

ALTERNATIVE SPORTS: A TOOL FOR MODELING SOCIALLY CONSCIOUS
BEHAVIOR

by

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DEDICATION

This study is wholeheartedly dedicated to my beloved parents who have been my source of inspiration and strength.

To my father for always believing in me, especially when I felt like giving up. For teaching me to be curious and sharing his love for the world with me. Most of all for imparting his love of sport with me and sparking the interest that led to this work. For his continual moral, emotional and financial support.

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Always and forever

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ABSTRACT

This study examines whether participation in alternative sports cultivates athletes' socially conscious attitudes and behaviors, especially pro-social and pro-environmental values and behaviors. The study is based on 20 semi-structured, in-depth interviews, with individuals recruited through purposive sampling. The results indicate a link between alternative sport participation and perceived pro-environmental and pro-social values and behaviors. Participants indicated that alternative sports have an influence on their perceptions of how they view and interact with nature; the interview data suggest a slight difference between participants of nature-based alternative sports vs. non-nature-based alternative sports with respect to these perceived outcomes. Participants also acknowledged perceived changes in pro-social attitudes and behaviors. A notable impact was recognized on mental health from participation in these types of sports. The results highlight a need to continue research between the intersection of alternative sports participation, pro-environmental and pro-social attitudes and behaviors, as well as alternative sports' potential role in cultivating socially conscious behavior.

I. INTRODUCTION

All over the world, the popularity of sport is increasing. This popularity, however, goes beyond the sport itself. Sport, along with its athletes, are progressively being used as beacons of hope, agents of change, as messengers, and especially as examples of what can be achieved in and out, and through sport. They reflect humanity's struggles but also highlight what humans are capable of achieving. Athletes, in particular, are reminders "of the spark of greatness within each of us" (Odell, 1994, pg. 239). As a result, sport has become one of humanity's greatest achievements, but while it showcases the best parts of society, it also reflects its worst. However, it seems that a growing trend in sports and the environments surrounding them have chosen to tap into the potential that sports hold as catalysts of change. One of ESPN's latest advertising campaigns is the perfect example of how there is a push to view sport as a place where anything can happen, and where individuals, and groups of individuals, and even those who follow sports can spark that greatness within them and others for the betterment of society as a whole. As the ESPN ad puts it:

Where else do we dream of defeating our heroes?
Where else do you fight for more than a win?
Where else is an injury just the beginning?
Where else are mountains no match for a ten-year-old?

Where else is standing up the bravest thing you can do?
Where else does a walk-on become the MVP?
Where else?
There's no place like sports (ESPN, 2019).

Of particular interest is the significant increase of what are known as alternative sports, reflected in the latest addition by the International Olympic Committee in 2016 where out of the five new approved sports for the Olympic Games in Tokyo (originally

scheduled for 2020), three are considered alternative: surfing, skateboarding, and climbing (Coakley & Dunning, 2000). Although much of the success of the popularity of these types of sports, is ascribed to the role of ESPN and its X Games platform (Bennett & Lachowetz, 2004), participation in them is growing and so is the involvement of alternative athletes in matters of social good and environmental stewardship.

Krein (2008) argues that alternative sports are better equipped for participants to create new and original worlds that differ from the mainstream. Nature sports, in particular, can provide athletes with an understanding of our relationship with the natural environment. Additionally, Humberstone (2011) points to the lack of ‘attention’ and research done to better understand the ‘affective embodiment’ of lifestyle or nature-based sports. In a similar line, Brymer’s work looks to improve understanding and explain various psychological impacts, including courage and humility (Brymer & Oades, 2009) and better fear and anxiety management (Brymer & Schweitzer, 2012), of participation in extreme sports.

This research signals the growth of these types of sports and the potential impact that participating in them can have on society. Although this research is promising, it is limited. As a result, the aim of this paper will be to add to the limited body of work that exists on the topic of alternative sports as a potential tool for modeling socially conscious behavior. The guiding question of this research is: how do athletes who participate in alternative sports perceive their experiences within these sports and how, if at all, do they see these experiences in relation to their behaviors, particularly their pro-environmental and pro-social behaviors? This analysis will allow for a better grasp of the function that

alternative sports have in present society and the link that may exist with socially conscious behavior.

II. LITERATURE REVIEW

By understanding the social context in which sports have evolved, one can better understand them. Just as, without comprehending how sports impact mental health and the psyche, along with what the social purpose of that sport is, the connection with participation in specific sports cannot be assimilated, and the potential of particular sports being used as tools for social and environmental good lost.

This literature review will begin with a discussion of sport as a social construct, followed by a review of the rise of alternative sports and their culture, as well as by an exploration of the potential relationship between sport and the environment. These will be looked at through a sociology lens, to help better set the ground for understanding the role of alternative sports in current society, and how, as social constructs, they may serve as a tool for social good.

When the Olympics first originated, the games consisted of athletes competing in eight events: pentathlon, running, jumping, discus throw, wrestling, boxing, pankration, and equestrian events (Olympic Games, 2019). The current list includes 57 sports (Olympic Games, 2019), arguably as a result of the constant emergence of new ones, such as Quidditch, which was created in 2005 (US Quidditch, 2019), for example, an outcome that mimics the ever-changing nature of society, where new sports are continually evolving to reflect the existing reality. The Olympic Games are a perfect example as the games are one of the most ancient platforms to mirror prevailing social structure, through the addition or removal of sports in the games as a reflection of the changing popularity, value, and worldwide appeal of sports over time (Kanin, 2019). In 2016 the International Olympic Committee, for example, approved five new sports to the

2020 Games in Tokyo. Three of those sports are considered alternative sports: surfing, skateboarding, and climbing (Coakley & Dunning, 2000). Alternative sports have steadily been growing since the 1990s, much of their success as a result of the increased media coverage, major tours, and events (Bennett & Lachowetz, 2004), to name a few. Nevertheless, the growth of these sports is worth noting. Snowboarding rose from 1.8 million to 3.6 million participants during the 90s; skin and scuba diving participation increased 75% from 1979 to 1996; rock climbing rose from 5 million participants in 1993 to 8.3 million in 1997; and mountain bikers went from 4 million in the early 1990s to more than 8 million in 1998 (Bennett & Lachowetz, 2004).

Paralleling the growth of these sports since the early 2000s, a movement of athletes has also been growing, most of which participate in alternative sports, who have increasingly become involved in environmentalism and sustainability. These include, but are not limited to, snowboarders Jamie Anderson, Kelly Clark, & Danny Davis, endurance athlete Joe Grant, professional rock climbers Emily Harrington & Beth Rodden, mountain athlete Anton Krupicka (Protect Our Winters, 2018), rugby player David Pocock (Spink, 2015) and surfers Kelly Slater & Terry Hardy (O'Connor, 2017). The movement is exemplified by pro-snowboarder Jeremy Jones and his Protect Our Winters (POW) pro-athlete network (2018) dedicated to climate change action. Jones aptly explains that even “though [they] can dress up for meetings, in the end [they] are pro athletes, dirtbags and diehards; for [them], winter is not just a passion, but a way of life” (Protect Our Winters, 2018). Jones and his POW network, however, are not alone in the fight to protect that livelihood. Other athletes and sport-related industries (such as GNU snowboards, Sand Cloud, & Ecoboards) alike that are seeing their ‘way of life’

threatened by the effects of climate change and like-minded groups are increasingly activating their ‘giant tribes’ (O’Connor, 2017) and ‘jumping on the sustainability wagon’. As a result, the idea of the way of life being threatened begs the question: what exactly does it mean to have nature be a ‘way of life’? Particularly while thinking about the role of sports, the environment, and their potential to foster pro-social and pro-environmental behaviors?

POW not only helps illustrate the growing participation of athletes, and sports institutions within the environmental arena, but it also lays the ground for the debate of whether their engagement is genuinely out of ecological stewardship or purely as part of a consumer-driven society within which athletes, in this case, pro-athletes, may view the environment as merely a resource out of which to gain a livelihood. Or is it perhaps that the type of sport that livelihood entails has something to do with their involvement? Is it that certain types of athletes are more inclined to serve as ‘environmental stewards’ than others? Does the kind of sport have anything to do with it? Does the sport an athlete is a part of make them more prone to pro-environmental or pro-social behavior, more so than athletes in other sports? And is the type of sport a significant influencer in the athletes’ socially conscious behavior? Before looking further into the questions posed above, it must be recognized that as an intrinsic part of society, sport has a more significant role to play in that it shifts and reflects society as it is.

Sport as a Catalyst for Change

Sport as a Social Construct

Sports as an institution (Harris, 2006), as institutionalized activities (Coakley, 2007), and even as a microcosm of society, are a manifestation of our most promising

achievements, and our most horrifying exploits (Lampman & Spickard Prettyman, 2011, pg. 279) (i.e., climate change). Athletes, in this particular instance, are, arguably, merely displaying the overarching view of society. On the other hand, it can be argued that sport is precisely the tool where change and shifts in perspective can be incubated. It provides a platform, and reach, that few other institutions have where athletes like Serena Williams, Billie Jean King, Colin Kaepernick, and Patty Mills can ignite or even represent change; be it gender equality (Bridges, 2016), police brutality (Reid, 2017), or Aboriginal affairs and issues (Metallinos, 2017). A characteristic that has not only been recognized by organizations like the United Nations but by governments around the world, forming an intrinsic part in the latest, albeit limited, research of sports sociology. Sport is increasingly being recognized to hold a significant role in addressing various problems in society beyond the different social purposes it has previously had. There has been a rapid growth of initiatives that seek to advance this role (social and economic) through sport (Black, 2010), arguably as a result of the United Nations formal recognition in 2001

That sport could be used at the individual, community, national and global levels as a mechanism, in combination with existing efforts, to achieve specific targets such as those concerning poverty reduction, realizing universal education, promoting gender equality, ensuring environmental sustainability and combating HIV/AIDS (Beutler, 2008).

Nevertheless, as Alosi (2007) highlights, to understand the purpose of sport in society, one must first understand what it is. The traditional definition of sport consists of determining them as “institutionalized competitive activities that involve rigorous physical exertion or the use of relatively complex physical skills by participants motivated by internal and external rewards” (Coakley, 2007, pg. 6). Alternatively, Coakley argues, some sport sociologists frame their research, instead, around the

definition provided by the answers to two questions: what activities does the world at large identify as sports? and whose sport counts with the most support and resources? (Coakley, 2007, pg.7). For the work presented here, sport will be defined by any voluntary physical activity undertaken, which focuses on completing a set of physical objectives, either as a game or for recreation purposes (Alosi, 2007).

With this in mind, one can look at sport throughout history and identify its various roles: a survival tool or as a symbol of worship in ancient times; as a way of training for war during peacetime during feudal times; and, to serve a specific utilitarian aim within ancient societies, such as Chinese mailmen and couriers being trained in long-distance running (Alosi, 2007). It is not until the 8th century B.C.E. that sport as an end in itself can be identified, from Greek gymnasiums to sports such as surfing, holes, and sledding on dry land (Alosi, 2007). However, the most significant shift in sport can be distinguished in the transition from medieval times to the Renaissance, where sports shifted from brute force to finesse (Alosi, 2007). Nevertheless, it was during the Industrial Revolution that modern sport developed as a means to cope with the impact of urbanization. It was also during this time that sport for the masses took root, as an “inevitable consequence of capitalistic development, meant to perpetuate a capitalistic class structure” (Alosi, 2007, pg. 7). Their purpose: to acclimatize workers to the correct work structure while diverting any potential uprisings through the creation of a submissive attitude towards authority. Even still, modern sport has experienced an acceleration without any fundamental shift in direction (Alosi, 2007).

The recognition of sport is thus significant, as it has the potential of providing governments with another tool at their disposal that reaches beyond just tackling health

issues, by providing a more substantial opportunity for combating social problems within their communities. However, research on the social impact that using sport as a tool to address social issues is to date, limited. Additionally, critics may argue that if sports have not undergone a significant change, perhaps they may not be the right tool to fix problems within the society that created them, particularly if they were designed to perpetuate a specific societal structure. It is here that the argument for alternative sports ought to be made.

Alternative Sports and Culture

It is assumed that extreme/alternative sports athletes have an ‘unhealthy’ relationship with fear or are generally perceived to have an ‘irrational’ need for adrenaline (Brymer, 2009). Brymer (2009) points to discussions surrounding adventure, lifestyle, and extreme sports, as typically surrounded by a presupposed risk-taking focus, a narrative, he argues, scholars have assumed when exploring these types of sports (Brymer, 2009). Identifiable by the recurrence of research where alternative athletes are labeled as adrenaline junkies and are portrayed as social deviants (Brymer & Schweitzer, 2012).

Nevertheless, extreme sports have served as subcultures, where certain groups of individuals differentiate themselves from other generations and their mainstream sports, such as is the case of snowboarding (Donnelly, 2006). This move away from the mainstream, however, has caused alternative and extreme sports to be viewed in an ‘us against them’ environment (Donnelly, 2006), where alternative and extreme athletes are seen in conflict with traditional sports and their culture. Even so, Coakley (2007) argues that these alternative sports provide members of Generation Y an alternative to the “exclusive, structured, performance-oriented, and elitist organized sports in America”

(Bennett & Lachowetz, 2004, pg. 241). They provide participants “creativity, individuality, friendship/camaraderie (even within a competitive setting), and a style that can only be developed when not constrained by teams and rules found in traditional sports like football, baseball, and basketball” (Bennett & Lachowetz, 2004, pg. 239). Thus, participating in extreme or alternative sports does not mean one is a social ‘deviant’, an ‘adrenaline junkie’ on a death wish, or emotionally unhealthy (Brymer, 2009), but rather that involvement in these types of sports provides a disruption of the *status quo* from the preexisting structure, and may even have positive outcomes, including psychological and social ones. Beneficial not only to the athletes themselves but to society as a whole.

