and promote to this segment with an awareness of the
health and wellness trend. Research surrounding the older segment of active sport
tourists has uncovered positive outcomes for those who are involved in sports tourism,
such as Dionigi’s (2002) results suggesting involvement in competitive sport as a means to express youthfulness, development, and construction of identity.

Security issues have been affecting the tourism field with a vast increase in awareness since September 11, 2001. Within the sports tourism sector, this trend affects the planning of destinations. Travelers want to go to destinations that they consider safe. Sports tourism promoters must be aware of this trend and promote destinations as being friendly, secure, and ready to take care of the tourist with no worries as to their being safe while traveling to, and visiting, the destination (Buhalis & Costa, 2006).

A trend that will not be excluded from sports tourism is that of seasonality. Weather affects most destinations’ attractiveness to the tourist, especially within the FIT (free and independent traveler) sector. While the tourism industry in its entirety is predominantly seasonal, sports tourism must also integrate specific effects of seasonality into planning (Buhalis & Costa, 2006).

Residents Versus Non-Residents

Tourism literature comparing residents and non-residents has historically been classified under the term local (resident) and non-local, or tourist (non-resident). Preferences from those involved in the current study led to the changing of the term “local” to “resident” due to underlying significance of the term “local” within the study area. Hawai’i has a long history of social and cultural identity debate; therefore use of the term “local” would insinuate a variety of meanings to different segments within the study. However, to enhance comparability, the term “resident” is used interchangeably
with “local”, and “non-resident” is used interchangeably with “non-local” or “tourist” herein.

Research has demonstrated that tourists differ from locals in their perceptions of destinations (Julta, 2000), their interpretation of attractions (Kaltenborn & Williams, 2002), and their uses of spaces that they share with locals (Snepenger, Murphy, O’Connell, & Gregg, 2003). Research comparing resident and non-resident motives, perceptions, and behavior has been conducted within the realm of recreational tourism. Many of these studies aim to gather economic information for purposes of insight into recreational management. While this is not the principal aim of the current study, comparisons can be made due to the similarities of the two focal populations.

Rosendahl, Thompson, and Anderson (2001), in a survey of visitors to Wilson’s Creek National Battlefield in Missouri, found that proximate visitors, compared to distant visitors, were younger, had lower incomes, were more likely to have previously visited the site, were more likely to have engaged in activities focused on exercise or enjoying the outdoors, and placed greater importance on experiencing nature and quietude, escaping life’s demands, pondering personal values, exercising, and being on one’s own. Distant visitors, on the other hand, were more likely to have participated in interpretive activities and ascribed more importance to learning about the Battle of Wilson’s Creek and learning about, and contemplating, the Civil War.

As in Rosendahl et al.’s (2001) study, Palso, Ivy, and Clemons (2009) found that proximate visitors to Stones River and Shiloh National Battlefields were younger than distant visitors to these sites. In addition, proximate visitors to these sites, as well as to Fort Sumter National Monument, collectively, on average traveled in larger groups and
spent less time on-site than distant visitors, and when planning their visits were more likely to have used information available from previous visits, acquaintances, newspapers, magazines, television, and radio. Distant visitors, on the other hand, were more likely to have obtained information via guidebooks, maps, brochures, and visits to chambers of commerce or welcome centers.

Anderson, Wilhelm Stanis, Schneider, and Leahy (2008) surveyed visitors to two reservoir-based recreation areas in Illinois managed by the U.S. Army Corps of Engineers. They found that proximate visitors were more likely than distant visitors to have been motivated by a desire to exercise, learn, and experience nature and solitude. Although summary or test statistics on the ages of proximate versus distant visitors were not reported, substantially larger proportions of proximate visitors in the case of each site were over age 40 (85.9% vs. 57.3% and 87.3% vs. 65.4%), suggesting that proximate visitors on average were probably older than distant visitors, in contrast with the findings of Rosendahl et al., (2001) and Palso et al., (2009).

The preceding section gives evidence of differences in the demographics, goals, and tendencies of the two populations when they are engaging in a similar activity. However, a change in the setting from recreational tourism to a competitive atmosphere may result in changes in the motives behind the different participant populations engaging in the event. This study’s principal aim is to reach within the experience of the two participant groups, and focus on why the groups differ, rather than what they differ on. The results will have practical applications to the industry on which this study focuses.
The effect of sports tourism on residents has been investigated with regard to event sports tourism and its economic and social impacts on local behaviors, yet residents’ motives for engaging in the same events as sport tourists have yet to be systematically studied. Although resident attitudes toward tourists and tourism are often assumed to be negative, studies have found that residents, when involved in the tourism events, can be accepting and grateful for the contributions of such events to the local economy and quality of life (Konstantaki & Wickens, 2010; Weed, 2009b). Research surrounding resident involvement in sports tourism (Fredline, 2005) suggests the need to incorporate residents’ experiences and perceptions into the strategic planning process for sports tourism (Weed 2009b).

Snelgrove, Taks, Chalip, and Green (2008) researched the differences in motives and identity within resident and non-resident attendees of the 2005 Pan American Junior Athletics Championships, an athletic event drawing thousands of spectators. The researchers determined that different marketing communications were necessary to reach the heterogeneity of passive sports tourist groups. Also measured was respondents’ sense of identity within the subculture of athletics. Visitor type had a significant effect on athletic identity\(^2\), such that visitors whose primary purpose was to attend the event scored higher on items measuring athletic identity than did casual visitors or locals. This study again documents a difference within the two populations of locals and tourists, corroborating those findings of recreation researchers (Anderson et al., 2008; Julta, 2000; Kaltenborn & Williams, 2002; Palso et al., 2009; Rosendahl et al., 2001; Snelgroger et al., 2003). However, Snelgrove et al.’s (2008) sample was

\(^2\) Defined as identifying with the subgroup of society composed of individuals who come together to share a common interest and develop distinctive attitudes, beliefs and values, in this case athletics (Snelgrove et al., 2008).
comprised of passive event sports tourists. The present study aims to extend this research by addressing differences within those who participate in the events.

**Theories and Motives Relating to Active Sports Tourism**

Investigations of motives relating to sports tourism have predominantly been based on three classic motivation theories: Murray’s (1938) Needs Theory of Personality, Maslow’s (1943) Hierarchical Theory of Needs, and Berlyne’s (1960) concept of optimal level of stimulation. This line of research has evolved into identifying roles of tourists. While these theories have created the underlying basis for investigation, evidence of distinctions between different types of tourists in their motivations and preferences has created a desire to further categorize tourists, with intent to get to a level of understanding that will allow the tourism industry to best anticipate the needs and desires of tourists within each category (Gibson, 2004).

The motives of participants in sports tourism have been analyzed with respect to road cyclists (Downward, Lumsdon, & Weston, 2009; McDonald, Milne, & Hong, 2002) and participants in Masters Games (Dionigi, 2002; Gillett & Kelly, 2006; Snelgrove et al., 2008; Walker, Hinch, & Higham, 2010) and have initiated strong arguments that behavioral research in sports tourism must “move beyond the level of events towards an understanding of the processes that produce them” (Weed, 2009a).

Walker et al. (2010) used a survey to assess achievement orientation and mode of experience of active sports tourists’ participating in the 2005 World Masters Games. After conducting a cluster analysis, the researchers identified four groups, all high on activity mode and task orientation, but either low or moderate on levels of social group,
place modes, and ego orientations. These results contradicted those of Gillett and Kelly (2006), who found Masters Games participants emphasized the social dimension over the competitive.

These studies have drawn conclusions about the motives of tourist participants in active sport tourism events; however, all the aforementioned studies excluded focus on resident participants, and were conducted within various Masters Games, an event that will be described in the following segment.

In the area of studies pertaining to the active sports tourist, much research has been conducted in relation to Masters Games, which exist “to enable people to continue participation in sports at an enjoyable competitive level…” (Trauer et al., 2003). Masters Games are spread over a number of days and include many different sporting events. While much of the comparable research has been conducted on Masters Games, the present study is unique as it focused on a single sport event—an open water swimming competition. The environment of the Masters Games, compared to that of the present study, presents a number of factors that will be difficult to compare, such as increased numbers of athletes, a wider variety of sport competitors present at the event, and a longer duration of the event.

In comparing motives between resident and non-resident participants in sports tourism events, two key studies have been conducted. In their study of the 2000 South Pacific Masters’ Games, Ryan and Lockyer (2002) found that non-resident participants were more strongly influenced by a competition motive than residents. Conclusions also suggested the existence of two principal motives of surveyed competitors being those related to self-challenge and socialization.
The study most germane to the current research is that of Gillett and Kelly (2006), who aimed to identify the level of influence of travel on participant motives. Using semi-structured interviews created around formerly identified motives within Masters Games research, the researchers uncovered five motives, including competition, extrinsic-achievement, socializing, camaraderie, and athletic identity, that were evident within non-local Masters Games participants. When a strong motive was expressed by an athlete within the semi-structured interviews, a follow-up question would be asked to see if the location of the competition between near or far from home competitions would affect the strength of the motive. Through this qualitative method of semi-structured interviewing, Gillett and Kelly (2006) found that the element of travel seemed to positively influence the strength of each motive identified.

Qualitative interviews allow for this level of investigation and ability to ask follow-up questions. However, because the current research follows a quantitative method for reasons of practicality, incorporation of the resident demographic as a benchmark with which to compare the non-resident population is used as a tool to identify the possible influence of travel on non-resident participants. Despite the difference in data collection method, the similarity in objectives inspired the researcher to use motives identified by Gillett and Kelly as those upon which to base much of her questionnaire.

The competition motive can be defined as the “desire to enter into rivalry in order to determine one’s ability in relation to another” (Gillett & Kelly, 2006:243). This motive was not found to be prominent within participants in the 1991 Australian Masters Games (McIntyre, Boag, Coleman, & Cuskelly, 1991), as participants were
more significantly motivated by the friendly atmosphere of the Games. Contrary to these findings was the research of Ryan and Lockyer (2002), who found the competition motive as being evident at an elevated level within non-local participants in the 2000 South Pacific Masters Games.

The opportunity for socialization is a motive commonly cited as cause for participation in sports tourism. The extent to which possession of this motive can differentiate groups of competitors has been the subject of much conflicting research (Cuskelly & Boag, 1996; McIntyre et al., 1991; Ryan & Lockyer, 2002). Despite conflicting findings surrounding its role in defining the sports tourist, socialization has repeatedly been identified as a motive present among sports tourism participants.

Extrinsic achievement was identified within both casual and serious competitors in Gillett and Kelly’s (2006) research, with many naming “winning a medal” as a primary motive for participating in the Games. Camaraderie was identified when competitors placed considerable value on the opportunity to share this experience with close friends and/or teammates. While this motive can be closely associated with socializing, it differs in adding an element of purpose to the element of socialization. Competitors motivated by camaraderie can be seen as team players; those who wish to experience, enjoy, and celebrate the competition with others (Gillett & Kelly, 2006).

Athletic identity has been defined as the degree to which an individual identifies with the athlete role (Brewer, Van Raalte, & Linder, 1993). This attribute was one of the five motives identified in the semi-structured interviews of Gillett & Kelly (2006) and has been additionally cited as a principal motive for engagement in sports tourism (Snelgrove et. al., 2008). The current study included a scale to measure this particular
attribute and facilitate comparability to past studies. The chosen scale, the Athletic Identity Measurement Scale (AIMS), has been used to measure the prevalence of athletic identity existing within different levels of athlete, ranging from non-participant to elite (Lamont-Mills & Christensen, 2006).

Participation in an athletic event relates to the identification of the participants to a particular subculture, i.e., a subgroup of society composed of individuals who come together to share a common facet, such as a sport, brand or activity, and who thereby develop distinctive attitudes, beliefs, and values (Gelder, 2007; Jenks, 2005). Therefore, all participants within a sporting event fall within this greater subculture of athletics. One of the most salient effects of identification within a subculture is the desire to share time and to interact with others who similarly identify with the subculture (Green & Chalip, 1998). Identification within this subculture of athletics relates to the motives one has to participate in a sport competition. The increased effort and expense involved with traveling to be a part of this subculture can be assumed to be a result of greater levels of identification with the subculture than those who live locally or are visiting the destination for an alternate primary purpose than to participate in the event (Snelgrove et al., 2008).

**Sports Tourism Development in Hawai‘i**

Ocean water sports are closely associated with the culture of Hawai‘i. For example, a Hawaiian, Duke Kahanamoku, introduced surfing to the world during his international travels. After breaking the world record in the 100-meter freestyle in 1903 and earning a spot on the United States Olympic swimming team, he toured the world for swimming training. Whenever he visited a coastal area, he demonstrated surfing,
thereby introducing the sport to the locals and forever intertwining surfing with Duke and Hawai‘i. This is an excellent example of how ocean water sports tourism has been a part of Hawai‘i, even before tourism was a realistic option for most people.

Hawai‘i offers a playground of opportunity for the sports tourist. At the beginning of the 20th century there were advertisements promoting the “Sunny Shores” and “Unrivaled Climate” that the islands provided (Desmond, 1999). This unrivaled climate is the principal attraction, with a steady streak of sunny days, resulting in the ocean maintaining a warm yet refreshing temperature year round. The landscape surrounding the town of Kona, located on the island of Hawai‘i, contains highways that are long and smooth, attracting cyclists from around the world, both to train for, and compete in, the most highly ranked “Kona Ironman” triathlon. Volcanoes and craters attract hikers from around the world, and the biggest attraction, large surf, has brought participants, industry employees, and spectators to the famous North Shore of O‘ahu, and the beaches of the islands of Hawai‘i, Maui, and Kaua‘i in order to promote the surf industry, which is currently estimated to be worth over a billion dollars (Dolcinar & Fluker, 2003).

Destination can also be linked to place, and Kaplanidou and Vogt (2007) address this aspect of sports tourism. Through comparing sport tourists who had previously visited the destination and those who had not, they discovered past experience with the destination significantly influenced intentions to revisit the destination for sports tourism activities. Because the sense of place associated with Hawai‘i, its reputation as a tourism destination, and the sports tourism opportunities held there, understanding the motives and behaviors of active sports tourists who participate in existing competitions will help guide the design of advertising campaigns to promote such events in Hawai‘i.
Active Sports Tourism in Hawai‘i

Sports tourism in Hawai‘i has been studied as a topic primarily focused on the economic impact of a given event (Agrusa et al., 2009). The primary sports events supported by the HTA are golf tournaments, triathlons, marathons, and football games—most of which are sports that do not exploit Hawaii’s natural geographic and climate related competitive advantages, thereby unfavorably placing the state in head-to-head competition with rival destinations (HTA, 2010a).

Although there is no shortage of events in Hawai‘i, there is a lack of research pertaining to niches attracted to its natural environment. Numerous sporting events that have a high level of community and tourist participation are held annually in the state, including but not limited to: triathlons, biathlons, open water swims, paddling events, surfing contests, body boarding contests, windsurfing contests, marathons and half marathons, running competitions, diving, and stand up paddling.

The HTA has acknowledged the presence and significance of the sports tourism industry within the islands. Its sports marketing division exists with the principal intent of promoting this very sector, and in 2011 allocated $7,930,000 specifically to the marketing and promotion of sporting events (HTA, 2011). Also, in 2011 the HTA contracted with NBC to broadcast sporting events occurring in Hawai‘i using their universal platform, including some ocean-based sports as well. This new deal further supports the need for deeper knowledge of the market and those who will be involved in the growing sports tourism market. Despite the monetary and organizational efforts, sports tourism arrivals to O‘ahu have continued to decline at an average annual rate of -10.0% over the past five-year period (Figure 1) in contrast to recovering overall tourism
Figure 1. Arrivals to O‘ahu for Sports Events (by air), 2007 - 2011
arrivals to O‘ahu (Figure 2). This, again, reinforces the need for deeper understanding of the sports tourism travel segment in order to bring the number of sports tourists back up through effective marketing campaigns.

Ocean Sports in Hawai‘i

Hawai‘i is briefly mentioned as a surf destination in Buckley’s (2002) study of surf tourism. However, qualitative research focusing on ocean sports events in Hawai‘i is sparse. Barbados, a destination with similar geographic and climatic advantages, has been studied and according to Elcock (2005) its warm and sunny climate gives it a very advantageous position for hosting major sporting events throughout the year. Hawai‘i sports marketing can similarly exploit these competitive advantages, drawing tourists to participate in outdoor and ocean related sports tourism events year round, thereby largely averting the climate-induced seasonality afflicting many tourist destinations.

Characteristics of Open Water Swimming Events

Open-water swimming has gained popularity through its re-introduction as an Olympic sport in 2008. In the first modern Olympic games the swimming events were held in open water. The year 2000 first introduced triathlons as a medal event in the Olympics, including an open water swim as the first leg of the race.

Open water swimming competitions begin either from a beach, a pier, or from a floating platform or large boat, with the swimmers crowded together at the starting line. At the sound of the starter’s gunshot, the swimmers run (or dive) into the water and seek to separate from the crowd. Heats are commonly divided by entry time, with an
Figure 2. Total Arrivals to O’ahu Versus Arrivals for Sports Events (by air), 2007 - 2011
average time of five minutes between the starting times of the different heats. Buoys are set at fixed distances along the course, creating points of reference and functioning as a guide to assist the participants’ navigation. A recent technological innovation is the use of timing devices strapped to participants’ ankles to permit monitoring of their progress during the race.

