Is It Just Me and The Ball? The Power of The Aesthetic Sport Experience

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Abstract

Kinesiology professionals work to promote and enhance healthy active lifestyles by emphasizing objective outcomes, such as improving health, gaining friendships, and achieving goals. However, the subjective experience of movement may be more meaningful and lead to more commitment to sport/PA, but is often neglected in kinesiology curriculum. The purpose of this study was to analyze the effectiveness of an educational curriculum on subjective, aesthetic sport experiences (ASE). Students (n=68) taking a 200-level philosophybased kinesiology course completed the curriculum over nine weeks as an assignment in their course. Students enrolled in one of three 100-level activity-based kinesiology courses served as the control (n=47). Post assessments with the Rickel Exercise Value Inventory (Rickel, 2005) revealed significantly higher subjective commitment among the treatment group (p=.015). Treatment group participants also scored significantly higher than the control group on social motivation (p=.01), as measured by the Motives for Sport and Physical Activity Measure-Revised (Ryan et al., 1997). Results indicate that kinesiology students may become more subjectively committed and socially motivated to sport/PA when given space to consider their personal ASEs. As subjective experiences may improve sport/PA behavior, kinesiology curriculum should value and include subjective experiences.

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Dedication

The ideas presented in this dissertation are a current culmination of my life experiences in practicing and studying physical activity. My dissertation is dedicated to the teachers, mentors, advisors, colleagues, and movement buddies in my life. To my parents for letting me *run wild* in nature, instigating my love for movement. To teammates and coaches who contributed to my aesthetic sport experiences. To friends and my dog who willingly and unwillingly hike, swim, run, ski, and play table tennis with me. To teachers who provided space to considered the unknown and explore meaning through the *dance* of learning. To my mentors, particularly Dr. Karen Appleby and Dr. Sharon Stoll, both who taught me that I am capable and encouraged me to share my voice. Finally, to myself for doing hard things.

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Chapter One: Introduction

Physical activity (PA) is a key ingredient to maintaining and improving mental and physical health (Centers for Disease Control & Prevention, 2020). Many take this to heart, literally to benefit their physically beating heart, by engaging in sports. Additional benefits of sports participation may include character growth, life preparation, improved social skills (Beni et al., 2017; English, 1978), and higher academic success (NCAA, n.d.; Sullivan et al., 2017; Whitehead et al., 2011). From a philosophical standpoint, sport participation extends beyond lowering cholesterol, socializing, and earning diplomas. Motor knowledge is gained through physical activities (Borge, 2015; Breivik, 2014; Gill, 1993; Marcel, 1952/1995; Meier, 1979/1995; Thomas, 1983).

Motor knowledge, therefore, transcends biomechanical, physiological, mental, and social achievements; instead, motor knowledge is the subjective *knowing how* rather than the objective *knowing that* (Breivik, 2014). Shooting a basketball properly requires specific biomechanical movements that create sufficient force to direct the ball at an appropriate angle. These are objective aspects that can be measured, compared, and critiqued. Knowing *that* the ball must be shot within these measurable parameters is much different than knowing *how* to actually shoot the ball. Little thought is required to successfully shoot a ball for the participant who knows *how*. Knowing *how* in PA/sport lives within the personal, qualitative, *aesthetic* experiences (Thomas, 1983).

Aesthetics generally refers to the beauty of an object, such as a piece of art, as seen by the viewer (Munro, 2021). However, aesthetics also exists within the performer's experience. The aesthetic is experienced through the athlete's senses or their inside view of having the experience, of "…having been there" (Thomas, 1983, p. 147). The aesthetic sport experience (ASE) is "…feeling-based and nonanalytical" (Thomas, 1983, p. 147). As Meier (1980/1995) describes:

...the texture of the being of the participant arises, by means of the body's power of expression. The player, through exuberant, delightful, joyous and spontaneous movement, gestures, and actions, confronts the world in a fresh manner, engages in dialog with it, and explores it and [self] in a manner pregnant with individual significance. (p. 125)

Qualitative, aesthetic experiences, therefore, may be instrumental in motivating continued sport participation (Fetter, 1976; Giamatti, 1989; Kretchmar, 2001; Saint Sing, 2004; Thomas, 1983). Further, as Kretchmar et al. (2017) emphasize, sport/PA contributes to the "…meaning or quality of life" (p. 11). The experience of "…having been there" (Thomas, 1983, p. 147) in sport/PA is meaning that will stay with the participant forever. As such, participant's ASEs may influence how they value and are committed to sport.

Unfortunately, an objective focus is usually more valued by those who participate in sport: to run faster, jump higher, win, or improve health (Kretchmar et al., 2017). Desires of "...wealth, fame, or pleasing Mom and Dad..." (Reid, 2002, p. xiii) keep athletes focused on the "...objectified, treadmill image of sport..." (Meier, 1979/1995, p. 94). Involvement in and long-term adherence to sport/PA may be deterred by the objective outlook. Research from the Aspen Institute suggests that children quit sports as early as age 11 because sports are no longer fun, with pressure to meet extrinsic outcomes and excessive stress to participate contributing to that climate (The Aspen Institute, 2019). Although parents want their children to have fun, many parents focus on the potential extrinsic rewards their child can achieve. Psychology researchers have continued to find lack of motivation among sport/PA participants who focus on extrinsic rewards (e.g., college scholarships, body weight, winning) (Deci & Ryan, 1985; Frederick & Ryan, 1993; Ruissen et al., 2018; Ryan & Deci, 2000).

University kinesiology programs¹ also tend to focus on the objective outcomes of sport participation (Anderson, 2002; Johnson & Twietmeyer, 2018; Kretchmar, 2005). The American Kinesiology Association (AKA) identifies the core elements of undergraduate kinesiology programs as (1) physical activity in health, wellness, and quality of life, (2) scientific foundations of physical activity, (3) cultural, historical and philosophical dimensions of physical activity, and (4) the practice of physical activity (American Kinesiology Association, 2021). The objective focus of these elements is highlighted in the

¹Kinesiology is a term used to describe the study of human movement and is often used as an umbrella term for fields where professionals research and promote physical activity (Schultz, 2016). The American Kinesiology Association (n.d.) defines kinesiology as "the academic discipline which involves the study of physical activity and its impact on health, society, and quality of life" (para. 1). Kinesiology includes physical education, coaching, athletic training, leisure and recreation, dance, sport administration, exercise and sport research, and pre-health related majors (e.g., physical therapy, physician assistant, occupational therapy) (Kretchmar et al., 2017).

descriptions provided on the AKA's website². Further, Twietmeyer and Johnson (2019) emphasize that most kinesiology programs fail to meet elements three and four. Without practicing and gaining proficiency in physical activity or exploring the philosophical purposes of movement, kinesiology students cannot be expected to experience, understand, and eventually promote the subjective possibilities of PA. Essentially, those who must promote, teach, evaluate, and model physically active lifestyles in their future careers are only prepared to do so by emphasizing objective outcomes.

Setting the Problem

Subjective aspects of PA and sport, such as ASEs, may influence motivation toward sport/PA and contribute personal meaning. Accordingly, kinesiology professionals should embrace and promote subjective aspects which influence the culture and purpose of sport/PA. Further, future kinesiology professionals should guide sport/PA participants to recognize and treasure subjective experiences. Unfortunately, the objective outcomes of PA and sport dominate the curriculum of most kinesiology programs. Therefore, educational experiences where kinesiology students discover and learn to promote subjective sport experiences are needed.

One strategy that may guide kinesiology students to understand the subjective aspects of PA and sport is an educational intervention focused on ASEs. Within such an intervention, participants (i.e., kinesiology students) should be able to identify and define the value and purpose of sport participation after contemplating and reflecting on their personal aesthetic sport experiences. Others have used a similar model to prompt change in participants' views through reading, reflecting, and writing (Bryant et al., 2018; Rickel, 2005; Shaw, 2020; Van Mullem, 2009). For example, Rickel (2005) found positive results after implementing a life narrative technique directed toward the subjective experiences that occur in PA among exercise participants.

However, research on ASE is lacking, particularly for the impact of such experiences on participants' commitment and motivation to sport. More research is needed to elicit positive change within the fields of kinesiology to include the subjective aspects of sport that are foundational to participation and meaning. An online educational intervention on ASE

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² https://www.americankinesiology.org/SubPages/Pages/Undergraduate% 20Core% 20Elements

completed with kinesiology students may affect how the students' value and are committed to sport, influence their motivation to participate, and influence how they will teach kinesiology in the future.

Problem Statement

The purpose of this study is to examine the effect of an aesthetic sport-focused curriculum on how college students seeking a major or minor in kinesiology related fields, are committed to, and are motivated to participate in sport. Commitment will be measured with the Rickel Exercise Value Inventory (Rickel, 2005) while motivation will be measured by the Motives for Physical Activity Measure-Revised (Ryan et al., 1997).

Sub-Problems

Commitment

- 1. What difference exists pre to post by **gender** on objective and subjective commitment to sport in kinesiology students?
- 2. What difference exists pre to post by **group** on objective and subjective commitment to sport in kinesiology students?
- 3. What difference exists pre to post with the interaction of **gender by group** on objective and subjective commitment to sport in kinesiology students?

Motivation

- 1. What difference exists pre to post by **gender** on motivation to participate in sport in kinesiology students?
- 2. What difference exists pre to post by **group** on motivation to participate in sport in kinesiology students?
- 3. What difference exists pre to post with the interaction of **gender by group** on motivation to participate in sport in kinesiology students?

Statistical Sub-Problems.

Commitment

- 1. No difference exists pre to post by **gender** on objective and subjective commitment to sport in kinesiology students.
- 2. No difference exists pre to post by **group** on objective and subjective commitment to sport in kinesiology students.

3. No difference exists pre to post with the interaction of **gender by group** on objective and subjective commitment to sport in kinesiology students?

Motivation

- 1. No difference exists pre to post by **gender** on motivation to participate in sport in kinesiology students.
- 2. No difference exists pre to post by **group** on motivation to participate in sport in kinesiology students.
- 3. No difference exists pre to post with the interaction of **gender by group** on motivation to participate in sport in kinesiology students?

Delimitations

The study is delimited to:

- 1. Two-Hundred college students who are seeking a major or minor in kinesiology related fields.
- 2. Participants who attend college at an Idaho institution of higher learning.
- 3. The treatment and control groups consist of college students who are seeking a major or minor in kinesiology related fields.
- 4. The instruments will measure (a) objective and subjective commitment to sport, as measured by The Rickel Exercise Value Inventory (Rickel, 2005), and (b) motivation to participate in sport as measured by the Motives for Physical Activity Measure-Revised (Ryan et al., 1997).
- 5. The intervention will be five, 20-minute online lessons completed outside of scheduled class time where reading, reflecting, and writing will occur.
- 6. The study will take place throughout an eight-week period in the fall semester.
- 7. The study is delimited to two small liberal arts institutions.
- 8. The study is delimited to a curriculum which is built for learning about aesthetic sport experiences.

Limitations

Participants for the study are a convenience sample. Students will be required to
participate as part of the class but do not have to share their data with the
researchers.

- 2. Participants may be students taught by the researchers. The material in the lessons may also be discussed in class.
- 3. The participants understand the research instrument statements as they are intended.
- 4. The participants understand the curriculum as intended.
- 5. Generalizability of the data is limited to the results of this study.
- 6. The results are limited to the reliability and validity of the Rickel Exercise Value Inventory and the Motives for Physical Activity Measure-Revised.

Assumptions

- 1. Students who are seeking a major or minor in kinesiology are a representative sample.
- 2. The test instruments are appropriate for the target population and are a valid and reliable measure of (a) commitment as measured by The Rickel Exercise Value Inventory (Rickel, 2005), and (b) motivation as measured by the Motives for Physical Activity Measure-Revised (Ryan et al., 1997).
- 3. The researcher will sample all participants using the same research methods.
- 4. The participants will spend adequate time on the intervention, reflect, and complete the intervention as intended.
- 5. The participants will understand the directions as they were intended.
- 6. The participants will have experienced ASEs sometime in their life, which enables them to understand the intervention content.
- 7. The participants will complete the inventories to the best of their ability.

Operational Definitions

The definitions found in this section will contribute to the readers understanding of the material.

Aesthetic Sport Experience

The inside view of having had the sport experience, of "...having been there" and experienced the "...sensuous and qualitative aspects..." of playing sports and engaging in physical activity (Thomas, 1983, p. 147).

Autotelic

The end or goal of the activity is the doing of the activity.

Bodily Knowing

Knowledge gained through motor actions of the body (Gill, 1993).

Commitment

The amount of involvement a person gives to sport (Rickel, 2005).

Embodiment

Humans as *beings-in-the-world* or *lived-bodies* where body and mind are united rather than viewed as a dichotomous objective body and subjective mind (Meier, 1979/1995).

Extrinsic Motivation

Drive to act because of external factors such as rewards or judgements from others (Center for Self-Determination Theory, 2021).

Intrinsic Motivation

Drive to act originating within the person such as from values and interests (Center for Self-Determination Theory, 2021).

Kinesiology

"The academic discipline which involves the study of physical activity and its impact on health, society, and quality of life" (American Kinesiology Association, n.d., para. 1).

Lived-Experience

Understanding and describing experiences as they are lived (Hyland, 1990).

Motivation

The drive to act (Center for Self-Determination Theory, 2021).

Motives for Physical Activity Measure-Revised

An instrument that assesses five motives for participating in physical activity: (1) fitness, (2) appearance, (3) competence/challenge, (4) social, and (5) enjoyment (Ryan et al., 1997). Cronbach's alpha for each subscale was: enjoyment, .92; appearance, .91; social, .83; fitness/health, .78; and competence, .88. See Appendix D.

