Personality Trait Differences of Traditional Sport Athletes, Bullriders, and Other Alternative Sport Athletes

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ABSTRACT
The purpose of this study was to examine the personality characteristics of traditional and alternative sport athletes. The participants were comprised of 70 male University Division I traditional sport athletes (e.g., tennis and volleyball), 63 male bullriders, and 50 male contemporary alternative sport athletes (moto-cross, wakeboarding, etc.). Athletes provided demographic information and responded to items related to Zuckerman's Sensation Seeking Scale and Cattell's 16 Personality Factor Inventory. Results indicated significant differences between the two alternative sport groups and the traditional sport group. Specifically, the alternative sport athletes were more reserved, self-sufficient, and sensation seeking than traditional athletes. Alternative sport athletes may need to be coached, conditioned, and rehabilitated differently than traditional sport athletes, because they seem to possess different personality characteristics than traditional sport athletes.

Key words: Coaching Style, Personality Factor Inventory, Risk Taking, Sensation Seeking Scale

INTRODUCTION

The purpose of this study was to examine the personality characteristics of traditional and alternative sport athletes using Zuckerman's Sensation Seeking Scale [1] and Cattell's 16 Personality Factor Inventory [2].

Classic questions that have confronted sport scholars, journalists, and the general populace are: "What is a sport?" and "Who is an athlete?" [3]. Individuals who participate in mainstream sports (e.g., football, basketball, and tennis) are routinely viewed as athletes. However, the debate of *what is a sport* and *who is an athlete* becomes muddied when considering activities typically referred to as alternative sports (e.g., "extreme," "X," and "adventure"). Not only do these activities receive scrutiny for being a sport, but the individuals who participate in them are often viewed differently than those participating in mainstream sports. Therefore, various types of sport activities and the subcultures associated

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with them will be discussed and specific personality characteristics of those who participate in the representative sports are examined to determine if any differences truly exist.

Over the years, two types of alternative sport activities have evolved. The first type is considered *traditional alternative sports,* which can be defined as competitive sporting events involving humans in competition with other humans or animals usually in a defined area that is regulated by established or institutionalized rules and involves increased risk of serious physical injury and even death (e.g., bullriders and bullfighters). These types of activities have historical roots that go back to the early 1800's for some and as early as 2000 BC for others. The second type is considered *contemporary alternative sports,* which are recreational physical activities performed in a competitive setting with increased risk of serious physical injury and even death (e.g., Eco-challenge, hang gliding, mixed martial arts, mountain biking, sky-dancing/surfing, and whitewater kayaking) [4]. These activities have received cultural pop labels such as "alternative," "extreme," "X," "gravity," "lifestyle," and "adventure". The media often presents alternative sports as cutting edge and the participants are often characterized as radical, unconventional and rebellious. The traditional alternative sports have been quite popular over the years, whereas the contemporary alternative sports are growing in popularity [3, 4]. Understanding what attracts people to these sports and learning why they persist in them even when the risk of injury and death are high is important [3, 5, 6]. Many traditional and contemporary alternative sports seem to revolve around a particular lifestyle. For example, bull riders often grow up in rural farming communities where horses, cows, and 4-H happens to be a regular part of their daily lives; whereas skate boarders typically reside in more urban locations where sidewalks and asphalt provide an avenue to their leisure experiences. Although these individuals may participate in other activities, many seem to be socialized into these activities based on the environment in which they live and their family life. In addition to possibly being socialized into these activities, many other factors such as individual personality characteristics may influence why some individuals drift toward alternative sports instead of seeking out the challenges offered in traditional sports.

With the emphasis on "extreme" in most alternative sports, it would be reasonable to assume that individuals who seek an adrenaline rush may gravitate to these types of sports. These athletes are pushing the current expectations of traditional and alternative sports and constantly re-evaluating the definition of an athlete. Several studies have examined personality differences of traditional team sport athletes (e.g., football, basketball, and volleyball) and traditional individual sport athletes (tennis, track and field, and swimming) [7, 8, 9]. Team-sport athletes tend to think in a larger spectrum and incorporate their teammate(s) in their game plan; whereas individual-sport athletes must think in terms of themselves and what their game plan is. Individual-sport athletes are not as concerned about how their actions will affect teammates, because they are on their own [9].