The WRS is a unique competition that prides itself on its community-based feel. The WRS website (www.waikikiroughwaterswim.com) states:

This swim is somewhat unique in being a single, all in one, grand swim for all ages, genders, a non-wetsuit affair without any elite prohibitions, open to all who think they can swim the 2.4 mile course. The start is staged in seeded waves, on 5-minute intervals, fast first, so as to reduce bumping and to make the finish all the more exciting for the large spectator attendance.

The Swim has no major sponsors, eg. "Budweiser Swim", and being a single large event does not have the confusion of modern events with 5 to 15 various sub-events based on age groups, gender, wet suits etc. It is thus, like the classic open-water swims of yesteryear, an event focused on the whole Pacific swim community, not just the modern competitive swim format. Moreover, it is especially welcoming to the local Hawaiian swim community of all levels of skill in hopes of drawing a broad spectrum of local citizens into a healthy community-fostering event.

Flow

Flow is a phenomenon first brought to light by Csikszentmihalyi in the 1970’s. The term is used to describe the “optimal experience”, one that comes as a result of one or all of the nine elements related to experiencing flow, including: a challenging activity that requires skills, the merging of action and awareness, clear goals, provision of immediate feedback, concentration on the task at hand, a sense of control, the loss of self-consciousness, the transformation of time, and an autotelic (intrinsically enjoyable) experience (Csikszentmihalyi, 1990). Trauer et al., (2003) suggest incorporation of the
idea of flow within a model of sports tourism developed by Ryan and Lockyer (2002) as a measure of intrinsic motivation. They summarize Csikszentmihalyi’s argument as being one that “human motivation could not be explained by external motivators such as pay or peer approval alone” (Trauer et al., 2003: 277). Czikszentmihalyi argued intrinsic motivation would be an essential element in the satisfied outcome of an individual’s experience. When an individual’s level of competence was equal to the level of challenge in a given situation, the outcome would be that of the “optimal experience,” or flow.

This idea of achieving the “optimal experience” was incorporated into this study to provide further insight into the intrinsic experience of the participants, and to determine if the outcome of flow was associated with the element of travel. Flow experiences have been researched in the case of college athletes (Russell, 2001), outdoor recreation activities (Mills, 2005), and elite figure skaters (Jackson, 1992). However, flow has not been researched with respect to tourism and assessing the travel element as one that enhances or detracts from the achievement of the “optimal experience”.

Incorporating a measure of flow experience in regard to traveling to an unfamiliar environment provides opportunity to advance knowledge in this area and deepen our understanding of the motives involved.

Summary and Conceptual Framework

Behavioral studies in the area of sports tourism are relatively prominent, although there has been continued scrutiny of methods and purpose. Debate exists over the quality level within these behavioral studies, as the vast majority focus on the “what” rather than the “why” (Gibson, 2004). Lack of behavioral research within the active
sports tourism industry in Hawai`i, or any similar major tourist destination involving the 3 S’s, demonstrates a large gap in the literature on sports tourism. As stated previously, Hawai`i has the environment and climate to give it a sustainable competitive advantage in the sports tourism market. Research into the motives of the target market segments must be conducted to guide prudent allocation of tourism promotion funds. While insight into non-resident motives is necessary to attract outside visitors and thereby external economic stimulation, the local community must be considered as well, especially within a community in which local participants often engage in the same sporting events as non-residents.

Weed & Bull (2009) emphasize that research on participants—the sports tourists themselves—has been particularly ignored. Where they are considered, they are usually presented as a homogeneous group generating a particular type of impact. Only in rare cases is there any detailed consideration of the experiences of sports tourists, which tends to focus on describing behaviors rather than understanding experiences (Weed, 2006). Because this research focuses on both resident and non-resident participants, this gap will be addressed to yield insight into the two groups and how to reach them for marketing purposes.

The conceptual framework of the study is shown in Figure 3. It illustrates the similarities within the two focal groups—residents and non-residents—in the study and depicts the one major difference between them, travel to destination, which is posited to influence the motives of the two groups. The resident participant has no added element; therefore all motives for participation will be uninfluenced by the travel factor. Codes M1-M5 represent the five types of motives identified in the literature reviewed above:
Figure 3. Conceptual Framework
competition, socializing, athletic identity, extrinsic achievement and camaraderie. The element of flow is posited as an outcome of both residents’ and non-residents’ participation in the event.

The following chapter introduces the design, instrumentation, and data collection process of the study. Each of these will be detailed in order for the reader to understand the complete process that resulted in the collection of the data upon which the analysis was based.
Chapter III

Methods

This study explored active sports tourism based on a survey of participants in the WRS. It sought to document the motives of active sports tourists in this event. Both non-resident and resident participants were studied in order to create a benchmark for comparison, as well as to gain insight into this particular segment of Hawaii’s active sports tourism segment. The study aimed to focus on understanding the behaviors of participants in an event; however, because of the small window of opportunity in which the data could be gathered, it was decided that quantitative investigation would aid most efficiently in the objective of understanding motives. In this section the approaches, strategies, instrument, data collection techniques, and data analysis will be described.

Study Design

The design of the study derived from the author’s history as a competitive swimmer, her interest in the sport of open water swimming, and her awareness of the growing popularity of sports tourism in Hawai‘i. The author’s extensive background as a competitive swimmer and experience in the sport of open water swimming produces an elevated ability to interpret this data as a non-swimmer would not possess. However, this also opens the opportunity for potential bias. Careful consideration in the construction of the instrument, data gathering process, and awareness of potential bias during data processing aims to mitigate this potential. The method of an on-site intercept
survey was decided upon in order to gain maximum numbers of participants in the short amount of time available for data collection within the structure of the event.

**Instrumentation**

The data were collected through a self-administered questionnaire, consisting of a total of 23 items printed on four pages. The items on the questionnaire were developed based on motives evident in past behavioral sports tourism studies (Cuskelly & Boag, 1996; Gillett & Kelly, 2006; McIntyre et al., 1991; Ryan & Lockyer, 2002), tested scales (Brewer, Houle, & Kluck, 2010; Jackson, Martin, & Eklund, 2008) and demographic questions. The instrument was divided into four sections, the first including participants’ preparation for the event, the second relating to experience during the event, the third gathering trip information of the non-resident participants, and the fourth pertaining to participants’ socioeconomic and demographic characteristics.

Three scales were included in the second section of the instrument. The first of the three scales is the motives scale. The scale includes 21 questions relating to different reasons why the resident or non-resident might choose to participate in the event. These scale items were measured on a seven-point Likert scale from 1 (“not at all important to me”) to 7 (“extremely important to me”).

The second scale was a modified version of the Athletic Identity Measurement Scale. The original AIMS consists of seven items to which individuals respond on a seven- point Likert-type scale from 1 (“strongly disagree”) to 7 (“strongly agree”). AIMS scores can range from seven to 49, with higher scores indicative of stronger
athletic identity. While the seven-item AIMS scale has been tested with a Cronbach’s Alpha of 0.93 (Brewer et. al., 2010), in order to make the scale more applicable to the study, the researcher slightly adjusted the wording of certain statements, changed the scale to a five-point Likert-type scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”), and also added two additional items. The resulting modified AIMS yielded a Cronbach’s Alpha of 0.91. Although these changes diminished direct comparability of the results to past studies, the data resulting from this modified version provided useful insights into the specific phenomena investigated in this study.

The third scale in the questionnaire was the Short Flow State Scale (S FSS). The S FSS was developed from the original flow scale in response to the need for a scale requiring less time to administer. The original scale includes four items pertaining to each of the nine elements of flow; the short scale includes only one question per element of flow, reducing the number of items in the battery from 36 to nine. These items were measured on a 5-point Likert-type scale from 1 (“strongly disagree”) to 5 (“strongly agree”). The S FSS was chosen for reasons of feasibility and time available for data collection despite the reduced amount of information gathered from a nine-item scale as opposed to a 36-item scale (Jackson, 2010). Cronbach’s Alpha for the scale used in the study was 0.81.

The question relating to years of formal schooling completed by each participant was measured by counting Kindergarten as year one of school. While in many studies completing four years of undergraduate college education would equate to 16 years of formal schooling, the current study equates 17 years to a four-year undergraduate degree.
Pilot Studies

To maximize reliability and validity, the author conducted two pilot studies to identify potential flaws in the instrument and allow for refinement or addition of questions. The pilot studies were conducted by the author and two assistants, at two of the four open water swimming competitions in the annual summer North Shore Swim Series, held on various locations on the North Shore of O‘ahu. The first was held in early June, the second mid-July. These events enabled the author to test the participant willingness to complete the questionnaire, become familiar with the logistics of an open water swimming event, and address possible semantic problems within the questionnaire. The instrument was modified after the first pilot study, and again after the second pilot study. Following conference with the two assistants, her advisor, and pilot study participants willing to provide feedback, the researcher fine-tuned the instrument to create the final survey instrument that was used at the WRS (Appendix A).

Research Context and Participants

The main research event investigated participants in the WRS. This open-water ocean swimming race occurs annually on Labor Day, and is conducted over an approximate course of 2.38 miles. The self-administered questionnaire was given to the participants immediately after they completed the race in order to best measure feelings and emotions at all points of the experience. In all cases respondents completed questionnaires between an estimated five and 45 minutes following race completion. The logistics of securing 419 completed questionnaires (48.4% of total race finishers) after the event was made possible by recruiting a team of 42 research assistants, the
majority of whom were members of the University of Hawai‘i swim team. Cooperation from the head coach was obtained and those members of the team who were not competing in the race were required to volunteer their time to assist in data collection. The volunteers were briefed before the day of the event by the principal investigator and familiarized with the goals of the project.

One week prior to race day the WRS race director sent an e-mail to all registered participants containing pre-race need-to-know information. Included was a short paragraph the lead researcher had written explaining the study, alerting participants to the presence of the surveyors on the finishing beach, and encouraging them to take part in the study. The goal was to let participants know a surveyor would most likely approach them after the swim, to reduce the element of surprise thereby facilitating greater levels of cooperation, and to ultimately obtain a larger sample size.

The surveyors gathered at the finish area of the event, where they were provided lanyards and nametags identifying them as members of a University of Hawai‘i at Mānoa survey team. Each was given the responsibility of handing out five clipboards, each pre-loaded with a pen and five questionnaires, for a total of 25 documents. The surveyors were instructed to approach participants after they exited the water, asking if they would like to participate in a brief study about the race they had just completed. As this study was minimally funded, no incentive was presented to the participants, however, the surveyors were creative in their methods of incentive, volunteering to get water for the participants, hold their caps and goggles, or read the questions to participants with poor eyesight.
Differences in the speed of competitors and the staggered starts of each heat contributed to the high number of completed questionnaires obtained. Additional contributing factors included the number of surveys each volunteer was able to distribute at once, and the elimination of trips to get more blank surveys by stacking five questionnaires on each of their five clipboards.

Potential for bias was evident, and was dependent on a number of factors, including gender, age, nationality or mood evident of the participants as they exited the water, and how each surveyor deemed any combination of these factors as approachable. This bias was mitigated by the author’s instructions to surveyors before the event. Assistants were instructed to approach more than just participants they were familiar with as the goal was to gather information from both resident and non-resident competitors. Rehearsal at the pilot studies provided insight into what the surveyors would need to be successful in approaching participants, including what to bring ahead of time (sunglasses, a towel to dry off participants’ hands, a white shirt) and a recommended script (Appendix B) for each researcher on how to present themselves to the participants, as the pilot study proved this was a potentially intimidating stage in the process. In order to maintain anonymity, the questionnaire did not contain any questions soliciting information on the identities of respondents. After respondents completed the questionnaire, the surveyors were instructed to drop off completed questionnaires at the University of Hawai‘i survey table located alongside other tables at the end of the race.

Because of the length of the questionnaire, and the fact that participants had just completed a 2.38-mile ocean swim, relatively high potential existed for respondent fatigue. However, distributing the questionnaire at the end of the race was essential to
capture the entire experience of participants. The data collection process and timing
was determined to be the fastest, most efficient way to obtain the desired data. Other
options such as a web-based or email survey were eliminated because of potential for
significant non-response bias.

After the event the author conferred with nine surveyors who had kept track of
refusal numbers. Between these nine, the approximate number of outright refusals was
26. When asked to estimate the percentage of refusals of the total number of swimmers
these surveyors had approached, responses averaged to an estimated 30% refusal rate.
Therefore, the estimated response rate was 70%.

**Data Analysis**

The author counted the completed questionnaires, making sure to not include
blank questionnaires that may have been inadvertently included in the returns. After
assigning each questionnaire with a unique identification number, the data were logged
into a SPSS data file. After entry by the lead researcher, the data were analyzed to
identify and remove out-of-range and other data entry errors. Following the data
cleaning, a series of analyses were run in the form of t-tests and contingency table
analyses. Results from the flow scale were analyzed as instructed by the flow manual.
Data from the motives scale were cluster-analyzed using Ward’s method and squared
Euclidean distance as the similarity measure. This is described in greater detail in the
following sections.

The following chapter reports results for the sample as a whole. Responses to
all 23 items on the questionnaire are reported in the same order in which they
appeared on the actual instrument. A significance level of 0.05 was used throughout the analysis. Statistically significant results are identified in all tables with an asterisk.
Chapter IV

Characteristics of the Sample as a Whole

To fully understand differences between non-resident versus resident participants in the WRS, it is necessary to first characterize the sample as a whole. Accordingly, in this chapter results for the entire sample are reported. These results should be useful to marketers of the WRS, who need a comprehensive view of the types of people who participate in the event. Findings are presented in the same order as their underlying data were collected in the questionnaire.

The chapter contains four sections. Section One reports the backgrounds of the participants as open water swimmers, including their training for the WRS. Section Two reports the motives and experiences of participants during the swim, including results from scales that measured athletic identity and flow, and results on respondents’ goals and perceptions of swimming conditions. Section Three details the trip characteristics of non-resident respondents and Section Four describes the demographic and socioeconomic characteristics of the sample.

Open Water Swimming Background of Participants

Respondents had diverse histories of open water swimming.

Previous competitions. Eighty-eight percent of participants previously participated in an open water swimming competition. Among these participants, the number of open water swimming competitions swum in the past three years ranged from
0 to 60 and averaged 8.94. The frequency distribution was skewed by eight values of 50 or higher. Therefore, in this case the median (6.00) is a better measure of central tendency than the mean (8.94). The year these participants began participating in open water swimming competitions ranged from 1950 to 2011 and averaged 2000. Forty-three percent of these participants had previously traveled to compete in an open water swim.

**Competing away versus competing at home.** Respondents were asked, “Have you ever participated in an open water swimming competition away from home?” Those who answered in the affirmative were asked to indicate the extent to which 11 factors either enhanced or detracted from their “experience competing away from home” on a scale from 1 (“strongly enhances”) to 5 (“strongly detracts”). A total of 172 respondents answered each item in the battery. The highest means, representing factors that most detracted from experiences, were for “colder climate” (3.53), “being away from my friend(s)” (3.13), and “being away from my family” (3.07) (Table 1). The lowest means, representing factors that most enhanced experiences, included “traveling to the destination” (2.16), “warmer climate” (2.24), “being away from work” (2.38), and “added pressure to perform well” (2.48). Intermediate responses included “warmer water temperature” (2.49), “being away from my normal routine” (2.93), “availability of food for my chosen diet” (2.94), and “sleeping away from home” (3.00).

**Ability to travel away from home for an open water swimming competition.** Respondents were asked to indicate which of nine possible factors determined their
Table 1. Elements affecting away-from-home open water swimming competition experiences in ascending order.

<table>
<thead>
<tr>
<th>Element</th>
<th>(n=172) Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traveling to the destination</td>
<td>1</td>
<td>5</td>
<td>2.16</td>
<td>1.056</td>
</tr>
<tr>
<td>Warmer climate</td>
<td>1</td>
<td>5</td>
<td>2.24</td>
<td>0.876</td>
</tr>
<tr>
<td>Being away from work</td>
<td>1</td>
<td>5</td>
<td>2.38</td>
<td>1.033</td>
</tr>
<tr>
<td>Added pressure to perform well</td>
<td>1</td>
<td>5</td>
<td>2.48</td>
<td>0.882</td>
</tr>
<tr>
<td>Warmer water temperature</td>
<td>1</td>
<td>5</td>
<td>2.49</td>
<td>1.089</td>
</tr>
<tr>
<td>Being away from my normal routine</td>
<td>1</td>
<td>5</td>
<td>2.93</td>
<td>0.977</td>
</tr>
<tr>
<td>Availability of food for my chosen diet</td>
<td>1</td>
<td>5</td>
<td>2.94</td>
<td>0.951</td>
</tr>
<tr>
<td>Sleeping away from home</td>
<td>1</td>
<td>5</td>
<td>3.00</td>
<td>0.905</td>
</tr>
<tr>
<td>Being away from my family</td>
<td>1</td>
<td>5</td>
<td>3.07</td>
<td>0.738</td>
</tr>
<tr>
<td>Being away from my friend(s)</td>
<td>1</td>
<td>5</td>
<td>3.13</td>
<td>0.658</td>
</tr>
<tr>
<td>Colder climate</td>
<td>1</td>
<td>5</td>
<td>3.53</td>
<td>0.945</td>
</tr>
</tbody>
</table>

Note: Scale ran from 1 (“strongly enhances”) to 5 (“strongly detracts”).
“ability to go on a trip for an open water swimming competition”. Multiple responses were accepted. The most frequent response was “finances” (21.6%), followed by “location of the competition” (20.8%), “getting time off from work” (19.4%), “time of year” (12.8%), “if my team is going” (7.3%), “if I have friend(s) or family member(s) at the location of the competition” (6.2%), “if I can stay with people I know” (4.7%), “if my family is willing to come with me” (4.4%), “if the swim is a part of the open water circuit”\(^3\) (1.7%), and “other” (0.2%) (Table 2). Thus, the major determinants that affected ability to travel to an open water swimming competition were finances, the location of the competition, and getting time off from work. Factors such as the swim being a part of the Open Water Circuit, whether the family was willing to join, or whether the participant could stay with people they knew were less influential.

