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URBAN ADVENTURE RACING: USING GROUNDED THEORY TO ASSESS MOTIVES

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Abstract
Although urban adventure races (ARs) have grown in popularity, little research exists on the reasons for the rising interest. Typically, adventure races are defined as a series of outdoor tasks completed within a given course or timeframe that are meant to challenge individuals, both mentally and physically. ARs borrow much from adventure programming. Aspects of AR programming may include goal-setting, problem-solving activities, and processing, and is often theoretically driven. This study used Grounded Theory as a basis for exploring why participants choose ARs, and if motives vary by gender. Of the 60 questionnaires collected, 40 were suitable for data analysis. We explored values associated with participating in an AR and gender. By using a modified laddering technique, the two identified values were "to become healthy," and "to focus on their health." Gender differences were also found.

1.0 Introduction
Previous researchers have examined different aspects of adventure races (ARs), such as emergency medical attention (Townes, 2005), adventure programming for individuals with disabilities (McAvoy, Smith, & Rynders, 2006), and the role of corporate culture in adventure racing (Kay & Laberge, 2002). ARs are described as having athletes perform multiple physically and mentally challenging tasks over a course in rugged, often remote, wilderness terrain (Townes, 2005). Goldenberg et al. (2005) conducted a study that measured outcomes from experiences individuals had while participating in an Outward Bound program. Although Outward Bound programs are not ARs, they both share many programming issues. Goldenberg et al.'s findings might be transferable to ARs because of the nature of adventure programming (e.g., prescribed challenges taking place in the outdoors) in an AR setting. Currently, researchers have not yet explored why adventure racers have chosen to participate in such events in the first place, or how Outcome-Focused Programming (i.e., recreation programming where the focus is on the a deliverable outcome; formally Benefits-Based Programming) can assist an AR agency in programming an event (Case, Hill, & Dey, 2009). Understanding reasons why racers choose to participate in ARS would help race providers promote and advertise to their target audience. As such, the general research questions guiding this study are:

- What are the attributes associated with male and female AR participants?
- What values (underlying motives) are sought out by AR participants?
- Do these values vary among men and women?

This study used the Grounded Theory Method (GTM) to provide a basis for the formation of a theory to explore why AR participants choose to participate in such events, assuming that information obtained from the returned questionnaires conveys applicable information to make relative claims to a theory. The GTM was introduced by Glaser and Strauss in 1967 as a technique for analyzing qualitative data in the field of sociology. The GTM serves as a process for generating a theory by analyzing the patterns, themes, common categories and observational data (Glaser & Strauss, 1967, Babbie, 2004). GTM is described as an approach that attempts to combine a naturalist approach with positivist concern for a "systematic set of procedures" in doing qualitative research (Babbie, 2004). The GTM employs the constant comparative method where observations are compared with one another via an iterative process, thus evolving into an inductive theory (Babbie, 2004).

There are four stages in the GTM: (a) comparison of incidents applicable to each category, (b) integrating categories and their properties, (c) delimiting the theory, and (d) writing theory (Babbie, 2004). From the data collected, the current researcher used this process to begin formulating a theory to seek answers to the research questions at hand. The current researcher then determined key attributes and outcomes that men and women derive from participation in adventure races and determined how

outcomes can be used to inform practitioners about adventure race participants. To assist in determining the values or motives for the participants, a modified Means-end Laddering approach was used. Means-end is an approach to determining one's reason for choosing a product, destination, or service. Laddering is the most effective way to determine one's attributes (concrete reasons), consequences (bi-products of the attributes), and values (underlying motives) for making a decision about a reason for doing something (e.g., choosing to participate in an AR).

Laddering was first conceived by Olson and Reynolds (1983) and theoretically grounded by Reynolds and Gutman (1988). Laddering builds means-end chains by asking a participant why an attribute is important; the response will either be another attribute or a consequence. The researcher continues this approach (or does so through a self-administered questionnaire) until the participant eventually gives an answer reflecting a value state or can no longer give a response. In this method, each response is similar to a rung on a ladder, and each rung leads the researcher to a higher level of thinking by the participants, known as value states (Hill, Goldenberg, & Freidt, 2009).