Alternative sports range from hiking to skateboarding, to base jumping, bouldering, and surfing, to name a few. The subculture, unfortunately, has, for the most part, been overshadowed by the assumption of being only for thrill-seeking, adrenaline hooked individuals (Brymer & Gray, 2010), who sometimes want to be perceived as original and fail (Coakley, 2007). Various sport sociologists, including Coakley (2007) and Jarvie (2006), take note of this subculture in their work as an essential piece when attempting to understand sports. This subculture can sometimes be perceived as challenging the *status quo*, and where its participants may be more receptive to social change (Coakley, 2007). However, this is most certainly not solely to be attributed to a skateboard, or a rope, instead of a ball (although rugby, a ball game, is considered an alternative sport and a traditional sport to some extent). It must then be argued that there is an inherent aspect within these sports that encourages or allows for shifts in perspective to happen, where

sport can potentially truly serve as an empowering social agent rather than as a mere platform.

One can define an alternative sport as any physical activity undertaken which focuses on completing a set of physical objectives, either as a game or for recreation purposes, which exists outside the mainstream world of sport; promotes values that differ from the dominant sports forms, such as organization by the participants themselves, less emphasis on competition, and an individual focus. They often include a lifestyle component, “in which authentic participation requires acceptance into the sports subculture” (Honea, 2014, pg. 1254). Nevertheless, Honea (2014) would argue that alternative sports are defined by what they are not: mainstream. He *loosely* defines them as “participant controlled and directed, individually focused with less emphasis on competition than traditional sports... historically without formal organization, [or which] have developed organizations from within the ranks of participants, and [reject] involvement on the part of perceived ‘mainstream’ sports organizations” (Honea, 2014, pg. 1255). It is worth noting here, however, what Honea identifies as the ‘*insider requirement*’, an aspect through which alternative sports encompass their own subculture “one that stands in opposition to the dominant culture” (Honea, 2014, pg. 1255), and which he distinguishes as more likely to happen than in traditional sports.

Donnelly (2006) criticizes the sometimes-alienating nature of extreme or alternative sports, calling for a better approach in research that will develop a solid understanding of the nature and culture of these sports. She argues that by separating sports into the categories of alternative and mainstream, the sports are made to stand at opposite sides (Donnelly, 2006). Nevertheless, Humberstone pinpoints lifestyle sports as paradox

creators that offer participants resistance and challenge to the prevailing sport ideologies, while incorporating aspects that buy into the mainstream capitalistic ideologies, as they are provided with a sympathetic view of nature as a partner rather than as a resource (Humberstone, 2011). Thus, setting the ground for the connection between sports and the environment, allowing then for the case for alternative sports and sustainability to be made.

Sports and the Environment

“Sport, in all its forms, creates an environmental footprint like everything else in life” (Casper & Pfahl, 2015, pg. 3). However, research in the sociology of sport has mainly focused on two groupings: “a) ethnicity, race, gender, sexuality, social class, disability, and intersections among these groupings or identities, and b) globalization, post-colonialism, sport policy, sports organizations, celebrity, marketing and advertising” (Harris, 2006, pg. 78). Approaches fail to look at sports beyond more than a simple platform through which to address environmental problems or raise awareness. Sigmund Loland highlights the conflict that may arise from combining ecological concern with sports, since modern sport implies extensive use of resources (1996). Although not the case for every sport, some even allow for an ecological concern to be nurtured more than others.

When attention is given to the matter of sport and the environment, it seems to focus primarily on the impact of sport on the environment, i.e., sporting events, construction of stadiums, waste production, and energy use. Although, perhaps a step in the right direction, initiatives that aim to only “understand environmental issues related to its teams’ games and stadia operation” (Casper & Pfahl, 2015, pg. 6), and the like, fail to

acknowledge the bigger problem. In turn, they perpetuate a ‘business as usual’ approach of sporting around the world without genuinely shifting to a more environmentally focused and conscious agenda. This strategy presents a missed opportunity on the potential that sport can have in contributing to a solution and social change. It limits procedures related to the environment to either operating within an outside-in or inside-out system. What this means is that a sports organization’s plans and operations are strategically tailored to the extent that the environment and related contextual elements impact them or “where sports organizations personnel understand how their efforts impact the environment” (Casper & Pfahl, 2015, pg.5). Mostly presented through the majority of research available on the matter, where the focus was on one of these two systems approaches to sporting (Loland, 2006; Shulenkorf, 2012; Black, 2010; Beutler, 2008; Jarvie, 2006; Coakley, 2007), which for the most part surrounded sporting events, mega-events to be specific. In turn, it also reflects the growing implementation of sport initiatives that are framed through, or limited by, one of these systems within the international development sphere.

Research has found that the “theory and evidence that both exercise in, and simple exposure to natural environments, can both function to improve affective state and reduce stress and aid recovery from stressful events” (Rogerson, 2017, pg. 2). With this in mind, alternative sports are best equipped in facilitating participants with this exposure to nature along with its potential benefits. Stemming from the fact that the majority of alternative/lifestyle sports take place in conjunction with nature, i.e., kayaking, standup paddling, climbing, snowboarding, wakeboarding, and surfing.

Nevertheless, as highlighted by Rogerson (2017), and Humberstone (2011), lack of research on this topic is still prevalent. Nonetheless, some research does exist. Even so, Brymer and Gray (2009) emphasize that the research that does exist downplays the importance of athletes' connection to the natural world. Through their work, they have attempted to correct this by looking into how extreme sports can initiate positive change in participants' relationships with the natural world (Brymer, Downey & Gray, 2009). It is here that an improved grasp on how to best use sport will be attained. Although still in its infancy, research is beginning to take place, which looks to better understand the link that exists between sports and sustainability, leading to what will eventually be an awareness for purposeful program development and implementation. The unification of sociological and psychological aspects will be fundamental in this understanding, for they are both simultaneously intrinsic to the knowledge of sport and how it may contribute to pro-social & pro-environmental behaviors. However, the fact remains that sport, globally, has already produced positive impacts socially, including contribution to the achievement of lasting peace, by serving as a bridge for social, religious, racial and gender divides (Beutler, 2008).

Nevertheless, further research is needed on the matter, as the knowledge that “doses of exposure to nature and green exercise bring performance-relevant physiological, immunological, and psychological benefits” (Rogerson, 2017, pg. 1) continues to grow. What is clear is that sports have an even more significant impact beyond their societal function, particularly within the brain, than previously thought, and its health benefits go beyond just the production of endorphins (Domonell, 2016). Although the connection between athletics and psychology has existed since the early 1920s with Coleman

Griffith, better known as the “adopted father of sports psychology” (Green, 2012), research on the impact of specific sports on the participant’s mental health remains limited.

Behavior and Sport

Sport, Mood, and Behavior

In recent years, the field of sports psychology has grown slowly in its attempts to better understand the connection that exists between participation in sports, the brain, and its influence on behavior (Kavussanu & Boardley, 2009). Participation in extreme sports has been found to have a positive impact on health (Brymer & Schweitzer, 2012) and to influence psychological constructs such as that of courage and humility positively (Brymer & Oades, 2009). The question then would be whether this happens through mere participation in these sports and whether this participation then shifts perceptions through social modeling. Or, if there is a psychological aspect that contributes to the modeling of certain behaviors depending on the sport? To begin to look further into these questions, a better understanding of how sport influences mood and action is needed.

It is accepted knowledge that exercise is not only good for the human body but also the mind. Exercising strengthens the bones, clears out bad cholesterol, decreases the risk of stroke, high blood pressure, and diabetes (Lagos & Singh, 2016), just to name a few physical benefits. Additionally, evidence has shown that exercising helps release “all the happy hormones” (Dubino, 2015). Cortisol increase, for example, has not only been shown to strongly influence learning and memory positively but is also associated with mood improvement (Basso & Suzuki, 2016). Similarly, the production of dopamine that rises during exercise is associated with the positive effects of exercising on cognitive

functioning. Endorphins released during exercise, on the other hand, provide a feeling of euphoria, which helps in sharpening focus and has positive effects on mood and memory (Lagos & Singh, 2016). Finally, serotonin increase has been recognized to have a beneficial effect by decreasing depressive- and anxiety-like behaviors (Basso & Suzuki, 2016, 2017). As this field is still growing, this is by no means an exhaustive list of all the chemical changes that happen in the brain during exercise. Nevertheless, they help provide a gateway into how physical activity connects to the psychology, and related behavior, of the individual. It can then be argued that the better the mood or mental health of an individual, the more likely they will be to behave positively, and one could even hypothesize that the likelihood that they will act in a pro-environmental and/or pro-social manner is then significantly increased.

Research has shown that psychological benefits from team sport participation are acquired from the communal experience that team sports provide, where participants learn to trust and depend on others; to give and accept help; work towards a common goal; while reducing the risk of depression by boosting self-esteem and confidence (Lagos & Singh, 2016). Consistent with self-determination theory (SDT), which suggests that autonomy supported interpersonal and social context promote self-determined motivation, well-being, and healthy development by satisfying three fundamental human needs: competence, relatedness, and autonomy (Ryan and Deci, 2000, 2002). Although, “few studies have collectively examined changes in mood, cognition and exercise physiology” (Basso, Crosta, Lee, McHale, Payne, Shen, Singh & Suzuki, 2015), knowledge on the relationship between the brain and physical activity, highlight that exercise “changes the brain’s anatomy, physiology, and function” (Suzuki, 2017). This

information is crucial in highlighting the use of physical activity not only as a therapeutic tool to attribute in the delay, prevention and even treatment of cognitive decline, but it calls attention to its potential as a powerful tool to enhance the brain in healthy individuals through improving concentration, mood, and stress resistance (Basso & Suzuki, 2016, 2017). It becomes particularly significant in placing sport as an essential tool for enhancing mental health.

By understanding the impact that exercising has on the mood and behavior of participants, the argument for alternative sports as a tool for pro-environmental and pro-social behavior can begin to be made by first understanding how it is that alternative sports influence specific moods and behaviors.

Alternative Sports and Behavior

Brymer (2009) highlights the false narrative that surrounds research encompassing adventure, lifestyle and extreme sports, and behavior along with the continuously assumed portrayal of these athletes as adrenaline junkies, or as social deviants (Brymer & Schweitzer, 2012). Notwithstanding, as has been previously established, involvement in these sports have positive outcomes psychologically and socially. Through understanding the psychosocial impacts participating in alternative sports has on athletes, all stakeholders concerned with health, sport and social good, can best develop, and promote, these sports within their communities and use them as a tool for more than health promotion. Instead, alternative sports can serve as an instrument to model social behavior within society. Additionally, alternative sports may offer an opportunity for individuals to move away from the mainstream, allowing participants to define their identities through these sports and their subcultures (Rédei, 2009).

Participation in alternative sports has steadily grown since the early 90s, with over 30 million participants in the early 2000s (Bennett & Lachowetz, 2004). However, research surrounding these sports has remained limited. Most of the research that exists on these types of sports has focused on what are known as extreme sports, commonly defined as independent sports where if a mistake or accident occurs, the most likely outcome is death (Brymer et al., 2009), i.e. B.A.S.E. (Buildings, Antennae, Space, Earth) jumping, extreme skiing, heliskiing/snowboarding, waterfall kayaking, big wave surfing, high-level mountaineering, free climbing, and skydiving, to name a few. These sports, although falling under the ‘alternative umbrella’ of alternative sports, also include experiences that arguably set them apart from the rest, i.e., the likelihood of death if an accident occurs. An example of the type of research that exists can be seen through Brymer and Oades’s (2009) study of extreme athletes, where they identified that there are significant lessons to be learned from extreme sports about courage and humility. Brymer and Schweitzer (2012), alternatively, looked to better comprehend the relationship of extreme athletes with fear and anxiety through the use of an interpretive phenomenological method, guided by one question during the interview process: “what is your experience of your activity?” (Brymer & Schweitzer, 2012, pg. 480).

Although these studies identify positive aspects of the extreme sport experience, Donnelly (2006) criticizes the sometimes-alienating nature of extreme or alternative sports. It is here that these types of sports can offer an opportunity for what Loland (1996) termed ‘ecosophy of sport,’ where sports can create an environment where ecological consciousness can be realized through participation (Loland, 1996). A correlation has been observed in participants actively involved in nature, having positive

health, wellbeing, and social connectedness, but there remains a limited understanding, and research, in comprehending exactly how individuals' interactions with the environment influence health and behavior (Yeh, Stone, Churchill, Wheat, Brymer & Davids, 2016).

Studies conducted on 15 participants from Europe, Australia, and the United States - 10 male and five female athletes aged 30 - 70 years - by Brymer & Oades (2009) and Brymer & Schweitzer (2012), found that the transformations which athletes experienced performing alternative sports were “permanent, instant and unexpected” (Brymer & Oades, 2009, pg. 118). The experience gained from participation in these sports went beyond the activity itself, spilling over to the athletes' lives in general (Brymer & Oades, 2009). They also found humility to be an intrinsic part of the involvement in extreme environments (Brymer & Oades, 2009). This idea mostly stems from the argument that these sports change the perspective of the athletes, as they fully grasp their mortality in turn becoming more humble, more respectful of life and nature in a way that it is, far greater and more powerful than humanity” (Brymer & Oades, 2009, pg. 114), which in its own right teaches one of humility.

The study also found that the athletes experienced high levels of anxiety or fear while participating in their chosen sport, but continued with their involvement, a choice they equated to courage. Fear is a critical part of the experience in extreme sport, albeit not of all alternative sports, nevertheless, athletes seem to consciously decide to work through it to continue with their involvement (Brymer & Schweitzer, 2012). Much like fear, extreme sport studies have shown that participants are aware of the danger entailed within their sport and are clear that fear is a ‘constant companion,’ yet they have

developed the necessary skills to overcome it. Participants can control their anxiety without experiencing the fight or flight reaction commonly provoked by fear or danger. Researchers describe this as the nature of the extreme sport experience, which entails courage and humility. Participating in it then naturally evokes these two constructs. As a result, alternative sports have the potential of teaching athletes better fear and anxiety management, where individuals then instead manage to remain calm and focus on their performance. They instead perceive fear as an instigator for “deep positive feelings and changes in behavior” (Brymer & Schweitzer, 2012, pg. 482), which results in a perception of personal empowerment that further motivates athletes to continue with the process, providing them a sense of achievement and harmony with themselves; a greater understanding of their ‘selves’ (Brymer & Schweitzer, 2012). This harmony is arguably extended to a perception of oneness with the environment (Brymer & Schweitzer, 2012). Nevertheless, as Barbara Humberstone points out, precisely “how the body engages with the elements through senses, the affective and evoked emotions in the physical and mindful practices” (2011, pg. 498) of these sports is yet to be fully explored.