**Training for the competition.** Eighty percent of respondents reported training for the event. Of those who had trained, 36.1% never trained alone, 19.1% rarely trained alone, 16% reported training alone or mostly alone, and 12.7% trained alone about half the time. Most participants (83.4%) had access to open water vs. a pool for training and 72.1% reported having regular training partners. The number of hours swum by those who trained ranged from 0.5 hours to 50.0 hours and averaged 7.43 hours.

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\(^3\) The Open Water Circuit consists of elite-level open water swimming competitions regulated by the constitution, general rules, and by-laws of FINA (Federacion Internationale de Natacion) (www.fina.org).
Table 2. Factors determining ability to travel for an open water swimming competition.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finances</td>
<td>21.6</td>
</tr>
<tr>
<td>Location of the competition</td>
<td>20.8</td>
</tr>
<tr>
<td>Time off from work</td>
<td>19.4</td>
</tr>
<tr>
<td>Time of year</td>
<td>12.8</td>
</tr>
<tr>
<td>If my team is going</td>
<td>7.3</td>
</tr>
<tr>
<td>I have friend(s) or family member(s) at the location of the competition</td>
<td>6.2</td>
</tr>
<tr>
<td>I can stay with people I know</td>
<td>4.7</td>
</tr>
<tr>
<td>Whether my family is willing to come</td>
<td>4.4</td>
</tr>
<tr>
<td>The swim is part of the Open Water Circuit</td>
<td>1.7</td>
</tr>
<tr>
<td>Other</td>
<td>0.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Results Focused on the 2011 WRS

This section reports the experiences surrounding participation at the 2011 WRS. Motives of the sample are reviewed and examined through a cluster analysis.

Preparation for the event. Thirty-two percent of participants were members of a team that came to compete in the event. The most frequently reported teams were three locally based teams, the Kamehameha Swim Club (17.0%), the University of Hawai‘i (10.4%), and Team Jet (7.4%). A complete list of teams present is provided in Table 3. When asked how long prior to the event each participant had registered, responses ranged from 0 to 210 days and averaged 62.81 days. Forty-four percent of respondents signed up with another person. Thus, most respondents decided to register for the event independently and over two months in advance. Two percent of respondents reported competing in the newly offered fins division.

Motives for participation. Respondents were asked to indicate how important or unimportant 21 motives for participating in the event were to them, on a scale from 1 ("not at all important to me") to 7 ("extremely important to me"). Average levels of ascribed importance to each item were computed for respondents who answered the entire battery. On average, respondents ascribed high levels of importance to “challenge myself physically” (5.75), “promote health and fitness” (5.61), “challenge myself mentally” (5.46), “do something exciting” (5.39), and “accomplish goal(s)” (5.34) (Figure 4). On average, moderate levels of importance were ascribed to “swim the famous Waikiki coastline” (4.57), “continue a personal tradition” (4.45), “be a part of an historical event” (4.30), and “relax” (4.29). On average, low levels of importance
<table>
<thead>
<tr>
<th>Team Name</th>
<th>Responses</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kamehameha Swim Club</td>
<td></td>
<td>23</td>
<td>17.0</td>
</tr>
<tr>
<td>University of Hawai‘i</td>
<td></td>
<td>14</td>
<td>10.4</td>
</tr>
<tr>
<td>Team Jet</td>
<td></td>
<td>10</td>
<td>7.4</td>
</tr>
<tr>
<td>Tattersalls Sydney AUS</td>
<td></td>
<td>8</td>
<td>5.9</td>
</tr>
<tr>
<td>Rainbow Aquatics</td>
<td></td>
<td>8</td>
<td>5.9</td>
</tr>
<tr>
<td>Dallas Aquatic Masters</td>
<td></td>
<td>7</td>
<td>5.2</td>
</tr>
<tr>
<td>Manoa Aquatics</td>
<td></td>
<td>7</td>
<td>5.2</td>
</tr>
<tr>
<td>SCAQ Socal Aquatics</td>
<td></td>
<td>7</td>
<td>5.2</td>
</tr>
<tr>
<td>The Olympic Club</td>
<td></td>
<td>7</td>
<td>5.2</td>
</tr>
<tr>
<td>BC Endurance</td>
<td></td>
<td>6</td>
<td>4.4</td>
</tr>
<tr>
<td>University of Hawai‘i Masters</td>
<td></td>
<td>4</td>
<td>3.0</td>
</tr>
<tr>
<td>O‘ahu Swim Club Masters</td>
<td></td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td>Team Caldwell</td>
<td></td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td>Waikīkī Swim Club</td>
<td></td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td>Aulea SC</td>
<td></td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>Hawai‘i</td>
<td></td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>Peter Hursty</td>
<td></td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>Team in Training</td>
<td></td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>Aloha Aquatics</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Aussie Ticker</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>BOCA Hawai‘i</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Biondi</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Dolphin S&amp;Row Club</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Hawai‘i Swim Club</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Kailua Masters</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Kailua YMCA</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>MOST</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Nuuanu Masters</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>SAC Swim</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>SF Tsunami</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Splash Aquatics</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Team Core</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Team Fuego</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Y Masters (Windward)</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Sacramento Swimming Enthusiasts</td>
<td></td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>135</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Figure 4. Motives of Entire Sample
were ascribed to “meet people” (3.84), “get in touch with myself spiritually” (3.73), “conquer fear(s)” (3.21), “gain greater acceptance from peer(s)” (3.03), and “win a prize” (2.82).

These results suggest that participation was most impelled by the intrinsic and competitive motives of facing personal challenges, enhancing health and fitness, and accomplishing goals. The importance ascribed to challenge-related motives corroborates the findings of Gillett and Kelly (2006: 248), who concluded that the “sporting challenge clearly provided considerable influence on the decision to take part”. Ryan and Lockyer (2002) also cited self-challenge as one of two principal motives found within competitors at the 2000 South Pacific Masters Games. The importance ascribed to physical fitness corroborates research results describing physical fitness as a prominent motive (Cuskelly & Boag, 1996; McIntyre et al., 1991) but contradicts Gillett and Kelly’s (2006) elimination of physical fitness as a “key” motive for participation in Masters Games.

Respondents ascribed least importance to extrinsic factors such as winning a prize and gaining social acceptance, and the intrinsic motives of spiritual insight and conquering fear. Contrary to these findings, Gillett and Kelly (2006) found extrinsic goal achievement as a key motive and Ryan and Lockyer (2002) found socialization to be a principal motive of Masters Games competitors. To some unknown extent these differences in results may have emerged because the WRS does not give out substantial prizes.

**Motives clusters.** To determine whether respondents held composites of motives for participating in the event, the motives data were cluster analyzed using Ward's
method and squared Euclidean distance as the similarity measure. Cluster analysis groups individuals or objects into clusters so that individuals or objects in the same cluster are more like each other than they are like individuals or objects in other clusters. It attempts to maximize differences between clusters relative to variation within clusters. In this particular application, respondents who were similar in terms of their responses to the motives battery were combined into clusters such that the respondents in a given cluster were similar, but the various clusters were distinct from one another.

In the case of the clustering routine used in this study, each respondent began as its own cluster (Figure 5). Next, the two respondents that were the most similar in terms of the items in the battery (i.e., “closest” in mathematical space) were combined to form a cluster. In subsequent steps, the two closest clusters (or respondents) were combined into a new aggregate cluster, thus reducing the number of clusters by one in each step. In some cases, a third respondent joined the first two in a cluster. In others, another group of two respondents joined to form a new cluster. Eventually, all respondents were grouped into one large cluster. At each step in the analysis, the union of every possible pair of clusters was considered and the two clusters whose fusion resulted in the minimum increase in within-group variation were combined (Hair, Anderson, Tatham, & Black, 1992).

A critical decision for the analyst is which of the various cluster solutions produced in the above process is best. Although no “right” answer to this question can be found, it is desirable for very similar clusters to be merged so that the results reported are not unnecessarily complex, but it is undesirable for very dissimilar clusters to be merged because this obscures the genuine diversity in the data. It is therefore logical and
Figure 5. Illustration of a hypothetical cluster analysis employing data and methods like those used in this study.
conventional to choose the solution that precedes the first solution in which very different clusters are merged. In the case of the present study, the six-cluster solution was selected after conducting a scree test and observing a jump in the fusion coefficient thereafter, suggesting that this solution maximized parsimony without an unacceptable loss of information (Figure 6). Based on their mean values on each of the motive items (Table 4), the six clusters were characterized as follows.

Cluster 1 comprised 11.2% of the cases in the analysis and was labeled, “Intensely Driven Individualists” (Figure 7) This cluster contained the fewest number of cases within the analysis. It ascribed the highest levels of importance to confronting physical and mental challenges, and on average ascribed high levels of importance to “do something exciting” (6.06) and “accomplish goal(s)” (5.97). On average, they ascribed the lowest levels of importance to camaraderie-related motives such as “participate in an event with teammate(s)” (1.96) and “participate with person(s) other than teammate(s)” (2.14). In their study of Masters Games participants, Ryan and Lockyer (2002) similarly found a cluster comprised of participants reporting high scores on items relating to self-challenge and low scores on social factors and named this group “Sports Purists”.

Cluster 2 comprised 22.9% of the cases in the analysis and was labeled, “Laid-backs” (Figure 8). This cluster contained the highest number of cases within the analysis. They ascribed low levels of importance to most items in the battery. On average they ascribed the highest importance to “challenge myself physically” (4.60) and the lowest importance to “gain greater acceptance from peer(s)” (1.43). Although
Figure 6. Cluster Analysis Scree Test
<table>
<thead>
<tr>
<th>Motive</th>
<th>All in Analysis</th>
<th>Cluster 1</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
<th>Cluster 5</th>
<th>Cluster 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 314)</td>
<td>(n = 35)</td>
<td>(n = 72)</td>
<td>(n = 70)</td>
<td>(n = 47)</td>
<td>(n = 43)</td>
<td>(n = 47)</td>
</tr>
<tr>
<td>Accomplish goal(s)</td>
<td>5.34</td>
<td>5.97</td>
<td>4.25</td>
<td>5.61</td>
<td>6.38</td>
<td>4.63</td>
<td>5.77</td>
</tr>
<tr>
<td>Conquer fear(s)</td>
<td>3.21</td>
<td>3.00</td>
<td>1.71</td>
<td>4.17</td>
<td>4.85</td>
<td>2.60</td>
<td>3.17</td>
</tr>
<tr>
<td>Promote health and fitness</td>
<td>5.61</td>
<td>5.86</td>
<td>4.56</td>
<td>6.13</td>
<td>6.60</td>
<td>4.51</td>
<td>6.28</td>
</tr>
<tr>
<td>Do something different</td>
<td>4.87</td>
<td>4.37</td>
<td>3.83</td>
<td>5.43</td>
<td>6.40</td>
<td>3.84</td>
<td>5.40</td>
</tr>
<tr>
<td>Do something exciting</td>
<td>5.39</td>
<td>6.06</td>
<td>4.10</td>
<td>5.87</td>
<td>6.68</td>
<td>4.51</td>
<td>5.66</td>
</tr>
<tr>
<td>Get in touch with myself spiritually</td>
<td>3.73</td>
<td>4.49</td>
<td>1.78</td>
<td>4.32</td>
<td>6.26</td>
<td>3.53</td>
<td>2.91</td>
</tr>
<tr>
<td>Challenge myself physically</td>
<td>5.75</td>
<td>6.51</td>
<td>4.60</td>
<td>6.01</td>
<td>6.74</td>
<td>5.14</td>
<td>6.09</td>
</tr>
<tr>
<td>Challenge myself mentally</td>
<td>5.46</td>
<td>6.31</td>
<td>3.81</td>
<td>5.90</td>
<td>6.60</td>
<td>5.02</td>
<td>5.94</td>
</tr>
<tr>
<td>Participate in an event with teammate(s)</td>
<td>4.13</td>
<td>1.96</td>
<td>2.50</td>
<td>5.36</td>
<td>6.29</td>
<td>4.33</td>
<td>4.06</td>
</tr>
<tr>
<td>Participate with person(s) other than teammate(s)</td>
<td>4.03</td>
<td>2.14</td>
<td>2.31</td>
<td>5.00</td>
<td>6.53</td>
<td>4.21</td>
<td>3.94</td>
</tr>
<tr>
<td>Meet people</td>
<td>3.84</td>
<td>2.29</td>
<td>1.97</td>
<td>5.14</td>
<td>6.29</td>
<td>3.91</td>
<td>3.38</td>
</tr>
<tr>
<td>Gain greater acceptance from peer(s)</td>
<td>3.03</td>
<td>2.00</td>
<td>1.43</td>
<td>4.17</td>
<td>5.27</td>
<td>3.60</td>
<td>1.77</td>
</tr>
<tr>
<td>Swim the famous Waikiki coastline</td>
<td>4.57</td>
<td>5.46</td>
<td>2.82</td>
<td>5.10</td>
<td>6.44</td>
<td>4.21</td>
<td>4.28</td>
</tr>
<tr>
<td>View scenery</td>
<td>4.64</td>
<td>5.63</td>
<td>2.81</td>
<td>5.36</td>
<td>6.60</td>
<td>4.02</td>
<td>4.28</td>
</tr>
<tr>
<td>Be a part of an historical event</td>
<td>4.30</td>
<td>5.29</td>
<td>2.21</td>
<td>5.06</td>
<td>6.45</td>
<td>3.98</td>
<td>3.79</td>
</tr>
<tr>
<td>Swim in a warm open water swim</td>
<td>4.84</td>
<td>5.97</td>
<td>2.96</td>
<td>5.46</td>
<td>6.62</td>
<td>4.35</td>
<td>4.66</td>
</tr>
<tr>
<td>Win a prize</td>
<td>2.82</td>
<td>1.91</td>
<td>1.63</td>
<td>3.04</td>
<td>5.23</td>
<td>4.05</td>
<td>1.43</td>
</tr>
<tr>
<td>Experience a high level of competition</td>
<td>4.19</td>
<td>4.66</td>
<td>2.86</td>
<td>4.33</td>
<td>6.55</td>
<td>4.70</td>
<td>2.87</td>
</tr>
<tr>
<td>Place well in my age group</td>
<td>4.18</td>
<td>4.51</td>
<td>3.01</td>
<td>4.36</td>
<td>6.11</td>
<td>4.98</td>
<td>2.81</td>
</tr>
<tr>
<td>Relax</td>
<td>4.29</td>
<td>3.83</td>
<td>2.54</td>
<td>4.91</td>
<td>5.53</td>
<td>3.63</td>
<td>4.74</td>
</tr>
<tr>
<td>Continue a personal tradition</td>
<td>4.45</td>
<td>5.40</td>
<td>2.79</td>
<td>4.63</td>
<td>6.68</td>
<td>4.09</td>
<td>4.13</td>
</tr>
</tbody>
</table>
Figure 7. Cluster 1: Intensely Driven Individualists (n = 35)
Figure 8. Cluster 2: Laid-backs (n = 72)
“challenge myself was the most motivating among the laid-backs, their average score on this factor was lower than that of any other cluster.

Cluster 3 comprised 22.3% of the cases in the analysis was labeled, “Sociable Health and Fitness Aficionados” (Figure 9). They ascribed moderate to high levels of importance to all items in the battery. On average, this cluster ascribed the highest average levels of importance to “promote health and fitness” (6.13) and “challenge myself physically” (6.01), and lowest levels of importance to “win a prize” (3.04), “gain greater acceptance from peers” (4.17), and “conquer fear” (4.17). The group had moderate to high average values for social and camaraderie-related motives such as “meet people” (5.14), “participate in an event with teammate(s)” (5.36), and “participate with person(s) other than teammates” (5.00). Ryan and Lockyer (2002) similarly reported a cluster comprised of participants reporting high scores on items related to self-challenge and socialization and named this group “Games Enthusiasts”.

Cluster 4 comprised 15.0% of the cases in the analysis and was labeled, “Hyper-motivateds” (Figure 10). This cluster ascribed high importance to every item in the battery, with means between 6.0 and 7.0 on 18 of the 21 items. The mean for the motive to which the lowest level of importance was ascribed (“conquering fear(s)”) exceeded those of the other clusters.