Means-end theory has been used in several disciplines in order to understand consumer behavior. It is mostly used in marketing and psychology, where it was first applied, in settings such as consumer recycling (Bagazzi & Dabholkar, 1994) and consumer expectations of service employees (Pieters, Botschen, & Thelen, 1998), and has more recently been used in recreation-based settings (Botschen & Hemetsberger, 1998; Goldenberg, Klenosky, O'leary, & Templin, 2000; Goldenberg, McAvoy, & Klenosky, 2005; Hill et al, 2009).

2.0 Methods

In 2009, Old Dominion University's Recreation and Wellness Department partnered with the Park, Recreation, and Tourism Studies Program to host the 4th Annual Monarch Adventure Race (MAR). The race course consisted of eight challenge stations throughout campus. The MAR is an urban adventure race lasting approximately two hours, and made up of teams of four, where at least one member needs to be of the opposite gender. It is made up of a "trail" that meanders throughout the campus and consists of eight stations with activities for teams to complete. Along the trail, teams may be required to complete several other tasks as well. Past activities have included kayaking, rock wall climbing, bicycling, and a Humvee pull. Annually, a total of 25 teams or 100 spots have been opened to participants, half of whom were from the university, and the other half from the general public. At the completion of the MAR, participants voluntarily filled out a questionnaire. The GTM was employed to assist researchers in discerning patterns and themes from observational data to begin to generate theory. Literature and extant theories (e.g., means-end theory and laddering) are important to the GTM approach, especially in the context of research findings (Charaz, 2006; Glaser & Strauss, 1967). We sought to determine the participants' motivation for participating in this event.

2.1 Data Collection

The sample for this study was participants from the Spring 2009 MAR in Norfolk, Virginia. This study used a self-administered questionnaire as a means for data collection. The questionnaire was adopted from several studies (Botschen & Hemetsberger, 1998; Goldenberg, Klenosky, O'leary & Templin, 2000; Goldenberger, McAvoy & Klenosky, 2005; Pieters Botschen & Thelen, 1998; Walker & Olson, 1991). The questionnaire had a total of three sections: Section 1: demographic information from each participant, such as gender, state of residency, and education; Section 2 identified attributes from the participants; and Section 3 identified values (laddering) by repetitively answering the question "why is [this] important to you?" Between the completion of the event and the awards ceremony, participants were approached and asked to be part of a study by filling out a 10-minute, anonymous questionnaire.

The questionnaire asked 12 racer demographic questions and proceeded to list up to four attributes for participating in the race, followed by ranking responses by order of importance. After ranking their responses, respondents were then asked to fill out up to four "laddered questions" in hopes of recording an attribute, a consequence, and a value from which the researchers could derive qualitative data. This self-administered questionnaire provided researchers with demographic data on race participants as well as 78 "laddered responses" that were used to make general assumptions in the formulation of theories addressing why individuals choose to participate in adventure races.

3.0 Results and Discussion

At the 2009 MAR, 64 participants comprising 16 teams competed. At the conclusion of the race, a total of 60 questionnaires were distributed to participants, with 52 returned. Of these 52, 40 were suitable for the purpose of data collection (67% response rate). The questionnaire respondents' demographic data gave a great deal of insight about the participants. The average age of the questionnaire respondents who participated in the MAR was 26.48, with 37.5% male participants. Of the 40 respondents, 75% were white, 10% were Asian/Pacific Islander, 2.5% were African American and 12.5% were listed as "other" or chose not to answer. Nearly 68% (67.5%) of responders claimed to be residents of the state of Virginia with a majority living within 30 miles of the race's location. Of the 40 participants responding to the question about their current marital status, 77.5% of race participants were single, 15% married, and 5% divorced. A full 80% of respondents had never participated in an AR before, while the other 20% had either been at the previous year's race, or participated in a similar event. Since this event was held on a college campus, the most popular occupation was "students" at 40%, while the other 60% had a wide variety of other occupations or chose not to answer. In terms of education, 45% had "some college" (13-15 years of education) and 47.5% had obtained their

Bachelor's degree (16 years of education). For those earning income, 17.5% earned $30,000 or less, 15% earned between $30,001 and $60,000, and 17.5% earned above $60,001 (20% of participants chose not to answer).