Sports and Pro-Environmental Behavior

Brymer et al. (2009) argue that if people feel psychologically connected to the natural world, they willingly make sacrifices to engage in sustainable practices. Signaling to Humberstone not being alone in attempting to unravel the connection between alternative sports, nature, and attitudes or motivations. Similarly, Krein (2008), for example, highlights alternative sports as allowing participants to develop new and original worlds, which may contribute to developing a better understanding of our relationship with the natural world. Data gathered by Brymer et al. (2009) suggest that these types of sports,

extreme sports particularly, can contribute to a positive change in participants ' relationship with the natural world. By allowing participants to develop feelings of connection to nature, athletes then identify themselves as being one with the natural world or as connected through a life of enhancing energy (Brymer et al., 2009; Brymer & Gray 2009). Allowing athletes to identify their relationship to the natural world as an 'intimate dance' is consistent with deep ecology's basic principle of 'biospherical egalitarianism' that sets equal right to live and blossom for all life forms (Loland, 1996). It can then be argued, as Brymer et al. (2009) do in their study of extreme sports as a precursor to environmental sustainability, that

Individuals who feel connected to or as part of the natural world place the well-being of the broader ecosystem above anthropocentric or personal concerns, emphasize the interdependence of people and nature, view humans as only one of many parts of nature, and advocate decision making that considers the larger natural system in which humans are embedded (Brymer et al., 2009, pg. 197).

This perspective highlights the need to further delve into how involvement in these sports changes the way participants view nature and the world around them, as well as how that may influence socially conscious behavior.

Pro-environmental behavior, then becomes key in contributing towards the achievement of environmental sustainability. As defined by Sawitri, Hadiyanto & Hadi: Pro-environmental behavior is conscious actions performed by an individual so as to lessen the negative impact of human activities on the environment or, and to enhance the quality of the environment... [examples of this behavior include] environmental activism (i.e., active involvement in environmental organizations), non-activist behavior in the public sphere (i.e., petitioning on environmental issues), private sphere environmentalism

(i.e., saving energy, purchasing recycled goods), and behavior in organizations (i.e., product design) (2015, pg. 28).

Additionally, the values-beliefs-norms (VBN) theory argues that pro-environmental behavior “stems from an acceptance of particular values, from beliefs that things important to those values are under threat, and from beliefs that actions initiated by the individual can help alleviate the threat and restore the values” (Sawitri et al., 2015, pg. 29). In turn highlighting the rise of alternative sports athletes’ involvement in environmentalism and sustainability, shedding light on the possible connection that may present itself as a significant example of the link between alternative sport participation, and socially conscious behavior. That the relationship between the two presents itself as a causal step to emotional care (release of endorphins, i.e.) and behavioral commitment that would lead to the protection of the natural world (Brymer et al., 2009). Resulting then in the argument, and need, for activities that foster both the development of the ecological self and behaviors that are consistent with it.

Alternative Sports as a Tool for Promotion of Pro-Social & Pro-Environmental Behaviors

The Gap in the Research

Holland-Smith, Love, and Lorimer (2013), for example, are among the few that have looked at better understanding the relationship between alternative sports and pro-environmental behavior. In their study of British surfers’ attitudes and values toward the environment, they discovered that even though the identity of the surfers was environmentally friendly, not all showed pro-environmental behavior. Nevertheless, the authors identified that there are arguments that establish an individual with a stronger

environmental identity as more likely to show pro-environmental behavior such as recycling and energy efficiency, an identity that prevailed in their study of surfers (Holland-Smith et al., 2013). Supporting this idea is the observation of surfers and windsurfers acting empathically to provide for environmental and health benefits, an aspect that is consistent with pro-environmental behavior and one that supports the significance of the senses in the practices of alternative sports which suggest significant differences from conventional sport (Humberstone, 2011). Humberstone (2011) argues that it is this embodied motion engagement with nature, that many alternative sports revolve around, where the senses, physical practice, and engagement increase consciousness in what is known as flow, and which she ascribes to a physiological change and sharpened awareness (Humberstone, 2011). This flow state created by alternative sport participation may contribute to the development of the ecological self if adequately stimulated.

Alternatively, the significance of the findings by Brymer and colleagues (Brymer & Oades, 2009; Brymer & Schweitzer, 2012; Yeh, Stone, Churchill, Wheat, Brymer & Davids, 2016), as well as the highlighted relationship found between alternative sports and the view of nature (Krein, 2008; Humberstone, 2011; Yeh et al., 2016; Holland-Smith et al., 2013), along with the psychosocial impacts of green physical activity (Yeh et al., 2016;), lies in noting that extreme and alternative athletes' experience through their sport in nature transforms their anthropocentric views. This view is replaced with a new connection to the natural world, an eco-centric realization of courage and humility (Brymer & Oades, 2009), where fear and anxiety instigate positive personal development for the self and those around (Brymer & Schweitzer, 2012). It is the very fluidity of

movement ‘through’ nature that Humberstone (2011) suggests highlights continuously changing perceptions and awareness of the self and the relation to the natural world.

Several other studies have looked to better understand the connection occurring between alternative sports and nature (Krein, 2008; Humberstone, 2011; Yeh et al., 2016; Holland-Smith et al., 2013). They highlight the lack of understanding that exists in the power that these sports may have in fostering intimate human-nature relationships that move “beyond a naïve understanding of the relationship between self and the natural world to a new ecocentric understanding” (Brymer & Gray, 2010, pg. 146). Highlighting the need to improve cognizance of alternative sport participation as a possible promotor of pro-environmental behavior. One that, if better understood, could lead to alternative sports programs developed that better aim at incubating this worldview and, thus, lead to a positive impact in socially conscious behavior. Further research ought to be done to better reflect whether it is the nature of how these sports originate, away from the ‘popular norm’ that turned them into a breeding ground for social change. Alternatively, whether it is that participation in them provides room for discourse, or if it is something that individuals who chose to participate already have and is simply brought to the surface through engaging in the sports.

When it comes to the perception surrounding these types of sports and their relationship to the natural world, it is not uncommon to come across arguments that assume that alternative and extreme athletes “seek to conquer, compete against or defeat natural forces” (Brymer et al., 2009, pg. 193), increasingly limiting and deemphasizing the “importance of [their] connection to the natural world” (Brymer & Gray, 2009, pg. 135). Brymer, Gray, and Downey (2009, 2009 & 2010) have aimed at changing these

assumptions through their study of extreme athletes drawing on ecopsychology to understand the athletes' perception of themselves and the environment. Their studies provide a solid base for what ought to be further delved into on the link between extreme, alternative and lifestyle sports and the natural environment as potential "precursors to environmental sustainability" (Brymer et al., 2009, pg. 193), as well as socially conscious behavior. Through the use of their key finding of extreme sports participants' tendency to "develop feelings of connection to the natural world... of being at one with the world" (Brymer et al., 2009, pg. 193) as a foundation for further inquiry. It is hypothesized then, following ecopsychology's premise, that by feeling connected with the natural world, a desire to care for it arises, resulting in the more active pursuit of practices that are environmentally sustainable (Brymer et al., 2009). Here is where the case for further study and a gap for the subsequent study lies. By actively pursuing to better understand the psychological, emotional, and social connections between "humans and the natural world" (Brymer & Gray, 2009, pg. 136) that result from participating within this subculture of sports so that the international arena may learn how to best facilitate these connections to achieve sustainability. It proves essential to grasp exactly how it is that involvement in these sports allows for participants to shift their perspective in regard to the natural world (Brymer & Gray, 2010).

Nevertheless, the research mentioned above has only begun to scratch the surface on the potential role that alternative sports could play in modeling socially conscious behavior. Given that connections are beginning to be formed between alternative sport participation and pro-social and pro-environmental behaviors, it is worth further inquiring into how these sports might shape and influence socially conscious behaviors. Is socially

conscious behavior developed through mere participation in these sports? If so, does participation then shift perceptions through social modeling, or is there a psychological aspect that contributes to the modeling of certain behaviors depending on the sport? It is these guiding questions that will, as a result, serve to form the study presented below in an attempt to contribute to the limited but growing research connecting sustainability, sports, and behavior.

The Present Study

Based on Krein (2008), Brymer & Oades, and Brymer & Schweitzer (2009 & 2012), and Humberstone (2011), this study examines if participation in alternative sports cultivates athletes' socially conscious behavior, specifically pro-social and pro-environmental behavior. For the purposes of this study, alternative sports were defined by the researcher as sports that ideologically or practically provide alternatives to mainstream sports and their values (Coakley & Dunning, 2000) and could be categorized as extreme, lifestyle, or nature-based (e.g., windsurfing, martial arts, kayaking, snowboarding, rock climbing). Similarly, socially conscious behavior was defined as acts that demonstrate a sense of empathy, caring, and ethics (Yörük, 2015). Pro-social behavior, on the other hand, will be "...defined as voluntary behavior intended to help or benefit another individual" (Kavussanu & Boardley, 2009, pg. 99). Finally, pro-environmental behavior was established as "conscious actions performed by an individual so as to lessen the negative impact of human activities on the environment or, and to enhance the quality of the environment" (Sawitri et al. 2015).

III. DATA AND METHODS

The study is based on 20 semi-structured, in-depth interviews, with individuals recruited through purposive sampling, beginning within the researcher's personal networks, followed by individuals recruited through snowball sampling. Questions during the interview aimed at better understanding each of the individual's behaviors, their values, and how they are connected to their sport participation. Recruitment criteria included: 1) being between the ages of 18 and 35 years old, 2) being an alternative sports athlete/participant, 3) having participated in their alternative sport(s) for more than a year, and 4) currently participating actively in at least one alternative sport. Interviews were set up directly with each interested participant at a place of their choosing, to foster comfort and familiarity. By using pseudonyms to represent each participant, this study intends to protect their anonymity and privacy.

Participants

Data for this study were obtained from in-depth interviews conducted throughout February 2020 with individuals active in alternative sports. Participants were recruited via the researcher's network through generalized messages to gauge interest, which established the aims of the study, as well as laid out the requirements for participation. After initial interest was expressed, each individual was directly contacted with further information about the study, and should they meet the criteria, were invited to participate in an interview either in person or via electronic means. Interviews with those interested in proceeding were set at a time, date, and method of their choosing, with most of them occurring at either a coffee shop or a bar, as well as through FaceTime. Each interview lasted between 30 min and 1hr 40min, with an average length of 48min. The

responsiveness and interest were unexpected, and given time constraints, the researcher had to turn people down for the study once a desirable number was reached.

Table 1 lays out basic demographic characteristics collected from the 20 interview participants in the study. Out of the 20 people interviewed, the majority (12) identified as female and eight as male. Thirteen were white/Caucasian, while four are Hispanic, and two are biracial; others represented included East Indian (1) and American Indian. Participants come from Guam, England, Australia, Germany, Canada and the US. Ages ranged from 18 to 35 years old, with the median being 31 years old. Additionally, the average number of sports that participants are involved in is 2.8, out of which 11 participants are involved in both alternative and traditional sports. There are 41 alternative sports that the individuals in this study are active in (Table 2), including:

Table 1. Interview Participants' Demographics

	Percentage	Mean	Median	Minimum	Maximum
Age of respondent (years)	—	30.7	31	18	35
Female	60%				
Male	40%				
White/Caucasian	65%				
Biracial	10%				
Hispanic	20%				
East Indian	5%				
N=20					

backpacking, standup paddle boarding (SUP), caving, rugby, extreme hiking, spearfishing, minibike racing, yoga, and dodgeball to name a few.

Table 2. Sport Participation per Participant

ID	Number of sports active in		
	Total	Alternative	Traditional
Taio	3	Ultimate Frisbee Disc Golf	Bowling
Aiysha	5	Hiking Kayaking Standuppaddleboarding	Soccer Basketball
Brandy	2	Caving Diving	
Alexandria	2	Scuba diving	Softball
Dante	1	Ultimate Frisbee	
Rosalind	3	Rugby Snipe racing	Boxing
Clarence	1	Ultimate Frisbee	
Tamera	1	Rugby	
Forrest	8	Rugby Snowboarding Wakeboarding Waterskiing Knee boarding Kayaking Paddle boarding	Skiing
Ibraheem	1	Minibike racing	
Philippa	8	Caving Trail running Canoeing Mountain biking Backpacking Canyoneering Mountaineering Diving	
Jemima	1	Minibike racing	
Aliyah	1	Powerlifting	

Table 2. Sport Participation per Participant (continued)

ID	Number of sports active in		
	Total	Alternative	Traditional
Wilfred	2	Ultimate Frisbee	Competitive Running
Hoorain	4	Rugby Hiking Disc Golf	Soccer
Marianne	3	Dodgeball Yoga	Walking
Billie	1	Rugby	
Neil	4	Spearfishing Bodyboarding Free diving	Swimming
Orla	3	Hiking (Extreme) Snorkeling	Jogging
George	2	Rugby	Gym
Average per participant	2.8		

Procedure

After acquiring verbal consent from each participant and gathering necessary background information (see Appendix A), the interviews began with questions aimed at learning about each participant's overall sports experience and their trajectory to their current alternative sport participation (see Appendix A). Questions, following a semi-structured guide, such as "*What specifically attracted you to these sports? How did your participation begin?*" were asked to get a better understanding of each individuals' involvement in the various sports. Once that was established, questioning shifted towards reflective inquiring on each of the participant's interactions with people, and the environment, when actively involved in the sport versus outside of it, as well as establishing each individual's environmental and socially conscious values and

behaviors. Finally, the questions toward the end of the interview aimed at stimulating reflection from participants and see if they could identify a link between their values and behaviors, both social & environmental, to their alternative sport participation. The final question's objective was to bring it all together by asking: *"Do you believe that the values and behaviors we have talked about are an outcome of your participation in the sport? How so? or would you say you already had those values/behaviors, and it is what it attracted you to your sport? If yes, how and why?"*

Once interviews were completed, the researcher transcribed all interviews using the software, Otter.ai. Each interview was also manually edited for accuracy, as needed. The researcher used multi-stage coding for data analysis. Analysis began by each interview being read thoroughly a first time to identify themes; then, a second reading took place to solidify ideas and highlight sub-themes (Lichtman, 2014). Statements were then coded based on the primary overarching categories that had been identified. Due to the large number of interviews and the breadth of topics discussed, a narrowing of analysis occurred to meet the scope of this research better. Transcripts were then read a third time to identify the final main themes.