Objective Outcome

A result based on factual judgments measured quantitatively (Gill, 1993).

Physical Activity

"...participation in dance, exercise, games, play and sport" (Johnson & Twietmeyer, 2018, p. 45).

Self-Knowledge

Knowledge we have about ourselves gained through personal experience.

Sensuous or Sensuality

Experiences lived through a person's senses, including "...visual, tactile, and kinesthetic perceptions" (Thomas, 1983, p. 166).

Sport

For the purpose of this intervention, sport is defined as physical activity engagement including competitive pursuits and physical activities pursued for personal fitness and leisure.

Sport Uniform

Attire worn by a sport participant whether in a competitive, recreational, or leisurebased sport activity.

Subjective

A result based on value judgments measured qualitatively (Gill, 1993).

The Rickel Exercise Value Inventory

An instrument that measures objective and subjective commitment to exercise (Rickel, 2005). Cronbach's Alpha for objective commitment: pre-test rating of .89, post-test rating of .78. Cronbach's Alpha for subjective commitment: pre-test rating of .87, post-test rating of .81. See Appendix C.

Value

Individual relative worth placed on some intrinsic or extrinsic object, experience, or persons (Lumpkin et al., 2003, p. 269).

Significance of the Study

The ASE may be instrumental in motivating continued participation in sport and may contribute to the meaning and quality of life. Therefore, the proposed study is important to (a) the participants (pre-professional kinesiology students), (b) the kinesiology discipline, (c) the kinesiology profession, and (d) the general population.

Participants (Pre-professional Kinesiology Students)

The *fun* that keeps people interested in sport may lie in the subjective, aesthetic sport experience. Therefore, understanding the influence ASEs have on value and commitment to sport will require that people have opportunities to contemplate and express their experiences. Study participants are able to do so by completing this study. In doing so, participants may discover what motivates them to participate in and value sports, which may influence their commitment and motivation to sport/PA.

Further, pre-professional kinesiology students will be directly influenced as researchers expand the knowledge base of kinesiology, and the kinesiology profession recognizes the role of subjective experiences in sport. Research on the subjective experiences will influence how kinesiology programs include the topic in curriculum, which may directly impact the knowledge and practices of future kinesiology professionals. Further, kinesiology students may be influenced to appreciate the ASEs they have while participating in sport.

Kinesiology Discipline

Studying subjective experience (e.g., ASE) is critical to understanding the full experience and meaning of sport. Unfortunately, researchers often neglect such subjective experiences. Information garnered through the proposed study may contribute to the knowledge base on subjective experiences in sport.

Kinesiology Profession

Understanding the subjective experiences in sport may influence how and what kinesiology professionals' study, teach, and promote. Currently, the focus of most kinesiology professionals are the objective outcomes of sport. Therefore, research on subjective experience is needed to guide the kinesiology profession to study, teach, and promote the full experience of participating in sport.

General Population

PA is a central part of the human experience and kinesiology is the avenue that leads to the knowledge about sport/PA and its role in the human experience. Kretchmar et al. (2017) emphasize that kinesiology is about the influence of PA on health, mortality, and the meaning and quality of life. Therefore, kinesiology professionals must work to understand the full experience (i.e., the objective and subjective) of sport/PA in human life. Such knowledge may directly influence how society views and participates in sport/PA.

Chapter 2: Literature Review

The purpose of this study is to examine the effect of an aesthetic sport-focused curriculum on how college students, who are seeking a major or minor in kinesiology related fields, are committed to, and are motivated to participate in sport. A discussion of the (a) benefits of sport, (b) objective focus, (c) kinesiology programs and the objective focus, (d) subjective focus, (e) aesthetic sport experience, and (f) aesthetic sport-focused curriculum are presented.

The Benefits of Sport

Throughout the years, organizations, researchers, health experts, and sport/PA professionals have advocated and demonstrated that sport offers important benefits. In 1978, sport philosopher Jane English described the "...basic benefits..." of sport participation as:

Health, the self-respect to be gained by doing one's best, the cooperation to be learned from working with teammates and the incentive gained from having opponents, the 'character' of learning to be a good loser and a good winner, the chance to improve one's skills and learn to accept criticism- and just plain fun. (p. 284)

Since English's statement, numerous organizations and professionals have identified important basic benefits of sport participation. Children may gain health, educational, social, & psychological benefits (Beni et al., 2017; Sullivan et al., 2017; The Aspen Institute, 2019). Young adults may experience social interaction, learn teamwork and responsibility, and gain leadership skills (Army & Navy Academy, 2020; NCAA, n.d.). Even the oldest people may find improved mental and physical health, social interaction, and stress relief through sport participation (Thomas, 2019).

Objective Focus

Unfortunately, these *basic benefits* tend to direct focus toward the objective outcomes that coaches, athletes/participants, parents, fans, and even medical professionals seek. From a medical standpoint, sports are beneficial because the physical exercise of sports can prevent and curtail disease (Centers for Disease Control & Prevention, 2020). Society at large advocates for sports because athletes obtain life-long social skills such as "…loyalty, commitment, dedication, sacrifice, hard work, determination, cooperation, and friendship…" (Lumpkin et al., 2003, p. 23). Of course, fans, coaches, and athletes' attention are directed

toward obtaining winning records. Further, as indicated by youth athletes, sports can be fun (Beni et al., 2017; The Aspen Institute, 2019)! Yet, even fun can lose its shine as many other activities are fun and desirable (Kretchmar, 2001), such as computer games and social media. Essentially, sport becomes a means to obtain something else rather than being meaningful itself (Kretchmar, 2005).

Of course, engaging in sports for physical and mental health, cognitive improvement, or to learn important social values are worthy endeavors and important to the overall sport experience (S. Stoll, personal communication, March 6, 2021). Further, striving to win can create a space to showcase talents, efforts, teamwork, and perseverance, especially when facing a worthy opponent (Delattre, 1975/1995). However, as Reid (2002) stated, "...wealth, fame, or pleasing Mom and Dad..." are often misguided motivations (p. xiii), which can lead athletes and coaches to cheat (e.g., Wolverton, 2014) and engage in other negative behaviors (e.g., flagrantly injuring opponents, Pesca, 2012). Athletes even willingly risk their own health to gain the cutting-edge through drug use³ (Aguilar-Navarro et al., 2020; Ulrich et al., 2017). Hyland (1990) reminds us that:

...where there is a stake in winning, it will always be tempting for a person immersed in the intensity and passion of that competitive situation to push the rules of the game, to cheat, to injure, and generally to 'do anything to win'. (p. 35)

Making athletes into machines trained to win is not a new phenomenon. Training regiments, nutrient timing, cross-training, body manipulations (e.g., surgery), steroids, and blood doping have dominated the sporting scene since the very beginning of competition (the ancient Greek athletes were obsessed with achieving perfection; Spivey, 2012). Athletes, and other interested parties, are infatuated with utilizing the latest methods to fine tune the athletic body. In 1986, historian John M. Hoberman presented a lecture titled *Sport and the Technological Image of Man*⁴. Hoberman (1986/1995) describes the technological advances

³ The World Anti-Doping Agency (WADA) was created in 1999 to research, educate, and monitor the use of performance enhancing drugs throughout the sports world (World Anti-Doping Agency, 2021). The agency completes millions of drug tests each year. For more information, see: https://www.wada-ama.org/

⁴ Hoberman has continued to discuss the technological man in his written works including his 1997 book, *Darwin's athletes: How sport has damaged Black America and preserved the myth of race*, and his 1992 text, *Mortal Engines: The science of performance and dehumanization of sport.*

that were used at the time to develop athletes into "...laboratory specimens whose structure and potential can often be measured in precise quantitative terms" (p. 203).

Since Hoberman's presentation, scientists have continued to discover new and exciting ways to test, measure, analyze, and prescribe personalized training for athletes and exercisers alike; methods that contribute to the objective focus of physical movement. For example, wearable technology such as the ZephrTM compression shirt can measure heart and breathing rates, posture, vertical jump height and time, explosiveness, and body temperature (Zephyr, 2020). The data is instantly available to coaches who carefully monitor the athlete's performance.

A more commonly used device is a fitness tracker such as the Apple watch. In addition to displaying the time, the watch will track sleep, remind the wearer of their goals, monitor time and intensity in PA, and even detect injury (Apple, 2020). Users can then share their data with internet friends for kudos or their coaches for training feedback. Journalist Rose George, a British recreational runner, recently highlighted the importance placed on sharing fitness and training data. George (2020) noted the abundance of fitness tracking software used by her fellow runners and the idea many of them share that "If it's not on Strava, it didn't happen" (para 2)⁵.

Gathering quantitative data on professional or recreational athletes can be beneficial for short-term improvements to participation (Dallinga et al., 2015; Dittrich et al., 2020; Schoeppe et al., 2016). However, obsession with data by athletes and coaches contributes to the objective focus of sport participation as athletes are simply reduced to numbers. As Fetter (1976) said, "...totally subsumed with the external pressures associated with a 'win at all cost' ideology, the athlete loses 'touch' with the sensually rich aesthetic possibilities available to [them]" (p. 143). Kinesiology programs, where sport is extensively researched, analyzed, and taught, are likely contributing to the objective focus enmeshed in modern sport. Perhaps the issue is older than modern sport and probably stems from the beginning of physical activity as an educational focus in the 19th century.

Kinesiology Disciplines and Objective Focus

Following the Civil war, notable interest in physical training, athletics, and recreation

⁵ Strava is a fitness training app designed for runners and cyclists that enables smartphones to track and upload various stats during workouts. For more see: https://www.strava.com/features

surged in American society (Park, 1987). However, sport was not affiliated with schools of the time as faculty gave little academic importance or time to extracurricular activities (Gorn & Goldstein, 2013). So, students created athletic competitions, events, and rituals, organizing all aspects themselves. As Gorn and Goldstein (2013) noted: "...it was the students themselves who formed clubs, fraternities, and sporting associations to mitigate dull curricula" against the desires of school personnel (p. 131). Rather than creating sports for prudential reasons, the students played for the love of playing, for the "...treasures of meaning..." found in sports (Kretchmar, 2001, p. 322). However, as sport became more popular, fame, winning, and money became ever more important (Smith, 1988).

Although student-run athletics boomed at most major colleges, academicians worried about the "deleterious effect [of sports] upon academic interests and the good name of the institution" (Smith, 1988, p. 120). For years, a fight waged in higher education over how and by whom athletics should be controlled, which prompted the creation of the system used today (Smith, 1988; Watterson, 2000). The debate also provoked significant changes to physical education programs. Sport programs eventually replaced the traditional gymnastic-based curriculum⁶, and coaches replaced physicians as physical education faculty⁷ (Gerber, 1971; Paul, 1996). Tying sport to physical education justified its presence in academic settings. However, the move sparked a new debate about the academic nature of physical education (Paul, 1996).

Physical Education/Kinesiology

The formation of physical education as a discipline was spurred by the large amount of focus given to health during the nineteenth century (Park, 1987). A scientific foundation of physical education was laid by physicians, such as Luther Gulick, Dudley Sargent, and Delphine Hanna, who were the earliest physical educators (Gerber, 1971; Park, 1987). The educators gathered extensive objective data on students, such as lung capacity, anthropometrics, and strength capability (Gerber, 1971). However, as sport entered the

⁶ Early physical education in the United States was crafted after European gymnastics systems (Paul, 1996).

⁷ By 1900, physical education had emerged as a discipline in teacher's colleges where students were taught by physicians in "...anatomy and physiology, physics, and anthropometry... as well as educational theory" (Schultz, A history of kinesiology, 2016, p. 43).

⁸ Citing Moorhead (1932), historian Joan Paul reminds us that athletics moved into physical education to legitimize sports in educational institutions, and then left physical education when the focus of athletics became capitalistic, emphasizing winning and entertainment (as cited in Paul, 1996).

discipline, the focus shifted from health and physical measurements to the education of the whole person, physically, socially, and morally (Gerber, 1971; Paul, 1996). As Williams (1948) noted, "Human relationship, social values, moral standards are intimately bound up and associated with all the activities of physical education" (p. 10). Scientific, laboratory-based activities became less important than social outcomes of sport/PA (Park, 1987). However, a comment by former Harvard president James Conant in his 1963 text, *The Education of American Teachers*⁹, sparked the revitalization of science-focused, objective based physical education (Schultz, 2016).

Professor Franklin Henry of the University of California at Berkeley responded to Conant's concerns by defining physical education as a scholarly field based in academic study (Henry, 1964). Henry's efforts resulted in the creation of specialization areas, or subdomains of physical education, which are still recognized today, and the eventual shift to call the discipline kinesiology¹⁰ (Schultz, 2016). The results of identified specializations within kinesiology vary. More focus is placed on research, which has illuminated the importance of human movement in many different professions, including health care, fitness, and leisure (Kretchmar et al., 2017). However, the shift has also devalued the physical education teaching profession (Schultz, 2016), and diminished the study of history, philosophy (including the aestehics of sport), and the practice of physical activity (Johnson & Twietmeyer, 2018; Twietmeyer & Johnson, 2019). As Kretchmar (1994) stated:

As prudent people, we do not want to waste time on mere play and games. So, we put play to work for us. We make sure that it serves rationally defensible ends-like fitness, moral development, socialization, knowledge, health and so on. (p. 105)

Because of the objective focus of kinesiology professions, kinesiology students, those who will be the leaders, advocates, researchers, and teachers of sport, are unlearned in the subjective, aesthetic nature of sport. Students learn the importance of exercise for health, study technical proficiency, and understand the psychological conditions of elite athletes. Yet, as Kretchmar (2001) promoted, students should be taught "...the far better stuff that lies

⁹ Conant said, "I am far from impressed by what I have heard and read about graduate work in the field of physical educations ... To my mind, a university should cancel graduate programs in this area" (Conant, 1963, p. 201).