Cluster 5 comprised 13.7% of the cases in the analysis and was labeled, “Mildly Drivens” (Figure 11). They ascribed moderate levels of importance to most items in the battery. Mildly Drivens were less likely to be affected by motives other than those concerning extrinsic achievement, on average ascribing moderate importance to “win a
Figure 9. Cluster 3: Sociable Health and Fitness Aficionados (n = 70)

Promote health and fitness
Challenge myself physically
Challenge myself mentally
Do something exciting
Accomplish goal(s)
Swim in a warm open water swim
Place well in my age group
Continue a personal tradition
Relax
Participate with teammate(s)
Participate with person(s) other than teammate(s)
Be a part of an historical event
Swim the famous Waikiki coastline
Meet people
View scenery
Do something different
Win a prize
Gain greater acceptance from peer(s)
Conquer fear(s)
Gain greater acceptance from peer(s)

Mean
Challenge myself physically
Do something exciting
Continue a personal tradition
Swim in a warm open water swim
Promote health and fitness
Challenge myself physically
Meet people
Participate with teammates (s)
Swim in the famous Waikiki coastline
Be a part of an historical event
Relax
Participate with person (s) other than teammate (s)
Experience a high level of competition
View scenery
Challenge myself mentally
Mean
Figure 11. Cluster 5: Mildly Driven (n = 43)
prize” (4.05), “experience a high level of competition” (4.70), and “place well in my age group” (4.98). Their highest average level of importance related to the motives “challenge myself physically” (5.14) and “challenge myself mentally” (5.02) though compared to the other clusters these averages were low. Compared to the other clusters, on average they ascribed the lowest importance to promoting “health and fitness”, although this average was relatively high (4.51).

Cluster 6 comprised 15.0% of the cases in the analysis and was labeled, “Aloof Health and Fitness Aficionados” (Figure 12). Members within this cluster ascribed high levels of importance to promoting “health and fitness” (6.28), “challenge myself physically” (6.09) and “challenge myself mentally” (5.94). On average, they ascribed the lowest levels of importance to items relating to acceptance from peers, those concerning competition, and extrinsic achievement such as “win a prize” (1.43) and “place well in my age group” (2.81).

These clusters show significant differences among respondents with respect to their motives to compete in the WRS. The names of the clusters were created to describe which motives distinguished each cluster. Motives related to competition, socialization, and camaraderie, but not extrinsic-related motives distinguished the clusters.

The appropriateness of selecting the six-cluster solution for study was corroborated by the fact that the five-cluster solution merged the Hyper-motivateds (Cluster 4) and the Aloof Health and Fitness Aficionados (Cluster 6), groups that clearly displayed distinctly different motives for participation. For example, the mean level of importance ascribed to “gain greater acceptance from peers” was 5.27 in the
Figure 12. Cluster 6: Aloof Health and Fitness Aficionados (n = 47)
Modified athletic identity measurement scale. Responses to the modified AIMS were given on a Likert-type scale from 1 (“strongly disagree”) to 5 (“strongly agree”). On average, responses to the 11-item battery were the highest for “I consider myself an athlete” (4.23), and lowest for “I spend more time thinking about sports than anything else” (2.70). The average for a scale that combined all items was 3.54 out of a possible 5 (Table 5; Figure 13).

Presence of athletic identity within clusters. Because athletic identity has been cited in past research as a motive for participating in sports tourism, the results of this scale were analyzed within the six clusters described above. Mean levels of athletic identity were highest among Hyper-motivateds (4.30), followed by Sociable Health and Fitness Aficionados (3.71), Mildly Drivens (3.65), Intensely Driven Individualists (3.57), Aloof Health and Fitness Aficionados (3.30), and Laid-backs (3.02). The differences between these means were statistically significant ($p < 0.001$). Differences between mean responses to individual items in the battery were also statistically significant at $p = 0.025$ or lower (Table 6).

Short flow state scale (S FSS). Responses were given on a Likert-type scale from 1 (“strongly disagree”) to 5 (“strongly agree”). On average, the item to which participants ascribed the highest level of agreement was “I felt I was competent enough
Table 5. Modified Athletic Identity Measurement Scale results in ascending order.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I spend more time thinking about sports than anything else”</td>
<td>1</td>
<td>5</td>
<td>2.70</td>
<td>1.248</td>
</tr>
<tr>
<td>“I want other people to perceive me mainly as an athlete”</td>
<td>1</td>
<td>5</td>
<td>3.04</td>
<td>1.174</td>
</tr>
<tr>
<td>“Sports is the most important part of my life”</td>
<td>1</td>
<td>5</td>
<td>3.14</td>
<td>1.223</td>
</tr>
<tr>
<td>“I feel bad about myself when I do poorly in sports”</td>
<td>1</td>
<td>5</td>
<td>3.16</td>
<td>1.178</td>
</tr>
<tr>
<td>“I need to participate in sports to feel good about myself”</td>
<td>1</td>
<td>5</td>
<td>3.31</td>
<td>1.267</td>
</tr>
<tr>
<td>“A lot of my life is organized around sports”</td>
<td>1</td>
<td>5</td>
<td>3.70</td>
<td>1.127</td>
</tr>
<tr>
<td>“I would be very depressed if I were injured and could not participate in sports”</td>
<td>1</td>
<td>5</td>
<td>3.82</td>
<td>1.121</td>
</tr>
<tr>
<td>“When I am participating in sports I can really be myself”</td>
<td>1</td>
<td>5</td>
<td>3.87</td>
<td>0.971</td>
</tr>
<tr>
<td>“I have many goals related to sports”</td>
<td>1</td>
<td>5</td>
<td>3.97</td>
<td>0.987</td>
</tr>
<tr>
<td>“I enjoy discussing sports with my friends”</td>
<td>1</td>
<td>5</td>
<td>3.98</td>
<td>0.956</td>
</tr>
<tr>
<td>“I consider myself an athlete”</td>
<td>1</td>
<td>5</td>
<td>4.23</td>
<td>0.818</td>
</tr>
<tr>
<td>AIMS</td>
<td></td>
<td></td>
<td>3.54</td>
<td>0.807</td>
</tr>
</tbody>
</table>

Note: Scale ranged from 1 (“strongly disagree”) to 5 (“strongly agree”).
1. 

I consider myself an athlete.

2. 

I enjoy discussing sports with my friends.

3. 

I have many goals related to sports.

4. 

When I am participating in sports I can really be myself.

5. 

I feel bad about myself when I do poorly in sports.

6. 

Sports is the most important part of my life.

7. 

A lot of my life is organized around sports.

8. 

I would be very depressed if I were injured and could not participate in sports.

9. 

I want other people to perceive me mainly as an athlete.

10. 

I need to participate in sports to feel good about myself.

11. 

I would be very depressed if I were in injured and could not participate in sports.

12. 

Sports is the most important part of my life.

AIMS Figure 13. Degree of Athletic Identity for Entire Sample.
### Table 6. Mean levels of athletic identity, by cluster membership.

<table>
<thead>
<tr>
<th>Statement</th>
<th>All in Analysis</th>
<th>Cluster 1</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
<th>Cluster 5</th>
<th>Cluster 6</th>
<th>F Ratio</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensely Driven Individuals</td>
<td></td>
<td>(n = 33)</td>
<td>(n = 69)</td>
<td>(n = 66)</td>
<td>(n = 43)</td>
<td>(n = 39)</td>
<td>(n = 44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I consider myself an athlete</td>
<td>4.24</td>
<td>4.33</td>
<td>4.00</td>
<td>4.29</td>
<td>4.72</td>
<td>4.15</td>
<td>4.09</td>
<td>4.94</td>
<td>0.000 *</td>
</tr>
<tr>
<td>I have many goals related to sport</td>
<td>3.99</td>
<td>4.21</td>
<td>3.61</td>
<td>4.06</td>
<td>4.63</td>
<td>3.87</td>
<td>3.82</td>
<td>7.20</td>
<td>0.000 *</td>
</tr>
<tr>
<td>I enjoy discussing sports with my friends</td>
<td>4.00</td>
<td>4.27</td>
<td>3.39</td>
<td>4.03</td>
<td>4.63</td>
<td>4.05</td>
<td>4.07</td>
<td>12.11</td>
<td>0.000 *</td>
</tr>
<tr>
<td>Sports is the most important part of my life</td>
<td>3.13</td>
<td>3.06</td>
<td>2.32</td>
<td>3.41</td>
<td>4.08</td>
<td>3.51</td>
<td>2.77</td>
<td>17.66</td>
<td>0.000 *</td>
</tr>
<tr>
<td>I spend more time thinking about sports than anything else</td>
<td>2.72</td>
<td>2.54</td>
<td>2.01</td>
<td>2.98</td>
<td>3.74</td>
<td>3.04</td>
<td>2.27</td>
<td>15.73</td>
<td>0.000 *</td>
</tr>
<tr>
<td>I need to participate in sports to feel good about myself</td>
<td>3.30</td>
<td>3.36</td>
<td>2.45</td>
<td>3.64</td>
<td>4.23</td>
<td>3.54</td>
<td>2.93</td>
<td>15.30</td>
<td>0.000 *</td>
</tr>
<tr>
<td>I want other people to perceive me mainly as an athlete</td>
<td>3.05</td>
<td>2.94</td>
<td>2.59</td>
<td>3.26</td>
<td>4.07</td>
<td>3.31</td>
<td>2.34</td>
<td>15.27</td>
<td>0.000 *</td>
</tr>
<tr>
<td>I feel bad about myself when I do poorly in sports</td>
<td>3.20</td>
<td>3.03</td>
<td>2.84</td>
<td>3.36</td>
<td>3.93</td>
<td>3.33</td>
<td>2.80</td>
<td>6.68</td>
<td>0.000 *</td>
</tr>
<tr>
<td>I would be very depressed if I were injured and could not participate in sports</td>
<td>3.83</td>
<td>4.03</td>
<td>3.48</td>
<td>3.92</td>
<td>4.19</td>
<td>3.74</td>
<td>3.84</td>
<td>2.62</td>
<td>0.025 *</td>
</tr>
<tr>
<td>When I am participating in sports I can really be myself</td>
<td>3.87</td>
<td>3.94</td>
<td>3.36</td>
<td>3.97</td>
<td>4.54</td>
<td>3.80</td>
<td>3.91</td>
<td>8.71</td>
<td>0.000 *</td>
</tr>
<tr>
<td>A lot of my life is organized around sports</td>
<td>3.70</td>
<td>3.54</td>
<td>3.14</td>
<td>3.85</td>
<td>4.54</td>
<td>3.85</td>
<td>3.52</td>
<td>9.78</td>
<td>0.000 *</td>
</tr>
<tr>
<td>AIMS</td>
<td>3.55</td>
<td>3.57</td>
<td>3.02</td>
<td>3.71</td>
<td>4.30</td>
<td>3.65</td>
<td>3.30</td>
<td>18.84</td>
<td>0.000 *</td>
</tr>
</tbody>
</table>
to meet the demands of the swim” (4.32) and the item to which participants ascribed the
lowest level of agreement was “I had a good idea about how well I was doing while I
was involved in the swim” (3.76). The total score for the S FSS was 3.94 out of 5,
demonstrating an above-average level of flow experienced within the sample (Table 7;
Figure 14).

**Presence of flow within clusters.** In order to investigate various levels of flow
experienced within groups of sports tourists, mean levels of flow were computed for
each of the six clusters described above. On average, reported levels of flow were
highest among Hyper-motivateds (4.36), Intensely Driven Individualists (4.05), and
Sociable Health and Fitness Aficionados (4.00), followed by Aloof Health and Fitness
Aficionados (3.95), Mildly Drivens (3.68), and Laid-backs (3.63). Differences between
mean responses to individual items in the battery were also statistically significant at
$p = 0.004$ or lower (Table 8).

The Pearson correlation between the modified AIMS and S FSS was 0.375 ($p <
0.001$). This suggests that these two variables are positively but imperfectly related and
other variable(s) might have intervened in the relationship between them.

The Pearson correlation between the modified AIMS and final times was -0.439
($p < 0.001$). If these final times are used to operationally define an “elite athlete”, this
finding corroborates those of Lamont-Mills and Christensen (2006), who discovered that
elite athletes displayed significantly higher levels of athletic identity than recreational
participants.
Table 7. Descriptive statistics for S FSS battery and scale.

<table>
<thead>
<tr>
<th>Feeling During Swim</th>
<th>(n=370)</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I had a good idea about how well I was doing while I was involved in the swim”</td>
<td>1-5</td>
<td>3.76</td>
<td>0.864</td>
</tr>
<tr>
<td>“I had a feeling of total control over what I was doing during the swim”</td>
<td>1-5</td>
<td>3.78</td>
<td>0.936</td>
</tr>
<tr>
<td>“The way time passed seemed to be different from normal during the swim”</td>
<td>1-5</td>
<td>3.80</td>
<td>0.966</td>
</tr>
<tr>
<td>“I did things spontaneously and automatically without having to think during the swim”</td>
<td>1-5</td>
<td>3.82</td>
<td>0.947</td>
</tr>
<tr>
<td>“I was completely focused on the task at hand during the swim”</td>
<td>1-5</td>
<td>3.83</td>
<td>0.915</td>
</tr>
<tr>
<td>“I was not worried about what others may have been thinking of me during the swim”</td>
<td>1-5</td>
<td>3.91</td>
<td>1.018</td>
</tr>
<tr>
<td>“I had a strong sense of what I wanted to do during the swim”</td>
<td>1-5</td>
<td>3.98</td>
<td>0.815</td>
</tr>
<tr>
<td>“I found the experience I had during the swim extremely rewarding”</td>
<td>1-5</td>
<td>4.24</td>
<td>0.817</td>
</tr>
<tr>
<td>“I felt I was competent enough to meet the demands of the swim”</td>
<td>1-5</td>
<td>4.32</td>
<td>0.753</td>
</tr>
<tr>
<td>S FSS</td>
<td>1-5</td>
<td>3.94</td>
<td>0.568</td>
</tr>
</tbody>
</table>

Note: Scale ran from 1 (“strongly disagree”) to 5 (“strongly agree”).
I felt I was competent enough to meet the demands of the swim.

I felt I was completely enough to meet the task.

I had a strong sense of what I wanted to do during the swim.

I may have been thinking of me during the swim.

I was not worried about what others may have been thinking of me during the swim.

I was completely focused on the task during the swim.

I did things spontaneously and automatically without having to think during the swim.

The way time passed seemed to be different from normal during the swim.

I had a feeling of total control over what I was doing during the swim.

I had a good idea about how well I was doing while I was involved in the swim.

I had a feeling of total control over what I was doing during the swim.

I found the experience I had during the swim extremely rewarding.

The way I felt during the swim was doing while I was involved in the swim.

Figure 14. Level of Flow Experienced for Entire Sample
Table 8. Mean levels of flow, by cluster membership.

<table>
<thead>
<tr>
<th>Feeling During the Swim</th>
<th>All in Analysis (n = 305)</th>
<th>Cluster 1 Intensely Driven Individualists (n = 34)</th>
<th>Cluster 2 Laid-backs (n = 69)</th>
<th>Cluster 3 Sociable Health and Fitness Aficionados (n = 68)</th>
<th>Cluster 4 Hyper-motivateds (n = 46)</th>
<th>Cluster 5 Mildly Driven Aficionados (n = 42)</th>
<th>Cluster 6 Aloof Health and Fitness Aficionados (n = 46)</th>
<th>F Ratio</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Competent enough”</td>
<td>4.32</td>
<td>4.56</td>
<td>4.01</td>
<td>4.31</td>
<td>4.54</td>
<td>4.29</td>
<td>4.41</td>
<td>3.99</td>
<td>0.002 *</td>
</tr>
<tr>
<td>“Did things spontaneously”</td>
<td>3.80</td>
<td>3.82</td>
<td>3.81</td>
<td>3.71</td>
<td>4.25</td>
<td>3.43</td>
<td>3.80</td>
<td>3.52</td>
<td>0.004 *</td>
</tr>
<tr>
<td>“Strong sense of what I wanted to do”</td>
<td>3.97</td>
<td>3.91</td>
<td>3.67</td>
<td>4.12</td>
<td>4.35</td>
<td>3.79</td>
<td>4.02</td>
<td>5.01</td>
<td>0.000 *</td>
</tr>
<tr>
<td>“Idea about how well I was doing”</td>
<td>3.76</td>
<td>3.79</td>
<td>3.51</td>
<td>3.88</td>
<td>4.20</td>
<td>3.48</td>
<td>3.74</td>
<td>4.82</td>
<td>0.000 *</td>
</tr>
<tr>
<td>“Completely focused on task”</td>
<td>3.82</td>
<td>4.12</td>
<td>3.39</td>
<td>3.96</td>
<td>4.37</td>
<td>3.64</td>
<td>3.61</td>
<td>8.72</td>
<td>0.000 *</td>
</tr>
<tr>
<td>“Feeling of total control”</td>
<td>3.74</td>
<td>3.76</td>
<td>3.45</td>
<td>3.84</td>
<td>4.33</td>
<td>3.43</td>
<td>3.70</td>
<td>6.37</td>
<td>0.000 *</td>
</tr>
<tr>
<td>“Not worried about what others were thinking”</td>
<td>3.90</td>
<td>4.09</td>
<td>3.83</td>
<td>3.82</td>
<td>4.26</td>
<td>3.40</td>
<td>4.06</td>
<td>3.81</td>
<td>0.002 *</td>
</tr>
<tr>
<td>“Time passed differently”</td>
<td>3.82</td>
<td>3.91</td>
<td>3.35</td>
<td>3.98</td>
<td>4.35</td>
<td>3.64</td>
<td>3.83</td>
<td>7.17</td>
<td>0.000 *</td>
</tr>
<tr>
<td>“Experience was rewarding”</td>
<td>4.23</td>
<td>4.47</td>
<td>3.70</td>
<td>4.37</td>
<td>4.65</td>
<td>4.05</td>
<td>4.39</td>
<td>11.72</td>
<td>0.000 *</td>
</tr>
<tr>
<td>S FSS</td>
<td>3.93</td>
<td>4.05</td>
<td>3.63</td>
<td>4.00</td>
<td>4.36</td>
<td>3.68</td>
<td>3.95</td>
<td>12.830</td>
<td>0.000 *</td>
</tr>
</tbody>
</table>

* indicates statistical significance.
**Goals for the competition.** The most frequently cited goal was to “finish the race” (36.2%), followed by “get a best time” (20.1%), “place in my age-group” (16.7%), “beat another participant” (14.2%), and “didn’t have any goals” (5.9%). Write-in responses of 1.6% or less included: “enjoy myself”, “have fun”, “achieve an intangible goal”, “other”, “achieve a particular time or placement goal or award”, “achieve a fitness or training goal”, “continue a personal tradition”, “see fish”, “challenge myself”, “work hard”, “suffer and go again”, and “help someone”.