IV. RESULTS AND DISCUSSION

The results are organized around the main aims identified of the research, which were to identify participants' perception of their sport participation in order to better understand how that experience affects their perceived influence, or lack thereof, on their pro-environmental and pro-social values and behaviors. The overarching themes selected from the thematic analysis were consistent with the layout established through the grouping of questions in the interview, which include sports experience, pro-environmental values and behaviors, pro-social values and behaviors, and the connection of these with alternative sports. It is the sub-themes that emerged from each category, including but not limited to mental health, consciousness & awareness, that will serve as a guide to the ensuing discussion.

Defining Alternative Sport

One of the first questions participants were asked during the interview was whether they considered the sports they were currently active in as traditional, alternative, or something else. This question aimed at laying down the framework that, as Alosi (2007) highlighted, would lead to a better understanding of the purpose of said sport in participants' lives, and potentially in their worldview and subsequent behavior. Although the rationale used by the researcher, including the definition of alternative sports used, was provided to participants before the interview, the intent of including this question was to understand better how the perception of their sport may affect how their participation impacts their mental health and their behavior.

Although none of the participants effectively defined what an alternative sport is, most of the participants (15 out of 20) described their sport as 'not' mainstream,

consistent with Honea's (2014) argument that alternative sports are defined by what they are not. For example, Orla stated:

Um, I guess alternative, I would say alternative 'cus, even though I do not want to say like hiking and going for runs is probably traditional, it's not in a way that people follow sports teams, only like the Olympics I guess, or if that's your sport.

For some, the idea of whether or not a sport was in the Olympics played a vital role in the definition of traditional sports, and subsequently set their sport apart. For others, mainstream sports were typically those sports primarily dominated by men. For example, Forrest defined traditional sports: "the big four in the US would be like soccer, basketball, baseball, football, at least in men's sports, and then pretty much anything outside of that it's going to be alternative in my mind." Several participants described how gender might play a role in whether a sport is considered mainstream or alternative, depending on whether women or men are participating in it.

Additionally, one of the common understandings of what defines a traditional sport was whether or not they had a large number of participants, or whether they were widely popular or on mainstream channels. For example, Hoorain described how "there's not a lot of coverage on rugby or disc golf or even rock climbing," and Marianne highlighted how there are "not a lot of people that play" dodgeball. Similarly, Philippa described it this way:

I definitely consider them to be alternative in that they are not a part of anything you would see on the Olympics, or in ESPN or something that can have sort of a mass spectator sport type thing so, yeah, I consider it to be untraditional sports.

A sport's participation rate and popularity mattered for participants' definitions of alternative sports across a range of sports. Nevertheless, some recognized the growing

popularity of their particular sport, how that affects its alternative sport definition and talked about their inductions or future induction into the Olympics, as Clarence elaborated:

I think they're gonna debut frisbee in the Olympics soon. And at that point, like I feel like would be more mainstream or when more kids play it in school.

There was also a general understanding within participants that alternative sports are mostly viewed as non-competitive, relaxed activities mainly sought for fun, based on honesty given their standard self-refereed format, thus adding an honesty/trust aspect to playing them. Dante, for example, talks about this aspect in ultimate frisbee;

I'll say alternative just in the sense the rules and kind of, like the spirit of the game... there's no officials really, it's a sport you call your own fouls or catches or whatever and usually it's just based on your judgment.

All the while, these sports are made up of a diverse group of people who are not expected to act, look, or behave in a specific way. All that is required is sharing the core values of the sport or ascribe to the culture of it. This particular aspect was a significant factor when discussing pro-social behavior and whether or not their sport had influenced their values and/or behaviors, a point that will be discussed further ahead in this work.

Rugby was a particularly interesting case, as rugby players appeared to all agree their sport is an alternative sport, but their reasoning as to why varied. Tamera, for instance, points to the argument of rugby's duality as both alternative and traditional:

I think of rugby as a very traditional sport, but that's because I grew up in the UK. And it was, I mean it was on the major TV channels, it was played in the parks, it was played at all my schools... but culturally in the US... culturally right now, it does feel like I'm in an alternative sport in the terms of like how a few people play it in the place where I am.

This line of argument was supported by George, where he highlights the idea that “from the mindset of most Americans, it’s definitely an alternative sport or something else.”

Another element worth noting that arose in this study, that unfortunately goes beyond the scope aimed in this work, is the socioeconomic aspect of some alternative sports. In this particular case, a notable socioeconomic difference was recognized in those that participated in what arguably fits under the motor-based alternative sports sub-category, i.e., minibike racing. When asked to define alternative sports, the two participants in this sub-category defined their alternative sport with regards to how accessible (note: financially accessible), it was to be a part of it within their community. Jemima, for example, states that “even if you’re having financial troubles, they’ll buy your bike and get you money and then let you buy your bike back whenever you’re ready. So, you’re never really out of the sport, even if you have to sell off your stuff.”

Finally, some did not consider their sport as traditional or alternative, but rather as something else. Alexandria, in fact, had not even thought of scuba diving as a sport until she got a little bit more into it, and even then, she did not consider it a sport more just a hobby. Neil shared a similar view of his sports:

I think in the end, hobby is probably what I describe my participation in bodyboarding, freediving, and spearfishing.

Interestingly all three of the participants that considered their activity as something else had their major sport be a nature-based alternative sport, which could lead to the argument that nature-based sports are a significant sub-group that sets them apart, or as Brandy put it:

I mean outdoor sports are kind of a category of their own...they're not necessarily competitive unless you're talking about really high levels, people are competing for like how deep they can go or, you know mountain climbers get competitive and that kind of thing...at the really highest levels but it's a different kind of competition. Like you're not just trying to win the game, you're trying to, like, push your personal limits and see what you can do.

The difference, or not, found between nature-based and non-nature based alternative sports, and to some extent, motor-based alternative sports, will be discussed more in-depth when talking about the influence of the sports on pro-environmental behaviors and values. The latter has more of a significance when talking about pro-social behaviors and values.

Although a set definition of what an alternative sport is was not found, a common ground was set through which alternative sports were defined as not mainstream. Nevertheless, the exact definition of what that meant varied between participants, whether mainstream, meant it was a commonly televised sport or with enough participants or popularity to be in the Olympics. Others defined alternative sports in terms of how the particular sport evolved and was played locally vs. in other places, and how that influenced the culture of the sport, as can be noted in the case of rugby. Additionally, for motor-based sports participants in this study, the defining feature of whether their sport was alternative, unlike most other participants, was defined by socioeconomic characteristics, specifically financial accessibility. Whether or not this is across most motor-based alternative sports, would be interesting to research further, and see what that means in terms of those subcultures and subsequent values and behaviors that result from those variables. In a similar line of thought, was the consensus found amongst some nature-based sports participants that they are a category of their own and not necessarily

part of the alternative sports category. Nevertheless, the author argues that although there are some differences identified between nature-based alternative sports and non-nature based alternative sports, they still fall within the alternative sports category, in a sub-category of their own. What is meant by this is that there are some identifiable similarities found across the board between all the sports represented in the present study, i.e., the idea of camaraderie, family & tribe, which will be further explored in the pro-social section below. At the same time, some characteristics can be ascribed to the different sub-categories, as was mentioned in the case of motor-based sports and their definition of what an alternative sport is. However, it is those similarities across the subgroups within this broader category that contributed to building a foundation from which a common understanding of the alternative sports experience, as it pertains to its potential as a tool for modeling behavior, could be built. It is from there that the remaining data were analyzed and the understanding that will be used in discussing the remaining findings.

Alternative Sport and Pro-Environmental Behavior

Out of the 20 participants, nine participate in non-nature based alternative sports, while participation in motor-based sports is two, five in nature-based alternative sports, and four currently participate in both nature and non-nature based alternative sports.

This section of the questioning focused on whether participants noticed a change in the way they interacted with the natural environment since they began playing their sport(s), or noticed a difference in the way they interact with or see the environment while playing the sport versus when not playing. Whether or not they considered themselves environmentalists and engaged in environmentally sustainable behaviors was

also part of the questioning. These questions aimed to establish whether or not a relationship could be identified between each specific alternative sport participation, and the individual's pro-environmental behavior.

Although five of the participants did not notice a change in how they interact with the environment since they began participating in their sport, twelve did. What that meant varied depending on the nature of the sport and each individual's experience. As exemplified by Billie, who participates in a non-nature based sport explains: "I think because of me working to build a goal with rugby to work on being faster, I'm outside a lot more than I used to be, I'm walking around trails on like training and practicing and a lot of time you know I'll be running and I just, it's different because I'm doing the same routes and I think I appreciate what's around me more than I used to." Hoorain, on the other hand, participates both in nature and non-nature based alternative sports, and in his opinion,

...especially in the case with hiking and to a degree with disc golf because that involves basically walking through the woods, my appreciation of the planet has increased just so rapidly. I've probably become more aware of environmental concerns, and you know tried to contribute where I can to protect that, and I think that it's just given me a more healthy environmental, a more healthy appreciation of, you know, all that the world has to offer.

Ultimately, whether they participated in nature vs. non-nature based alternative sports did not seem to have an influence on their interaction with the environment. Rather, the difference between the sub-categories of alternative sports was highlighted amongst participants when referring to whether or not they had noticed a change in their interaction with the environment since becoming involved. Alexandria's account of her sport helps emphasize how participating in scuba diving influenced her interaction with

the environment since she started, where she, “just found myself so so blessed like I've been able to see humpback whales in the wild and manta rays and dolphins and turtles and to know that... there are generations that aren't going to have the privilege to see that, and that's a bit of motivation for me.” Alexandria also identifies that this heightened appreciation for what she has been able to experience through her sport, in addition to being around the world of scuba diving has ‘very much’ influenced even the type of sunscreen she uses when she gets up in the morning, the type of shampoo she puts in her hair, and the type of perfume she wears. Alexandria attributes this as a result of being “questioned by some of my diving instructors” before going in the ocean. As a result, making her more mindful of how the things she puts on her body “can affect the environment further.” Her sport experience has brought attention to this aspect where she will now think before jumping in the water in Australia “wait, what did I put on my body today?” something she recognizes not thinking twice about when swimming in lakes as kids in Canada. She helps demonstrate how alternative sports participation, particularly, nature-based alternative sports, can help shift worldviews through involvement.

Alternative Sport Participation and Environmental Awareness/Consciousness

Several participants spoke of an appreciation of nature that was either acquired or heightened through their participation in their sport. Even still, Forrest, who participates in both nature-based and non-nature based alternative sports, recognizes that for him “there hasn't been much of a change as much as it's been a change for the appreciation of it.” Individuals involved in the motor-based alternative sports, on the other hand, did not appear to have a meaningful shift in their environmental interactions. They did, however,

identify a heightened sense of appreciation for their physical surroundings as Jemima explains:

...to be on [the minibike] close to the ground, on your own, and you can focus on everything around you, and it's just a completely different experience. So that's given me a different perspective on the world in general.

Alternatively, some participants grew up with these types of sports, making it difficult for them to infer whether their sport participation influenced a specific value or behavior. Brandy, for example, was born and raised in Guam, and her parents were involved in alternative sports themselves. As a result, she finds it:

...hard to say because it was so gradual, so I was always very aware of the environment. I mean, I think certainly caving has changed the way I see, it's also because I'm a geologist like I look at the ground, and I know that it's interconnected with everything else. So, I guess I can't say that the sport itself changed my view of it, but it was kind of because I already had an appreciation for kind of the natural world that I was drawn to those sports. I don't know, and it's kind of chicken and egg thing. I'm not quite sure what came first.

Similarly, Neil who was born and raised in Australia, and was exposed to the ocean from an early age, talks about it in this way:

I think I've always thought of myself as having a bit of a, like a connection with the ocean having you know through my dad and through being around the ocean from such a young age. So certainly. Yeah. I'd say...actually when I started more doing the yeh, going out on spearfishing as well, where I really started to notice more about I guess the quality of the water, whether there was litter on the beach or not, and certainly, from then I've been more conscious about what I want to use or what I, what could potentially end up in the ocean.

His account, not only helping shed light on barriers that some participants that have been involved with alternative sports all their lives, may have in identifying where values and behaviors stem from. Instead, his account also helps identify through his connection to the ocean, his participation in spearfishing, and his awareness of how he can impact

what “ends up in the ocean,” in setting the argument to discuss nature-based vs. non-nature-based alternative sports degree of influence on participants in this study.

Nature-Based Alternative Sports vs. Non-Nature Based Alternative Sports

Participants’ interaction with the environment while participating in their sport seemed to be influenced by whether or not their sport was a nature vs. non-nature based alternative sport (here minibike racing is being included in the non-nature based alternative sports category and will be in this sub-group henceforth unless otherwise stated). Humberstone (2011) highlights an argument that is consistent with the proposition that nature sports have a more significant potential to provide athletes with an understanding of the relationship with the natural environment. The idea of ‘affective embodiment’ that Humberstone (2011) talks about is further reinforced by the results of this research, consistent with the theory of embodiment where individuals use their own bodily experience and processes to understand their emotional experience (Reed, Moody & Atkinson, 2020). In this case, reflected in their perception and interaction with the natural environment, through a sense of appreciation and consciousness. For example, for Wilfred, that change in appreciation manifests as being in the moment:

I think you’re very cognizant of the fact like, you kind of appreciate, you know, ‘I’m in this particular moment in the sport, and it just happens to be exactly the way it needs to be’, you know versus like when there’s something negative where it’s like a really windy day or something... so I think there’s a cognizant understanding of what’s going on there.

George, on the other hand, identifies that change of consciousness and speaks of his surroundings perception when actively participating in his sport. In sharing this perspective, he also helps connect some of the psychological impacts mentioned earlier in this work, both through exercise, but also as an outcome of time spent outdoors.