¹⁰ Schultz (2016) discussed the various names kinesiology disciplines have used over the years. The names have changed in-tune with the shifting focus and attempt to unify the diverse sub-disciplines of kinesiology.

beyond. They need to meet the activity itself in a more intimate way and experience some of its treasures- treasures of meaning that typically remain hidden" (p. 322).

Subjective Experience

Because significant attention is given to the objective, quantitative aspects of sport and physical activity, the subjective, qualitative experiences are often unconsidered. In 1983 Kupfer (1983/1995) said:

More Americans are participating in more sports but we do not seem playful about it. We compete to win tournament and trophy or work on shape and health. Eyes fixed on glory, waistline, and heartbeat, we do not pay much attention to the aesthetic qualities inherent in participating in the sport itself. (p. 403)

His words are still relevant today. Subjective experiences in sport occur when the body becomes the subject enmeshed in the "…nonutilitarian nature of sport" (i.e., play), rather than an object to be manipulated (Thomas, 1983, p. 166).

Play. Philosophers have dedicated significant time toward understanding play. Huizinga (1950/1995) described play as "...an integral part of life... it adorns life, amplifies it, and is to that extent a necessity both for the individual... and for society" (p. 6). Fink (1960/1995) took this idea a step further by equalizing play with work, death, and love. Play, therefore, is not wasteful idleness, but is a key intrinsic experience necessary for a fulfilling life. Play is a fundamental part of our existence that has "...permeated all of human history..." and is entwined with social meaning and connection (Meier, 1980/1995, p. 120).

Meier (1988/1995) presented a clear, acceptable description of play within sport when he said if "...sports are pursued voluntarily and for intrinsic reasons, they are also play forms; if they are pursued involuntarily or engaged in predominantly for extrinsic rewards, they are not play forms" (p. 32). Huizinga, Fink, and Meier's thoughts should lead us to believe that if play is present in sport, deeper, more meaningful experiences can be achieved by the participant.

The type of play in sport is not childlike play, where spontaneous creations and adaptations dominate the activity. Instead, sports revolve around agreed upon regulations, the *can* and *cannot*, which make each sport unique. Rules are not intended to remove play from the activity, but to create a "...co-operative endeavor to maximize pleasure or joy..."

(Keating, 1964/1995, p. 148). Within sport, play can be abundantly present, even with strict guidelines dictating the participant's actions.

Athletes may play a sport and win that sport but winning does not mean play occurred. What is the reward then, for playing sport if not to win? The reward for playing is simply that the play actually occurred (Fink, 1960/1995), because "play is an exceptional mode of being...to explore wondrous fields of possibility" (Meier, 1980/1995, p. 128). Feezell (1986/1995) indicated, the athlete's "...purpose is to win the contest and to experience the playful and aesthetic delights of the experience" (p. 155). Athletes from any level of sport should accept that, win or lose, the point of the game was that it occurred, that they played. Giamatti (1989) believed that leisure activities:

...are all autotelic activities- that is, their goal is the full exercise of themselves, for their own sake, because in them a condition is achieved that is active, not idle; entertaining, not simply useful; perfecting of our humanity, not merely exploitative of it. (p. 16)

Kretchmar (2006) emphasized that:

One of the greatest things about physical activity and play is that they make our lives go better, not just longer. It is the quality of life, the joy of being alive, the things we do with our good health that matter to us as much or more than health itself.

Finally, in Thomas' (1983) view:

It is not enough to justify the existence of sport on any basis other than such sensuality as the basis for pleasure and an awareness of the self as human and not merely as an object among objects in the world. (p. 167)

The autotelic, subjective, and qualitative aspects of sport should be the foundation of why we play. As Saint Sing (2004) stated, "If sport does not help us transcend our base nature, then why play? Why spend hours and days and months and years drilling the wrong message into young people's minds? For a medal that costs three dollars" (p. 69)? Meier (1979/1995) suggested rearranging the focus of sport away from objective outcomes:

Rather than concentrating solely on the objectified, treadmill image of sport, predominantly centered upon the development and attainment of physical strength, motor skills, and technical efficiency it appears to be legitimate, fruitful and

imperative to focus upon the full range of dynamic, lived experiences available therein. (p. 94)

If Saint Sing, Kretchmar, Meier, Thomas, and Giamatti are correct, the subjective, aesthetic aspects of sport are the core of why people participate.

Aesthetic Sport Experience

Aesthetics is a branch of philosophy concerned with beauty and art (Edgar, 2015). Levinson (2005) identified three foci of philosophical aesthetics: (a) practicing or making art, (b) properties of beauty or grace, and (c) attitude or perception experienced. Overall, philosophers who study aesthetics are concerned with understanding "what, in short, is art, or counts as an aesthetic feature, or constitutes an aesthetic experience" (Levinson, 2005, p. 4). Since the 1960s, sport philosophers have also debated these questions within the realm of sport, play, and physical movement (Edgar, 2015; Morgan & Meier, 1995). Edgar identified two categories of study for the aesthetics of sport: (a) sport as art and (b) aesthetic qualities of the sport experience.

Sport and Art

Although most sport philosophers agree that many sports have artistic components, critics argue that too many fundamental differences exist between sport and art to accept sport as art (Hyland, 1990). Early writers included Reid (1970), Kupfer (1975), and Best (1974). In 1978 David Best opined that "...it is high time we buried once for all the prolix attempts to show that sport is art" (Best, 1978/1995, p. 389). However, sport philosophers, including Best, continued to debate the topic (e.g., Wertz, 1979; Best, 1980; Cordner, 1984/1995; Wertz, 1984; Roberts, 1986/1995; Hyland, 1990; Davis, 2001; Mumford, 2012; Elcombe, 2012; Culbertson & McFee, 2017). Much of the debate centers on the purpose of sport and art. As Thomas (1983) stated 30 years ago: "...the fact remains that art is done by artists and viewed by audiences for different reasons than sport is done by athletes and viewed by audiences" (p. 147).

Aesthetic Qualities of Sport

Little debate exists on whether sport has aesthetic qualities, though much discussion has occurred around what those qualities may be. Specifically, aesthetic qualities of sport may include the beauty, grace, drama (Edgar, 2015) and the sensuousness of (a) watching or (b) participating (Thomas, 1983).

Watching. In sport, as in art, the audience takes an outside-in view, where they evaluate and *experience* the observable aspects of the sport (Thomas, 1983). Sport philosophers, psychologists, and sociologists have discussed many aspects of the spectators' aesthetic experience beginning with whether sport is beautiful and therefore aesthetic. Lowe (1973) discusses the debate between Maheu (1963), Kaelin (1963), Jokl (1964), Wohl (1966), Dumazedier (1968), and Weiss (1969). Ziff (1974), Vivas (1959), Kovich (1971), and Elliot (1974) proposed that beauty was unimportant in sport and was *beside the point*. Best (1978/1995) categorized some sports as *aesthetic* (e.g., gymnastics, synchronized swimming, figure skating), and others as *purposive* (e.g., basketball, football, track). Doing the sport in an aesthetically pleasing manner is the purpose of *aesthetic* sports. On the other hand, purposive sports may have aesthetic qualities, but such qualities are unrelated to the purpose of the sport (it does not matter how beautifully a ball is shot; what matters is that it hits its mark).

However, Anthony (1968) noted that although aesthetics is a minor factor in *purposive* sports, millions of people who view such sports indicate pleasurable, aesthetic aspects of the experience. As Mumford (2014) stated: "Many sporting events manifestly do have aesthetic value and we can consider what it is about them that makes them so pleasing, as well as what kind of aesthetic value is gained in watching sport" (p. 181).

Other philosophers have addressed the aesthetics of sports in various ways. Kupfer (1983/1995) argued that an aesthetic appreciation of sport offers richness to the activity and to daily life. Cordner (1984/1995) discussed the efficiency of movement within sport as a form of grace. Roberts (1992) highlighted the role *remaking* sports through media has on the aesthetic significance of sport. Finally, Novak (1994) and Mumford (2012) described the sensuous qualities experienced by the spectators of sport. Although not all agree, *aesthetic* and *purposive* sports may be enjoyed, aesthetically, by the spectator.

Participating. Philosophers have primarily focused on the aesthetics of sport from the spectator's view. However, aesthetics can also be experienced by the participant as they engage in sport. As Thomas (1983) said, "The body as subject becomes the source for the aesthetic experience, and it is an aspect of sport reserved for the performer and not accessible to the spectator" (p. 166).

Fetter (1976) was one of the early writers concerned with the aesthetic experience of participating in sport. Her belief was that "...one's body can also in itself be a rich and primary source of the aesthetic experience" (Fetter, 1976, p. 3). Noting that little had been written or explored on the topic, Fetter used existing aesthetic theory, existential phenomenological philosophy, and athletes' personal accounts to explore the aesthetic experience of the performer; what she called *the body aesthetic*. The author discussed the performer's experience through incarnation, body spatiality, temporality of the body, rhythmic form, and the body as symbol. In summary, Fetter (1976) proposed that "the football player, as well as the dancer, can enter into the world of the beautiful and sensually delightful experience of [their] moving body" (p. 5).¹¹

Thomas (1983) presented an overview of the aesthetic dimensions within sport (i.e., art, aesthetics of watching, aesthetics of participating). Unique to her text is her discussion of the "...sensuous dimension" of sport which she calls the *aesthetic sport experience* (Thomas, 1983, p. 166). Relying heavily on Fetter's work, Thomas (1983) describes the ASE as a personal, subjective experience that is only for the athlete and unavailable to the spectator. To be in such a state, the athlete must be completely involved in the activity, or experience *oneness*. ¹² Thomas (1983) emphasized that ASEs are the foundation of enjoyment within sport, and that these experiences remain with the athlete long after the physical movement is over.

Since Fetter and Thomas' work, few philosophers have given attention to the ASE had by sport participants. David Best, known for his work on the sport as art debate, briefly recognized the presence of aesthetic feelings of the sport participant (Best, 1978/1995). Best (1978/1995) described the aesthetic feeling during a "...well-executed dive, a finely timed stroke in squash, a smoothly accomplished series of movements in gymnastics... and a training run when one's body seems to be completely under one's control" (p. 384).

¹¹ Fetter continued her work on the aesthetic body in publications such as *The Body Aesthetic: A Symbolic Experience* (1977); *Sport, Myth and the Courage of Self-creation* (1978); *An Experiential Body Aesthetic* (1980); and *The Body Beautiful: Beyond Stereotypes* (1982).

¹² Thomas' description of oneness is based on Fetter's discuss of the topic. Other sport philosophers have also explored the idea of oneness including, Kupfer (1983/1995), Hyland (1990), Meier (1979/1995), and Saint Sing (2004).

According to Best, such aesthetic feelings create the enjoyment experienced by sport participants.

Kupfer (1983/1995) also described the joy associated with the aesthetic experiences available when playing sports. In Kupfer's (1983/1995) view, "The runner...can appreciate from the 'inside' the pattern his arm, leg, and breath movement creates. For him, shifting, breathing, and muscular exertion are viscerally felt and heard, whereas spectators can only infer this experience from what they see" (p. 403). The athlete experiences the aesthetics of the rhythms, environment, and tensions of the sport. The athlete can hear the swish of the ball and feel the rhythm of the front crawl (Kupfer, 1983/1995).

Wacquant (2004) also described the involvement of senses in sport when he engaged in an ethnographic study of inner-city boxers by learning to do the sport himself. As he trained with the other boxers, Wacquant experienced what he called "...sensuous intoxication" (Wacquant, 2004, p. 71):

What is most likely to elude the outside observer is the extreme sensuousness of the pugilistic initiation. One would need to call up all the tools of visual sociology or even those of a truly sensual sociology that remains to be invented to convey the process whereby the boxer becomes organismically "invested" by and bound to the game as he progressively makes it his-boxers commonly use metaphors of blood and drugs to explain this particular relation akin to a mutual possession. For it is with all of one's senses that one gradually converts to the world of prizefighting and its stakes. To give this proposition its full force, one would need to be able to capture and convey at once the odors (the heady smell of liniment sniffed full force, the sweat hanging in the air, the stink of the situp table, the leathery scent of the gloves); the cadenced "thump" of punches against the bags and the clanking of the chains they hang from, each bag having its own sound, each drill its tonality, each boxer his own manner of accenting the machine gun-like rattle of the speed bag; the light "tap-tap" or frantic galloping of feet on the wooden floor while skipping rope, or the muffled squeak they let out as they move gingerly on the canvas of the ring; the rhythmic puffing, hissing, sniffing, blowing, and groaning characteristic of each athlete; and especially the collective layout and synchronization of the bodies in the space of the gym, whose mere sight suffices to wield lasting pedagogical effects; not to forget the

temperature, whose variation and intensity are not the least relevant properties of the room. The combination of all these elements produces a sort of *sensuous intoxication* that is key to the education of the apprentice boxer. (pp. 70-71)

Wharton (2004) also described the impact of his ASE through his phenomenologically based dissertation project where he described his *personal long run*. He stated: "When one experiences the sensuousness of the 'long run' eventually they are thrust outside themselves and become seriously sensitive to the perception of living, doing, performing, and experiencing" (p. 11). Through these experiences, the athlete discovers what "...genuinely lies inside" (Wharton, 2004, p. 2).