**Challenges present in the WRS.** When presented with a list of five possible challenges encountered during the race, the most frequently cited response was “none of these” (51%). “Strong current” was cited by 15.3% of respondents, followed by “jellyfish” (14.6%), “poor water clarity” (5.4%), “other swimmers/ too crowded” (3.4%), “large swell” (2.9%), and “personal” (2.4%). Less than 2% checked “other” and wrote in such challenges as “equipment issues”, “high wind”, “navigation”, “missed buoy”, “hot water”, and “course set-up inadequate”.

**Final times.** Reported times were converted to a common unit of seconds for analytical purposes. Results ranged from 2700 seconds (45 minutes) to 8760 seconds (2:26 minutes). The average time of respondents was 4554.56 seconds (1:15.91), and the median time was 4440.00 seconds (1:14.00). Because only one clock was present at the finish line, results pertaining to this question to some extent may have been affected by sampling error and/or non-response bias (269 respondents answered the question). Official race results reported online showed an average time of 4926.67 seconds.
(1:22.11) and a median time of 1:20.44. On average, Mildly Drivens reported the fastest times (1:06.62), followed by Hyper-motivateds (1:09.65), Laid-backs (1:15.78), Sociable Health and Fitness Aficionados (1:16.89), Intensely Driven Individualists (1:17.78), and Aloof Health and Fitness Aficionados (1:27.75).

**Residency status.** Eighty-eight percent of the sample responded to the question regarding residency status. Residents, those living on O‘ahu for six months per year or more, represented 67.1% of this total, and non-residents represented 32.9%.

**Trip Characteristics**

Of the non-residents, 96.7% planned to swim in the WRS before leaving home. The length of non-residents’ trips ranged from 1 to 305 days and averaged 11.42 days. However, the existence of one outlier resulted in the median trip length of 7 days being the best measure of central tendency. An estimated 42.4% of traveler respondents reported that the WRS as well as some other purpose motivated their trip, whereas 33.6% reported that the WRS was the sole purpose of their trip (Table 9).
Table 9. Non-resident respondents’ trip purposes.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participate in the WRS 2011</td>
<td>48.0</td>
</tr>
<tr>
<td>Recreation</td>
<td>28.8</td>
</tr>
<tr>
<td>Maui Channel Swim/ Relay</td>
<td>8.1</td>
</tr>
<tr>
<td>Visit relative(s) and/or friend(s)</td>
<td>7.1</td>
</tr>
<tr>
<td>Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Social event (birthday party/ class reunion)</td>
<td>1.5</td>
</tr>
<tr>
<td>Vacation, holiday</td>
<td>1.5</td>
</tr>
<tr>
<td>Other Swimming Competitions</td>
<td>1.0</td>
</tr>
<tr>
<td>Dick Evans bicycle competition</td>
<td>0.5</td>
</tr>
<tr>
<td>Other</td>
<td>0.5</td>
</tr>
<tr>
<td>Convention or meeting</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Demographic and Socioeconomic Characteristics**

Age of participants ranged from nine to 77 years and averaged 36.90 years.

Males represented 62.4% of the sample and females represented 37.6%. The number of years of formal schooling completed ranged from four to 24 years and averaged 17.44 years, which equates to over four years of undergraduate college education. The highest percentage (24.5%) of participants completed 17 years of school (four years of undergraduate education); the next highest percentage (15.9%) completed 19 years, or two years of graduate education.

Ninety-one percent of the sample resided in the United States or Canada. Those who did not reside in the United States or Canada reported residing in Australia (5.2%), the United Kingdom (0.7%), New Zealand (0.7%), or Japan (0.2%). Fifty-eight percent of participants belonged to swimming organizations or clubs. The most frequently cited teams or organizations were the University of Hawai‘i Masters (6.9%), Kamehameha Swim Club (5.6%), and the University of Hawai‘i Intercollegiate Varsity
Team (4.7%). A complete list of represented teams and swimming organizations is provided in Appendix C.

The most frequently cited annual household income levels of respondents were $150,000 or more (27.6%), followed by $100,000 to $149,999 (22.7%), $75,000 to $99,999 (19.3%), $50,000 to $74,999 (13.0%), under $30,000 (9.9%), and $30,000 to $49,999 (7.5%) (Table 10). This differs greatly from patterns of overall levels of income in the United States as a whole (Figure 15).

### Table 10. Respondents’ 2010 total household incomes before taxes.

<table>
<thead>
<tr>
<th>Income Bracket</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>$30,000 to $49,999</td>
<td>7.5</td>
</tr>
<tr>
<td>Under $30,000</td>
<td>9.9</td>
</tr>
<tr>
<td>$50,000 to $74,999</td>
<td>13.0</td>
</tr>
<tr>
<td>$75,000 to $99,999</td>
<td>19.3</td>
</tr>
<tr>
<td>$100,000 to $149,999</td>
<td>22.7</td>
</tr>
<tr>
<td>$150,000 or more</td>
<td>27.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Summary**

Overall, respondents had a history of participating in open water swims. They were primarily motivated by such intrinsic, competitive motives as a desire to meet personal challenges, enhance health and fitness, and accomplish goals. Respondents were less motivated by extrinsic factors such as winning a prize or gaining social acceptance. Respondents reported above-average levels of athletic identity and flow. The most frequently cited goal was to “finish the race” and most participants cited no noteworthy challenge with external elements during the swim.
Figure 15. 2010 Pre-Tax Household Incomes of American WRS Respondents Versus U.S. Households
Respondents on average were age 37, 62.4% were male, and 58.3% were members of swimming organizations or clubs. Their average level of education was equivalent to a four-year college degree, and the modal annual household income level before taxes was $150,000 or more.

Those who traveled to the competition represented 28.9% of the sample. Most of these travelers planned to participate in the competition before leaving home and the median length of stay was seven days. Over a third traveled primarily to participate in the event, and nearly half of those who traveled came to swim in the WRS 2011 as well as for another purpose. In the next chapter comparisons will be made between the motives, characteristics, and behavior patterns of these travelers versus residents of O‘ahu.
Chapter V

Comparisons of Resident Versus Non-Resident Participants in the WRS

In this chapter the motives, characteristics, and behavior patterns of resident versus non-resident respondents are compared. The purpose of the chapter is to report insights into sports tourist behavior obtained by using resident respondents as a benchmark against which to compare tourist respondents. T-tests were conducted on variables measured on an interval or ratio scale and contingency table analyses were conducted on variables measured on a nominal scale. Of the 419 respondents, 58.9% identified themselves as residents of O‘ahu (living on O‘ahu for six months per year or more), 28.9% identified themselves as non-residents, and 12.2% did not respond.

This chapter is divided into three sections. The first section compares residents’ and non-residents’ backgrounds as open water swimmers, including training regimens leading up to the event. Section two compares the motives, experiences, and goals of residents versus non-residents during the event, including results on scales measuring athletic identity and flow. Section three compares the demographic and socioeconomic characteristics of the two groups.

Open Water Swimming Background of Participants

Residents and non-residents displayed diverse histories of participating in open water swimming competitions.
**Previous competitions.** When presented with a question regarding previous participation in an open water swimming competition, 92.4% of non-residents and 85.2% of residents responded affirmatively, not a statistically significant difference \( p < 0.054 \) (Table 11). Residents swam an average of 7.25 open water races within the past three years, whereas non-residents swam an average of 12.11 races, a statistically significant difference \( p < 0.001 \).

When asked what year respondents first competed in an open water swim, on average residents began their competitive open water swimming in 2003, while non-residents on average began in 1995, a statistically significant difference \( p < 0.001 \). Non-residents represented 86.8% of those who had previously traveled to an open water swimming competition, whereas residents represented 18.0%, a statistically significant difference \( p < 0.001 \).

In summary, non-residents more frequently participated in open water swimming competitions, were more likely to have traveled to participate in an open water swimming competition, and on average were involved in the sport for eight years longer. These findings corroborate those of Ryan and Lockyer (2002) who found non-resident participants to be more experienced Masters Games competitors than residents \( p < 0.001 \).

**Competing away versus competing at home.** Respondents were asked, “Have you ever participated in an open water swimming competition away from home?” Those who answered in the affirmative were then asked to indicate the extent to which
Table 11. Previous open water swimming experience of resident versus non-resident respondents.

<table>
<thead>
<tr>
<th>Variable</th>
<th>All in Analysis</th>
<th>Residents</th>
<th>Non-Residents</th>
<th>Test Statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=362</td>
<td>n=244</td>
<td>n=118</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous participation in an open water swim competition (%)</td>
<td>87.6</td>
<td>85.2</td>
<td>92.4</td>
<td>$\chi^2 = 3.71$</td>
<td>0.054</td>
</tr>
<tr>
<td>Number of open water swims completed in past 3 yrs. (years)</td>
<td>n=308</td>
<td>n=204</td>
<td>n=104</td>
<td>$t = -0.37$</td>
<td>0.000 *</td>
</tr>
<tr>
<td>Year first competed in an open water swim (year)</td>
<td>2000.28</td>
<td>2003.25</td>
<td>1994.64</td>
<td>$t = 5.99$</td>
<td>0.000 *</td>
</tr>
<tr>
<td>Have you traveled to an OWSC? (%) yes</td>
<td>n=312</td>
<td>n=206</td>
<td>n=106</td>
<td>$\chi^2 = 136.73$</td>
<td>0.000 *</td>
</tr>
</tbody>
</table>
11 factors enhanced or detracted from their “experience competing away from home” on a scale from 1 (“strongly enhances”) to 5 (“strongly detracts”).

Factors that strongly enhanced residents’ experiences competing away from home included “warmer climate” (2.37), “added pressure to perform well” (2.49), and “being away from work” (2.55) (Table 12). Elements that strongly detracted from residents’ experiences included “colder climate” (3.58), “sleeping away from home” (3.25), and “being away from my normal routine” (3.22).

Factors that most strongly enhanced non-residents’ experiences included “traveling to the destination” (1.76), “warmer climate” (2.13), and “being away from work” (2.28). Factors that strongly detracted from non-residents’ away-from-home experiences included “colder climate” (3.63), “being away from my friend(s)” (3.21), and “availability of food for my chosen diet” (3.08).

Statistically significant differences emerged in the case of two factors: “traveling to the destination” ($p < 0.001$) and “water temperature” ($p < 0.006$), suggesting these two elements more greatly enhance the away from home experience for non-residents than residents.

**Ability to travel away from home for an open water swimming competition.**

Residents most frequently cited “finances” (22.8%), “time off from work” (19.9%), “location of the competition” (18.3%), and “time of year” (11.6%) as factors determining their ability to travel for an open water swimming competition. Non-residents most frequently cited “location of the competition” (23.4%), “finances” (21.7%), “time off from work” (19.1%), and “time of year” (13.7%) as factors
### Table 12. Extent to which residents versus non-residents reported that various factors enhanced or detracted from away-from-home open water swimming competitions.

<table>
<thead>
<tr>
<th>Element</th>
<th>All in Analysis (n=149)</th>
<th>Residents (n=67)</th>
<th>Non-Residents (n=82)</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traveling to the destination</td>
<td>2.19</td>
<td>2.73</td>
<td>1.76</td>
<td>5.92</td>
<td>0.000 *</td>
</tr>
<tr>
<td>Sleeping away from home</td>
<td>3.04</td>
<td>3.25</td>
<td>2.87</td>
<td>2.58</td>
<td>0.011 *</td>
</tr>
<tr>
<td>Being away from my normal routine</td>
<td>3.00</td>
<td>3.22</td>
<td>2.82</td>
<td>2.53</td>
<td>0.012 *</td>
</tr>
<tr>
<td>Availability of food for my chosen diet</td>
<td>2.99</td>
<td>2.88</td>
<td>3.08</td>
<td>-1.27</td>
<td>0.206</td>
</tr>
<tr>
<td>Warmer water temperature</td>
<td>2.56</td>
<td>2.69</td>
<td>2.45</td>
<td>1.30</td>
<td>0.197</td>
</tr>
<tr>
<td>Being away from my family</td>
<td>3.11</td>
<td>3.16</td>
<td>3.07</td>
<td>0.76</td>
<td>0.446</td>
</tr>
<tr>
<td>Being away from my friend(s)</td>
<td>3.19</td>
<td>3.16</td>
<td>3.21</td>
<td>-0.40</td>
<td>0.689</td>
</tr>
<tr>
<td>Being away from work</td>
<td>2.40</td>
<td>2.55</td>
<td>2.28</td>
<td>1.59</td>
<td>0.115</td>
</tr>
<tr>
<td>Colder climate</td>
<td>3.61</td>
<td>3.58</td>
<td>3.63</td>
<td>-0.35</td>
<td>0.726</td>
</tr>
<tr>
<td>Warmer climate</td>
<td>2.24</td>
<td>2.37</td>
<td>2.13</td>
<td>1.64</td>
<td>0.103</td>
</tr>
<tr>
<td>Added pressure to perform well</td>
<td>2.50</td>
<td>2.49</td>
<td>2.50</td>
<td>-0.05</td>
<td>0.959</td>
</tr>
</tbody>
</table>

Note: Scale ran from 1 (“strongly enhances”) to 5 (“strongly detracts”).
determining their ability to travel for an open water swimming competition. Statistical
tests were precluded by the multiple-response nature of the question that generated these
results.

**Training for the competition.** When asked if participants had trained for the
competition, 86.0% of non-residents and 78.5% of residents responded affirmatively,
not a statistically significant difference ($p < 0.086$). Those who responded affirmatively
were then asked the extent to which they had trained alone. Among residents, the most
frequent responses were: did not train alone (34.9%), followed by trained alone (19.9%),
“rarely” trained alone (16.7%), “mostly” trained alone (16.7%), and trained alone “about
half the time” (11.8%). Among non-residents, the most frequent responses were: did not
train alone (32.4%), followed by “rarely” trained alone (25.5%), “mostly training alone”
(17.6%), trained alone “about half the time” (13.7%), and trained alone (10.8%). There
were no statistically significant differences within the two groups ($p < 0.183$). Similarly,
no statistically significant differences emerged in terms of the hours residents versus
non-residents spent swimming ($p < 0.263$), or whether members of these groups had
any “regular training partners” ($p < 0.073$).

Ninety percent of residents had access to open water in which they were able to
train, whereas 74.5% of non-residents had access to open water, a statistically significant
difference ($p < 0.001$). This confirms our intuition that some non-residents may have had
less opportunity to train in open water compared to those living on an island. Complete
results of resident and non-resident participant training preparation are provided in Table
13.
Table 13. Training regimes of resident versus non-resident respondents.

<table>
<thead>
<tr>
<th>Variable</th>
<th>All in Analysis n=367</th>
<th>Residents n=246</th>
<th>Non-Residents n=121</th>
<th>Test Statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you train for this competition? (% yes)</td>
<td>80.9</td>
<td>78.5</td>
<td>86.0</td>
<td>$\chi^2 = 2.95$</td>
<td>0.086</td>
</tr>
<tr>
<td>Did you train alone? (%)</td>
<td></td>
<td>n=288</td>
<td>n=186</td>
<td>n=102</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>16.7</td>
<td>19.9</td>
<td>10.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mostly</td>
<td>17.0</td>
<td>16.7</td>
<td>17.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>About half the time</td>
<td>12.5</td>
<td>11.8</td>
<td>13.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rarely</td>
<td>19.8</td>
<td>16.7</td>
<td>25.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>34.0</td>
<td>34.9</td>
<td>32.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours/week spent swimming during training? (avg.)</td>
<td>7.42</td>
<td>7.11</td>
<td>7.96</td>
<td>$t = -1.12$</td>
<td>0.263</td>
</tr>
<tr>
<td>Access to open water for training? (%)</td>
<td>84.6</td>
<td>90.2</td>
<td>74.5</td>
<td>$\chi^2 = 12.29$</td>
<td>0.000 *</td>
</tr>
<tr>
<td>Any regular training partners? (%)</td>
<td>70.4</td>
<td>66.8</td>
<td>77.0</td>
<td>$\chi^2 = 3.21$</td>
<td>0.073</td>
</tr>
</tbody>
</table>
Results Focused on the 2011 WRS

This section reports differences in the preparation for the WRS between residents versus non-residents. The motives of, and degrees of athletic identity and flow experienced by, the two groups are compared. The goals, challenges, and final times of residents versus non-residents are also compared.