When I'm playing rugby, all my endorphins are firing off, and am more vocal and more physical, almost like a drug. So when you're, you know that kind of drug you're on you do notice different things that are going on in the environment that you're interacting with, and like I said, with the colors are, sharper images are gorgeous, the sky is bluer, the grass is greener. It is an elevated sense of consciousness.

He provides valuable insight into the other aspects identified in this research about the connection of the environmental aspect with pro-social behavior, and mental health. Both to be further explored later in this work. Nevertheless, it also establishes a foundation that allows connecting alternative sports beyond only pro-environmental behavior. Clarence's change of interaction with the environment through her sport allows highlighting how alternative sports, even non-nature based, can still heighten environmental awareness. For her, it involves a change in perception for the wildlife in her immediate environment while she participates in the sport. She explains:

Yeah, I'm definitely noticing, there's a park we play out, they have a pond, and I remember there were a few games we played where we heard just tons of frogs, and it was just such a great sign because a lot of the parts we play you don't really hear a lot of wildlife which is scary. And so, it reinforced me like okay this park is doing the right things in terms of water management because they have this really strong frog population. That was like creepy for us at first, we're like 'what's that sound?', and then it was just really nice to be out there, alongside the frogs.

Finally, another way that their alternative sport participation enables participants is also through exposure and recognition of the shift and changes to the natural environment, and how it may influence the experience, and even the sport itself, as described by Forrest's account:

When I'm out wakeboarding or when I'm out snowboarding or on the rivers or kayaking, paddle boarding, it's definitely more like I notice things more now. I noticed like the cities, the impact the cities have on the waterways, or from out in the country, and I noticed like the growth of like that there's an overgrowth or there's undergrowth... you notice things more like you know for up there, and

you see elk, you see a rabbit jumping around or like the snow pile is big like, ‘oh the trees are blowing this way’... you definitely get a chance to notice that more when you’re doing those individual type sports.

Environmentalism, Zero Waste Life & Greta Thunberg

During the interviews, another objective was to learn whether or not participants considered themselves environmentalists, and what that meant to them for context. Although it is not the sole factor to influence how a person chooses to behave, there are links between how a person perceives themselves and their subsequent behavior. Nevertheless, when answering whether or not individuals in the research identified as environmentalists, they seemed to be conflicted with the term itself. This was mostly out of the perceived expectation that if an individual identified themselves as an environmentalist, then they were expected to live a zero waste life or be like Greta Thunberg, the teenage Swedish environmental activist and former Nobel Prize nominee for her climate change activism (Carrington, 2019). Marianne, for instance, explains that for her being an environmentalist means being thoughtful of the environment and individual’s impact on it while striving to take measures to reduce that impact. “So in that way,” she states, “I would call myself an environmentalist, but I’m definitely not like Greta.” Thus, Marianne’s reference nodding to the idea that calling oneself an environmentalist acknowledges a certain set of expectations. An expectation that may have contributed to some participants hesitation of self-labeling as environmentalists. Instead, some mentioned their environmental consciousness. Neil’s comments are reflective of this view: “No, I don’t think I’d go that far. But certainly, like I said, I hope that I’m environmentally conscious.”

Nevertheless, 12 of the participants did consider themselves environmentalists, two as weak environmentalists, and six did not identify as environmentalists. Interestingly, those that did identify as environmentalists defined the term as having an ‘environmental consciousness’ that goes beyond themselves where their actions or lack thereof has an impact on the natural world. To make this point, several acknowledged the impact on future generations, including George:

... make sure I guess we live in a clean environment and we hand something off to my kids and grandkids that’s actually sustainable, they’ll be able to live in comfortably... an environmentalist is someone who is aware of the impact that human beings have on the environment and our making slow but steady changes to their personal habits to help improve the outcome of like I guess humanity’s toll on earth.

Finally, the biggest goal of this section in the interviewing process was to understand whether there was a connection between the participants’ alternative sport participation and the way they viewed or interacted with the environment. The last question, consistent with Brymer et al. (2009), sought to find out whether participants thought any aspect of their sport contributed to their environmental behaviors and/or values.

Most of the participants acknowledged this connection which is consistent with Sawitri et al.’s (2015) value-beliefs-norms (VBN) theory regarding pro-environmental behavior. Where individuals with a defined set of VBNs, in this case, the value participants placed on their immediate environment that their sports are dependent on. In turn, making them more likely to take action should that value be perceived as being threatened, i.e., due to climate change. Nevertheless, there was a difference of value placed amongst those that participate in nature-based alternative sports, versus their counterparts, whose view of the environment is more of an interconnected consciousness.

This aspect, in line with much of Brymer's work and several of the premises outlined in ecopsychology and the research done on green exercise. Philippa's environmental behavior, acquired from her participation in her eight nature-based sports, also help support Brymer's work on courage. Philippa explains that caving allows her to lose her sense of fear, while also allowing her to gain respect for the environment. To her, the environment and humans cannot 'exist without each other'. As a result, she states that,

.... today I am always constantly looking for more environmentally sustainable practices to adopt and then like really look at the entire life of that sustainable practice to see if it's actually worth it or not.

Non-nature based alternative sports participants, albeit not displaying the same level of environmental consciousness or pro-environmental behavior than their counterparts, did still showcase a willingness to protect their immediate environment, whether for future generations or as a recognition that their sports could cease to exist if certain conditions, or accessibility, were no longer possible. Dante, for example, showcases this in terms of caring for the field for ultimate frisbee games. Ibraheem, on the other hand, compares caring for the environment, and mud pits for minibike racing, to buying a new car:

You know, it's something nice. You want to keep it nice. You want to take care of it. You enjoy it. You know you enjoy being outdoors and having fun like this. Take care of it. Make sure it's still there for your kids to go do it [referring to minibike racing] ...it goes into you like it take care of it.

The more individuals appeared to spend time outdoors, and the more direct interaction with nature, the more they identified a changed, and even heightened awareness, and willingness to take steps within their personal lives to help protect the environment. It also provided further evidence to the idea of green exercise and its

benefits, as laid out by Rogerson (2017) on the participant's physiology, immunology, and psychology, as well as adding to the research on greenspaces as practical tools for preventive mental health promotion and intervention (Barton & Rogerson 2017). The willingness displayed by the participants in this study to protect the environment then, helps corroborate the argument consistent with ecopsychology's premise of a desire to care for the natural world, which ensues from a feeling of connectedness with it. Nevertheless, the argument can still be made that there may be sports that are better equipped to nurture this ecological concern than others, as was shown by the marginal difference between the pro-environmental behavior of the nature-based vs. non-nature based alternative sports. By recognizing this aspect, however, the manner through which alternative sports can then be used to support more pro-environmental behavior, can then be better achieved. It is essential to mention here, the importance that time spent outdoors has on the appreciation for the natural world, but also points to the psychological impact that takes place within the individuals and how it translates beyond the involvement in the sport.

Alternative Sport and Pro-Social Behavior

Mentioned earlier in this work following Rédei's (2009) research was the idea of alternative sports as creators of a space where individuals can move away from the mainstream, and as a result, allows them to define their own identities and subcultures. Given that it has already been established that alternative sports are not mainstream, Rédei's (2009) argument is more fitting, mainly when talking about the role of these sports and their potential influence on pro-social behavior. Similar to the previous section, this part of the interview's main focus was on looking to better understand any

potential link between alternative sports participation, values, and behaviors. In order to achieve this, the questioning was very similar to the pro-environmental behaviors and values section. Participants were asked whether they noticed a change in their interaction with other people since they began engaging in their sport(s) or noticed a connection between their experiences and how they interact with people outside of their sport. Additionally, they were asked whether or not they considered themselves socially conscious and engaged in socially conscious behaviors. The ultimate goal being whether or not a relationship could be established between each specific alternative sport participation and their socially conscious behavior. In this section, there was no identifiable difference between the alternative sports sub-categories of participants. As a result, they were all analyzed as one group. Nevertheless, three sub-themes did emerge, which contribute to highlight how it is that alternative sport participation can contribute to shaping pro-social behavior: sense of belonging, mental health and open-mindedness.

Sense of Belonging

Out of the 20 participants, 17 noticed a change in the way they interact with other people within their sport, while two identified that change of interaction with fellow alternative sport participants, which they attributed to the specific alternative sport itself. Nevertheless, the type of change identified varied amongst the research participants, but when further analyzed a common trend was identified between their experiences: participants identified a sense of belonging to their sport and its people. Although experienced differently by each participant, it is clear that alternative sport participation for them was influenced by this feeling of belonging. For Forrest, for example, this meant,

...a personal growth point like started playing rugby, and I was also in school at the same time and definitely like partying, or whatever, and I realized that what that was doing to me in my body and my relationships and so a lot of like reflection on that. And there's all the guys on the team are like you know it's not necessary to go out and do those things. They're going to like you, whether they like you because of who you are not how much you can drink or how much like to party, and you realize what's good for you.

The duality of the social impact of participants is showcased through Forrest's interpretation of how it personally influenced him by being accepted for who he was and not for how much he drank or partied, in turn contributing to him making better choices in his life. Similarly, Marianne talks of her experience and the influence of having more than the camaraderie in her team, but a sense of belonging with people in her sport and across the sport itself.

An aspect that arguably contributes to motivating individuals to continue participating in these sports. Even so, probably one of the most talked-about qualities by participants was the idea of having found their people, their tribe, a family-like group where individuals were accepted for who they are, as they are, an aspect to be discussed further ahead. Brandy's account of her experience with rugby allows to spotlight this aspect of relatedness within alternative sports:

I started playing rugby, and you know, I just come from like, a rather conservative background at the time. I was raised Mormon overseas and all that. And I've been under some pretty intense pressure to like, you know, be good. Yeah. And then I came to Austin, and I started playing rugby and, you know, everyone was gay, and I'm like 'oh, my people', and it felt so good. Like, 'yeah this is my sport'.

The sense of belonging discussed here proves crucial not only when discussing how pro-social behavior may be modeled through social interactions within alternative sport participation, but it also sheds light on the psychological impact that these interactions

have on participants, in the line of Brandy's account of how good it felt to find her people. This is a characteristic shared by several of the participants in this study, to be further discussed below.

Mental Health

When asked whether participants saw a connection between their alternative sports experience and how they interact with people outside of their sport, participants acknowledged a connection, but it did not seem to be as noteworthy. This particular question in the interview process, rather than highlighting the impact of the activities on social interactions *per se*, highlighted instead the mental impact of these types of sports. That is, their well-being might change due to the tight-knit, acceptant culture that is associated with these sports. As well as the fact that these activities are viewed as being outside of the mainstream, referring back to the argument made by Rédei (2009) on identities. As a result, many of these individuals not only feel welcomed, but as was mentioned in the previous sub-theme, they feel a sense of belonging to their *tribe* who accepts them precisely for whom they are, in turn, impacting emotions, moods, and, ultimately, behaviors. One of the most referred impacts mentioned by participants of this study was that of the influence on a variety of psychological aspects, including anxiety (3), with mentions of the affect on depression, to name a few. Neil, for example, shared his account of how his sports experience not only allowed him to interact with individuals he usually did not interact with but how his sport contributed in developing an emotional connection with some of his friends, "who are hard to get to know on a more emotional level." His account, again, contributing to supporting alternative sports fulfillment of relatedness.

Additionally, it was identified that competence, as established by the SDT theory, was also accomplished through alternative sport participation through its impact on confidence. Confidence (5) was the most prominent psychological aspect that participants identified as being affected by their alternative sport participation. Marianne shares her account of how dodgeball, gives her a place where she does not have to fit a certain stereotype, while also contributing to her confidence:

...it has given me a little more confidence, I guess, because like I said, I wasn't like a natural athlete... so like being good at something like people wanting me to be on their teams and stuff like that does like give you a certain confidence when you're kind of just carrying about your daily life.

Eighteen-year-old Billie's account supports the argument made by Marianne, however in a different manner as is not related to her physical attributes as much as it is confidence that goes beyond her sport participation:

I think I have become more confident because of rugby. I think it's made me more sure of myself, and that does translate to relations I have with other people just the way I talk with people...and I think rugby kind of just gave me this new profound confidence in a sense, and it's still growing and still developing so I'm not always the most confident person, but definitely when I'm having conversations with new people you know I speak up more for myself, and I put my opinion out there.

And then there are accounts like Aliyah's, a Mexican American woman, who did not grow up with sports, and only became involved in sports when she went to college and no longer depended on 'mom and dad'. She decided to try rugby. Although she talks about having gained physical confidence from her rugby experience, it is her powerlifting participation that she ascribes to having had a more considerable impact on her confidence, both physically and mentally:

But with powerlifting like I said, because it's a lot of mental. It's giving me that confidence to interact more with other people, both female and male, and be more sure of myself.

Confidence was certainly a meaningful outcome for many of the individuals in this study, and something that ought to be called attention to. Consistent also with Brymer & Oades's (2009) proposition on the impact of alternative sport participation on courage and humility, where participants learn to cope with the perceived danger, move past it and even find a motivation to push themselves beyond their limits. This aspect of providing a unique benefit of participation in these sports for modeling positive behaviors and influencing positive mental health outcomes. As was the case for Jemima where she has become more confident in herself through her participation in minibike racing, where she has learned more about herself, and what her limits are, even 'pushing them,' in turn becoming more outspoken and more willing in other aspects of her life. Similarly, Tamera points to the intersection of how sport participation influences moods and how that subsequently spills over onto other aspects of the participant's lives. A characteristic that is only increased by positive social interactions as well, as has been the case in the accounts shared by participants in this study, and echoed by Tamera:

I can probably say that I'm more confident, but I think that happens to me all the time when I join a sport or when I have a good group and I've always believed that like being part of any sport, with a team makes you confident and happier, at least your interaction with everybody. So, that's not specific to rugby. But once I joined the rugby team and started playing something and having all the kind chemical happy feels that you get from playing any sport, I saw myself being happier in my everyday life.