Uniforms worn in sport may also contribute to the sensuousness of the experience. Foster and Stoll (2020) conducted a qualitative study on college students' experiences wearing sport uniforms. One theme that emerged from the data was *personal experience*, which included statements about identity, confidence, empowerment, accomplishment, and joy. The researchers suggested that providing opportunities for athletes to recognize and express aesthetic experiences may illuminate the subjective purpose of sport (Foster & Stoll, 2020).

Especially poignant in the writings of the philosophers and authors cited in this paper is the recognition that the sensuous, ASEs are central to the overall experience of participating in sport. Unfortunately, Fetter's (1976) thoughts from 45 years ago are still applicable now:

An exclusive focus on rigid performance requirements and an exaggerated sense of the value of victory have all too frequently resulted in an alienation of the athlete from the delightfully sensuous immediacy of [their] body in movement, as [they have] learned to ignore [their] lived body in sport, to objectify and use [their] body as a commodity to be bought, hazed, drugged and manipulated to achieve the all important win. (p. 1)

Focusing on objective outcomes diminishes the subjective, aesthetic experiences that occur in sport; experiences that sport philosophers note are instrumental in motivating continued sport participation (Giamatti, 1989; Fetter, 1976; Kretchmar, 2001; Saint Sing, 2004; Thomas, 1983). Unfortunately, those who teach and direct sport (e.g., kinesiology professionals) often do not recognize, discuss, or promote ASEs (Twietmeyer & Johnson,

2019). Kinesiology programs should include aesthetic focused curriculum in their programs. As Fetter (1976) indicated, such education "…is validation of the qualitative sensual richness of one's moving body" (p. 149). Education that includes ASEs should be foundational to kinesiology programs as ASE is foundational to the sport experience.

Aesthetic Sport-Focused Curriculum

Because sport is part of the educational landscape the purpose should be aligned with educational values; to learn how to learn and *dance* with the things that contribute to bountiful flourishing, such as ASEs (Garrison, 2010; Gill, 1993). Doing so may look different than what has always been done (Garrison, 2010). Within sport and physical activity, participants, through their bodies, have freedom to "...express... explore... discover... invent... and create" (Kretchmar, 2006, p. 6). Participants can view their bodies in movement not as an entity but in terms of how they experience them (Hyland, 1990). Further, sport is a self-transforming activity where the participant can "...make the self over, to refashion or refigue or re-form the self into a perfect self, over and over again..." (Giamatti, 1989, pp. 26-27).

Including the subjective, ASE in our sport endeavors may also reveal a new sense of motivation and commitment to physical movement, aspects which Kretchmar (2005) identifies as the top challenges of movement educators. Rather than "...cajole... threaten... educate... provide rewards..." or "...pray for divine intervention" (Kretchmar, 2005, p. 129) to create motivation, we should guide participants s to discover human Eros¹³, or passionate desire, for valuable things (Garrison, 2010).

Limiting motivation to objective outcomes can be "...self-stultifying..." (Gill, 1993, p. 5). As part of the subjective dimension, ASEs may be an avenue to Eros, which, may motivate participants to return to sport again and again (Giamatti, 1989; Fetter, 1976; Kretchmar, 2001; Reid, 2002; Saint Sing, 2004; Thomas, 1983). However, ASEs are often "...spontaneous, private, and difficult to communicate" (Thomas, 1983, p. 167), perhaps because the subjective is "...invisible, indelible, and intangible..." (Saint Sing, 2004, p. 27). Or, as Giamatti (1989) said, we do not have the language to describe the subjective because of the limits of language. Further, realizing that aesthetic moments occurred requires after-

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¹³ Garrison (2010) describes Eros as passionate desire for things that are good.

the-fact examination because sports often play-out quickly, leaving the athlete with little time during the sport to recognize the experience (Thomas, 1983).

Garrison (2010) encapsulates these philosophers' thoughts when he said, "Qualitative experience is thus first had, and only later, if ever, known. Enthralled by the power of an aesthetic quality, we are initially inarticulate. The qualitative whole leaves us speechless at the limits of language" (p. 102). Therefore, coaches and others who lead sport and PA, who should desire bountiful flourishing for their participants, should dedicate space and time for participants to learn the aesthetic, qualitative aspects of sport.

Sport philosophers have offered thoughts on how athletes and others in movement can learn the aesthetic, qualitative aspects of sport. Reid (2002) discusses four actions, attitudes, and/or perspectives that a philosophical athlete takes to capitalize on learning and self-knowledge that translates to all aspects of life: self-discovery, responsibility, respect, and citizenship. According to Reid (2002), athletes who engage with sport in such a manner, "...who become conscious of a personal sense of meaning can tap into a deep and lasting motivational drive. Meaning-motivation is stronger and more constructive than motives such as money, pleasing others, or avoiding punishment" (p. 125).

Esposito (1974/1995) emphasizes the need for reflection if one is to engage with the subjective:

The player of games, if reflective about what [they are] doing, realizes that even beyond the (objective) success of winning the game, there is the interest [they take] in the very act of playing itself. It is this interest that is difficult to understand from the view of the spectator who sees the activity of play only as a means to realizing the object of the game. (p. 115)

Fetter (1976) believed a dedication to playfulness is required for athletes to engage with the ASE; playfulness that is freely chosen and includes responsive-openness¹⁴ and an autotelic focus. Further, the role of educators in helping sport participants recognize and partake in the ASE is critical (Fetter, 1976).

¹⁴ Fetter (1976) defined responsive-openness as actively orientating oneself to the environment and inner experience. Hyland (1990) used the same idea throughout his discussion of philosophical concepts related to sport.

Rickel (2005) focused on the need for teaching methodology which incorporates the subjective. She noted, "in physical activity, educators must go beyond the idealist philosophy of knowledge transferring from the educator to learner, and use a life narrative technique to help incorporate exercise into a person's life using subjective ends" (Rickel, 2005, p. 23). Rickel (2005) found positive results from using a philosophy-based life narrative learning approach, which incorporated the subjective experiences of physical activity into a college fitness classroom. Participants from the intervention group increased in their objective and subjective commitment to physical activity, while participants in control group only moderately increased their objective commitment.

Further, some sport psychologists have found positive results after using methods that focus on the subjective or *affective* benefits of PA (e.g., PA is enjoyable) rather than the objective or *instrumental* benefits (e.g., weight control, cardiovascular risk; Ruissen et al., 2018; Rhodes et al., 2009; Stadler et al., 2009). Russien et al. (2018) utilized print brochures to inform college students about healthy active living coupled with an affective mental contrasting strategy aimed to direct participants' attention to the affective benefits of exercise (e.g., enjoyment and stress reduction). Participants (inactive female students) who received this education significantly improved their engagement in PA. The results align with Reid's (2002) view that "...few people will continue to exercise unless they find some meaning in their movement" (p. 42).

Combining the philosophical standpoints presented creates a framework for an educational intervention centered on ASEs. Such an intervention will first require a perspective shift, to one of embodiment, where the objective and subjective meet and do not overshadow one another. The shift should include pivoting from the worry of what others expect of athletes, to the athlete experiencing who they are (Fetter, 1976; Reid, 2002); an embodied being. The perspective sees sport as autotelic or worthy because of what it is to each individual participating, not only because of the potential outcomes.

Participants must also have opportunities to contemplate and express their experiences. Gill (1993) and Garrison (2010) emphasize that knowers learn through interaction and reflection (i.e., *dancing* with knowledge). Within contemplation and reflection, knowers will consider what is meaningful in their lives; meaning which most claim to be seeking yet give little attention to finding (Kretchmar, 2001). Through the dance,

participants explore meaning, "...its heights, its depths, its robust and impoverished forms, the precise difference between something that has only modest levels of meaning for us and something that is genuinely meaningful" (Kretchmar, 2001, p. 260).

Thomas (1983) also believed that reflection is key because sports and physical activity occur so quickly, leaving little time to recognize ASEs. Further, reflection may help participants discover the language needed to articulate their ASE. As Gill (1993) indicated:

There is something fundamental about the process of linguistic exchange of ideas, of explaining and questioning subject matter, to actually comprehending, exploring, and creating knowledge. When students have an opportunity to respond to ideas and information, among themselves as well as with the teacher, it becomes real and part of them in a way that it does not when merely assimilated silently. (p. 69)

As participants *dance*, they explore and create new knowledge (Garrison, 2010), and ultimately are shaped by the dancing "...because the dancers themselves are capable of transformation" (Gill, 1993, p. 138).

By creating space for the dancing to occur, for sport participants to themselves transform, we, as educators, are fulfilling our calling to guide our students to Eros, the passionate desire that amplifies and enlivens our existence. We widen our focus, away from the cookbook instructions that confine us to objective outcomes and include the aesthetic, qualitative dimension. The contents of this dimension are unique to each person but that it exists is common for all. Therefore, educators must create space to allow the individual to recognize their own unique experience, to dance with "...what is real, what is true, and what is good" (Gill, 1993, p. 184), what truly lies inside.

Chapter 3: Methods

The purpose of this study was to measure the effect of an aesthetic sport-focused curriculum on commitment and motivation to sport among pre-service kinesiology students. Objective and subjective commitment to sport were measured using the Rickel Exercise Values Inventory (RVI) and motivation to participate in sport was measured using the Motives for Physical Activity Measure-Revised (MPAM-R). The study took place during the fall 2021 semester (August-December). The study planned to use a Solomon Four Group design (Navarro & Siegel, 2018), which included two control groups and two treatment groups. The first treatment group completed pretests and posttests and five online lessons on ASE (i.e., the treatment). The second treatment group completed the five online lessons on ASE and the posttests. The lessons were included as a course requirement, though only students who provided consent to use their data were included in the study. The first control group completed pretests and posttests measures at the same time as the treatment group, while the second control group only completed the posttests. Only those who provided consent to use their data were included in the study.

Participants

Students enrolled in one of nine 100-200 level kinesiology courses of any gender, 18 years and older participated in the study. The participants were selected from a convenience sample of students at three research universities taking a course from a kinesiology instructor who agreed to include the study in their course. The selected courses were chosen to yield the most similar population, specifically for age and year in school. Students enrolled in the identified courses participated in the study as an assignment in their respective course. However, only students who provided consent to use their data were included in the study.

Participants in the treatment groups attended the same university and completed the same 200 level kinesiology course, although there were four different instructors teaching the courses. Participants in the control groups attended one of the other two universities where three different instructors included the study in their 100 or 200 level kinesiology courses. The treatment (i.e., online lessons) was offered to participants from the control groups following the completion of the study.

Institutional Review Board Approval

University of Idaho Institutional Review Board (IRB) approval was sought and granted prior to beginning the study, IRB 20-180. See acceptance letter in Appendix A. An amendment was submitted a month prior to data collection to include participants from two additional universities. See amendment approval in Appendix A.

Informed Consent

Students in the identified classes were given an overview of the study. A short video to introduce the study was created because it was impossible to meet live and in-person with each course due to time and distance conflicts. The video was shown to participants by each instructor of the treatment group, and by two instructors in the control group. The script was presented in-person with the classes taught by the third instructor in the control group (the script from the video was used). See Appendix J for the script and a link to the video. The participants then completed an IRB approved informed consent form which was available to the participants on their institution's content management system (e.g., Canvas) within their designated course page. Only data from participants who gave permission for the researchers to use their data were included in the study, although all students were required to complete the tasks as an assignment in their course.

Study Procedures

The Solomon Four Group design (Navarro & Siegel, 2018), which included two control groups and two treatment groups, directed the study. This design reduces the interaction of testing over time, reducing the likelihood that the pretests influence the treatment (Trochim et al., 2016). Four instructors who all teach the same 200 level kinesiology course at the same university (five sections of this course were offered with one instructor teaching two sections) were asked to include the intervention in their courses. The instructors agreed, but requested to follow the same timeline. As two treatment groups were needed, the instructor's courses were randomly assigned to one of the treatment groups; one group would complete the pre and post-tests and the treatment, while the other group would complete the treatment and post-tests.

The control groups included instructors from a second university who taught different sections of a 100-level kinesiology course, and an instructor at the third university who taught two different 200-level kinesiology courses. The instructors' courses were randomly

assigned to one of the two control groups. The first group completed the pretests and posttests, while the second group only completed the posttests. Both control groups completed the tests within the same timeframe as the treatment groups. To make the groups as similar as possible lower-level kinesiology courses were included where students would presumably be similarly aged and mature. Further, using 100-200 level classes provided the most likelihood that participants had engaged in sport recently. ¹⁵

The instruments and treatment (i.e., ASE curriculum) were uploaded to the classroom management system page for each course (e.g., Moodle, Blackboard, and Canvas). Participants completed the components of the study through their respective system as an assignment for the course. To reduce testing threat ¹⁶, the RVI was be completed one week before the MSPM-R for pre and post-testing. By separating the instruments over time, participants would be less influenced in their response to the second instrument. The ASE curriculum, composed of five different lessons, was completed over five weeks, spread one week apart (see below and Appendix B). Within each lesson, participants were presented with information and open-ended, second and third-order questions (Reimer et al., 1983). Each lesson took about 20 to 30 minutes to complete. At the end of each lesson, participants were asked to reflect on and apply the information over the next week; thus, why the lessons were separated by one week.

Once the study concluded, instructors were asked to send the data to the student researcher using the following method:

- 1. Export responses to an Excel sheet.
- 2. Delete any students who did not say yes on the consent form.
- 3. For the remaining students, replace their names with a number. Keep a master list on your end so you know which student matches with which number.
- 4. Remove any other identifiers that might have been downloaded (student numbers or emails, etc.).
- 5. Email me the data.

¹⁵ Research indicates that participation in sport and physical activity decreases significantly following high school (Winpenny et al., 2020).