3.1 Attributes Influencing Participation by Gender
The first research question explored the attributes of ARs that influence participation among men and women. Analysis of the data provided by respondents was based on linked laddered responses given by participants. After reviewing the responses, five attributes (concrete reasons) were identified for each gender. Table 1 shows the overall number of responses for the top five attributes, and Table 2 illustrates attribute responses according to gender. The most common responses for attributes influencing AR participation were exercise, fitness, working out, physical activity, or physical education (see Tables 1 and 2). The emerging theme was based around fitness, thus the attribute category was entitled "fitness." Phrases that encompassed this category included physical fitness, exercise, work out, and physical activity.

Table 1. *General Attributes Influencing Participation*

Attribute	# of Responses
Fitness	34
Fun	28
Bonding	18
Competition	16
Friendships	14

Table 2. *Attributes Influencing Participation between Men and Women*

Gender	Attributes				
	Fitness	Fun	Bonding	Competition	Friendships
Males	14	13	5	8	5
Females	20	15	13	8	9

3.2 Values Associated with Participation by Gender
The second research question explores the values (e.g., underlying motives) perceived to be associated with participating in ARs. To find the sought out values associated with adventure racing, the laddered responses were examined. Of the 160 ladders analyzed, 40 were useful (i.e., they were initiated by an attribute of participating in an AR and ended in a value of the individual that serves as an inner motivation for participation). Many of the individuals who took the questionnaire began with "fun" as an attribute of participating in an AR. Fun, being a value itself, was not included in the number of ladders analyzed for this study unless it linked to another terminal value. Twenty-two ladder chains were excluded as a result based on irrelevant responses since fun is a final value (Rokeach, 1973). Table 3 shows results from the analyzed ladder chains received from questionnaires.

Table 3. *Values Associated with Adventure Race Participation*

Value	# of Chain Endings
Fun	29
Health	15
Self-Esteem	7
Happiness	6
Sense of Accomplishment	6
Social Acceptance	6
Self-fulfillment	3
Family	3
Pleasure	2
Self-respect	1

From both males and females, fun was the most important terminal value overall for participation in ARs. Aside from "fun," race participants saw ARs as a means to become healthy or to focus on their health, which was the second most important value in association with ARs. The means-end chains produced other values associated with AR participation such as self-esteem, social acceptance, happiness, sense of accomplishment, self-fulfillment, family, pleasure, and self-respect, however they did not receive as many responses as "fun" or "health."

3.3 Frequently Occurring Values
After examining data in relation to the second research question, it is possible to derive an answer for the third question where the researcher identifies the most frequently occurring underlying values or motives for participation among men and women. The findings indicate that the top two motives between both genders, fun and health, respectively. Table 4 shows the top four most frequently occurring motivators for AR participation between males and females based on the amount of chains ending in particular terminal values per gender. In general, men focused on winning and the competitive aspects of the AR, while women focused on the socialization aspects and a sense of accomplishment.

Table 4. *Frequently Occurring Values between Men and Women*

				Values		
Gender	Fun	Health	Self-Esteem	Happiness	Sense of Accomplishment	Social Acceptance
Males	14	4	5	3	0	2
Females	15	11	2	3	6	4

4.0 Conclusion and Implications

As illustrated in the current study, the means-end theory approach of Laddering can be applied to ARs to inform practitioners about individuals who participate in these events. However, this study should be viewed with caution due to the lack of using LadderMap software for data analysis. LadderMap is the primary tool used to analyze this type of data (i.e., software program that allows for the interconnections between hierarchical nature of attitudes, consequences and values, reflective in the means-end theory in the data), and then create Hierarchy Value Maps and Means-end chains. Unfortunately, LadderMap was not available to the researchers during this study, thus the attributes and values were explored by researchers for consistent themes, rather than true hierarchical analysis.