**Preparation for the event.** Thirty-two percent of residents and 25.2% of non-residents belonged to teams that came together to participate in the WRS; not a statistically significant difference ($p < 0.184$). On average, non-residents registered 81.35 days prior to the event, whereas residents registered an average of 53.03 days in advance, a statistically significant difference ($p < 0.006$). This suggests non-residents were less spontaneous in their planning than residents. No statistically significant differences emerged with respect to propensity to register with another person ($p < 0.128$) or to compete in the newly offered fins division ($p < 0.406$) (Table 14).

**Motives for participation.** Compared to residents, non-residents ascribed greater importance at a statistically significant level to “do something exciting” ($p < 0.010$), “challenge myself mentally” ($p < 0.033$), “swim the famous Waikīkī coastline” ($p < 0.002$), “be a part of an historical event” ($p < 0.001$), “swim in a warm open water swim” ($p < 0.038$), “continue a personal tradition” ($p < 0.042$), and “experience a high level of competition” ($p < 0.048$), but less importance to “conquer fear” ($p < 0.042$) (Table 15; Figure 16).
<table>
<thead>
<tr>
<th>Variable</th>
<th>All in Analysis</th>
<th>Residents</th>
<th>Non-Residents</th>
<th>Test Statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member of a team that came to participate in the WRS (% yes)</td>
<td>n=358</td>
<td>n=243</td>
<td>n=115</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>29.9</td>
<td>32.1</td>
<td>25.2</td>
<td>$\chi^2 = 1.76$</td>
<td>0.184</td>
</tr>
<tr>
<td>Number of days signed up prior to the event (avg.)</td>
<td>n=335</td>
<td>n=223</td>
<td>n=112</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>62.50</td>
<td>53.03</td>
<td>81.35</td>
<td>$t = -4.77$</td>
<td>0.006 *</td>
</tr>
<tr>
<td>Signed up for the WRS with another person (% yes)</td>
<td>n=322</td>
<td>n=217</td>
<td>n=105</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>42.5</td>
<td>39.6</td>
<td>48.6</td>
<td>$\chi^2 = 2.31$</td>
<td>0.128</td>
</tr>
<tr>
<td>Competed in the fins division (% yes)</td>
<td>n=358</td>
<td>n=242</td>
<td>n=116</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.7</td>
<td>2.1</td>
<td>0.9</td>
<td>$\chi^2 = 0.69$</td>
<td>0.406</td>
</tr>
</tbody>
</table>
### Table 15. Motives of resident versus non-resident respondents.

<table>
<thead>
<tr>
<th>Motive</th>
<th>All in Analysis (n=300)</th>
<th>Residents (n=212)</th>
<th>Non-Residents (n=88)</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accomplish goal(s)</td>
<td>5.35</td>
<td>5.28</td>
<td>5.50</td>
<td>-1.09</td>
<td>0.276</td>
</tr>
<tr>
<td>Conquer fear</td>
<td>3.18</td>
<td>3.34</td>
<td>2.80</td>
<td>2.04</td>
<td>0.042 *</td>
</tr>
<tr>
<td>Promote health and fitness</td>
<td>5.61</td>
<td>5.61</td>
<td>5.59</td>
<td>0.11</td>
<td>0.909</td>
</tr>
<tr>
<td>Do something different</td>
<td>4.86</td>
<td>4.82</td>
<td>4.96</td>
<td>-0.62</td>
<td>0.533</td>
</tr>
<tr>
<td>Do something exciting</td>
<td>5.39</td>
<td>5.26</td>
<td>5.70</td>
<td>-2.61</td>
<td>0.010 *</td>
</tr>
<tr>
<td>Get in touch with myself spiritually</td>
<td>3.72</td>
<td>3.78</td>
<td>3.59</td>
<td>0.68</td>
<td>0.498</td>
</tr>
<tr>
<td>Challenge myself physically</td>
<td>5.75</td>
<td>5.68</td>
<td>5.90</td>
<td>-1.19</td>
<td>0.234</td>
</tr>
<tr>
<td>Challenge myself mentally</td>
<td>5.47</td>
<td>5.34</td>
<td>5.78</td>
<td>-2.14</td>
<td>0.033 *</td>
</tr>
<tr>
<td>Participate in an event with teammate(s)</td>
<td>4.09</td>
<td>4.11</td>
<td>4.03</td>
<td>0.28</td>
<td>0.776</td>
</tr>
<tr>
<td>Participate with person(s) other than teammate(s)</td>
<td>3.99</td>
<td>3.89</td>
<td>4.22</td>
<td>-1.22</td>
<td>0.224</td>
</tr>
<tr>
<td>Meet people</td>
<td>3.78</td>
<td>3.72</td>
<td>3.94</td>
<td>-0.92</td>
<td>0.361</td>
</tr>
<tr>
<td>Gain greater acceptance from peer(s)</td>
<td>3.01</td>
<td>3.09</td>
<td>2.82</td>
<td>1.09</td>
<td>0.275</td>
</tr>
<tr>
<td>Swim the famous Waikiki coastline</td>
<td>4.55</td>
<td>4.33</td>
<td>5.07</td>
<td>-3.15</td>
<td>0.002 *</td>
</tr>
<tr>
<td>View scenery</td>
<td>4.64</td>
<td>4.50</td>
<td>4.97</td>
<td>-1.91</td>
<td>0.057</td>
</tr>
<tr>
<td>Be a part of a historical event</td>
<td>4.28</td>
<td>4.04</td>
<td>4.85</td>
<td>-3.39</td>
<td>0.001 *</td>
</tr>
<tr>
<td>Swim in a warm open water swim</td>
<td>4.84</td>
<td>4.69</td>
<td>5.19</td>
<td>-2.09</td>
<td>0.038 *</td>
</tr>
<tr>
<td>Win a prize</td>
<td>2.79</td>
<td>2.76</td>
<td>2.85</td>
<td>-0.34</td>
<td>0.737</td>
</tr>
<tr>
<td>Experience a high level of competition</td>
<td>4.16</td>
<td>4.00</td>
<td>4.52</td>
<td>-1.99</td>
<td>0.048 *</td>
</tr>
<tr>
<td>Place well in my age group</td>
<td>4.14</td>
<td>4.00</td>
<td>4.50</td>
<td>-1.92</td>
<td>0.056</td>
</tr>
<tr>
<td>Relax</td>
<td>4.28</td>
<td>4.29</td>
<td>4.24</td>
<td>0.20</td>
<td>0.838</td>
</tr>
<tr>
<td>Continue a personal tradition</td>
<td>4.44</td>
<td>4.28</td>
<td>4.82</td>
<td>-2.04</td>
<td>0.042 *</td>
</tr>
</tbody>
</table>
Figure 16. Motives of resident versus non-resident respondents (n=300)
These results contradict those of Ryan and Lockyer (2002), who found that non-resident participants in the South Pacific Masters Games ascribed significantly greater importance to “challenging others”, yet corroborate their findings of the same group of participants ascribing significantly greater importance to “serious competition”. These discrepancies may be due in part to the incomparable results pertaining to a single-day, single-sport event versus the multi-day Masters Games. In addition, the location of the WRS on an island known as a “sea/sand/sun” vacation destination may have dampened to some extent non-residents’ competitive spirit. Although 96.7% planned to swim in the WRS before leaving home, only 33.6% of non-residents traveled solely to participate in the WRS. Therefore, nearly two thirds had multiple purposes for visiting O’ahu.

**Motives clusters.** Residents represented 70.7% of participants who completed the battery of motives and also responded to the question of residency, while non-residents represented 29.3%. No statistically significant differences emerged between residents and non-residents in terms of cluster membership.

**Modified athletic identity measurement scale.** The group of participants who completed the modified AIMS and also stated their residency status was comprised of 66.6% residents and 33.4% non-residents. Overall, non-residents displayed a greater degree of athletic identity than residents ($p < .002$). Statistically significant differences between the two groups also emerged in the case of five of the 11 items in the battery (Table 16; Figure 17). Specifically, non-residents, compared to residents, expressed greater agreement with the statements, “I consider myself an athlete” ($p < 0.022$), “I
Table 16. Degree of athletic identity expressed by resident versus non-resident respondents.

<table>
<thead>
<tr>
<th>Variable</th>
<th>All in Analysis (n=341)</th>
<th>Residents (n=227)</th>
<th>Non-Residents (n=114)</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I consider myself an athlete”</td>
<td>4.24</td>
<td>4.17</td>
<td>4.38</td>
<td>-2.30</td>
<td>0.022 *</td>
</tr>
<tr>
<td>“I have many goals related to sport”</td>
<td>3.97</td>
<td>3.90</td>
<td>4.10</td>
<td>-1.85</td>
<td>0.065</td>
</tr>
<tr>
<td>“I enjoy discussing sports with my friends”</td>
<td>3.98</td>
<td>3.88</td>
<td>4.18</td>
<td>-2.71</td>
<td>0.007 *</td>
</tr>
<tr>
<td>“Sports is the most important part of my life”</td>
<td>3.13</td>
<td>3.06</td>
<td>3.26</td>
<td>-1.43</td>
<td>0.153</td>
</tr>
<tr>
<td>“I spend more time thinking about sports than anything else”</td>
<td>2.69</td>
<td>2.66</td>
<td>2.75</td>
<td>-0.66</td>
<td>0.507</td>
</tr>
<tr>
<td>“I need to participate in sports to feel good about myself”</td>
<td>3.30</td>
<td>3.16</td>
<td>3.58</td>
<td>-3.08</td>
<td>0.002 *</td>
</tr>
<tr>
<td>“I want other people to perceive me mainly as an athlete”</td>
<td>3.03</td>
<td>2.96</td>
<td>3.18</td>
<td>-1.88</td>
<td>0.061</td>
</tr>
<tr>
<td>“I feel bad about myself when I do poorly in sports”</td>
<td>3.15</td>
<td>3.14</td>
<td>3.17</td>
<td>-0.22</td>
<td>0.823</td>
</tr>
<tr>
<td>“I would be very depressed if I were injured and could not participate in sports”</td>
<td>3.82</td>
<td>3.70</td>
<td>4.04</td>
<td>-2.72</td>
<td>0.823</td>
</tr>
<tr>
<td>“When I am participating in sports I can really be myself”</td>
<td>3.86</td>
<td>3.76</td>
<td>4.06</td>
<td>-2.96</td>
<td>0.003 *</td>
</tr>
<tr>
<td>“A lot of my life is organized around sports”</td>
<td>3.70</td>
<td>3.55</td>
<td>3.98</td>
<td>-3.83</td>
<td>0.000 *</td>
</tr>
<tr>
<td>AIMS</td>
<td>3.54</td>
<td>3.45</td>
<td>3.70</td>
<td>-3.07</td>
<td>0.002 *</td>
</tr>
</tbody>
</table>

Note: Scale ranged from 1 (“strongly disagree”) to 5 (“strongly agree”).
I consider myself an athlete.

I have many goals related to sport.

I enjoy discussing sports with my friends.

I have many goals related to sport.

I consider myself an athlete.

I would be very depressed if I were injured and could not participate.

When I am participating in sport I can really be myself.

Sports is the most important part of my life, a lot of my life is organized around sports.

I need to participate in sports to feel good about myself.

"Sports is the most important part of my life".

"Sports means as much to me as anything else".

I spend more time thinking about sports than anything else.

I feel bad about myself when I do poorly in sports.

I want other people to perceive me my life.

A lot of my life is organized around sports.

I need to participate in sports to feel good about myself.

I would be very depressed if I were injured and could not participate.

When I am participating in sports I can really be myself.

I enjoy discussing sports with my friends.

I have many goals related to sport.

I consider myself an athlete.

Figure 17. Degree of Athletic Identity Expressed by Resident Versus Non-resident Respondents (n=341)
enjoy discussing sports with my friends” ($p < 0.007$), “when I am participating in sports I can really be myself” ($p < 0.003$), “I need to participate in sports to feel good about myself” ($p < 0.002$), and “a lot of my life is organized around sports” ($p < 0.001$).

Snelgrove et al. (2008) discovered athletic identity to be greater for visitors compared to locals, although this was among attendees at, as opposed to participants within, an event. The present findings suggest this pattern extends to sports participants as well. They also corroborate Gillett and Kelly’s (2006: 253) conclusion that “a sense of athletic identity could only be fully experienced away from the home location”, suggesting the element of travel was necessary to fully adopt the role of an athlete.

**Short flow state scale (S FSS).** The group of participants who completed the Short Flow State Scale and also answered the question stating their residency status consisted of 67.4% residents and 32.6% non-residents. The overall scale showed no statistically significant differences between the two groups ($p < 0.203$) suggesting the element of travel did not affect the propensity to experience flow. However, non-residents expressed greater agreement with the statement, “I felt I was competent enough to meet the demands of the swim” ($p < 0.016$), perhaps because of their greater experience as open water swimming competitors (Table 17; Figure 18).

**Goals for the competition.** No statistically significant differences among residents versus non-residents emerged in terms of their goals for the WRS.
Table 17. Degrees of S FSS experienced by resident versus non-resident respondents.

<table>
<thead>
<tr>
<th>Feeling During the Swim</th>
<th>All in Analysis (n=359)</th>
<th>Residents (n=242)</th>
<th>Non-Residents (n=117)</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I felt I was competent enough to meet the demands of the swim”</td>
<td>4.32</td>
<td>4.26</td>
<td>4.46</td>
<td>-2.43</td>
<td>0.016 *</td>
</tr>
<tr>
<td>“I did things spontaneously and automatically without having to think during the swim”</td>
<td>3.82</td>
<td>3.84</td>
<td>3.78</td>
<td>0.55</td>
<td>0.581</td>
</tr>
<tr>
<td>“I had a strong sense of what I wanted to do during the swim”</td>
<td>3.98</td>
<td>3.95</td>
<td>4.03</td>
<td>-0.91</td>
<td>0.362</td>
</tr>
<tr>
<td>“I had a good idea about how well I was doing while I was involved in the swim”</td>
<td>3.76</td>
<td>3.72</td>
<td>3.83</td>
<td>-1.22</td>
<td>0.224</td>
</tr>
<tr>
<td>“I was completely focused on the task at hand during the swim”</td>
<td>3.83</td>
<td>3.78</td>
<td>3.93</td>
<td>-1.49</td>
<td>0.138</td>
</tr>
<tr>
<td>“I had a feeling of total control over what I was doing during the swim”</td>
<td>3.77</td>
<td>3.76</td>
<td>3.80</td>
<td>-0.45</td>
<td>0.656</td>
</tr>
<tr>
<td>“I was not worried about what others may have been thinking of me during the swim”</td>
<td>3.91</td>
<td>3.93</td>
<td>3.87</td>
<td>0.54</td>
<td>0.592</td>
</tr>
<tr>
<td>“The way time passed seemed to be different from normal during the swim”</td>
<td>3.80</td>
<td>3.76</td>
<td>3.88</td>
<td>-1.22</td>
<td>0.223</td>
</tr>
<tr>
<td>“I found the experience I had during the swim extremely rewarding”</td>
<td>4.24</td>
<td>4.20</td>
<td>4.33</td>
<td>-1.43</td>
<td>0.155</td>
</tr>
<tr>
<td>S FSS</td>
<td>3.94</td>
<td>3.91</td>
<td>3.99</td>
<td>-1.28</td>
<td>0.203</td>
</tr>
</tbody>
</table>

Note: Scale ranged from 1 (“strongly disagree”) to 5 (“strongly agree”).
I felt I was competent enough to meet the demands of the swim.

I found the experience I had during the swim extremely rewarding.

I had a strong sense of what I wanted to do during the swim.

I was not worried about what others may have been thinking of me during the swim.

I did things spontaneously and automatically without having to think during the swim.

I was completely focused on the task at hand during the swim.

I had a feeling of total control over what I was doing during the swim.

The way time passed seemed to be different from normal during the swim.

I had a good idea about how well I was doing while I was involved in the swim.

The way time passed seemed different from normal during the swim.

I had a good idea about how well I was doing while I was involved in the swim.

Figure 18. Level of Flow Experienced by Resident Versus Non-resident Respondents (n=359)
Challenges present in the WRS. No statistically significant differences among residents versus non-residents emerged in terms of challenges present in the WRS.

Final times. Reported times were converted to a common unit of seconds for analytical purposes. The average time for the 178 resident respondents was 1:18.43 (4,706.09 seconds) and 1:10.29 (4,217.48 seconds) for non-residents, a statistically significant difference ($p < 0.001$) suggesting that non-residents were more proficient swimmers than residents.

Demographic and Socioeconomic Characteristics.

The average age of residents was 33.8, 9.6 years younger than non-residents, who had an average age of 43.4, a statistically significant difference ($p < 0.001$) (Table 18). Respondents were 62.2% male and 37.8% female. Percentages within the two participant subsamples were similar, with 38.7% female non-residents and 37.4% female residents. Seventy-nine percent of non-residents resided in the U.S. or Canada. Seventy-five percent of non-residents belonged to a swimming organization or club, compared to 48.1% of residents, a statistically significant difference ($p < 0.001$). On average, the highest year of school completed among residents was 16.8, which represents more than three years of college. Non-residents reported an average of 18.7, representing more than one year of graduate school. This difference was statistically significant ($p < 0.001$).