¹⁶According to Trochim et al. (2016) a testing threat can occur when the measurement instruments make the groups more aware of or receptive to the treatment.

This method removed the need to travel to each university to acquire the data. However, this method proved difficult and time consuming for the instructors of the treatment group. The author met with these instructors where they copied their data to a jump drive which was then cleaned by the author. Unfortunately, two of the instructors were not able to make the meeting. So, an alternative option was provided, which still ensured the data was kept confidential. A Qualtrics survey which allowed files to be uploaded was created. The two instructors who were unable to meet in-person, used this method to send their data. The data was cleaned by removing anyone who did not consent to participate, removing identifying information, and replacing participant names with numbers.

Instrumentation

For this study, two instruments were used to gather pre and post-test data. Although the participants provided qualitative responses within the lessons, it was not analyzed for this study. Rather, the qualitative responses are used to inform the results (see *Aesthetic Sport-Focused Curriculum* below and chapter five). Further, the qualitative data served to inform the course instructors on their students' activity on this course assignment.

RVI

The RVI measures objective and subjective commitment to exercise (Rickel, 2005). Rickel developed and validated the instrument ¹⁷ in 2005 through two pilot studies and her final dissertation study. The final instrument includes 17 questions, answered using a five-point Likert scale based on level of agreement: *great, much, some, little, no.* Questions 1-10 of the instrument measure objective commitment, with a range of scores 10-50. Questions 11-17 measure subjective commitment with a range of scores 7-35. The Cronbach's Alpha for the final instrument was rated at .89 for objective commitment for the pre-test and .78 for the post-test. Cronbach's Alpha for subjective commitment was rated .87 for the pre-test and .81 for the post test. Next, the instrument includes a space for ranking the three most important items from the 17 questions. The instrument concludes with one, open-ended question: *Describe what motivates you to participate in exercise, play, or be in movement activities.* The instrument is included in Appendix C.

¹⁷ The RVI was also validated in 2007 by Stoll et al. (2007) when studying commitment to exercise.

MPAM-R

The MPAM-R is an instrument created by Ryan et al., (1997) that assesses five motives for participating in physical activity and sport: (1) fitness- PA related to physical health (five items, score range: 5-35); (2) interest & enjoyment- engaging in PA because it is fun and stimulating (seven items); (3) competence/challenge- PA to improve or learn new skill (seven items); (4) appearance- PA related to physical appearance (six items); and (5) social- PA related engaging with others (five items). The original version of the MPAM, created by Fredrick and Ryan in 1993, only included three motives. Participants completing the MPAM-R answer 30 questions by rating one (not at all true for me) to seven (very true for me). A score for each subscale is calculated by averaging the responses to items within each subset with a rage of 1-7). Cronbach's alpha for each subscale was: enjoyment, .92; appearance, .91; social; .83; fitness/health, .78; and competence, .88. The instrument is included in Appendix D.

Aesthetic Sport-Focused Curriculum

The treatment groups engaged in the aesthetic sport-focused curriculum composed of five, 20-30 minutes lessons, on their university's content management system. In a 2019 preliminary study, curriculum development began. Discussions and questions were created about the aesthetics of the sport uniform which developed into pilot study one; a qualitative, narrative-based study with 56 university students enrolled in a *sport in society* course (see Foster and Stoll, 2020, *Aesthetic, social, and moral meaning of sport uniforms*). Pilot study one elicited descriptions of ASEs which informed the ASE curriculum used in the present study.

The ASE curriculum was developed throughout the fall 2020 semester. The curriculum (a) topics and content were crafted from existential, philosophical theory (Marcel, 1952/1995; Merleau-Ponty, 1948/2004) and sport existential writings (Kretchmar, 2005; Thomas, 1983), while the (b) types of questions asked were designed using moral development theory (Reimer et al., 1983).

Topics and Content

The lesson topics and content are existential and phenomenological (e.g., Maurice Merleau-Ponty (1948/2004) and Gabriel Marcel (1952/1995)), and informed through the sport existential writings of Janis L. Fetter (1976), Klaus V. Meier (1980/1995), Carolyn E.

Thomas (1983), Joseph H. Kupfer (1983/1995), Drew A. Hyland (1990), Michael Novak (1994), Loic Wacquant (2004), Susan Saint Sing (2004), and R. Scott Kretchmar (1994, 2005, 2006, 2017). Existentialism is directed toward the meaning of the individual human existence which occurs through the lived experience. Further, in existentialism, people are embodied beings rather than bifurcated as a mind and a body. As Meier stated, "The lived-body is not an object which [a human] possesses, rather it is [a human] and [a human] is [their] body" (1979/1995, p. 91). The individual, subjective experience within the body during sport is the foundation of the ASE curriculum.

Through the curriculum, participants explore why they value sport, and engage with information about ASEs. Specifically, during the first lesson, participants reflect on the value and purpose of sport in society and in their own lives (Kretchmar, 2005). During the next three lessons, participants explore ideas about ASEs through various mediums (e.g., written text, quotes, videos). Participants consider the information, reflect upon and answer questions about their own ASEs, and apply the information to their current sport engagements. Specifically, in lesson two the senses of sight, sound, smell, and touch that occur in sport are explored (Thomas, 1983; Wacquant, 2004); in lesson three, participants consider the feel of participating in sport (Fetter, 1976; Meier, 1979/1995; Saint Sing, 2004); and in lesson four participants ponder the physical objects with which they engage in sport (Novak, 1994; Thomas, 1983).

Completing the lessons on ASEs should broaden participant's view of the subjective value of sport. In lesson five, participants return to the value of sport, where they consider and describe what is valuable about sport to them after identifying their ASEs (Giamatti, 1989; Meier, 1980/1995; Kretchmar, 2005). See Appendix B for further discussion on the theoretical constructs that support the curriculum topics.

Questions

The content (supported by sport existentialism) of the lessons formed the foundation of the questions asked in the curriculum, while the type of questions asked were developed using moral development theory (Reimer et al., 1983). Together, therefore, moral development theory and sport existentialism inform the structure of each lesson.

Using Reimer et al.'s (1983) moral development questioning strategies, the ASE curriculum questions were developed. The strategies stimulate thinking beyond currently

held ideas by exploring personal reasoning. Reimer et al.'s (1983) strategies begin with initial questioning (first order) and lead to in-depth questioning (third order). Initial questions introduce the topic and create awareness and connection. In-depth questions use probing techniques to provoke deeper responses. To answer in-depth probing questions, participants must clarify their responses as they apply knowledge of the issue. Using the suggested questioning strategies in this study should draw the participant from the objective focus/value of sport and into the subjective focus/value of sport. The curriculum and the theoretical constructs that support the curriculum questions are further discussed in Appendix B.

Pilot study two was a quasi-experimental study, with 48 kinesiology students, 18 of which completed the ASE curriculum. The results suggested a positive influence of the ASE curriculum on objective and subjective commitment to exercise (see Foster & Stoll, 2021, *Aesthetic sport experiences: The missing link to an active lifestyle?*). Pilot study two confirmed translation validity of the ASE curriculum; the content is aligned with the theoretical constructs (Trochim et al., 2016).

Researcher Positionality

Researcher positionality is the position the researcher has chosen to adopt within a given research study (Savin-Baden & Major, 2013). Although positionality statements are unusual in quantitative research, positionality is appropriate to disclose potential bias. Positionality is particularly salient for this study because of the qualitative, subjective nature of the ASE curriculum.

The study of phenomenological theories and reflection of personal, subjective sport experiences was the basis for this study. Aesthetic experience is an integral part of the sport experience for anyone who participates, which aligns with ideas from many sport philosophers (e.g., Kretchmar, Meier, and Thomas). In pilot study one, participants described the aesthetic experience they have with their sport uniforms (qualitative, narrative based study). Results from pilot study one supported the position. As a qualitative approach, pilot study one curriculum provided a way to gather and analyze the meaning people have with their sport experiences (Trochim et al., 2016), which informed the creation of the ASE curriculum.

The ASE curriculum was informed by existing theory and research (within sport existentialism and moral development theory), results from pilot study one, and discussion

with the research team. This foundation provided appropriate face validity¹⁸ for the ASE curriculum. However, personal experience lens and bias may influence curriculum development and results. Therefore, each aspect of the curriculum was examined to ensure alignment with existing theory to reduce potential bias and improve content validity¹⁹. Pilot study two was then conducted to further test for content validity, and for construct validity²⁰. Finally, the quantitative design and larger sample size of pilot study two increased the internal validity of the study (Trochim et al., 2016). Further, none of the courses that were used for data collection were taught by the researcher or major professor to reduce potential influence of their biases on the participants.

Study Design

Upon careful review of the present study design and pedagogy, the actual study using four different instructors, did not meet the assumptions for a Solomon Four Group Design. The design, while the strongest experimental design, assumes that the exact same curriculum and teacher pedagogy will be delivered in each of the experimental treatment groups. Each treatment should have been delivered by the same instructor so as to minimize any pedagogical influence differences. In the current study, each instructor had a different level of pedagogical and educational background/experience, that assured that each class received a different treatment. For example, two instructors had a strong background in the existential theories and lived body research (i.e., Maurice Merleau-Ponty and Gabriel Marcel) supporting the study curriculum. As such these instructors could deliver a more robust treatment and potentially have a greater impact on the study participants. The other instructors applied current research design curriculum and had a limited knowledge of the interactive healthy active lifestyles content area, which, unfortunately, would potentially limit the study impact (see *Interview with Instructors*). Thus, to assume that all treatments in this study were the same is not possible. Before data analysis, the decision was made to analyze the data as separate treatments using a pretest, posttest randomized groups design

¹⁸ Face validity indicates that the concepts have been appropriately operationalized, adequately reflecting the constructs (Trochim et al., 2016).

¹⁹ Content validity provides a check on the content to see how well the operationalization of the constructs align with the content (Trochim et al., 2016).

²⁰ Construct validity indicates how well the instrument measures what it is supposed to measure (Trochim et al., 2016).

(see Table 1). By using this design, the assumptions more closely match how the research applied curriculum was administered with different instructors and how the study was conducted in different classrooms taught by different instructors.

The treatment group completed the pre-tests (i.e., RVI and one week later, the MPAM-R), the treatment (i.e., five online lessons), and the post-tests (i.e., RVI and one week later, the MPAM-R). The control group completed the pre-tests, and the post-test. The control group participants were offered the intervention after data collection.

The results of the present study will inform the importance of the subjective experience in sport. Although sport philosophers have discussed the importance of ASE (e.g., Fetter, 1976; Meier, 1980/1995; Thomas, 1983; Hyland, 1990; and Kretchmar, 1994, 2005, 2006, 2017) few studies with measurable, numerical data on the topic exist. The instruments used in this study gathered numerical based data providing a distinction between the objective and subjective experience.

Table 1 Pre-test, Posttest Randomized Design

O_1	X	0_2				
03		04				
	X	0_5				
		0_6				
0 ₁ =Pretest Group 1						
X=Treatment Group 1						
0 ₂ = Posttest Group 1						
0 ₃ = Pretest Group 2						
0 ₄ = Posttest Group 2						
X=Treatment Group 3						
0 ₅ = Posttest Group 3						
0 ₆ = Posttest Group 4						

Interviews with Instructors

The instructors who agreed to implement the treatment/intervention into their coursework did so under the condition that they could follow a similar format across the five

classes and implement the intervention curriculum at a time that fit best with their course schedule. Therefore, the intervention did not conclude until the end of the fall semester although it did not take the entire semester to complete (nine weeks was required). Further, the instructors determined how to direct their students in completing the lessons. So, interviews with each instructor were conducted at the conclusion of the study to understand how the intervention was included in their courses. Further, an initial review of the data indicated a large difference in outcomes between the instructors who implemented the intervention. Therefore, the instructor could have influenced the data. Seven questions were asked to each instructor in the treatment group, individually over Zoom. The questions asked and responses for each are presented in Appendix E and are discussed in chapter five.

Data Analysis

Data sorting began by ensuring that only those who had agreed to participate by way of the consent form were included. If no consent form was included, the data was deleted. Next, names were replaced with numbers for all participants and any other identifying information was deleted (e.g., email addresses, student numbers, etc.). Responses to the instruments were pasted into one Excel sheet and reviewed for errors. Data from participants who did not fully complete both instruments were deleted. If participants in the treatment groups did not fully complete the online lessons, their data were deleted. Participants in a group that included pre and post testing were only included if they completed both pre and posttest instruments. Responses from the RVI were converted into numbers (1-7 Likert scale). The responses from the MPAM-R were correctly numbered when downloaded but were reviewed for errors and corrected where needed.

Descriptive statistics for the posttest scores for the treatment and control groups were processed. For each analysis, Levene's test was used to examine homogeneity of variance. An Independent samples t test was used to detect differences between the group means with alpha set at error rates of p<.05. Bonferroni's correction was applied giving an adjusted alpha of p<.025.

RVI

The RVI (Rickel, 2005) was used to measure each group for the subjective and objective components.

MPAM-R

The MPAM-R (Ryan et al., 1997) was used to measure each group for five motives for participating in physical activity: (1) fitness, (2) appearance, (3) competence/challenge, (4) social, and (5) enjoyment.

Variables

The independent variable for the study is the ASE curriculum. The dependent variables are the scores of the (a) RVI and (b) the MPAM-R. Gender was the only categorical variable.

Chapter Four: Results

The purpose of this study was to measure the effect of an aesthetic sport-focused curriculum on commitment (measured by the RVI) and motivation (measured by the MPAM-R) to sport among pre-service kinesiology students.