Although very little research has examined personality characteristics of traditional alternative sport athletes such as bullriders, the following characteristics have been commonly identified in rodeo athletes: high dominance (commanding, controlling, or prevailing over others); high self-sufficiency (the ability to maintain oneself without outside aid; quite stubborn and not willing to be "checked out" after a ride unless severely injured); high tension (inner striving, unrest, or imbalance); low shrewdness (clever, discerning awareness), positive life satisfaction (fulfillment of a need or want from life); low awareness of neurological stress (stress to the nervous system); and an internal style of health attribution [10-13]. These characteristics seem to guide their everyday lives and extend to their competitive outlets.

Likewise, few studies exist that examine contemporary alternative sport athletes. Recently, alternative sports such as alpine skiing, surfing, adventure racing and the ECO challenge have caught the attention of some researchers [4, 5, 14, 15]. These studies investigate risk taking and other personality characteristics of the athletes involved. Although many of these athletes demonstrate a preference for novel high-risk activities [5], their overall personality characteristics are somewhat diverse [4, 15, 16]. These studies indicate that several sport-specific athletic traits may exist [4, 5, 15]. In general, some of the common traits among these athletes include emotional stability, remaining calm, patience, and handling adversity [15].

Other studies have examined personality traits and characteristics specific to a particular contemporary alternative sport. For example, alpine skiers have been studied in many regions of the world. Two personality perspectives have emerged, one from English/Italian studies and the other from Czech/Slovakian studies. The English/Italian studies have concluded that alpinists are more introverted and sensitive, with relatively high tension and anxiety [15]; whereas the Czech/Slovakian alpinists are considered more independent with less guilt and anxiety [17]. Surfers have also been frequently studied over the years. They seem to exhibit a desire to engage in risky and adventurous activities, have an active imagination, intellectual curiosity, and independence of judgment [5]. Adventure racers tend to exhibit qualities such as extroversion, emotional release, calmness, control, and invincibility [6]. In a study that compared several high-risk sport groups to one another, sky divers were much more extroverted and psychotic, whereas alpinists were the most introverted of all the groups [17]. Most of the studies comparing sports with similar high levels of risk find the athletes have very similar sensation seeking scores and are attracted to variation and complexity, intense sensations, risks and adventures [4, 5, 14, 15]. Conversely, traditional sport athletes (e.g., football, baseball, and volleyball) when compared to contemporary alternative sport athletes (alpine skiing, surfing, wakeboarding, etc.) score much lower on sensation seeking, suggesting risk taking may be a personality characteristic associated with participation in these contemporary alternative sports (i.e., high risk sports) [5, 18].

While very few studies have examined differences or commonalities among athletes who compete in traditional and alternative sports [15, 19, 20], no studies have explored the personality traits and characteristics of bullriders. Specifically, research does not appear to exist which attempted to determine if bullriders are similar or different to those participating in other alternative sports. Likewise, very few studies have compared alternative sport athletes to traditional sport athletes. Therefore, the primary purpose of this study was to expand the research on bullriders by examining five personality characteristics in comparison with contemporary alternative sport athletes and traditional sport athletes. We also sought to clarify the relationship between risk taking and activity choice. Specifically, are bullriders similar to moto-cross, wakeboarding, and downhill racing or more like traditional sports such as tennis, volleyball, and swimming/diving?

METHOD

PARTICIPANTS

Two hundred and fifty male athletes were asked to participate in the study of which 183 (72%) completed the questionnaire. Contemporary alternative sport athletes were the predominant group to decline completion of the questionnaire (n = 35), followed by traditional sport athletes (n = 22), and finally bullriders (n = 10). Reasons for declining to participate were lack of time or not interested. Those who chose to participate included 70

male Division I university traditional sport athletes, 63 male traditional alternative sport athletes (bullriders), and 50 male contemporary alternative sport athletes. The traditional sport athletes who participated in the study included tennis (n = 10), volleyball (n = 8), baseball (n = 24), rugby (n = 8), and swimming/diving (n = 20). The contemporary alternative sport athletes who participated in the study included wakeboarding (n = 3), motocross (n = 42), drag racing (n = 1) and downhill race skiing/snowboarding (n = 4). The participants ranged from 18 to 35 years of age (M = 22, SD = 4.5) and identified themselves as White (n = 154, 84%), Hispanic (n = 9, 5%), Black (n = 5, 3%), Asian (n = 2, 1%), and other (n = 13, 7%). All athletes from each of the three groups met the minimum two-year competition requirement in their sport prior to participation in this study (see Table 1). The experience level of the participants ranged from 2 to 30 years (M = 10 years). Sixty-eight percent of the traditional sport athletes were between the ages of 18 and 21 with 64% of them having 10 or more years of experience. Fifty five percent of the bullriders were between the ages of 18 and 21 and 59% of the bullriders had 10 or more years of experience bullriding. Forty-two percent of the alternative sport athletes were between the ages of 18 and 21 with 52% of them having 10 or more years of experience.