Among non-residents, the most frequently cited annual pre-tax household income was $150,000 or more (42.5%), followed by $100,000 to $149,999 (22.1%), $75,000 to $99,999 (17.7%), $50,000 to $74,999 (7.1%), $30,000 to $49,999 (7.1%),
Table 18. Demographic and socioeconomic characteristics of resident versus non-resident respondents.

<table>
<thead>
<tr>
<th>Variable</th>
<th>All in Analysis</th>
<th>Residents</th>
<th>Non-Residents</th>
<th>Test Statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=362</td>
<td>n=243</td>
<td>n=119</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent female (%)</td>
<td>37.8</td>
<td>37.4</td>
<td>38.7</td>
<td>$X^2 = 0.05$</td>
<td>0.824</td>
</tr>
<tr>
<td></td>
<td>n=359</td>
<td>n=242</td>
<td>n=117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (avg.)</td>
<td>37.0</td>
<td>33.8</td>
<td>43.5</td>
<td>$t = -5.96$</td>
<td>0.000 *</td>
</tr>
<tr>
<td></td>
<td>n=363</td>
<td>n=244</td>
<td>n=119</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident of U.S. or Canada (%)</td>
<td>91.2</td>
<td>97.1</td>
<td>79.0</td>
<td>$X^2 = 32.74$</td>
<td>0.000 *</td>
</tr>
<tr>
<td></td>
<td>n=358</td>
<td>n=239</td>
<td>n=119</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member of swimming organization (% yes)</td>
<td>57.0</td>
<td>48.1</td>
<td>74.8</td>
<td>$X^2 = 23.06$</td>
<td>0.000 *</td>
</tr>
<tr>
<td></td>
<td>n=357</td>
<td>n=238</td>
<td>n=119</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. years of formal schooling (avg.)</td>
<td>17.5</td>
<td>16.9</td>
<td>18.6</td>
<td>$t = -4.20$</td>
<td>0.000 *</td>
</tr>
<tr>
<td>Total 2010 household income before taxes (%)</td>
<td>n=312</td>
<td>n=199</td>
<td>n=113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under $30,000</td>
<td>9.6</td>
<td>13.1</td>
<td>3.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$30,000-$49,999</td>
<td>7.1</td>
<td>7.0</td>
<td>7.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$50,000-$74,999</td>
<td>13.1</td>
<td>16.6</td>
<td>7.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$75,000-$99,999</td>
<td>19.6</td>
<td>20.6</td>
<td>17.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$100,000-$149,999</td>
<td>23.1</td>
<td>23.6</td>
<td>22.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$150,000 or more</td>
<td>27.6</td>
<td>19.1</td>
<td>42.5</td>
<td>$X^2 = 26.43$</td>
<td>0.000 *</td>
</tr>
</tbody>
</table>
and under $30,000 (3.5%). Among residents, the most frequently cited income bracket was $100,000 to $149,999 (23.6%), followed by $75,000 to $99,999 (20.6%), $150,000 or more (19.1%), $50,000 to $74,999 (16.6%), under $30,000 (13.1%), and $30,000 to $49,999 (7.0%). The difference between these distributions was statistically significant ($p< 0.001$) (Figure 19). These findings suggest non-residents tend to have overall higher income levels than residents.

The demographic and socioeconomic differences in the two groups corroborates past research. Rosendal et al. (2001), and Spencer (2012) found non-resident visitors to recreation areas to be on average older than resident visitors, and to have had higher incomes. In addition, Gibson (1998: 161) described active sports tourists as “more likely to be male, affluent and college educated”. Finally, Walker et al. (2010) found non-resident participants in the 2005 World Masters Games to be highly educated although their sample was slightly more likely to be female than male.

**Summary**

This chapter reports many statistically significant differences in the motives, characteristics, and behaviors of residents versus non-residents. There were also many items to which resident and non-resident participants responded similarly.

The open water swimming backgrounds of non-residents, compared to non-residents, were apt to be longer and more frequent with more likelihood to travel. Non-residents ascribed greater importance to the motives “do something exciting”, “challenge myself mentally”, “swim the famous Waikīkī coastline”, “swim in a warm
Figure 19. Total 2010 Household Income Before Taxes
open water swim”, and “continue a personal tradition”. The only motive to which residents ascribed greater importance than non-residents was “conquer a fear”.

Non-residents reported a greater degree of athletic identity, felt more competence during the race, and were on average faster swimmers than residents. However, the overall level of flow was experienced similarly among residents and non-residents and the two groups reported similar goals and challenges. Finally, non-residents were significantly older, more educated, more affluent, and more likely to belong to a swimming-related organization or club than residents.

Despite the many differences between the two subgroups, residents and non-residents showed statistically insignificant differences in their previous participation in an open water swim (although the extent of this participation varied), as well as their training habits. The only statistically significant difference emerging from training habits of the two subgroups was the resident participants’ greater level of access to open water to train.

Preparation for the event showed insignificant differences between the two subgroups for coming to the event as a member of a team, signing up with another person, and competing in the fins division. The only statistically significant difference was the length of time in which non-residents registered for the event, being much further in advance than residents. This also stands to reason, as non-residents would likely want to register before making the trip to O‘ahu.

In the next, and final, chapter, the above results, findings reported in the previous chapter, and results of past studies will be synthesized and discussed, conclusions will be drawn, and suggestions for further research advanced.
Chapter VI

Conclusions and Recommendations

This final chapter discusses results detailed in the previous two. It gathers together information from the study, draws conclusions, and compares the study findings to those of past studies that have similar points of comparison. The chapter is divided into four sections. The first section will discuss the results and lead into the second section that will draw conclusions from the lines of thought created in the first section. The third section will discuss various limitations of the study. The fourth section will make recommendations for further research in this area.

Discussion

This study originally sought to explore the motives behind the behavior of sports tourists, with the aim of answering the questions: (a) What are the motives of those who travel to O‘ahu to participate in the WRS? (b) How do these motives compare to those of resident participants? (c) Does the element of travel affect the level of flow experienced by participants? (d) What are the characteristics and behavior patterns of those who participate in the WRS? Information pertaining to the primary objectives of the research project was discovered, along with much ancillary information.

The non-resident participant. The inability of some non-residents to train in open water, overall faster times, a higher level of overall athletic identity and competence during the swim, lack of fear, and reported excitement about the event all
characterize the non-resident open water swimmer. In combination, these results profile the non-resident participants as more competent swimmers.

Supporting this conclusion is the fact that non-residents on average were faster swimmers than residents even though lack of access to open water for training purposes was reported more frequently by non-residents than residents. Although training in a pool definitely gets one in shape to swim in any body of water, inability to train in the particular medium in which you will be racing is a disadvantage. This can be comparable to runners needing to train at a higher altitude because of differences in oxygen levels. The ocean brings elements that are not replicated in the pool, such as the taste of salt water, added buoyancy, the lack of lane lines or a line on the bottom of the pool to guide your course, spotting the buoys to try to stay on track, other swimmers swimming close to you, and a common fear derived from inability to see the bottom. Non-residents also displayed a significantly higher level of athletic identity than residents and reported feeling a higher level of competence during the swim. All of these results suggest that non-residents were more competent and confident in their open water swimming abilities. This, in turn, may have ensured that this aspect of their trips would be enjoyable, rewarding, and contribute to maximizing their return on the investment in their trips.

Non-residents ascribed greater levels of importance on motives relating to competition (“experience a high level of competition”) and self-challenge (“challenge myself mentally”), corroborating the findings of Ryan and Lockyer (2002), who also found competition and self-challenge motives to be more evident in non-resident
participants. On the other hand, the lack of statistically significant differences in socially oriented motives contradicts the findings of Gillett and Kelly (2006).

Motives for participation in the 2011 WRS. While the study was focused on a particular event, the extent to which this would unify participants was not anticipated. The previous section illustrated the differences that enabled non-resident swimmers to be profiled. However, enormous difference in the motives of resident versus non-resident respondents did not emerge. This was unanticipated as past studies comparing motives between resident and non-residents showed at least one significant motive that distinguished the subgroups. Within the current study, the motives non-residents valued at a significantly different level than residents were mostly those attributable to the nature of the event and the geographic location in which it occurred. Although these motives were those that showed significant differences between residents and non-residents, motives related to the event were not the motives to which non-residents ascribed the highest level of importance. The motive, “challenge myself physically”, along with the other thirteen motives that did not result in statistically significant differences, suggests that residents and non-residents possessed similar motives for participation. These similarities are also evident in the lack of statistically significant differences between residents and non-residents in training regimens, preparation for the event, goals, and levels of flow experienced.

The nature of the event. The nature of the WRS indeed differs from the multi-day, multi-sport events that have been the focus of much past active sport tourism
research, and this study shows the resulting differences in participant motivation. The level of extrinsic motivation was less evident in this study’s sample compared to Masters Games participants. This stands to reason because no prize money was bestowed on winners, only a plaque or trophy and the honor of completing the race, the latter being the most frequently cited goal for the sample as a whole. Moreover, within the clusters, no cluster was largely characterized by extrinsic motives. This lack of extrinsic motivation, combined with the willingness of these swimmers to travel to participate in the event for no tangible reward, evidences their intrinsic motives and humility, also possibly explaining why the “Mildly Drivens” were the fastest swimmers yet were only the third highest scoring group in terms of athletic identity. Perhaps these findings resulted from the single-day nature of the event, combined with the overwhelming dependence of swimming on self-motivation and the resultant lack of opportunity to develop and experience a sense of camaraderie. Swimmers spend many lonely hours training with their heads underwater, unable to receive encouragement from others until they stop. This instills a sense of self-motivation that might explain their apparent lack of desire for extrinsic achievement, especially when participating in an event created with a goal of enhancing a sense of community togetherness.

Of the eight motives resulting in statistically significant differences in levels of importance between the resident and non-resident participants, three related to the geographic setting and the nature of the event. The WRS website explicitly states it is a community-based event with no large prizes, no entry time cut-off, and no large sponsorships. There are a significant number of local participants involved in the swim, it is an historical event held in a world-renowned tourism destination. The lack of
monetary incentive, and the promotion of the event as being community-based, does not foster a competitive environment and distinguishes this event as one that is highly regarded, yet not focused on the competitive aspects of the race. This contention is supported by the fact that neither the motive, “Experience a high level of competition”, nor the goal “Beat another participant”, emerged as primary drivers of participation. Instead, non-resident participants were motivated to swim the famous Waikīkī coastline, in a warm open water swim, and participate in an event unique to O‘ahu.

**Geographic setting.** Motives found to be significantly higher among non-residents suggest a desire to be a part of something unique to the destination of Waikīkī: to “swim the famous Waikīkī coastline”, to “swim in a warm open water swim”, to “be a part of an historical event”, and to “continue a personal tradition”. Residents clearly would not be motivated to swim the Waikīkī coastline or in a warm open water swim since they have this opportunity on a regular basis. Perhaps the close proximity of the event to the residents’ location also diminished the motivation related to “be part of an historical event”. The motive “to continue a personal tradition” supports the aforementioned suggestion that the non-residents use the WRS, some repeatedly, as an ancillary reason to visit Hawai‘i. However, the swim also aroused their motivation to “do something exciting”, showing, even after repeated participation, anticipation.

Additional conjectures drawn from the data support indication of the destination itself being a motivator. Although 74.5% of non-residents had access to open water to train, perhaps this was a motivator to come to swim in open water for the remaining 15.5%. The element of socialization that distinguished Ryan and Lockyer’s (2002) two
clusters did not distinguish non-residents and residents in this study, although it was apparent in distinguishing clusters created from the sample as a whole.

**Purpose of trip.** The fact that only 33.6% of non-residents cited the WRS as the sole purpose for their trip, yet 96.7% had planned to swim in the WRS before they left home suggest that most non-residents did not come to Hawai‘i solely to participate in the WRS. The large difference between these statistics shows that most of these sports tourists traveled for reason(s) other than participation in the event. This suggests that the event served to provide respondents with an additional reason to visit Hawai‘i, perhaps influencing the timing of a long anticipated trip and providing a catalyst to finally purchase a plane ticket.

Some of the write-ins for the question on trip purpose included other open water swims or other athletic events. This shows some travelers’ interest in participating in multiple activities on their trips, suggesting that they wanted to get something more out of their trip than just a single competition, perhaps to help justify the expense involved. This, in turn, suggests that sports marketers in Hawai‘i should consider joint marketing of multiple events scheduled in close proximity one to another, which of course would require coordination among event organizers. Currently the only multi-day, multi-sporting event held on O‘ahu is “Duke’s Ocean Festival” which includes all the ocean sports in which Duke Kahanamoku participated. This festival is heavily marketed to local residents, as many of the ocean events are rarely practiced at high levels in other regions of the world.

Swimmers who had previously traveled to compete in an open water swim
reported their away-from-home experiences were enhanced by the element of travel, warmer climate, being away from work, and added pressure to perform well. The element that most detracted from the away-from-home experience was “colder climate”. Hawai‘i is a beneficiary of this finding as it has a naturally enhancing warmer climate.

Conclusions

This study has advanced knowledge of this sports tourism segment, in some measure filling gaps and improving upon weaknesses in past research, by including residents as a point of reference for non-residents, and studying a small-scale, single-sport competition. This study was also the first to address the possible effect of travel on flow.

The WRS is a one-day competition in one sport, yielding insights into the character of the open water swimmer as an active sports tourist. This does, however, limit comparability to studies of active sports tourists participating in Masters Games, since those studies focus on groups that participate in an event over multiple days with multiple sports and ancillary festivities. Despite this lack of comparability, an overarching conclusion that can be drawn by this study and similar studies is that active sports tourists are by no means a homogenous group. This conclusion therefore reinforces the need for continued investigation of participants in order to better understand active sports tourists.
The three basic conclusions drawn from the results and discussed in the above section are:

1. Statistically significant differences emerged between residents and non-residents in the case of eight motives, both corroborating and contradicting past related research.

2. Motives for engagement in the WRS depended heavily on geographic setting and the nature of the event.

3. The experience of flow was not significantly affected by the element of travel.

Overall, these conclusions shed light on a specific sector of the sports tourism market in O‘ahu. With evidenced difference in motives and a profile of the tourists who engage in the WRS, the HTA’s sports marketing division can not only better understand a particular target market, but also better design marketing campaigns to attract particular open-water sports tourists to O‘ahu.

**Marketing implications for entire sample.** Both the sample as a whole and non-residents were profiled in detail, permitting more precise design and dissemination of promotional messages intended to maximize future event participation. On the most basic level, results on the demographic and socioeconomic characteristics of the sample can give WRS board members insights into the types of athletes they are reaching, what they like about the race, and how to design promotional appeals to reach more participants. As reported in the literature review, the nature of the event is family oriented and not extremely geared toward competition. It is, however, considered among the open water swimming community a race not to be missed.
The high incomes of participants enhance their attractiveness as a market segment. Their high levels of education, athletic identity, swimming ability, and experience as open-water competitors suggests that promotional messages should communicate in a sophisticated manner intended to reach accomplished and committed athletes. Their relatively high level of affiliation with swimming organizations (58%) suggests that personal selling to the organizations’ leaders and/or advertising in organizations’ newsletters or on their Websites may be viable ways of attracting this segment.

The distinct clusters that emerged clearly suggests the heterogeneity of both the sample as a whole and non-residents, suggesting that promotional messages intended for an “average” participant are unlikely to succeed. Instead, a market segmentation approach that disaggregates the market into relatively homogeneous segments, one or more of which can be targeted with persuasive messages tailored to their distinct characteristics, should be employed.

Ritchie (1996) compared propensities of participants versus non-participants in the New Zealand Masters Games to visit with other attractions or partake in additional touristic activities while on their trips. He found participants to be less likely than non-participants to engage in these ancillary activities. This suggests that the opposite might be the case with one-day, single sport events such as the WRS, especially since only 33.6% of respondents cited the event as the sole purpose of their trip and most respondents were members of affluent households. Thus, single sport events such as the WRS should be the subject of further inquiry, as they show potential to generate positive economic impacts in Hawai‘i. The results of the Masters Games research
versus this research also suggest the uniqueness of each type of sports tourism and the need for further research on single-sport and one-day events such as the WRS.

**Marketing implications for non-residents.** As stated above, active sports tourists are by no means homogenous. They are motivated by various factors, elements that contribute to their ability to travel, what they get out of a sports tourism experience, and how they go about preparing, that is, their dedication to the sporting event in which they travel to compete. This study’s sports tourists were affluent, well educated, and older than residents. This is not surprising. They come to Hawai‘i for their love of travel, an escape from their routines, and to be a part of something only Waikīkī can provide. They are athletes, efficient in the water and experiencing a high level of intrinsic satisfaction when they swim in the WRS. As a group, they can be considered more competent swimmers.