Participants

Two hundred and fifty-eight subjects from three different research institutions in the Northwest United States were included in the study. After reviewing the data, 11 subjects were removed because consent was not given, and 40 were removed because they did not fully complete the lessons and/or pre/posttests. One subject was removed because each response given was the exact same (e.g., selected only 7 on the Likert scale). Two were removed from instructor six's posttest only class because they were also in the pretest-posttest class taught by instructor six. Finally, five were removed from instructor six's posttest only class because they were also taking a sport philosophy class with the author and were likely influenced by her teaching. The final sample included 202 participants; 124 identified as male while 78 identified as female; no other gender category was selected. The majority of subjects had a background in sport or were currently engaged in sport; 11 participants indicated having no sport experience. See Table 2 for participant details.

Data Screening

The data of the treatment groups was reviewed prior to analysis. Instructors 1, 2, 3, and 4 included the treatment in their sections of a course titled *Exploring Meaning in Sport and Movement*. Through the course, students are introduced to philosophy of sport and movement. Kinesiology students must take the course as a degree requirement, but the course is also open to other university students. According to instructor 1 and 2, about 50% of the students in their courses were kinesiology majors.

The sample size for instructor 3 was too small (n=15) compared to the other treatment groups and therefore that class was removed (10% loss). Instructor 4 taught two sections (n=33, n=29). However, instructor 4 has no background in philosophy of sport whereas instructors 1 and 2 have taken advanced coursework and published in sport philosophy (see Appendix E). When pre-evaluating the three treatment groups (taught by instructors 1, 2, and 4), they cannot be examined in toto because they were different treatments due to the instructor background. The curriculum was the same in each class, but the pedagogy was not.

The scores of instructor 4's classes were similar to the control, verifying the instructor's lack of knowledge in the philosophy of sport. Therefore, instructor four's classes were removed (42% loss). Instructors 1 and 2 had similar sample sizes and have similar background and training. Therefore, the final treatment group included data from instructors 1 and 2 (n=68, 31% female, 69% male, 1 with no sport experience). See Table 2.

The data from the control groups was also reviewed prior to data analysis, and included instructors 5, 6, and 7. Instructor 6 taught two different classes; one class completed the pre and post-tests, the other class only completed the post tests. The sample size of the posttest only class taught by instructor six was very small (n=6) and therefore was removed (11% loss). The final control group included instructors 5, 6, & 7 (n=47, 51% female, 49% male, 3 with no sport experience). See Table 2.

The courses taught by instructors 5 and 7 were at the same university, while instructor 6 taught a similar course at a different university. The purpose of these classes is to develop skills, knowledge, and basic pedagogical strategies in a variety of physical activities and games. Instructor 5 is an Assistant Professor in Physical Education Pedagogy and studies physical activity promotion. Instructor 6 is an Associate Lecturer with 20 years of experience teaching kinesiology students. Instructor 7 is a certified physical education teacher seeking an advanced degree in physical education pedagogy.

All data were screened for normality and met the assumptions for normality. Group statistics for the data analyzed are included in Appendices F-I.

Pretest Analysis for Commitment using the RIV

Because participants under instructor 7 did not complete the pretest but were included in the final control group, the researchers first analyzed data from those who did complete the pretests to see if the groups were the same at the pretest time. No difference exists between the control and treatment groups on the pretest measures for objective and subjective commitment (alpha set at p<.05).

- a. The mean for the *treatment* group on *objective* outcomes was 35.93 (SD \pm 5.46) while the mean for the *control* group on *objective* outcomes was 36.58 (SD \pm 6.84). No significant difference was found between the two groups at the pretest for objective outcomes using an independent samples t test; t(92) = -.481, p=.63.
- b. The mean for the *treatment* group on *subjective* outcomes was 24.29 (SD ± 4.05),

while the mean for the *control* group on *subjective* outcomes was 22.46 (SD \pm 6.60). No significant difference was found between the two groups at the pretest for subjective outcomes using an independent samples t test; t(32) = 1.32, p = .195.

Group statistics for data on commitment at pretest is found in Appendix F. Because there is no difference between the treatment and control groups at pretest, any difference at the posttest may be from the treatment.

Pretest Analysis for Motivation using the MPAM-R

No difference exists between the control and treatment groups on the pretest measures for any of the five measures of motivation to participate in sport (fitness, interest & enjoyment, competence, appearance, & social) in students taking a kinesiology course. Therefore, any difference at the posttest can be assumed to be from the treatment.

- a. The mean for the *treatment* group on *fitness* motivation was 5.96 (SD \pm .734) while the mean for the *control* group on *fitness* motivation was 3.11 (SD \pm .66). No significant difference between groups on fitness motivation at pretest t(92) = -.877, p=.38.
- b. The mean for the *treatment* group on *interest and enjoyment* motivation was 5.63 (SD \pm .987) while the mean for the *control* group on *interest and enjoyment* motivation was 5.83 (SD \pm .789). No significant difference between groups on interest and enjoyment motivation at pretest t(92) = -.932, p = .35.
- c. The mean for the *treatment* group on *competence* motivation was 5.56 (SD \pm .976) while the mean for the *control* group on *competence* motivation was 5.84 (SD \pm .974). No significant difference between groups on competence motivation at pretest t(92) = -1.22, p=.23.
- d. The mean for the *treatment* group on *appearance* motivation was 5.29 (SD \pm 1.10) while the mean for the *control* group on *appearance* motivation was 5.38 (SD \pm 1.31). No significant difference between groups on appearance motivation at pretest t(92) = -1.22, p = .72.
- e. The mean for the *treatment* group on *social* motivation was 4.3 (SD \pm 1.37) while the mean for the *control* group on *social* motivation was 4.14 (SD \pm 1.41). No significant difference between groups on social motivation at pretest t(92) = .517, p = .61.

Group statistics for data on motivation at pretest is found in Appendix G.

Table 2 Study Participants Prior to Data Sorting

Instructor	Group	n=	No Consent	Incomplete Tests or Lessons	Final n=	Male	Female	No Sport Experience
	Pretest							
1	Treatment	36	-	1	35	22	13	-
	Posttest							
	Pretest							
2	Treatment	41	2	6	33	25	8	1
	Posttest							
	Pretest							
3	Treatment	35	2	15	18	8	10	1
	Posttest							
	Treatment							
4	Posttest	38	-	5	33	24	9	3
	Treatment							
4	Posttest	36	2	5	29	18	11	3
	Pretest							
5	Posttest	18	1	2	15	8	7	2
	Pretest							
6	Posttest	17	7 3 3	11	5	6	-	
6	Posttest	16	1	2	6	3	3	
7	Posttest	22	-	-	22	11	11	1
TO	ΓAL	258	11	40	202	124	78	11

Table 3 Final Study Participants

Instructor	Group	n=	No Consent	Incomplete Tests or Lessons	Final n=	Male	Female	No Sport Experience
1	Pretest	36	-	1	35	22	13	-
	Treatment							
	Posttest							
	Pretest		2	6	33	25	8	1
2	Treatment	41						
	Posttest							
5	Pretest		1	2	15	8	7	2
	Posttest	18						
6	Pretest		3	4	10	5	6	-
	Posttest	17						
7	Posttest	22	-	-	22	11	11	1
TO	ΓAL	134	6	12	115	70	45	4

Statistical Sub-Problems²¹ for Commitment using the RVI

Group statistics for data on commitment at posttest is found in Appendix H.

Objective Commitment

- 1. No difference exists by *group* on the posttest measures for *objective* commitment to sport in students taking a kinesiology course.
 - a. The mean for the *treatment* group on objective commitment was 37.56 (SD \pm 5.21) while the mean for the *control* group on objective commitment was 36.02 (SD \pm 6.34). An independent samples t test revealed no significant difference between the treatment and control groups for the objective commitment measures, t(113) = 1.42, p=.16. We fail to reject the null hypothesis.
- 2. No difference exists by *gender* regardless of group on the posttest measures for *objective* commitment to sport in kinesiology students.
 - a. The mean for *males* for objective commitment was 37.50 (SD \pm 5.70). The mean for *females* for objective commitment was 36.04 (SD \pm 5.71). An independent samples t test revealed no significant difference between male and females in the study for objective commitment, t(113) = 1.34, p = .18. We fail to reject the null hypothesis.

Subjective Commitment

- 1. No difference exists by group on the posttest measures for subjective commitment to sport in students taking a kinesiology course.
 - a. The mean for the *treatment* group on subjective commitment was 25.51 (SD \pm 4.64) while the mean for the *control* group on objective commitment was 23.09 (SD \pm 5.84). An independent samples t test revealed a significant difference between the treatment and control groups for the subjective outcome measures, t(84) = 2.38, p = .02 (Bonferroni corrected). We reject the null hypothesis.
- 2. No difference exists by *gender* regardless of group on the posttest measures for

²¹ The original statistical sub-problems listed in chapter one are not applicable to the revised study design because we cannot compare over time. Therefore, new subproblems were created. Further, gender within groups was not analyzed in the study because of the inequality in sample sizes.

subjective commitment to sport in kinesiology students.

a. The mean for *males* for subjective commitment was 25.57 (SD \pm 5.2). The mean for *females* for subjective commitment was 22.89 (SD \pm 5.02). An independent samples t test revealed a significant difference between male and females in the study for subjective commitment, t(113) = 2.74, p = .007 (Bonferroni corrected). We reject the null hypothesis.

Statistical Sub-Problems for Motivation using the MPAM-R

Group statistics for data on commitment at posttest is found in Appendix I.

Fitness Motivation

- 1. No difference exists between the control and treatment groups on the posttest measures for fitness motivation to sport in students taking a kinesiology course.
 - a. The mean for the *treatment* group on fitness motivation was 5.98 (SD \pm .732) while the mean for the *control* group on fitness motivation was 6.06 (SD \pm .822). An independent samples t test revealed no significant difference between the treatment and control groups for the fitness motivation measures, t(113) = -0.57, p = .57. We fail to reject the null hypothesis.
- 2. No difference exists by *gender* regardless of group on the posttest measures for fitness motivation to sport in kinesiology students taking a kinesiology course.
 - a. The mean for *males* on fitness motivation was 6.06 (SD \pm .703) while the mean for *females* on fitness motivation was 5.93 (SD \pm .860). An independent samples t test revealed no significant difference between males and females for the fitness motivation measures, t(113) = .913, p = .36. We fail to reject the null hypothesis.

Interest & Enjoyment Motivation

- No difference exists between the control and treatment groups on the posttest measures for interest and enjoyment motivation to sport in students taking a kinesiology course.
 - a. The mean for the *treatment* group on interest and enjoyment motivation was $5.75 \text{ (SD} \pm .928)$ while the mean for the *control* group on interest and enjoyment motivation was $5.81 \text{ (SD} \pm 1.0)$. An independent samples t test revealed no significant difference between the treatment and control groups

for the interest and enjoyment motivation measures, t(113) = -0.38, p = .71. We fail to reject the null hypothesis.

- 2. No difference exists by *gender* regardless of group on the posttest measures for interest and enjoyment motivation to sport in kinesiology students.
 - a. The mean for *males* on interest and enjoyment motivation was 5.81 (SD \pm .99) while the mean for *females* on interest and enjoyment motivation was 5.72 (SD \pm .91). An independent samples t test revealed no significant difference between males and females for the interest and enjoyment motivation measures, t(113) = .477, p = .63. We fail to reject the null hypothesis.

Competence Motivation

- 1. No difference exists between the control and treatment groups on the posttest measures for competence motivation to sport in students taking a kinesiology course.
 - a. The mean for the *treatment* group on competence motivation was 5.63 (SD ± .86) while the mean for the *control* group on competence motivation was 5.63 (SD ± 1.04). An independent samples t test revealed no significant difference between the treatment and control groups for the competence motivation measures, t(113) =.01, p= .99. We fail to reject the null hypothesis.
- 2. No difference exists by *gender* regardless of group on the posttest measures for competence motivation to sport in kinesiology students.
 - a. The mean for *males* on competence motivation was 5.73 (SD \pm .92) while the mean for *females* on competence motivation was 5.47 (SD \pm .94). An independent samples t test revealed no significant difference between males and females for the competence motivation measures, t(113) = 1.43, p = .16. We fail to reject the null hypothesis.

Appearance Motivation

- 1. No difference exists between the control and treatment groups on the posttest measures for appearance motivation to sport in students taking a kinesiology course.
 - a. The mean for the *treatment* group on appearance motivation was 5.44 (SD \pm 1.26) while the mean for the *control* group on appearance motivation was 5.23 (SD \pm 1.30). An independent samples t test revealed no significant difference

- between the treatment and control groups for the appearance motivation measures, t(113) = 0.84, p=.40. We fail to reject the null hypothesis.
- 2. No difference exists by *gender* regardless of group on the posttest measures for appearance motivation to sport in kinesiology students.
 - a. The mean for *males* on appearance motivation was 5.58 (SD \pm 1.18) while the mean for *females* on appearance motivation was 5.00 (SD \pm 1.35). An independent samples t test revealed a significant difference between males and females for the appearance motivation measures, t(113) = 2.44, p = .016 (Bonferroni corrected). We reject the null hypothesis.

Social Motivation

- 1. No difference exists between the control and treatment groups on the posttest measures for social motivation to sport in students taking a kinesiology course.
 - a. The mean for the *treatment* group on social motivation was 4.46 (SD \pm 1.33) while the mean for the *control* group on social motivation was 3.74 (SD \pm 1.58). An independent samples t test revealed a significant difference between the treatment and control groups for the social motivation measures, t(88) = 2.58, p = .01 (Bonferroni corrected). We reject the null hypothesis.
- 2. No difference exists by *gender* regardless of group on the posttest measures for social motivation to sport in kinesiology students.
 - a. The mean for *males* on social motivation was 4.19 (SD \pm 1.50) while the mean for *females* on social motivation was 4.12 (SD \pm 1.44). An independent samples t test revealed no significant difference between males and females for social motivation measures, t(113) = .263, p = .79. We fail to reject the null hypothesis.