Table 1. Means and Standard Deviations for Age, Experience Level, and Years of Experience by Type of Sport

	Traditional (n = 70)		**Traditional Alternative (n = 63)**		**Contemporary Alternative (n = 50)**		**Total (N = 183)**	
	M	***SD***	***M***	***SD***	***M***	***SD***	***M***	***SD***
Age	20.10	1.40	21.68	4.02	25.44	5.97	22.10	4.53
Experience Level	3.34	1.02	3.44	0.81	3.06	1.14	3.30	0.10
Years of Experience	10.95	5.18	10.56	4.62	11.20	7.72	10.89	5.79

To ensure that the results of this study were not based on group demographic differences, t-tests were performed on age, years of experience, and experience level to determine that the three groups were similar before examining their personality traits. Group membership was similar for age, $F(16, 72) = 0.70$, $p > 0.05$; years of experience, $F(16, 72) = 0.21$, $p > 0.05$; and experience level, $F(16, 72) = 1.63$, $p > 0.05$. These results indicate that any differences found in the data were due to factors other than the group's demographic information.

MEASURES

Demographics Questionnaire. A demographics questionnaire was administered which requests the following information: age, types of sports they participate in, sport they participate in most, ethnicity, number of years competing, and whether they consider themselves competitive or recreational athletes and why.

Zuckerman's Sensation Seeking Scale [1, 21, 22]. The sensation seeking scale consisted of 27 forced choice questions. Each question was designed to force participants to choose between two statements; one of which is considered to be more sensation seeking than the other. Two types of modifications were made to this questionnaire. First and foremost the items pertaining to females were removed, since only males were questioned. Second, because the questionnaire was originally designed in the 1960's the wording was also changed slightly by modifying six items to represent the current alternative and traditional sport athletes and their environments.

The average range of male athlete scores using the original Sensation Seeking Questionnaire ranged from 19-23. The range of the current data scores is 14-19 across all groups. Bullriders ranged from 17-19, extreme sport athletes ranged from 16-18, and traditional sport athletes ranged from 14-16. The lowering of score range is due to the modifications made to the scale. In all, thirteen items were excluded from the scale and six items were modified. Two examples of modifications to the scale items are shown below:

(Old) A. I often wish I could be a mountain climber.
B. I can't understand people who risk their necks climbing mountains.
(New) A. I think of myself as an extreme sport athlete.
B. I do not understand people who take high level sport risks.
(Old) A. I sometimes like to do things that are a little frightening.
B. A sensible person avoids activities that are dangerous.
(New) A. I like to do activities that give me an adrenaline rush.
B. A sensible person avoids activities that create an adrenaline rush.

This scale was graded by assigning one point to each sensation seeking statement chosen by the participant. The score was then a raw number out of 27. According to Zuckerman, for ages 19-30 the male scores should range from 19-23 [22]. As individuals get older, their level of sensation seeking seems to get lower. Zuckerman [23, 24] has reported the internal reliability coefficient ranging from .68 to .88 among American males for the Total score and test-retest reliability ranging from .70 to .94 over a period of 3 weeks. A variety of studies also demonstrate the criterion-related validity of the SSS-V using reports of behavior and personal history [23, 24]. Although modifications were made to the instrument for the purpose of our study, the reliability remained quite high (r = .81).

Cattell's 16 Personality Factor Inventory (16PF) [2]. Cattell et al's. 16PF is a widely used personality inventory. Developed using factor analysis in the 1950s and revised several times since, the 16PF is the principal instrument by which research has been conducted into Raymond Cattell's model of personality [25, 26], according to which human personality may best be described in terms of 16 traits (the primary factors that emerged from analysis of a large item pool). All are bipolar traits; both high and low scores reflect meaningful information about the test-taker's personality. Five of the 16 factors were chosen for this study, based on the traits found in other research common to these athletes. The other 11 factors were excluded in this study due to time, low previous reliabilities for those factors, and the lack of connectivity for athletes.