It is worth revisiting the concept here by Basso & Suzuki (2016) who highlighted that beyond the production of dopamine and endorphins released during exercise which result

in a feeling of euphoria, along with the increase of cortisol and serotonin, they also have a positive impact on mood (including depression & anxiety) and memory (Lagos & Singh, 2016). Additionally worth emphasizing, is the psychological effect outcomes that time spent in green spaces has on individuals (Barton & Rogerson 2017), an added contribution from the results discussed here on how participation in alternative sports, both as a result of time spent outdoors and the tight-knit culture of these types of sports, allow for the promotion of pro-mental health behaviors. This aspect, in specific, can be identified throughout in some of the accounts already provided by some of the individuals who participated in the study, while also contributing to decreasing the risk of depression by boosting self-esteem and confidence (Lagos & Singh, 2016). Nevertheless, although for some the mood improvement is a nice bonus, for others, the impact that their alternative sport participation has on their mood, and as a result, in their lives, is a lot more significant. That change naturally varies amongst participants. For Alexandria, it relates to a form of stillness, where participating in her sport contributes to “her world becoming calm,” and it also influences her by making her more “chilled, a bit more relaxed” and maybe making her “an easier personality to be around.” Rosalind shares some of this view, where she too sees that influence carried over to her everyday life, including into how she behaves in her profession:

...even talking with patients like at my job, I have to talk to patients like all day and rugby... it almost made me more like relaxed in a way. You know, growing up... it's more of like a *status quo* situation, and you have to act a certain way. It's almost like you're on edge all the time to make sure that you're doing it correctly and acting the way you're supposed to act. Rugby made me a little bit more free.

At the same time, however, there are individuals like George, who identify a more important and direct influence of their sport on their emotional state:

But it just is I don't know there's something when I'm not playing rugby, I'm much more stressed, I'm angrier, and opposed to when I'm in season, I've got a smile, all the f*****g time on my face and I can't stop grinning.

George's account contributes to emphasizing the psychological impact that participation in these sports can have. However, it also provides a stepping point to further explore the third main sub-theme identified in the results of this research, which is open-mindedness. Yet another characteristic that seemed to have a pivotal influence in participants' lives beyond the sport.

Open-Mindedness

There seems to be a universal acceptance of individuals in these types of sports. Be it through a strong sense of camaraderie, which in turn helps promote, and even exacerbate some of the psychological benefits, and results, to an extent, in a spillover effect as participants implement their improved moods, and mental health, onto their everyday lives. Individuals like Ibraheem, for example, ascribe their alternative sport participation as very much life-altering, and even lifesaving:

My life was going downhill pretty fast with alcohol, and this sport has pretty much saved me with not only the sport itself but the people that I've met through it. They're going to tell you when you're getting a little out there. You know, we've got a couple members that have gone through rehab and stuff like that. And it's the club that's backing them to do it too 'cus this club is family.

Others mostly talk about the open-mindedness found in these sports, which in turn makes them very accepting and welcoming communities to all kinds of individuals. This aspect has an overarching leverage on allowing individuals to feel a sense of belonging.

As a result, their emotional status is also impacted, through accepting individuals how they are, for who they are. This is done by enabling individuals, like Brandy, to allow their “guard to come down... and just be [themselves] goofy and know, good and bad sides [are] okay.” Also, worth noting is another characteristic of how alternative sports can positively impact mental health, and even open-mindedness, is through the outdoor component of most of these types of sports, including both nature and non-nature based. Accentuating, in particular, the effect that being out in nature has on the brain, as was already highlighted in this work by the research done on green exercise. Forrest helps further emphasize this point by stating that for him:

...it’s a big stress reliever big, if I’m like having any kind of emotional anxiety type thing or whatever and if I’m able to get out in nature and enjoy it, and I step I’m gonna be changed the way I interact with people, the next time I see them just it releases a lot of like, yeah, it’s just a great way to like work through problems, you know sometimes being by yourself and getting to be in nature and work through some of those issues. It makes you a better coworker a better partner down the road a better friend even down the road like further on in life, so I think that’s a big advantage too.

Although not all identified a change in their social interactions, all participants did consider themselves socially conscious and engaging in socially conscious behaviors with the most common behaviors being helping people (4), political correctness (4), open-mindedness (4), and standing up to bullying (3).

Much like the previous section in the interview process, this section attempted to identify participants’ views on a potential link between their involvement in alternative sports and their social values and behaviors. Overall, 15 participants identified their sport as having an influence on their socially conscious values and behaviors, with four not identifying such changes, and one not sure. At the same time, 18 believed that the people

they associate with within their sport, have influenced their environmental and/or social values and/or behaviors. Consistent not only with Brymer et al. (2009), Oades and Schweitzer's (2012) work on the psychological impacts of extreme sports participation, but it also provides insight on the proposition presented earlier in this work regarding whether the psychological impact then influences the modeling of specific behaviors depending on the type of sports. Still, this characteristic would require a comparison study between alternative and traditional sports for further insight.

Nevertheless, the premise of the SDT theory, where when the three fundamental needs of competence, relatedness, and autonomy (Ryan and Deci, 2000, 2002) are met then self-determined motivation, wellbeing and healthy development are promoted. This idea is conveyed in this research through the effect of alternative sports participation on mental health, particularly through relatedness, and to some extent competence. Thus, further supporting the work done by Suzuki (2016) on the impact of exercise on mood. Furthermore, earlier in this work, the argument was made for the potential that alternative sports may hold in providing individuals an opportunity to determine their identities within them and away from the mainstream, while being welcomed to be part of a community with shared values, which is acceptant of individuals without expectations to conform to a specific stereotype. It is contended that the results of the research discussed here support that argument as well.

Dante helps spotlight, another facet of this interaction, consistent with the already discussed welcoming and accepting nature of these sports, contributing to the open-mindedness aspect, by realizing that other individuals that are there are also looking to belong somewhere, thus making them more acceptant of newcomers through empathy:

I mean it's kind of like more like a, I guess, more development or just promoting relationships, it's like, well, if that didn't happen that's okay for this person. Maybe it's their first time playing, or maybe there's something there... and they're just looking for a community to be around and just kind of help...

This aspect is echoed by Alexandria's account where she highlights participation in her sport as setting a base where all participants can relate to one another, and once in the sport, it does not matter who each individual is or where they come from, but the fact that they are all there with a common interest, which for her it makes the experience more meaningful. She states that within her sport, she has become "a little bit more self-accepting" by being around people that

...just frickin love being underwater and that's all that matters so I think it's just I think there's a little bit more about accepting side of things from like a social perspective and interacting with people that I never would normally because when you're underwater you're all just there and you're all supporting each other literally can't tell each other apart... so I think it's that acceptance and of like all people really and I think that just helps you, just kind of live a better life, but I think it has made me a lot more aware of it and just kind of a lot more like, okay, cool, like I should be chill.

This quotation signals not only to the point immediately being discussed here of becoming more open-minded, and as a result more accepting but also nods to some of the other aspects already discussed in this section, such as confidence, and mental health.

Nevertheless, the research helped to also highlight alternative sport participation as a tool for modeling behavior, as was best exemplified through Marianne's experience. She was sexually harassed in her sport, and the league set an example of what is, or is not, allowed, thus setting a precedent of the kinds of behaviors that are or are not tolerated in the sport. She recounts:

...especially with dodgeball like I've had instances where or like, I mean, any league that you play in like is against you know like any sort of like slurs or

homophobia or like anything like that. They don't tolerate any behavior that brings any of those things into the game, so a couple of times, things have gotten heated, and someone has called someone like a slur. They were suspended for their actions... I've had a team... like they were sexually harassing me as we were playing and I reported it to the league, and they were removed from the league so like I think those actions speak quite loudly to like the types of behaviors that are okay and not okay at dodgeball and kind of carry on to the rest of your life.

Similarly, Brandy speaks to a broader understanding of what it means to be a caver and the behaviors that are promoted through the caving community, while realizing that it is a dual interaction for her of being influenced but at the same time of being attracted to what she identifies with.

I mean, you kind of absorb it's just social behavior just what humans you know we kind of absorb what goes around us... I was already pretty liberal, I guess when I started these things, but mostly caving community is pretty left-leaning and it's kind of an artistic bent to sort of have. So yeah, I think I have been pulled to the left, I guess, but it's been my own choice too. Yeah, I'm gravitating towards what appeals to me.

The last aspect in particular, further contributing to negating the misconception of alternative sports participants as social 'deviants', 'adrenaline junkies' on a death wish, or emotionally unhealthy (Brymer, 2009). Additionally, the evidence presented here reinforces the argument that participation in these sports is a disruption of the mainstream. For those participating in this study, their involvement is perceived to have led to positive psychological and social outcomes, a benefit to both the individual and society in general. In turn, reaffirming Coakley's (2007) idea of these types of sports challenge of the *status quo*, and the resulting receptivity from participants to social change. Taio explains just one of the ways through which this can take place while pinpointing how open-mindedness plays a role:

...just being around different people and having a conversation about different life experiences and where they've come from and how you know, how they were raised, or how things are, where they come from, whether it's another state or another country or whenever it may be. Yeah, if you're not around that and steeped in it and not have the opportunity to have those stories and those you know, different perspectives, you have no way of knowing what it's like for somebody else and I've gotten to do that by meeting all the various people that I've met through playing frisbee and disc golf and all that kind of stuff in the past... and it will absolutely influence you moving forward.

George's personal experience through his alternative sport participation further reinforces, not only Taio's point, but highlights the overall potential that alternative sports participation can have in helping shift perspectives to incite social change:

I grew up in a very conservative part of Texas, a small town... through rugby, I was actually opened up to a lot of different people—a lot of different ideas. And the more liberal. I guess by having an open mind, interacting with a lot of people who have liberal and progressive, I was swayed more in that direction... you're very open-minded to environmental issues and the plight of other human beings... in that aspect it's just being able to interact with rugby has helped me, interact with a lot of human beings with a lot of different ideas and keep an open mind and evaluating those ideas to figure out which ones actually work, and which ones are the most effective and sticking with those ideas.

Furthermore, as has been already mentioned throughout the participants' accounts, the alternative sports experience and the influence it has on individuals' behaviors and their psyche, tends to have a spillover effect as was argued by Brymer & Oades (2009), of the experience of these sports far-reaching beyond the sports themselves. Aiysha, for example, mentions how after she goes hiking, she still feels like "being friendly in other social settings, so like spillover." Even Ibraheem signals to a major spillover from his sports participation, which in his view, has made him "a lot more patient with people." He will sit "there with a smile on [his] face because of the club." He explains that he

“didn’t use to be one of those,” but due to his sports participation, he can now go to the mall with his wife and “not want to hurt someone.”

Even still, the recognition of what happens in social interactions, and how desirability, or even wanting to belong, may play a role in how participation in these sports influences individuals should be acknowledged. Wilfred explains;

Because I mean, you know, ultimately, if you’re out there and playing with these people on a weekly or bi-weekly basis, I mean, your interactions with them will influence a lot of your mentality, you know, especially if it’s people that you do other things with as well... I think a lot of that influences your mindset because, you know, those are the people that you’re associating with within the sport, and then you take that outside, and you’re talking about other things as well. You can influence kind of your mindset going into some of those other environments. So, it’s like it starts there on the field, and then it goes out into the regular world as well.

Ultimately, the resulting data obtained in this section did not only contribute in further reinforcing the importance of social interaction, where participants felt a sense of relatedness, and to a lesser extent of competence, two of the three fundamental aspects as laid out by SDT, and which according to the theory can influence values and behaviors. It also supports the arguments laid out by Suzuki (2016) on the impact of exercise participation on mood. Beyond that, the results presented here highlight the argument made earlier on the significance of the need to understand not only the social impact of participation in these sports but also the type of influence this participation has on mental health. What has been shown in this particular section has been on the perceived benefits of sports participation. The participants report that the sports they are active in has influenced how they feel about themselves. The benefits they report include a sense of belonging, open-mindedness, and an array of improvements in self-reported mental health. For example, several participants report increased levels of confidence which

allows them to perceive better, healthier, happier lives while also allowing them to perceive better interactions with others outside of their sport. This aspect is crucial when looking to understand further how these sports may serve as a tool for modeling socially conscious behavior. As well as, how all of these aspects are interconnected and can be either positively or negatively influenced by one another in a self-perpetuating cycle. This in turn, makes the alternative sports experience crucial in determining the types of moods and behaviors that can be perpetuated, along the type of pro-social behavior that participants can carry onto all aspects of their lives. It becomes crucial then to note the significance of this, in addition to the ideas presented in the previous section, and the effect that time in nature through these types of sports has on values and behaviors as well, an aspect that will be discussed further in the following section.

Alternative Sport as a Tool to Model Socially Conscious Behavior

This study has shown that there is, within participants of this study, in fact, a relationship between alternative sports participation and pro-environmental, as well as pro-social behaviors (including an important impact on mental health). As part of the interview process, the last section of the interview consisted of one question that aimed at bringing all the other sections together and intended at inquiring whether a notable intersection could be established between them all. The question was framed in two parts: *Did participants believe that the values and behaviors talked about were an outcome of their participation in their sport or whether they believed they already had those values/behaviors, and it is what attracted them to the sport?* Out of the 20 participants, five answered both, six identified their values and/or behaviors as an outcome of their participation in their sport, while nine believed they already had these

values, and it is these values that attracted them to the sport. Upon further analysis, attempting to establish if there was a differentiation amongst the alternative sport subcategories established earlier in this work, no noteworthy distinction was found. Nevertheless, participants that believed their values and/or behaviors to be a result of their participation in their alternative sport ascribed that outcome as all-encompassing quality, one with an impact beyond the sport itself. For some, as was in the case of George, that influence is ascribed as:

...rugby has helped shaped me to be the person that I am, I didn't have the values that I did before rugby... [it has] opened me up to a lot of cool people, a lot of cool ideas and very much so in the boat of being aware, environmentally as I can possibly be and being as respectful and supportive of humans, as I can be.

Similarly, participants noted an impact to their worldview. Hoorain shares his account through which he identifies not being particularly interested in his alternative sports as much at the beginning, but then identifies a shift:

... I wasn't particularly interested in backpacking. I never took disc golf, very seriously, and rugby was just something to do. So, I kind of fell in love with it as I went through it and just kind of learned to value it more and more as it went on. So, I would say that it did shape my behaviors my values my, you know, my opinions from a social and environmental standpoint. Probably not directly. But I think that I wouldn't be who I am today, without those experiences.... that's you know, the most direct way I can attribute my experience with sports into my current worldview.