Chapter Five: Discussion

The purpose of this study was to assess the influence of ASE curriculum on commitment and motivation to sport/PA. Students from three different universities participated in the study. Subjective commitment to PA was significantly higher among the treatment group (p=.015), with males in the treatment group scoring significantly higher than females in the treatment group (p=.02). Further, those in the treatment group scored significantly higher for social motivation (p=.009).

Commitment to Sport/PA

Commitment (i.e., the amount of involvement a person gives) to sport/PA was measured using the Rickel Values Inventory (Rickel, 2005).

Objective Commitment

We failed to reject the null hypothesis for all measures of objective commitment difference by group and difference by gender, . Essentially, all participants scored the same for objective commitment. Objective commitment is involvement in sport/PA to obtain something such as fitness, health, achieving goals, appearance, socialization, advocacy, and so forth. Objective commitment has a long history within sport and PA (see Chapter 2), and is heavily promoted as reason to be physically active (e.g., the World Health Organization, Centers for Disease Control, and SHAPE America encourage 60 minutes of exercise per day). Therefore, people in general would view sport/PA through an objective lens (Kretchmar et al., 2017; Meier, 1979/1995). Kinesiology students who learn, according to the American Kinesiology Association, the why and how of PA, may especially adhere to an objective lens. Although kinesiology curriculum should include philosophical elements and actual engagement in PA (American Kinesiology Association, 2021), many programs fail to accomplish this goal (Johnson & Twietmeyer, 2018). Students likely learn and accept objective commitment as the norm of sport/PA when objective outcomes are the bulk of kinesiology programs.

Although not analyzed in this study, no significant change in the objective commitment scores occurred from pre to post among the control group (pre-objective M= 36.58, SD \pm 6.84; post-objective M=36.02, SD \pm 6.34; p=.871). Commitment to activity is expected to increase after taking courses where students practice and gain proficiency in movement (Twietmeyer & Johnson, 2019). Yet, the mean remained the same while the range

of scores (possible range 10-50) pre to post shifted down (pre: 22-50; post: 17-48). Because the pre to post sample sizes of the control group were different (see chapter 3), this conclusion is limited. However, this data contradicts Rickel (2005) and Hasey's (2007) data where mean scores for objective commitment increased over time (the participants, however, in both studies were general students taking exercise courses).

The current finding reveals a potential issue in kinesiology curriculum. Commitment should be influenced through foundational kinesiology classes that teach motor knowing. Students (future PA/sport leaders) may not be adequately gaining an appreciation for movement, even for objective reasons. However, similar posttest means were found in the present study with Hasey et al.'s (2007) findings, but not with Rickel's (2005) findings (see Table 4). Participants for both Hasey et al. (2007) and Rickel (2005) studies were college students participating in a fitness course, whereas participants in the present study were kinesiology students in a sport philosophy-based course. More data is needed to compare findings over time among different groups of people. However, a non-kinesiology major should improve on objective knowledge since most non-kinesiology students would not study the kinesiology curriculum.

Table 4 Objective Comparison of the RVI

Study	Treatment Group Posttest Objective Mean	Treatment Group Posttest Objective SEM	Control Group Posttest Objective Mean	Control Group Posttest Objective SEM
Present	37.56	±.63	36.03	±.93
Hasey et al. (2007)	37.37	±.67	36.28	±.75
Rickel	12 lessons: 33.8	12 lessons: ±1.25	33.95	±1.35
(2005)	<12 lessons: 32.61	<12 lessons: ±.96		

Interestingly, the data approached significance among the treatment group pre to post (pre-objective M = 35.93, $SD \pm 5.46$; post-objective M = 37.56, $SD \pm 5.21$; p = .077) although the range of scores (possible range 10-50) shifted slightly down (pre range: 25-50; post range: 24-48). The same trend was found by Rickel (2005) and Hasey et al. (2007); see Table 4. Therefore, when students complete a course with subjective-based curriculum, under the guidance of a philosophically trained instructor, their objective commitment level may

rise. Although the goal of the ASE curriculum is to influence subjective commitment, deep discussion and reflection on why sport/PA is valuable likely influences all reasons for participating. Therefore, that the treatment group changed over time is unsurprising. Kretchmar et al. (2017) said, "The fact remains, however, that quality and quantity- meaning and health- are not independent elements in a whole person" (p. 11). Subjective (quality) and objective (quantity) commitment are two sides of the same coin.

Rickel's (2005) study confirms this idea. In her study, the control and treatment groups were taught by the same instructor who engaged in philosophical training prior to the study. Scores significantly increased pre to post on objective commitment within the treatment and control groups. However, no significance was found between the groups. Likely, the instructor's philosophical perspective influenced students in both groups. The background of those who taught the control group classes in the present study is not philosophically based, which may explain why no change occurred for objective commitment (the treatment group instructors have philosophical training and experience; see appendix F).

Subjective Commitment by Group

A significant difference was found between the treatment and control groups for subjective commitment. Therefore, we reject the null hypothesis. Subjective commitment is autotelic involvement, meaning the end or goal of the activity is actually doing the activity (Giamatti, 1989). The difference between the groups could mean that the ASE curriculum stimulated a change in perspective about the subjective. Because the ASE is under-discussed in kinesiology (Fetter, 1976; Hyland, 1990; Kretchmar, 1994; 2005; 2006; Kretchmar et al., 2017; Meier, 1979/1995; Saint Sing, 2005; Thomas, 1983; Twietmeyer & Johnson, 2019) students introduced to the subjective may find their own experiences in the subjective important. Lying within their psyche is the subjective experience (Kretchmar, 2001; Meier,1979/1995) which, needs space and time to be considered and expressed (Giamatti, 1989; Thomas, 1983). Therefore, moral development theory and curriculum design/pedagogy, which requires space, time, and deep reflection on subjective ideas (Reimer et al., 1983), was foundational to creating the ASE curriculum, which appears to have stimulated change.

Pedagogy based on moral development theory was also utilized in pilot study one (connection to the sport uniform; Foster & Stoll, 2020). Data was intentionally gathered at

the end of the semester when students were conditioned to think deeply and express thoughts through writing. Further, they spent a full term in a safe environment that permitted them to challenge the status quo and to argue for or against timely topics (Reimer et al., 1983; Stoll & Beller 1993; 2004). The method is especially salient for discussing topics that are new and abstract (Garrison, 2010; Gill, 1993), such as ASEs (Stoll, S. K., personal communication, March 28, 2022). Pilot study one appeared to be a complete success. Participants were immersed in the topic and crafted meaningful descriptions of their experiences with sport uniforms (Foster & Stoll, 2020). For example, participant 13 said:

Similar to the "ring the bell the dogs salivate" when I would put my leotard on it was an instant feeling of power and it put me in the zone and made me zero in on what I wanted which was to win. (Foster & Stoll, 2020, p. 15)

Others cherished their sport uniforms, which created joy and meaning: "I loved that thing" (participant 12), it created "a sense of meaning and a lot of memories...", and "...made me want to keep participating in sport" (participant 7).

Luvaas (2019) used a similar method to develop a series of primers that required deep thinking about the unfamiliar idea of forest bathing. Treatment participants in the Luvaas' study (n=57) completed four *barrier-lifting* lessons. Greater mindful sensory engagement with nature and decreased psychological stress occurred among those who completed the lessons regardless of setting (i.e., urban or natural), although not statistically significantly. The results suggest the importance of discussion and reflection in connecting to nature regardless of how often a person can actually be in nature. Similarly, in the present study, discussing and reflecting on ASEs may have uniquely connected participants to the activity, although their experiences may be in the past, or occur infrequently.

Importantly, reflective and subjective thought occurs when appropriate curriculum is taught by a philosophically educated instructor (Kretchmar, 1994; 2005; Stoll, S. K., personal communication, March 28, 2022; Twietmeyer & Johnson, 2019), which is also supported by moral development theory and pedagogical design (Kohlberg, 1981; Lickona, 1991; Reimer et al., 1983). Instructors themselves must understand the subjective, lived experience (Kretchmar, 2005) to lead students to describe their experience as they live it (Hyland, 1990), and gain passionate desire (Garrison, 2010). The lived experience, subjectively trained instructor leads students through the *dance* of knowing which takes time and deep reflection

(Garrison, 2010; Gill, 1993). The treatment group instructors in the present study likely influenced the presentation of the curriculum which would influence the results. The instructors' educational background and pedagogical training includes sport philosophy and moral development pedagogy. Such pedagogical methods give "...validation of the qualitative sensual richness of one's moving body" (Fetter, 1976, p. 149).

Interestingly, the data from the classes taught by instructor 4, although not included in this study (see chapter three & Appendix F), were like the control group. Instructor 4 lacks background and training in philosophy and pedagogy. Although the curriculum was the same, instructor 4 appears not to have taught the concepts in a way to elicit change (see chapter three for more details). In Rickel's (2005) dissertation study, the treatment and control groups were taught by the same philosophically trained instructor, which posed a significant limitation and may explain why no significant difference was found between the groups on subjective commitment (Rickel, 2005). Philosophical background is foundational to a teacher's pedagogy and therefore, likely influenced how the instructor taught both the control and treatment groups. Therefore, philosophically educated instructors are best fit to lead students toward higher-order thinking and reflection, and engagements necessary for change to occur (Kretchmar, 1994; 2005; Kohlberg, 1981; Lickona, 1991; Reimer et al., 1983).

As with objective commitment, similar posttest means for subjective commitment in the present study were similar to Hasey et al.'s (2007) findings. However, mean scores from Rickel's (2005) study were lower (see Table 4). The similarity between Hasey et al.'s participants and the participants in the present study is unclear. More data is needed to compare findings over time among different groups of people. It may be unfair to compare the groups, they are different populations, in that majors or minors should score higher at the beginning and the end regardless of completing the ASE curriculum.

Subjective Commitment by Gender

Male participants scored significantly higher on subjective commitment than females in the study. Therefore, we reject the null hypothesis for gender. The difference in gender may be influenced by the disproportional number of males to females (n=70, 61% male; n=45, 39% female). To investigate further, a larger, more similar sample is needed.

However, a potential explanation for the difference may be that modern sport was created by and for men (Gorn & Goldstein, 2013) and continues to be more acceptable for and dominated by males (Schultz, 2018). Thus, males have more opportunities in PA/sport and are likely confident, competent, and comfortable in objective sport/PA settings, creating space to have ASEs. Subjective experiences are typically not discussed in sport/PA settings because the objective focus dominates (Fetter, 1976; Kretchmar, 2001; 2006; Kretchmar et al., 2017; Reid, 2002; The Aspen Institute, 2019; Saint Sing, 2004; Thomas, 1983; Twietmeyer & Johnson, 2019). Yet, ASEs still occur, but are simply not recognized

Table 5 Subjective Comparison of the RVI

Study	Treatment Group Posttest Subjective Mean	Treatment Group Posttest Subjective SEM	Control Group Posttest Subjective Mean	Control Group Posttest Subjective SEM
Present	24.29	±.49	19.35	±1.22
Hasey et al. (2007)	24.25	±.61	22.46	±1.29
Rickel (2005)	12 lessons: 20.97	12 lessons: ±.84	20.18	±.66
() ()	<12 lessons: 20.42	<12 lessons: ±.85		

Females have historically been constrained within sport/PA in how, when, why, and what they can play (Pieper, 2016; Schultz, 2018; Staurowsky et al., 2015; Vertinsky, 1989). Additionally, females are expected to appear femine within sport/PA (Krane et al., 2004; Schultz, 2018; Staurowsky, 2016), potentially directing their focus outward. For example, body image concerns because of sport uniforms has been studied under objectification theory (Lauer et al., 2018; Lunde & Gattario, 2017; Steinfeldt et al., 2013). The objectification theory framework "...places female bodies in a sociocultural context with the aim of illuminating the lived experiences and mental health risks of girls and women who encounter sexual objectification" (Fredrickson & Roberts, 1997, p. 174). The studies highlight how female athletes feel objectified due to the uniforms they must wear. Further, objectification theory also posits that peak motivation and awareness of internal bodily states diminish with objectification (Fredrickson & Roberts, 1997). Therefore, females may interalize

sociocultural expectations and participate for objective reasons (Schultz, 2016) creating barriers in realizing ASE.

Though not analyzed critically in the present study, the qualitative responses did not appear to reveal any differences by gender. The same was true for pilot study two. In pilot study one, gender was not identifed by the participants, but most were assumed to be male. One participant, assumed to be female, did indicate feeling uncomfortable while wearing her leotard because, in her veiw, the public sexualizes gymnastics. No other responses were on this topic. However, the researchers did not specifically ask about experiences of objectification while in uniform. Therefore, no definitive conclusions can be made. Additional research with a similar sample size is needed.

Motivation to Sport/PA

Motivation was measured using the Motives of Physical Activity Measure-Revised, which categorizes motivation into extrinsic (i.e., fitness & appearance) and intrinsic motivations (i.e., interest and enjoyment, competence, and social; Ryan et al., 1997). Motivation is commonly used as a measure to predict PA behavior in psychological research. Researchers agree that higher motivation to be physically active leads to more physically active behavior, especially if that motivation is intrinsic (Deci & Ryan, 1985; Ryan & Deci, 2000; Ryan et al., 1997; Stelzer et al., 2018). On the surface, intrinsic motivation is similar to subjective commitment while extrinsic motivation associates with objective commitment. Examining motivation in conjunction with commitment should provide direction in promoting physically active lifestyles.