The five-factor questionnaire consisted of 56 multiple-choice questions. Each question had three multiple-choice answers; in all questions, the middle answer was a question mark. These questions were designed to force the participant to choose between either true or false or two statements. If the participant was unable to choose which statement was most like them, they had the option to choose the question mark. In scoring these items, each statement associated with its corresponding factor received two points and each question mark received one point. The raw score was dependent upon how many questions there were for that factor. Each factor was categorized as one trait vs. another; therefore, the raw score determined which trait the individual was more like. For example, Factor A examined the bipolar traits of reserved vs. outgoing. If the individual scored 12 or higher they were considered to be outgoing. If the score was less than 12 the individual was considered to be reserved.

The five primary factors selected from Cattell's 16PF are described as follows: Factor A (reserved vs. outgoing); reserved is defined as an individual who is distant, cool, impersonal,

and detached. Outgoing, on the other hand, is one who is attentive to others, kindly, easygoing, and likes people. Next, Factor H (shy vs. venturesome); shy is depicted as individuals showing traits such as threat-sensitive, timid, hesitant, and intimidated. Therefore, a venturesome individual displays traits of socially bold, thick-skinned, uninhibited, and able to take stress. Third is Factor I (tough-minded vs. tender-minded); tough-minded individuals are characterized as utilitarian, objective, unsentimental, self-reliant, no-nonsense, and rough. The tender-minded individuals are characterized as sensitive, aesthetic, sentimental, intuitive and refined. Fourth is Factor Q1 (conservative vs. experimental). The conservative individual is typically traditional, attached to familiar, and respecting of traditional ideas. The experimental individual is then one who is open to change, liberal, analytical, critical, freethinking, and flexible. Finally, Factor Q2 measures group-dependence vs. self-sufficiency. The group-dependent individual tends to be group-oriented, affiliated, a joiner and follower, and dependent on others. Self-sufficient individuals differ in that they are self-reliant, solitary, resourceful, and individualistic [27, 28].

The reliabilities of the 16PF were consistent with previous studies for these same factors ranging from 0.63 to 0.93 across the five factors [28, 29]. The reliabilities for each factor in this study were: Factor A = 0.69, Factor H = .87, Factor I = .79, Factor Q1 = .68 and Factor Q2 = .79.

PROCEDURES

Institutional research approval was obtained from the University committee for the protection of human subjects. Participants were contacted through university and club sport teams, professional organizations (i.e., Professional Rodeo Cowboys Association, Professional Bull Riders, and National Intercollegiate Rodeo Association), and Olympics and national extreme sport organizations in the United States. Traditional sport athletes were contacted through their coaches and/or team managers, whereas alternative sport athletes were contacted by person, phone and/or e-mail. Arrangements were then made to meet with the athletes either in a group setting or individually depending on the nature of the sport. During the meeting, the researcher described the study, answered any questions, received consent from those interested in participating, and administered the questionnaire. In all cases, participants completed their questionnaire away from other peers or coaches. Upon completion, the researcher collected the questionnaire and thanked them for their efforts.

RESULTS

The purpose of this study was to examine the differences among bullriders, contemporary alternative sport athletes, and traditional sport athletes on the following five primary personality factors derived from Cattell's 16PF and Zuckerman's sensation seeking personality factor: (a) Factor A: reserved vs. outgoing; (b) Factor H: shy vs. venturesome; (c) Factor I: tough-minded vs. tender-minded; (d) Factor Q1: conservative vs. experimental; (e) Factor Q2: self-sufficient vs. group reliant; and (f) SS: high or low sensation seeking. Results of a one-way ANOVA revealed significant differences for three of the five personality factors, as well as the sensation seeking scores. The main effects identified as significant were: Factor A, $F(2, 180) = 4.39$, $p = 0.01$; Factor I, $F(2, 180) = 9.701$, $p < 0.0001$; Factor Q2, $F(2, 180) = 13.55$, $p < 0.0001$; and the Sensation Seeking Score, $F(2, 180) = 5.45$, $p < 0.01$. The main effects not considered significant were Factor H, $F(2, 180) = 0.148$, $p = 0.86$ and Factor Q1, $F(2, 180) = 1.241$, $p = 0.29$. The overall results indicated that there were no significant differences in personality factors or sensation seeking scores between bullriders (traditional alternative sport athletes) and contemporary alternative sport athletes ($p > 0.05$;

see Table 2). However, significant differences were found between the two alternative sport groups and the traditional sport group. Specifically, bullriders and other alternative sport athletes reported to be more reserved (Factor A), self-sufficient (Factor Q2), and sensation seeking than traditional athletes. This meant that the traditional sport athletes reported to be more outgoing and group dependent than the other two groups. Post-hoc analysis revealed that contemporary alternative sport athletes were more tough-minded and traditional sport athletes were more tender-minded (Factor I). Bullriders scored more tender-minded, but were not shown to be significantly different from the other alternative sport group. Traits common to all three groups were venturesome (Factor H) and experimental (Factor Q1).