This specific event shows the willingness of athletes to participate in an event for the simple pleasure of doing it, for the intrinsic benefits received, and the lengths to which they will go to be a part of the event. There is no prize money, only the feeling of accomplishment provided by completion of a long-running community-based event. The results suggest that the WRS provides sufficient intrinsic rewards to motivate these athletes to incur the considerable expense of a trip to Hawai‘i. Results showing 42% of non-residents reported the WRS was only one of multiple trip purposes, combined with their median stay of seven days and their high incomes, enhance their attractiveness as a market niche.
The results of this study show these travelers have characteristics similar to those documented in past sports tourism studies and consistent with the demographic trends of most travel sectors—aging yet health-conscious. They were habitual, as they ascribed high average levels of importance to “continue a personal tradition”. They wanted to be a part of something unique to O’ahu, to “swim the famous Waikīkī coastline”, and were also motivated to come and “swim in a warm open water swim”. This suggests a need for further research on the extent to which a sense of place motivates participation in the swim. They also felt traveling, sleeping away from home, and getting away from their normal routine enhanced their participation in an open water swimming competition. They want to get away, to be a part of something unique to O’ahu, and like the benefits they receive from traveling. The higher means levels of importance non-residents ascribed to “swim the famous Waikīkī coastline”, “be part of an historical event”, and “swim in a warm open water swim” suggest that the unique geographic setting of the event should be mentioned, if not emphasized, in promotional messages.

The travelers in the sample were older, had higher household incomes, and were more educated than the resident participants. This suggests the desirability of travelers to the WRS as a market segment. Although this was a one-day competition, nearly all respondents (96.7%) planned to swim in the WRS before leaving home. Therefore, although the results show 42.4% of non-residents reported the WRS was only one of multiple trip purposes, almost all surveyed knew this would be a part of their trip to O’ahu. Trips of non-residents showed a median value of seven days, leaving six days to participate in other activities, some of which may have occurred in Hawai‘i, and
reinforcing the contention that destination significantly drove participation. Although this study did not focus on expenditures during the trip, these travelers undoubtedly contributed to the economy through their spending in hotels, restaurants, and other businesses.

**Limitations**

Limitations to the study are largely based on the data collection phase. Although respondent fatigue and resultant item non-response is a limitation of all survey research, especially studies that involve the use of self-administered questionnaires, to some unknown extent this problem may have been worse in this inquiry because respondents were contacted immediately after they had finished a 2.38-mile open-water swim and in most cases had to complete the relatively lengthy questionnaire while standing up.

Possible variations in surveyors’ approaching tactics and/or conscious or subconscious preference for potential respondents may have introduced some bias in results. However, the large sample size, representing 48% of the race participants, probably minimized this possible error.

The choice of the clustering routine employed, the selection of the six-cluster solution, and the naming of the clusters were inherently (yet unavoidably) subjective decisions. However, a standard clustering routine was used, the subjectivity of the choice of the six-cluster solution was reduced through the use of a scree test, and the cluster centroids were reported in detail to enable readers to rename the clusters as they see fit.
This research is the first of its kind in many respects. It was the first to focus on a single sport, single day competition held in a destination renowned for its tourist draw. It was the first sports tourism study to examine both non-residents and residents. It was the first active sports tourism study to incorporate the psychological element of flow in order to address this element of intrinsic motivation found in athletes. Because of this uniqueness, the study has made new contributions to knowledge. On the other hand, this same uniqueness diminishes the generalizability of the results. Although many similarities can be seen between open water swimmers and Masters Games participants, the significant differences in the events severely limits the comparability of studies of athletes participating in them.

**Recommendations for Further Research**

Deeper insights into these phenomena can be obtained by using Structural Equation Modeling to develop a model of the inter-relations of motives, athletic identity, flow, training regimens, and demographic and socioeconomic characteristics. The extent to which this model differs among residents versus non-residents could then be empirically tested.

Future studies could also address the role of ocean sports in the Hawaiian culture and how this association affects active sports tourists who travel to Hawai‘i. This would take on a more anthropological approach, but it would be interesting to study not only the quest to be a part of an athletics subculture but also the Hawaiian ocean sports culture. Is that another reason travelers visit Hawai‘i, to be a part of the romanticized view of Hawaii’s ocean sports culture, and thereby engage in an “authentic” experience?
Further inquiry using qualitative methods such as semi-structured interviews could potentially provide further insight into what exactly motivated the swimmers. Using such methods, similar studies could be conducted on a broader spectrum of Hawai‘i ocean sports to determine whether the same motives among travelers exist. This approach could also assess the significance of the Hawaiian culture among the motives to participate.

An economically focused study could delve deeper into what active sports tourists do on their trip. Few such insights were obtained from this multi-purpose study. Consequently, a study completely focused on the spending volumes and patterns of these tourists could potentially provide further insights for marketing purposes.

This was the first study to address the outcome of flow using the element of travel as an independent variable, and as reported above, no statistically significant results emerged. However, studies focused on a range of sporting events and a broader spectrum of athletes, including those who traveled to events, could more completely investigate the possible effect of travel on the experience of flow.

**Final Remarks**

Clearly, much remains to be discovered about sports tourism, including tourism related to single-day, single-sport events like the WRS. To the extent such discoveries are made, sports marketers and competition managers will be better equipped to plan, organize, promote, and manage such events and ensure that they provide meaningful experiences to those who compete in them, including those who travel long distances to do so.
Appendix A

Survey Instrument

2011 SURVEY OF WAIKIKI ROUGHWATER SWIMMERS

School of Travel Industry Management

1. Have you previously participated in an open water swimming competition?
   [ ] Yes   [ ] No  → SKIP TO QUESTION 2

1a. In how many open water swimming competitions have you participated in the past 3 years? ______
1b. In what year did you participate in your first open water swimming competition? ______
1c. Have you ever participated in an open water swimming competition in which you’ve had to travel to a different state/country than where you reside? [ ] Yes   [ ] No  → SKIP TO QUESTION 2
1d. Below are some elements of away-from-home open water swimming competitions. For each one, please indicate if you feel it enhances, detracts, or doesn’t affect your experience competing away from home.

<table>
<thead>
<tr>
<th>Element</th>
<th>Strongly Enhances</th>
<th>Enhances</th>
<th>No Effect</th>
<th>Detracts</th>
<th>Strongly Detracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traveling to the destination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sleeping away from home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being away from my normal routine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of food for my chosen diet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warmer water temperature</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being away from my family</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being away from my friend(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being away from work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colder climate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warmer climate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Added pressure to perform well</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1e. What determines your ability to go on a trip for an open water swimming competition? (Please check all that apply.)
   [ ] Finances  [ ] Whether my family is willing to come with me
   [ ] Time off from work  [ ] The swim is part of the Open Water Circuit
   [ ] If my team is going  [ ] Other; please describe:
   [ ] Time of year
   [ ] Location of the competition  [ ] I can stay with people I know

2. Did you train for this competition? [ ] Yes   [ ] No  → SKIP TO QUESTION 3

2a. Did you train alone? [ ] Yes   [ ] Mostly   [ ] About half the time   [ ] Rarely   [ ] No
2b. How many hours per week did you swim during your training? ______
2c. Did you have access to open water, versus a pool, for training? [ ] Yes   [ ] No
2d. Did you have any regular training partners? [ ] Yes   [ ] No

PLEASE TELL US ABOUT YOUR WAIKIKI ROUGHWATER SWIM 2011 EXPERIENCE

3. Are you a member of a team that came together to participate in the Waikiki Roughwater Swim 2011? [ ] No   [ ] Yes  → 3a. Which team?

4. How long before the Waikiki Roughwater Swim 2011 did you sign up to participate? ______

PLEASE CONTINUE ON NEXT PAGE →
5. Did you sign up for the Waikiki Roughwater Swim 2011 with another person? [ ] Yes [ ] No

6. Below are some motives for participating in the Waikiki Roughwater Swim 2011, followed by scales from 1 to 7, where 1 means “not at all important to me” and 7 means “extremely important to me.” For each one, please circle the number on the scale that represents how important or unimportant it was in your decision to participate in the Waikiki Roughwater Swim 2011.

<table>
<thead>
<tr>
<th>Motive for Participating in the Waikiki Roughwater Swim 2011</th>
<th>Not At All Important To Me</th>
<th>Somewhat Important To Me</th>
<th>Extremely Important To Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accomplish goal(s)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conquer fear(s)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote health and fitness</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do something different</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do something exciting</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get in touch with myself spiritually</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenge myself physically</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenge myself mentally</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participate in an event with teammate(s)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participate with person(s) other than teammate(s)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meet people</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain greater acceptance from peer(s)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swim the famous Waikiki coastline</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>View scenery</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Be a part of a historical event</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swim in a warm open water swim</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Win a prize</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience a high level of competition</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place well in my age group</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relax</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue a personal tradition</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Below are some statements about how you may or may not feel about yourself as an athlete, followed by scales from 1 to 7, where 1 means “strongly disagree” and 7 means “strongly agree.” For each one, please circle the number that best matches the extent to which you agree or disagree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I consider myself an athlete</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have many goals related to sports</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy discussing sports with my friends</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports is the most important part of my life</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I spend more time thinking about sports than anything else</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I need to participate in sports to feel good about myself</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want other people to perceive me mainly as an athlete</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel bad about myself when I do poorly in sports</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would be very depressed if I were injured and could not participate in sports</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I am participating in sports I can really be myself</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A lot of my life is organized around sports</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. Please answer the following questions in relation to your experience in the Waikiki Roughwater Swim 2011 that you have just completed. These questions relate to the thoughts and feelings you may have experienced while taking part. There are no right or wrong answers. Think about how you felt during the swim, then answer the questions using the rating scale below. For each question, circle the number that best matches your experience.

<table>
<thead>
<tr>
<th>Feeling During the Swim</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt I was competent enough to meet the demands of the swim</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I did things spontaneously and automatically without having to think during the swim</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I had a strong sense of what I wanted to do during the swim</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I had a good idea about how well I was doing while I was involved in the swim</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I was completely focused on the task at hand during the swim</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I had a feeling of total control over what I was doing during the swim</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I was not worried about what others may have been thinking of me during the swim</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The way time passed seemed to be different from normal during the swim</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I found the experience I had during the swim extremely rewarding</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

9. What, if any, were your goals for the Waikiki Roughwater Swim 2011? (Please check all that apply.)
   - [ ] Get a best time
   - [ ] Beat another participant
   - [ ] Place in my age group
   - [ ] I didn’t have any goals
   - [ ] Other; please specify: ____________________________

10. Did any of the following present a challenge to you during your participation in the Waikiki Roughwater Swim 2011? (Please check all that apply.)
    - [ ] Strong current
    - [ ] Poor water clarity
    - [ ] Jellyfish
    - [ ] Large swell
    - [ ] None of these
    - [ ] Other; please specify: ____________________________

11. What was your final time? ____________________________  [ ] Don’t know

12. Did you complete the competition in the newly offered fins division?  [ ] Yes  [ ] No

13. Do you live on Oahu for six months per year or more?
    - [ ] Yes  ➔ SKIP TO QUESTION 18
    - [ ] No ➔ CONTINUE TO QUESTION 14

PLEASE TELL US ABOUT YOUR TRIP.

14. Did you plan to swim in the Waikiki Roughwater Swim 2011 before you left home on this trip?
    - [ ] Yes  [ ] No

15. On what date did you leave home for this trip?  Month____ Day____ Year____

16. On what date will you return home from this trip?  Month____ Day____ Year____

PLEASE CONTINUE ON NEXT PAGE ➔
17. What was the purpose of this trip? (Please check all that apply.)
   [ ] Business
   [ ] Convention or meeting
   [ ] Recreation
   [ ] Visit relative(s) and/or friend(s)
   [ ] Participate in the Waikiki Roughwater Swim 2011
   [ ] Other; please specify: __________________________

18. How old were you on your most recent birthday? ________

19. What is your gender? [ ] Female [ ] Male

20. Do you permanently reside in the United States or Canada?
   [ ] Yes [ ] No → 20a. In what country do you permanently reside? __________________________
   GO TO QUESTION 21

   20b. What is the zip or postal code of your permanent residence? __________________________

21. Are you currently a member of any swimming organizations or clubs?
   [ ] Yes [ ] No → GO TO QUESTION 22

   21a. Which one(s)? __________________________

22. Please circle the highest year of formal schooling you have completed.
    [ ] No Formal Schooling
    Undergraduate education
    Grade School  K  1  2  3  4  5  6  7  8  High School  1  2  3  4  5  6  7  8  college education  1  2  3  4  Graduate college education  1  2  3  4  5  6  7+

23. Which one of the following broad income ranges includes your household's total 2010 income before taxes?
   [ ] Under $30,000
   [ ] $30,000 to $49,999
   [ ] $50,000 to $74,999
   [ ] $75,000 to $99,999
   [ ] $100,000 to $149,999
   [ ] $150,000 or more

Thanks for your help!! Please return your completed questionnaire to the person who invited you to participate or to the University of Hawai'i Survey table. If you completed this questionnaire after you left the race, please return it to: Allison Adams c/o University of Hawai'i at Manoa School of Travel Industry Management, 2560 Campus Road George Hall 346, Honolulu, HI.
Appendix B

Script for Research Assistants

Introduction Example for Research Assistants

Hello, congratulations on your finish! My name is _____________ and I’m here with the University of Hawaii sports tourism graduate research project, would you mind taking a few minutes to fill out this questionnaire? It is for a graduate student who is studying open water swimming. It would be really helpful, thanks!

Instructions for Research Assistants

- Please wear a plain white t-shirt.
- When you arrive in the morning please go to the research table under a GREEN easy-up where you will sign in and you will be provided with an official nametag.
- Try to approach people who you don’t know
- Try to approach people who are not from Hawai‘i; who don’t live here and who traveled to participate in the event.
- Try to approach them when they have had time to chill out a bit
- Please arrive no later than 9:00 am to the Hilton Hawaiian village, where the race is going to end.
- Be charming yet professional
- Put on a thick skin, be persistent but don’t upset anybody
- Make sure they complete all sections of the survey! If they are not residents they should fill out the entire thing. If they are residents, one section will be left blank.
  This is very important!!!
- If you approach a group, try to have enough clipboards to give to all of them
- Don’t rush them; tell them to return the survey either to you or to the research table and POINT OUT the research table.
- If they have additional questions that you don’t know the answer to, point them to Dr. Spencer (first) at the research table, to Alli (second), or to Laura Lesar, or to Lorenn Swesey.
- Please carry around a towel (for them to dry their hands off) and enough pens so you don’t run out.
- Remember to congratulate them on finishing 😊
- When you have all completed surveys and need more blank ones, go to the research table and ask Dr. Spencer for a refill.
- The goal is for each research assistant to get 30 completed surveys!!! If you get more than 30 you are my hero.
- Thank you thank you thank you for your HELP!!!
Appendix C

List of Represented Teams and Swimming Organizations

ALAPA
Aloha Aquatics
Aulea Swim Club
Barracuda Aquatics of Monterey Peninsula
BC Endurance
BOCA
Bold and Beautiful Swim Squad
Bondi Surf Club
Boulder Aquatic Masters
Bozeman Masters
BRCM
Cardiff by the Sea Masters
Clark Hatch Fit. Ctr.
Coach
COLOC Masters Swimming
Crow County Country Club
CUSA Swim
Dallas Aquatic Masters
Danwoody GA Masters Swim
Davis Aquatic Masters
Dolphin Club
El Cerrito Aquatics Masters
Elovera Surf Club
FAST (USA Swimming)
Georgia Masters Killer Whales
Greenwich YMCA Dolphin
Harbord Frigid Frogs
Hawaii Swim Club
High Performance New Zealand
Honolulu
Hunter Swim Club Australia
Iceburgs
ISPMA
JJ’S Swim Class
Kailua Masters
Kailua YMCA
Kaisey
Kamehameha Swim Club
Kapolei Swim Club
KSC
Lincoln Way Masters
Longhorn Aquatics
Manoa Aquatics
Marin Pirate Masters
Masters- Northern Arizona- Flagstaff
Masters Nuuanu YMCA
Masters Swimming Menlo Masters
Mile High Masters
Mission Viejo Nadadores
MOST
MOST Tri-sitition Alamo Area Tri Club
MTSC Hendersonville, TN
North Sydney Aussie Masters
Norwood
NOVA Masters (Irvine, CA)
Oahu Club Masters
Oregon Masters PAC-5
Pacific Northwest Aquatics PAQ
Peter Hursty
Pleasanton Seahawks
Punahou Aquatics
Queenscliff SKC
Rainbow Aquatics Red Tide
Rose Bowl Masters (RBAC)
Sacramento Swimming Enthusiasts
Sandpipers Swim Club-Las Vegas
SCAQ
SF Tsunami
Solana Dead
South Engl Rowing Club
SPIT Amateur Swimming Club, Sydney
Splash Aquatics
Sugid Frogs SF Dolphins
Stanford Masters
Swim Clinic
Swimming AUS
Tattersalls Australia
Team Core
Team Fuego
Team In Training
Team JET
Team Shorebreak Inc
Terry Hills Swim Centre Sydney
The Olympic Club
Tri-Smart Tri Team
Tri Valley Masters
UCI Masters
UCLA Masters
UCM
UCMS
University Of Denver Masters
University Of Hawaii
UH Masters
USA Swim
USA Terrapin
USF Masters
USMS
Vancouver Open Water Swim Ass’n
VIMS
Waikiki Swim Club
Walnut Creek Masters
West Hollywood Aquatics
Willoughby Swim Club
Windward Y Kailua Masters
Wolfpac
YMCA
YMCA Masters
References