After reviewing the qualitative data, results can be used via the GTM to provide a foundation for a possible theory as to why men and women choose to participate in ARs. When comparing responses given by males and females, both sexes appear to be in agreement; the two most popular attributes that influenced both sexes to participate in the AR were fun and fitness. However, there is a shift in attributes causing them to race. Males are interested in competition, bonding and friendships, while females are more interested in bonding, friendships, and competition.

The most predominant values associated with AR participation were fun and health; however, other values included self-esteem, social acceptance, and happiness. Glaser and Strauss noted that the researcher must compare incidents in Stage 1. In this case, this refers to responses which show similarities. For this study, the responses with similar phrases were assessed. Stage 2, characterized by placing such incidences in categories based on those similarities, is where the researcher is able to integrate categories and their properties to form themes, patterns, or relationships. Stage 2 is where the most frequent responses, for attributes and values, formed categories or themes of their own. Stage 3 begins the process of delimiting the theory. A theory can emerge from the relationships between themes and the theory may become clearer as delimitations to a theory emerge.

In this study, data provided a foundation for the beginning of a theory as to why men and women are motivated to participate in ARs. Self-esteem may motivate men to participate because of the race's emphasis on winning and its competitive nature, while women may be motivated by social acceptance because of the race's tendency to foster relationships within the groups or a sense of accomplishment through completing the race. Because this is an exploratory study, and the first of its kind concerning this subject matter, Stage 4 cannot be completed by this study alone. Stage 4 is the act of actually writing the theory. Replication of the study would be necessary in order to write and develop a theory.

This study could be used in a number of ways, both by professionals and by researchers. The findings of this study can serve as an aid to professionals who provide both sanctioned and unsanctioned ARs. Program planners can use the information to provide programs based on the attributes of the race that influence and initiate interest in AR participation. Also, professionals may use findings from this study as a marketing tool to understand what motivates people to participate in ARS and to obtain information on what participants expect based on the attributes and values that motivate them to participate. Researchers may also use this study as the basis for a future study.

Even though this research provided some insight, there are more ways that this research can be replicated to provide more information on other aspects of an AR. Since this is an exploratory study, there are a number of directions that researchers could precede, in regard to finding attributes, values, and motivations of AR participation. For example, other variables beside gender can be explored when assessing motivations for participation in ARs. Studies examining variables such as differences in age groups and potential benefits derived from participation in ARs are suggested. Also, an interesting study might explore the size of the race and the motivations that influence race participation since this study was only conducted on a relatively small, unsanctioned race. Differences between the motivations of individuals participating in nationally sanctioned races versus unsanctioned races could also yield differences which might assist in marketing. This study could be replicated at Old Dominion

University to examine whether the study would yield the same results or to test differences in motivations between student and non-student groups.

In conclusion, with the recent growth of "newer" adventure events (e.g., Tough Mudder, Warrior Dash, Spartan Race), this study was able to provide insight into a relatively new recreation activity and its participants. This qualitative, exploratory study provided a basis for examining underlying values that motivate individuals to participate in ARs. It also provided a basis to postulate an introductory theory that can be a foundation for further research on motivations of AR participants. There is a need for more understanding of AR participants since it is a new, emerging activity. Men are motivated to participate because of an emphasis on winning and the competitive nature of the race, while women are motivated by social acceptance, based on the race's tendency to promote bonding within the groups, or a sense of accomplishment by completing a race. This is similar to other gender-based findings (Hill, Ridinger, Shapiro, & Gómez, 2012). With AR and adventure runs at an all-time high, it is essential for race directors to understand the participant. Future studies should continue to explore other theoretical frameworks to help explain why certain motives are influencing behaviors.

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