Table 2. Means and Standard Deviations for the Five PF and Sensation Seeking Subscales by Type of Sport

	Traditional (n = 70)		Traditional Alternative (n = 63)		Contemporary Alternative (n = 50)	
Factor	**M**	**SD**	**M**	**SD**	**M**	**SD**
A (reserved vs. outgoing)	13.43[b]	4.31	11.40[a]	3.92	11.92[a]	4.03
H (shy vs. venturesome)	12.70	6.41	12.79	5.94	13.28	5.51
I (tough-minded vs. tender-minded)	7.64[b]	3.86	6.24	3.35	4.80[a]	3.14
Q1 (conservative vs. experimental)	15.93	5.22	16.30	4.60	17.38	5.38
Q2 (self-sufficient vs. group dependent)	6.01[b]	4.03	9.03[a]	4.26	9.72[a]	4.55
SS (sensation seeking)	15.47[b]	5.25	17.86[a]	3.18	17.16[a]	3.98

[a] and [b] are significantly different by group for each factor at $p < 0.05$.

DISCUSSION

Past research has examined personality traits and characteristics of individual sport athletes and team sport athletes, high risk and low risk athletes, or traditional sport and alternative/extreme sport athletes [4, 5, 14, 15]. In this study, however, we were interested in separating alternative sports into two categories, traditional alternative sport (bullriders) as compared to contemporary alternative sports (wakeboarders, moto-cross racers, etc.) to determine if different personality traits are associated with the level of risk inherent to the sport. The assumption was that getting on top of a bull and having no control over it would require different personality characteristics than moto-cross racing or wakeboarding where the athlete has some control. Interestingly enough, none of the personality traits examined in this study were found to be significantly different between bullriders and contemporary alternative sport athletes. This study confirmed that bullriders, wakeboarders, moto-cross racers, and downhill skiers (racers) are similar on the five personality traits measured. That is to say, both alternative sport groups appear to exhibit stronger tendencies toward the following traits: reserved, venturesome, self-sufficient, experimental (open to change), and sensation seeking (adventure seeking, experience seeking, disinhibited, and susceptible to boredom). These results, which are based on the operational definitions developed for this study, are consistent with previous studies examining alternative sport athletes (e.g., alpine skiers, surfers, adventure racers) and suggest that traditional alternative athletes (such as bullriders) may be similar to contemporary alternative sport athletes [4, 5, 14, 15].

The one personality trait where the bullriders seem to be more closely aligned with the traditional sport athletes is Factor I (tough-minded vs. tender-minded). Although not

significant, bullriders in the current study scored more toward tender-mindedness, whereas the contemporary alternative sport athletes scored more towards tough-mindedness. Tough-mindedness is associated with being more utilitarian, objective, unsentimental, self-reliant, no-nonsense and rough, whereas tender-mindedness is characterized as sensitive, aesthetic, sentimental, intuitive and refined [2]. In previous research, bullriders have been shown to be less shrewd and more positive which could contribute to the tendency toward tender-mindedness [10, 13]. Some of the alternative sport athletes have reported being overly confident and invincible which could be associated with their perceptions that they are more tough minded or no-nonsense [6, 17]. Future research should examine this personality trait with a more comprehensive group of alternative sport athletes.

This study did find three personality traits which reflected differences in athletes attracted to types of sports. Bullriders and contemporary alternative sport athletes were found to be significantly different from traditional sport athletes on three of the five personality traits examined. Bullriders and the other alternative sport athletes scored more reserved, self-sufficient and sensation seeking than traditional sport athletes, whereas traditional sport athletes scored more outgoing and group dependent than the alternative sport groups. These results support previous studies examining specific alternative sports and traditional sports and further expands the research on bullriders [5, 10]. These findings show that bullriders and other alternative sport athletes are much more energized by being themselves (reserved) and relying on their specific abilities (self-sufficient), whereas the traditional sport athletes are much more energized by being involved with others (outgoing) and consulting others about their work patterns (group dependence). This appears to make sense because most alternative sports, whether traditional or contemporary, are designed to match individual athletes and their skill set against one another. Coaches of traditional teams, whether it is a high school or college golf team (coactive sport) or a basketball team (interactive sport) tend to provide instructions focused on team cohesion and group dependency [28], whereas alternative sport athletes usually learn to be more independent and self-sufficient since they tend not to have a regular coach or trainer [3]. Very little team competition or coach interaction ever occurs in alternative sports. In fact, alternative sport athletes often practice and perform on their own without a coach or adult influences. Alternative sport athletes often rely on themselves and competitors for training tips and motivation, whereas traditional athletes often have teammates and coaches who provide feedback and motivation.