Philippa, on the other hand, accredits her alternative sports participation to changing her life as a high-risk youth, mainly through the lessons she learned, especially in regards to caring for the environment, through her sports involvement:

I definitely think my sport swayed me 100%. I had no concept of the outdoors or very little... I maybe always had an inclination to go outside and maybe an attraction to the outdoors, but I had no concept of how to take care of the land and what I should leave, how I should just function in the outdoors I didn't have any

idea until I sought them out on my own... and I wouldn't have had any other opportunity had it not been for mostly caving, scuba diving did help and instill some of those characteristics, but I mean just menial compared to the sort of all-encompassing world of cave exploration, it has very much taught me how to be the person I am today and showed me why I wanted to be that person.

Others view the influence as a change in consciousness and even heightened appreciation. This was specially the case for those that identified themselves as already having some of these values and behaviors. Although Neil, for instance, talks about already having a connection with the ocean growing up, he mentions gaining a higher awareness in regards to food and consumption through spearfishing. He identifies it as the;

... one behavior that is definitely come out of the sport spearfishing was more my consciousness of where umm, I guess, live food or food that once lived was coming from and how that was sourced... and you know, getting my own food, and then trying to kind of taking that concept and attaching it to other meats that I eat, that's for sure... trying to make it, I guess the smallest imprint on the world around me, environmentally... I think that has evolved more of a connection with the ocean... that definitely drew me to those sports as well.

Alexandria, for instance, illustrates a feature that several participants talked about which is: how whether or not they identified acquiring, or already having the various values and/or behaviors, there is something that happens when participants are exposed to new ideas or people from various walks of life, and how once that takes place they become more open-minded. For Alexandria, scuba diving opened her eyes to more of the socially and environmentally conscious behaviors that she argues would not have necessarily been across, and from there, in her experience, it all starts to snowball when one open's their eyes to that type of world all of a sudden.

Others, however, identify a dual effect where they are attracted to their sports because of their existing values and/or behaviors, but also because they have gained new values and/or behaviors through their sport participation. For Forrest, it is definitely what attracts him to those sports. For him, it is “a twofold almost because it’s both answers in a sense, it’s what attracted me to the sports, but it’s what’s keeping me involved in those sports at the same time.” Likewise, as has already been discussed earlier in this work, alternative sports tend to have specific cultures depending on the sport, which once involved in these sports, it is common for individuals to be able to find a sport that matches their particular worldview or interests stretching beyond the activity itself.

Tamera explains how this was the case for her:

...I again was a very kind of outdoors nature-oriented person, and so I wanted to play a sport that was outdoors, and it would allow me to be in the elements all the time. Being athletic, I knew that the culture of other people in rugby was often very outdoorsy type too, you know, understand wildlife and love of nature, so I wanted to be more around that. And then in terms of social issues, I was looking for a place where the group too would be very diverse in terms of nationality and gender and sexuality and all different things, really. And so that’s why I chose rugby because I kind of knew that there’s a culture of that.

Although rendering inconclusive if the sport an individual is part of directly influences whether they will be more likely to pro-environmental behaviors. The discussion identified from the outcomes found in the other sections, alternative sports, albeit not directly, do have a notable effect on the participants’ behaviors, even on the ones that have identified already having them before their alternative sport participation. They, in fact, for the most part, argue that although already having some of them, the sport strengthens them, and paradoxically allows for new values and/or behaviors to be learned. As was the case for Ibraheem where the values he already had attracted him

more to the sport and the people, and the sport and the people have served to reinstate and strengthen these values. Similarly, for Billie, through her account of her alternative sports experience, she argues that although she already had those values, rugby has strengthened them while also allowing her to gain new values. For her, “the new values I got through [rugby] were just within me personally and how I interact with others.” Ultimately, as Brandy explains, it seems that for many of the participants their alternative sports experience is not determined by one aspect or another but rather,

Saying that I have certain personality traits and I’m drawn towards things that are new and different and weird, and then I find people who are like-minded and they just kind of amplify that and then once you kind of go down that route that opens up to other worldview and yeah just kind of creates a cycle.

Brandy’s account alludes to a characteristic that has not been discussed, but that ought to be acknowledged, which is that the individuals within the sport have the ability to create or perpetuate the sports culture. In turn, they can influence the experience that individuals may have in those sports. As a result, then, acknowledging participants ability not only take from the sport but also contribute and impact the sport, as well as their fellow alternative sport participants. In Clarence’s case, for instance, she mentions her jobs as really impacting those values way more than the sport, but she can help, and hopefully impact people in the ultimate frisbee community, and her team. Orla talks about a similar point where individuals influence one another via their sport participation. She identifies,

there has been a bit of influence ‘cus just maybe like everyone has their own maybe, environmental own like niche passion and they can share that information and have my own knowledge I’ll share that so we do influence each other in the way that we just share information about topics that we both care about like in this environment and what is going on and the hiking or water sports world.

Even though a noteworthy difference was found in the alternative sports sub-categories and pro-environmental behavior, the most significant influence of alternative sports participation was distinguished in terms of pro-social behavior. This demonstrates the already highlighted aspect of these types of sports, which indeed encourages and allows for shifts of perspectives to take place. Further, this results in the manifestation of these sports as a unique tool for the empowerment of social agents. Additionally, to the potential that participation in these sports has on mental health, consistent with existing research on the psychological impact on mood, social interactions, and exposure to nature that has already been discussed. Notwithstanding, the results did show that the more participants spent time outdoors, and interacted with nature, as was the case for nature-based alternative sports participants, the more their pro-environmental behavior was positively impacted, as well as amplifying the effect on mental health. An aspect consistent both with the arguments made by green exercise (Rogerson, 2017) and ecopsychology (Fischer, 2013). The results help highlight that time outdoors besides facilitating activity, contributes to the promotion of better mental and physical health (Barton & Rogerson, 2017). This result, in turn, shifts focus to the need to explore the connection between alternative sport participation better, and its impact not only on health, but further emphasis on mental health and how that in turn influences behaviors. Additionally, how it is that if experienced correctly that alternative sports participation can then influence socially conscious behaviors.

Ultimately, the results provided by the study participants' accounts spotlight that there is indeed an identifiable connection between alternative sport participation, pro-environmental and pro-social values and behaviors, including positive impacts on mental

health. This is crucial, especially when looking at the potential for these types of sports to serve as a tool for addressing social and environmental issues within communities and move said communities to a more sustainable future for all. These results have also contributed to establishing a foundation from where to explore these connections further, as well as how to manipulate them better in order to achieve greater social and environmental good.

V. CONCLUSION

The aim of the work presented here was framed around the question: *How do alternative sports participants view the relationship between their participation and their behavior, specifically pro-environmental & pro-social behavior?* As a result of the data gathered through interviewing 20 alternative sports participants, it can broadly be argued that alternative sports, whether nature-based or non-nature based, notably influence individuals perceived pro-environmental and pro-social values and/or behaviors. Nevertheless, further research is needed in order to identify whether these perceived outcomes result in actual changes in values and behaviors.

Unlike pro-social behavior, the impact of alternative sports participation on pro-environmental behavior seems to distinguish a difference, albeit minimal, between the perceptions of those involved in nature-based alternative sports vs. non-nature based alternative sports. This arguably is a result of what Brymer et al. (2009) identify, similar to ecopsychology's premise, of feeling connected with the natural world, which develops a need to protect it. Thus, supporting the argument of the difference existing in the outcomes of pro-environmental values and/or behaviors between nature-based vs. non-nature based alternative sports. Which has to do with the more that participants interact with the natural environment, the more they develop this feeling of interconnectedness, and in turn, the more their values and behaviors are shaped towards protecting that interdependence. Pro-social behavior, on the other hand, did not identify a difference between the alternative sports subcategories. Nevertheless, it did highlight alternative sports as non-mainstream activities that satisfy tenants established through SDT theory, of competence, relatedness, and autonomy (Ryan and Deci, 2000, 2002). Even though

relatedness was the most notable in the results of this study, competence was also observed but to a lesser degree, and autonomy less so. Signaling then, to the need for further research on how these types of sports may contribute to promoting those two needs as well. Beyond that, the results presented here highlight the importance of the tight-knit, tribe & family-like, and camaraderie aspects of the alternative sports experience, which is welcoming and accepting. The magnitude of this quality for most of the participants in this study showed an influence beyond the social aspect. It highlighted its potential benefits on mental health and how that translates onto participants' everyday life. This specific characteristic was only amplified by time spent in nature. These results contribute to establishing a solid foundation from where to continue to explore the plausible use of alternative sports as a tool for modeling socially conscious behaviors.

Nevertheless, some limitations ought to be acknowledged when reviewing the outcomes presented in this work. The author recognizes that values and behaviors may not necessarily be the same throughout all alternative sports. Furthermore, this research is strictly based on interview data and social research, and it does not include observations, that may present limitations in fully understanding behaviors. Similarly, given the nature of the questioning, which required participants to identify where a particular behavior and/or value was acquired in retrospect, may have proven difficult for participants, which may, in turn, influence the accuracy of the perceived effect of these sports on values and behaviors. While the researcher took the necessary precautions for participants to feel as comfortable as possible, and without any prompt to answer one way or another, it is conceded that individuals may still have answered out of social desirability. Finally, even though there was a substantial number of alternative sports represented in the study, not

all of the existing alternative sports were included; this, in turn, may limit the findings to this specific group of participants.

It is important also to acknowledge the demographic limitation of the work presented here, where the majority of participants identified as white/Caucasian. Although there was some representation from various minorities, this sample cannot be rendered a significant representation of the population. Similarly, it should be noted that there can be an argument for some alternative sports as not being accessible to all, i.e., snowboarding or scuba diving, given that they require equipment that tends to be expensive, as well as requiring the means to get to either a mountain or a beach to be able to participate in the sport. Thus, limiting who can afford to be part of these sports. However, not all alternative sports require such accessibility, but the perception that they may, or the need for communities to be easily exposed to the outdoors, may hinder the ability for individuals to be involved in these types of sports. Here too, is where the potential for further research lies in exploring the specifics of the demographical characteristics across alternative sports, particularly if these are going to be used as a tool to help solve problems within communities worldwide.

Additionally, one aspect worthy of discussion here, partly contributing to the debate of what an alternative sport is, particularly on whether the lack of participation is a defining factor of these sports. Furthermore, the argument being made in this work on the potential of these types of sports as a tool for modeling socially conscious behavior signifies that in order for that to happen, these types of sports would need to be popularized to be brought to the masses. As a result, this brings to question whether these sports would still be considered alternative or not. Although the author acknowledges that

some aspects of these sports could potentially change the more individuals participate in them, there is evidence to be found in already popular alternative sports where the core values and culture remain majorly intact. Rugby here helps illustrate this point best.

However, as was argued, sport cannot only help address matters such as gender inequality, poverty, and conflict, but it holds a yet to be fully understood potential to shift and model socially conscious behaviors, pro-environmental and pro-social specifically. Through participation, health is impacted while positively influencing cognitive and social development at the same time. These are consistent with the idea that sports can play a significant role in achieving sustainable development. Still, as various interactions of sport participation have been reviewed, work that focuses on the relationship with the natural world and within development remains limited by existing assumptions and frameworks arguably created to perpetuate the *status quo*. At the same time, the literature has provided a guiding base from which to further inquire for a better understanding of the field and has alluded to the multiplicity of aspects that make up sports. Thus, as a multi-faceted tool, and in order to best understand the potential for social and environmental good that sports may have, all of its intrinsic aspects need to be looked at in a *sine qua non* manner rather than as separate entities, which was the aim of the study presented here. By doing this, then society may finally come to realize that it is “hitched to everything else in the universe” (Brymer & Gray, 2009, pg. 136), the natural world, and mental health included. A solid first step for this to happen may just be in furthering the understanding of how it is that ecopsychology develops within extreme and alternative sports. By re-evaluating the existing research done into these sports, the understanding of the existing connection to nature may then be strengthened (Brymer &

Gray, 2009). At the same time, the psychological impact and how it translates in a social setting, starting by acknowledging the powerful transformative potential that they may hold in “fostering intimate-human nature relationships” (Brymer, & Gray, 2010, pg. 371). Without understanding “whether this [perceived] ecocentric awakening is a typical outcome for extreme sports [involvement], or if an ecocentric perspective is characteristic of those participants who are more likely to continue participation” (Brymer & Gray, 2010, pg. 371) in the long term, sustainable development initiatives cannot properly be developed through sport for effective impact. Additionally, the impact of participation in these sports on mental health must also not be ignored, whether these will be positively impacted through the social or the natural/outdoor aspect of these sports. An effective tool not only when modeling socially conscious behaviors, but also in addressing mental health globally, i.e., anxiety and depression. As a result, making it critical to further research these sports’ all-encompassing potential to address problems in today’s world.

If anything is clear, it is the fact that society needs to urgently, purposefully, and boldly take steps to change its current path towards a more sustainable future for all. The decision to do so, and how exactly it will be achieved will determine the future that will await. Regardless, as the former United Nations Secretary-General Ban-Ki Moon highlighted, “action is needed...from all sectors of society to meet the greatest challenge humanity has ever faced” (United Nations Department of Public Information, 2016). Ultimately, only time will tell whether the world of opportunity awaiting will be embraced or not. Time may be running out.

In any case, the groundwork has been established through the study presented here, one that determined a link between sports participation and pro-environmental and pro-

social values and behaviors. Nevertheless, this work has just begun to scratch the surface on the potential that participation in alternative sports can have as a tool for promoting socially conscious behaviors. The author argues that further exploration is required, particularly on the role that ecopsychology and green exercise may play, as well as the psychological impact of participation in these sports can have on the modeling of specific behaviors, particularly pro-environmental and pro-social behaviors (including the promotion of mental health). In addition, further inquiry on the social and environmental impact that these sports can have in serving as a tool when addressing problems within communities around the world. This research is, hopefully, but the beginning of what will ideally become a new tool for fostering socially conscious behaviors everywhere.