Two common traits were found among the three groups of athletes. The first characteristic common to the athletes involved in this study is that they seem to be more venturesome than shy. More specifically, these athletes consider themselves to be more bold and adventurous in social/sport situations rather than being cautious and uneasy in social/sport contexts. The second common trait is that they seem to be more experimental than conservative. In other words, most athletes like to think up new ways of doing things and to pursue new experiences. Previously, emotional stability, remaining calm, patience, and handling adversity have been identified as common traits associated with contemporary alternative sport athletes [5, 15]. These two traits add to the list of common traits among these athletes, expanding the findings to bullriders and traditional sport athletes. The findings may provide sport psychologists, coaches, and trainers with insight into methods and approaches for working with athletes in these types of sports.

Researchers have been curious for years about whether alternative sport athletes are higher risk takers or sensation seekers than traditional sport athletes. This study supports previous research showing that sensation seeking seems to be a personality characteristic associated more with participation in alternative sports rather than traditional sports.

Bullriders had the highest mean scores for sensation seeking, followed by the other alternative sport athletes. These results support most of the other studies with similar high levels of risk and expands the literature on bullriders by showing that these alternative sport athletes are attracted to varying levels of complexity, intense sensations, risks, and adventures [4, 5, 14, 15].

Although the individuals in this study may enjoy participating in other sport-related activities, many seem to have a real affinity toward the sport they train and compete in regularly. Future research is needed to examine various personality characteristics across diverse traditional and alternative sport groups and whether these individuals solely participated in their most preferred sport or had experiences in other types of sports. These studies could reveal whether specific personality differences exist between these sports and whether they are influenced by gender, cultural and ethnic backgrounds, and/or past sports experience. Previous research indicates that males and females may perceive emotions and experience activities differently [30]. Thus, it may be worthwhile to determine if this is also true in for alternative sports. In addition, longitudinal research is needed that examines whether certain characteristics that are common across various sports lead to such positive outcomes as sport performance success, injury prevention and rehabilitation, or sport career transition success.

Interestingly, in the current study 41% of the contemporary alternative sport athletes chose not to participate in the study whereas, only 24% of the traditional athletes and 14% of the traditional alternative athletes (i.e., bullriders) refused to participate. Contemporary alternative sport athletes may be less interested and willing than traditional sport athletes to help someone who represents an adult authority figure. This reasoning may just perpetuate the stereotype of being a contemporary alternative sport athlete. Thus, future investigations should examine reasons why athletes decline to participate in studies and whether this is related to their age, personality, sport, or the persuasiveness and appearance of the person who is administering the survey. To do this, researchers may have to become a participant observer or become more imbedded with those they research.

CONCLUSION

The results of this study indicate that both types of alternative sport athletes may be different from athletes participating in mainstream or traditional sports. Specifically, these athletes seem to possess different personality characteristics than traditional sport athletes. Based on these differences, they may need training instruction, conditioning, and injury rehabilitation that is different than what is typically offered to traditional sport athletes. Zuckerman suggests that individuals identified as sensation seeking are more confident, self-efficient, courageous, optimistic, and creative [18, 24]. These same qualities are also used as coping skills to deal effectively with stress [21, 22, 31]. Therefore, knowing that bullriders and other alternative sport athletes are fairly independent and reserved may suggest that coaches and athletic trainers work with these athletes differently. One suggestion is to allow these athletes more input into their injury rehabilitation and workouts, but a better explanation of why certain things need to be done before sending them out to work independently will also be necessary. Also, coaches should keep in the back of their minds that alternative sport athletes are much more susceptible to boredom than traditional athletes and may need their routine changed more frequently than the traditional sport athlete. Currently there are no set timeframes for how frequently the routines need to be changed; however, this could be examined in future research. Therefore coaches and athletic trainers would probably need to examine other ways to motivate these individuals to compete in a safe, yet higher risk taking

environment. Future research should examine these athletes using qualitative techniques in order to identify coaching styles and rehabilitation strategies that are most meaningful to the sensation seeking type personality.

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