APPENDIX SECTION

APPENDIX A

INTERVIEW GUIDE

Background Questions

1. Which race/ethnicity best describes you? (Please choose only one.)

- White
- African American
- Asian
- Hispanic
- Mixed race
- Rather not say
- Another race or ethnicity (please specify)

2. What is your gender?

- Female
- Male
- Non-binary/ third gender
- Prefer not to say
- Prefer to self-describe (please specify)

3. What is your age?

- 18-20
- 21-25
- 26-30
- 31-35

Experiences Playing Sports

4. Could you tell me about your experiences playing sports? What other sports have you played?

5. What sport do you currently play?

6. Do you actively participate in more than one sport? Please specify.

7. Do you think of the sport(s) you participate in as traditional sports, or alternative sports, or something else? How would you describe your sports? (Can you explain?)

8. What alternative sports are you regularly active in?

- Rock climbing

- Kayaking
- Standup Paddle Board (SUP)
- Hiking
- Yoga
- Slacklining
- Ultimate frisbee/Disc golf
- Wakeboarding
- Mountain biking
- Snowboarding
- Other (please specify)

8. How long have you been playing ___ (the alternative) ___ sport(s)?
9. What specifically attracted you to these sports? How did your participation begin?
10. What do you like the best about your sport? What do you like the least?
11. How would you describe your experience of your sport?
12. Why (alternative sport) versus other types of sports?
13. (If they have participated in both traditional and alternative sports), could you compare your experience playing ___ (the alternative) sport with your experience playing ___ (the traditional) sport?

Pro-Environmental Views

14. Do you think you've noticed a change in the way you interact with the natural environment since you began playing (the alternative) sport(s)? When did that change start? Who/what influenced that change?
15. Do you notice a difference in how you interact with or see the environment when you are playing your sport versus when you are not playing? Can you explain?
16. Would you call yourself an environmentalist? What does that mean to you?
17. How would you characterize your environmental values? Have those values changed over time?
18. Do you engage in environmentally sustainable behaviors? What kinds of behavior? When did you start?

19. How likely are you to take action on environmental matters? Or have you already taken action on environmental matters? Could you give me some examples?

Pro-Social Views

20. Do you think you've noticed a change in the way you interact with other people within your sport since you began playing (the alternative) sport(s)? When did that change start? Who/what influenced that change?
21. What about outside of the sport – in your view, do you see any connection between your experiences and how you interact with people outside of the sport? Please explain.
22. Would you call yourself socially conscious? What does that mean to you?
23. How would you characterize your socially conscious values? Have those values changed over time?
24. Do you engage in socially conscious behaviors? When did you start?
25. How likely are you to take action on social issues or have you already been active? Could you give me some examples?

Overall Connections between Sport & Values

26. Do you think any aspect of your sport contributes to your environmental behaviors? What about your environmental values? Why and how has your sport contributed to these?
27. How about your socially conscious behaviors and socially conscious values, do you think your sport contributes to them? Why and how?
28. Would you say that the people that you associate with within your sport have influenced your environmental/social values, and/or how you behave since you began participating in it? How? Please be specific.
29. Do you believe that the values and behaviors we've talked about are an outcome of your participation in the sport? How so? Or would you say you already had those values/behaviors and it is what it attracted you to your sport? If yes, how and why?
30. Is there anything else you'd like to add?

Note: Follow up and probing questions will be used as need be. With permission, interviews will be voice recorded, supported with note taking by researcher.

REFERENCES

- Alosi, M. (2007). The evolution of the social functions of sports & the advent of extreme sports. Chicago: Sports Function. Retrieved from:
https://www.pointbmovie.com/Learn_files/SportsFunction_Alosi.pdf.
- Barton, J., & Rogerson, M. (2017). Themed editorial: The importance of green space for mental health. *BJPsych International*. Retrieved from:
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5663018/pdf/BJPI-14-79a.pdf>.
- Basso, J. C., Crosta, C., Lee, T. R., McHale, A., Payne, N., Shen, S., Singh, N., & Suzuki, W. (2015). Examining the effects of long-term high-intensity aerobic training on behaviors associated with the prefrontal cortex, hippocampus and striatum. *NYU Poster*. Retrieved from: <https://www.wendysuzuki.com/exercise-publications>.
- Basso, J. C., & Suzuki, W. A. (2016/2017). The effects of acute exercise on mood, cognition, neurophysiology, and neurochemical pathways: A review. *Brain Plasticity*, 2, 127-152. <https://doi:10.3233/BPL-160040>.
- Bennett, G., Lachowetz, T. (2004). Marketing to lifestyles: Action sports and generation Y. *Sport Marketing Quarterly*, 13, 239-243.
- Beutler, I. (2008). Sport serving development and peace: Achieving the goals of the United Nations through sport. *Sport in Society*, 11(4), 359-369.
<https://doi:10.1080/17430430802019227>.
- Black, D. R. (2010). The Ambiguities of development: Implications for ‘development through sport’. *Sport in Society*, 13(1), 121-129.
<https://doi:10.1080/17430430903377938>.

- Bridges, F. (2016). Serena Williams writes open letter about gender equality, empowerment and resilience. *Forbes*. Retrieved from:
<https://www.forbes.com/sites/francesbridges/2016/12/07/serena-williams-writes-open-letter-about-gender-equality-empowerment-and-resilience/#1ca6834307a5>.
- Brymer, E. (2009). The extreme sports experience: A research report. *IFPRA World*, 6-7.
- Brymer, E., Downey, G., & Gray, T. (2009) Extreme Sports as a Precursor to Environmental Sustainability. *Journal of Sport & Tourism*, 14(2/3), 193-204.
<https://doi:10.1080/14775080902965223>.
- Brymer, E., & Gray, T. (2009). Dancing with nature: rhythm and harmony in extreme sport participation. *Journal of Adventure Education and Outdoor Learning*, 9(2), 135-149. <https://doi:10.1080/14729670903116912>.
- Brymer, E., & Gray, T. (2010). Developing an intimate “relationship” with nature through extreme sports participation. *Leisure/Loisir*, 34(4), 361-374.
<https://doi:10.1080/14927713.2010.542888>.
- Brymer, E., Oades, L.G. (2009). Extreme sports. A positive transformation in courage and humility. *Journal of Humanistic Psychology*, 49 (1), 114-126.
- Brymer, E., Schweitzer, R. (2012). Extreme sports are good for your health: A phenomenological understanding of fear and anxiety in extreme sport. *Journal of Health Psychology*, 18 (4), 477-487.
- Carrington, D. (2019). Greta Thunberg nominated for Nobel peace prize. *The Guardian*. Retrieved from: <https://www.theguardian.com/world/2019/mar/14/greta-thunberg-nominated-nobel-peace-prize>.

- Casper, J. M., & Pfahl, M. E. (Eds.) (2015). *Sport Management and the Natural Environment*. Oxford, UK: Routledge.
- Coakley, J. (2007). *Sports in Society: Issues and Controversies* (9th Edition). New York, NY: McGraw-Hill Higher Education.
- Coakley, J., Dunning, E. (Eds.) (2000). *Handbook of sport studies*. London: Sage. Stull, G.A. Subramaniam, P.R., & Silverman, S. Thomson Reuters.
- Domonell, K. (2016). Why endorphins (and exercise) make you happy. *CNN*. Retrieved from: <https://www.cnn.com/2016/01/13/health/endorphins-exercise-cause-happiness/index.html>.
- Donnelly, M. (2006). Studying extreme sports. Beyond core participants. *Journal of Sport & Social Issues*, 30 (2), 219-224.
- Dubino, L. (2016). 10 Ways to increase your happy hormones. *HuffPost*. Retrieved from: https://www.huffpost.com/entry/10-ways-to-increase-your_b_8452602.
- ESPN (2019). No place like sports ad. *ESPN Marketing*. Retrieved from: <https://www.youtube.com/watch?v=KqLEdaYo2AU>.
- Fischer, A. (2013). The project of ecopsychology. *State University of New York Press*. Albany, NY, 3-27.
- Green, C. D. (2012). America's first sport psychologist. *American Psychological Association*, 43(4), 22. Retrieved from: <http://www.apa.org/monitor/2012/04/sport.aspx>.
- Harris, J. C. (2006). Sociology of sport: Expanding horizons in the subdiscipline. *Quest (Human Kinetics)*, 58, 71-91. Retrieved from: <http://www.nakhe.org>.

- Holland-Smith, D., Love, A., & Lorimer, R. (2013). British surfers and their attitude and values toward the environment. *School of Social and Health Sciences, University of Abertay, Dundee UK*.
- Honea, J. C. (2013). Beyond the alternative vs. mainstream dichotomy: Olympic BMX and the future of action sports. *The Journal of Popular Culture*, 46 (6), 1253-1275.
- Humberstone, B. (2011). Embodiment and social and environmental action in nature-based sport: spiritual spaces. *Leisure Studies*, 30(4), 495-512.
<https://doi:10.1080/02614367.2011.602421>.
- Jarvie, G. (2006). *Sport, Culture and Society*. Oxford, UK: Routledge.
- Kanin, D. B. (2019). *A Political History of The Olympic Games*. Routledge ISBN 9780429724312.
- Kavussanu, M., & Boardley, I. D. (2009). The prosocial and antisocial behavior in sport scale. *Journal of Sport & Exercise Psychology*, 31, 97-117.
<https://doi:10.1037/t.33475-000>.
- Krein, K. (2008). Sport, nature and worldmaking. *Sport, Ethics and Philosophy*, 2(3), 285-301. <https://doi:10.1080/17511320802475713>.
- Lagos, L., & Singh, R. (2016). How playing sports benefits your body ... and your brain, *TED-Ed*. Retrieved from: https://www.youtube.com/watch?v=hmFQqjMF_f0.
- Lampman, B., & Spickard Prettyman, S. (2011). Thinking through the contradictions in sport. In Spickard Prettyman, S., & Lampman, B. (Eds.), *Learning Culture through sports* (2nd ed.). Lanham, Maryland: Rowman & Littlefield Publishers, Inc.

- Lichtman, M. (2014). *Qualitative research for the social sciences*. Los Angeles: Sage, ISBN 978-1-4129-9864-2.
- Loland, S. (2006). Olympic sport and the ideal of sustainable development. In Heather Reid (Ed.) *Journal of the Philosophy of Sport*, 33, 144-156. Retrieved from: <http://iaps.net/journal/>.
- Metallinos, N. (2017). For Patty Mills, giving voice to indigenous Australians comes naturally. *ESPN*. Retrieved from: http://www.espn.com/nba/story/_/id/18839614/for-spurs-patty-mills-giving-voice-indigenous-australians-comes-naturally.
- O'Connor, L. (2017). Trump won't save us from climate change. Maybe surfers will. *HuffPost Environment*. Retrieved from: https://www.huffingtonpost.com/entry/surfing-climate-change-donald-trump_us_58c05f3be4b0d1078ca38474.
- Odell, C. F. (1994). Sports and the archetypal hero. In M. Stein & J. Hollowitz (Eds.), *Psyche and Sports* (pp. 235-243). Wilmette, IL: Chiron Publications.
- Olympic Games (2019). Olympic history - From the home of Zeus in Olympia to the modern games. Retrieved from: <https://www.olympic.org/ancient-olympic-games/history>.
- Protect Our Winters (POW). (2018). About us. Retrieved from: <http://protectourwinters.org/about-us/>.
- Protect Our Winters (POW). (2018). The Alliance. Retrieved from: <https://protectourwinters.org/the-pow-alliance/>.

- Rédei, C. (2009). Motivation for participating in lifestyle sports. *Lucrări Stiin Ifice Agricultural Management of Banat University of Agricultural Sciences & Veterinary Medicine Timisoara*, 11(4).
- Reed, C. L., Moody, E. J., & Atkinson, A.P. (2020). Embodiment of emotion throughout the lifespan: The role of multi-modal processing in perception, cognition, action and social and emotional functioning. Retrieved from: <https://www.frontiersin.org/research-topics/8911/embodiment-of-emotion-throughout-the-lifespan-the-role-of-multi-modal-processing-in-perception-cogni#overview>.
- Reid, E. (2017). Eric Reid: Why Colin Kaepernick and I decided to take a knee. *The New York Times*. Retrieved from: <https://www.nytimes.com/2017/09/25/opinion/colin-kaepernick-football-protests.html>.
- Rogerson, M. (2017). Commentary: Environmental influences on elite sport athlete's well-being: From gold, silver, and bronze to blue, green and gold. *Frontiers in Psychology*, 8 (78). <https://doi.org/10.3389/fpsyg.2017.00078>.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. <https://doi.org/10.1037/10003-066X.55.1.68>.
- Sawitri, D.R., Hadiyanto, H., & Hadi, S.P. (2015). Pro-environmental behavior from a social cognitive theory perspective. *Procedia Environmental Sciences*, 23, 27-33.
- Shulenkorf, N. (2012). Sustainable community development through sport and events: A conceptual framework for sport-for-development projects. *Sport Management Review*, 15, 1-12. <https://doi.org/10.1016/j.smr.2011.06.001>.

- Spink, A. (2015). Australia's breakdown king David Pocock more concerned with climate change than facing the All Blacks. *The Mirror*. Retrieved from: <https://www.mirror.co.uk/sport/rugby-union/australias-breakdown-king-david-pocock-6716559>.
- Suzuki, W. (2017). The brain-changing benefits of exercise. *TED Ideas Worth Spreading*. Retrieved from: https://www.ted.com/talks/wendy_suzuki_the_brain_changing_benefits_of_exercise?language=en.
- US Quidditch (2019). About US Quidditch. Retrieved from: <https://www.usquidditch.org/about/mission/>.
- Yeh, H., Stone, J.A., Churchill, S. M., Wheat, J.S., Brymer, E. & Davids, K. (2016). Physical, psychological and emotional benefits of green physical activity: an ecological dynamics perspective. *Sports Med*, 46, 947-953. <https://doi.org/10.1007/s40279-015-0374-z>.
- Yörük, B. K. (2015). Are generous people more likely to vote? Tax price effects of charitable giving on voting behavior. *Annals of Economics and Statistics*, 119/120, 345-373. <https://doi.org/10.15609/annaeconstat2009.119-120.345>.