Fitness, Interest and Enjoyment, Competence, and Appearance Motivations

No difference existed between the treatment and control groups for fitness, interest and enjoyment, competence, or appearance motivations. Therefore, we fail to reject the null hypotheses. The scores on the MPAM-R for fitness, interest and enjoyment, competence, and appearance from both groups in this study were similar to previous studies (e.g., Appleby et al., 2021; Kirby, 2019; Sibley et al., 2013; Stelzer et al., 2018). However, such studies used the MPAM-R to identify a behavior (e.g., why are you participating in this event; Appleby et al., 2021) and/or fitness levels (e.g., how fit are people who are motivated to participate for social reasons; Sibley et al., 2013). Therefore, research using the MPAM-R is limited to descriptions of what *is*. To influence behavior to become more intrinsic, which improves PA

behavior (Stelzer et al., 2018) an intervention is needed, which was the purpose of the present study. Leading people to "...meaning-motivation is stronger and more constructive" (Reid, 2002, p. 125) thereby improving PA behaviors.

Ryan et al. (1997) categorized fitness and appearance as extrinsic motivations and interest/enjoyment and competence as intrinsic motivations. However, all four motivations could be objective rather than subjective focused, which may explain why no difference was found between groups for all four motivations (remember, no difference was found on objective commitment). The MPAM-R measures superficial concepts that are like a *laundry list* of reasons why people participate. Kretchmar (2001) labeled such reasons as *prudential* (p. 318) while Meier (1979/1995) described them as the "...the objectified, treadmill image of sport..." (p. 94).

One may be intrinsically motivated to engage in sport/PA for interest/enjoyment and/or competence in an objective way (e.g., to obtain enjoyment or demonstrate competence). Philosophers suggest that motivations should extend beyond a list of reasons to participate and become subjectively meaningfully (Kretchmar, 2005; Thomas, 1983; Rickel, 2005), autotelic (Fink, 1960/1995; Giamatti, 1989), and transcendent (Saint Sing, 2004). To capture the intimate, meaningfulness of participation requires deeper consideration (Esposito, 1974/1995; Garrison, 2010; Gill, 1993), which may not be captured in the MPAM-R.

Appearance Motivation by Gender

A significant difference was found between males and females on appearance motivation (p=.016). As previously discussed, it is unsurprising that males would score higher as sport/PA engagement is more acceptable for males. No clear conclusions can be made because there was a disproportional number of males to females in the (total males: n=70, 69%; total females: n=45, 31%). However, the mean inequalities might indicate that a gendered nature of sport continues to exist. Males may rate all reasons for participating in PA/sport higher than females. Is this because males have historically been more welcome in PA/sport settings (Gorn & Goldstein, 2013), or that males have more opportunities to participate (Schultz, 2016)? Or, perhaps the instrument cannot capture that men and women could have different subjective perspectives (see Carol Gilligan's book, *In a Different Voice: Psychological Theory and Women's Development*, 1982). More data is needed to understand the differences on mean scores between genders.

Social Motivation by Group

A significant difference was found on social motivation between the treatment and control groups (p=.011). Therefore, we reject the null hypothesis. Participating for social reasons means others are involved in the activity, which is not necessarily the case for the other four motivation categories (i.e., fitness, competence, appearance, and interest/enjoyment). Further, sport/PA are often played with others, especially at the high school and college levels. High school and college sports at all levels group athletes into teams even if the sport is individually completed (e.g., cross country running, tennis, golf, gymnastics, bowling, and so forth). Therefore, the social aspects of sport/PA likely influence motivation.

Although social engagement could be objectively motivated (e.g., participate to be with other people), the influence of others, such as teammates, on the individual lived experience cannot be overlooked. Novak (1994) describes involvement with others in sport as "...a ritual of election", particularly when donning the same uniform (p. 140). The results from pilot study one confirmed Novak's idea. *Belonging with others* was a major theme revealed after participants considered what if felt like to be in uniform (Foster & Stoll, 2020). As one participant said, the uniform "... signified acceptance, joy, and purpose." Similar sentiments were noted by participants in the present study during lesson four of the ASE curriculum. During lesson 4, participant seven said, "I would wear my jersey to school often because I liked representing my team and sport in front of others." From lesson five, participant 18 said "I participate [in] a sport because I believe in the value of learning how to work as a team, to be a leader, developing friendships and staying healthy all around." Also, from lesson five, participant 64 stated: "I participate because I love playing as a team, I love all the friends and family [who] come, the support is huge. The adrenaline rush is amazing." Therefore, the ASE is likely influenced by connection with others.

PA/sport can be a source of social identity (Kretchmar, 2006). Social identity was coined and defined by social psychologist Henri Tajfel (1981) as "that part of an individual's self-concept which derives from his/her knowledge of his/her membership of a social group (or groups) together with the value and emotional significance attached to that membership" (p. 255). Personal meaning can develop through social interaction (Kretchmar, 2006).

Wacquant (2006) describes the connection of the social and subjective through his journey into the world of boxing. As he trained with and learned from other boxers, he was initiated into their world by *sensuous intoxication*:

What is most likely to elude the outside observer is the extreme sensuousness of the pugilistic initiation. One would need to call up all the tools of visual sociology or even those of a truly sensual sociology that remains to be invented to convey the process whereby the boxer becomes organismically "invested" by and bound to the game as he progressively makes it his. (p. 71)

PA/sport is entwined with social meaning and connection (Meier, 1980/1995); it is a structured, "...co-operative endeavor to maximize pleasure or joy..." (Keating, 1964/1995, p. 148). Therefore, the social fabric of sport/PA may be integral to the subjective experience of participation, which aligns with the findings in the present study.

Interestingly, the lowest rated motivation in the present study, was social motivation, which was also found in previous studies (Fredrick et al., 1997; Kirby, 2019; Stelzer et al., 2018). Social motivation was especially low for the control group (M= 3.74, SD=1.63) when compared with previous research with university students attending US schools. Stelzer et al. (2018) found a mean score for social motivation of M=4.18 (SD=1.62), and Kirby (2019) found a mean of M=4.71 (SD=1.43)²². The MPAM-R instrument is based on self-determination theory (SDT), which includes *relatedness* as a foundational psychological need (see https://selfdeterminationtheory.org/the-theory/). Relatedness refers to the relationships a person has to others. As college students have many social interactions (Rockenback et al., 2019), it is surprising that social motivation is rated low among university students.

Why then, would participants in the present study rate social motivation so low when they write abundantly about the social connections made through sport/PA? Perhaps, when seen on an instrument like the MPAM-R, the subjective connection of social interactions is not recognized. The social items on the MPAM-R include:

²² Social motivation was rated much higher (M=5.1, SD=1.3) among adult women (18-79 years old) participating in a cycling event (Appleby et al., 2020) indicating a potential influence of age and gender.

- Because I want to be with my friends.
- Because I like to be with others who are interested in this activity.
- Because I want to meet new people.
- Because my friends want me to.
- Because I enjoy spending time with others doing this activity.

Each of these motives could be interpreted as an objective reason to participate in sport/PA. But, when considered in a deeper, reflective sense (e.g., the educational experiences of the treatment group), the social component of the individual lived experience blossoms.

Relatedness is likely a critical part of the ASE (based on the findings from pilot studies one and two, and the present study). It is part of the lived-experience (Meier, 1979/1995; Merleau-Ponty, 1948/2004), but the MPAM-R may not be capturing it correctly. As participants engaged in the ASE curriculum, they considered their lives in sport/PA; where, what, with whom, smells, sights, feelings, and so forth. They learned they are body-subject rather than body-object (Meier, 1979/1995; Merleau-Ponty, 1948/2004). They also may have recognized the "...mutuality and inseparability..." of self to others within sport (Fetter, 1976, p. 123); that other participants, even their opponents, are also body-subject. As Fetter (1976) said, "Sport offers numerous opportunities for this experience of oneness as a sensual dialogue with the world and others" (p. 124). Although the participants could describe the social importance of their sport/PA experiences, the social reasons identified on the MPAM-R likely failed to capture those experiences for the study population.

Chapter Six: Implications

Sport philosophers have discussed the importance of ASE (e.g., Fetter, 1976; Meier, 1980/1995; Thomas, 1983; Hyland, 1990; Kretchmar, 1994, 2005, 2006, 2017) yet few studies with measurable, numerical data on the topic exist. The present study contributes important, quantitative data on ASE. The goal of the ASE curriculum was to offer kinesiology students a topic in which they were likely unfamiliar, but one that offers deeper meaning and connection to a personally relevant, physically active lifestyle. Overall, the goal appears to be achieved and significant results were found on subjective commitment in the treatment group, but under very specific criteria. Subjective commitment is valued when participants are guided by competent instruction into a space to read, write, and reflect on a non-normal, yet meaningful topic (i.e., ASE).

The Value of the Subjective

Research on why people participate in sport/PA is usually limited to psychological studies that categorize motivations into superficial concepts. The studies in which the MPAM (Fredrick & Ryan, 1993) and the MPAM-R were created (Ryan et al., 1997) determined that intrinsic motivations (e.g., interest and enjoyment, competence, and social interaction) were correlated to more exercise. Although useful, the instrument does not extend beyond prudential reasons (Kretchmar, 2001) and fails to capture the personally meaningful connection people have with sport/PA. For example, interest and enjoyment are measured on the MPAM-R with the following statements:

- Because it is fun.
- Because I like to do this activity.
- Because it makes me happy.
- Because I think it's interesting.
- Because I enjoy this activity.
- Because I find this activity stimulating.
- Because I like the excitement of participation.

These banal reasons lack depth and provide insufficient information on why people value sport/PA. The subjective experience should be considered more deeply to create commitment to sport/PA. To understand subjective experiences, people must reflect deeply on their experiences.

The qualitative responses captured from the ASE curriculum highlight the understanding that can occur through deeper reflection. Participants wrote paragraphs describing the *fun* of playing rather than simply indicating they play because it is fun. The amount and depth of writing completed by the treatment group support the quantitative results and support the pedagogical methods used. A few participants recognized subjective related reasons to participate during lesson one. Participant 6 said "...that's the reason I dance, it's to feel free in the music." Participant 27 connects with the idea that they do not have to play but get to play; they said "...that there is much more to sports than just the health, psychological, educational, and financial benefits." However, during lesson one, more participants described objective motivations for participating in sport/PA. For example, participant 62 said:

Sport is valuable to me because it is a way I can make sure I stay active and help me stay not so lazy all the time. It is a way to go out and have fun with your friends and bond with one another, and also push each other. It also brings me entertainment to watch the professionals play at such a high level.

And, participant 15 said:

Sport is currently valuable because it allows me to block out everything going on in life at the moment and just focus on one thing. It helps me compress all my anger and feelings at the moment and let it all out.

Some participants continued to highlight objective commitment after completing the ASE curriculum. In lesson five (the last lesson of the ASE curriculum), participants were asked to imagine creating a video that portrayed why they participate in their *sport*. When answering *what message would you want to be expressed to those who watch your video*, participant 62 said: "I would want my message to be to find an activity that can be your release, something that makes you feel detached from the stressful parts of your life." However, others emphasized the subjective aspects of participation such as sports being "...more than about winning [it's] life long [sic] memories that you will remember forever and hopefully meet some of your best friends" (participant 15).

Although the responses overtime varied, all participants were able to describe "a time that your sport felt autotelic and was so enjoyable that you wanted to participate again, and again" (question four in lesson five, see Appendix B). Combined, participants (n=68) wrote

5,268 words for this prompt. Participants described competitions, practices, sports camps, casual games with friends or family, wins, and goals. Participant 5 wrote:

I think for me the autoetelic [sic] moments happened most during practices. Games always had too much pressure placed on them and for that reason every so often we'd have more fun practice (sic). These included little to no coaching during drills. We were just supposed to feel the moment and do what felt natural. Then we would end the day with a fun game or competition that still involved our sport. Most of the time a scrimmage against ourselves. These moments are best described as refreshing. With the pressure to win or be perfect gone, we mostly just used the time to reconnect with ourselves, the game, and each other. It was refreshing because it was a reminder why we chose to play at that level. Those days were the most fun and most remembered from my entire career.

Participant 7 relayed their experience throwing the javelin in high school:

Once I got up to throw, I just let my mind go and stopped thinking about each step I needed to do. I threw my first disc and I PR'd!23 Everyone cheered when they heard my distance and I was so excited to throw again. I got up to throw my second disc, and I PR'd again! My coach was so proud of me and my friends were cheering me on. I threw my last disc and, yet again, I PR'd! I wanted to keep going and going to see how far I could throw, but I was finished with the event.

And participant 36 described a "turkey bowl football game" with friends:

This was one of the most fun experiences I've ever had playing football because we all played at one point or another and we all love football but it wasn't for anything there was nothing on the line. This made it way more fun and way easier to let loose and do things that you always wanted to do in football but never had the courage cause the pressure that was put on you.

Although their situations varied, their commonality was the individual meaningfulness of the experiences. Participants met "...the activity itself in a more intimate way..." (Kretchmar,

²³ Personal Record (PR).

2001, p. 322), and found "...the beautiful and sensually delightful experience of [their] moving body" (Fetter, 1976, p. 5).

Pedagogy for the Subjective

The need for intentionally crafted pedagogy is highlighted in the present study and aligns with moral development theory (Kohlberg, 1981; Lickona, 1991; Reimer et al., 1983) and previous research (Bryant et al., 2018; Luvaas, 2019; Rickel, 2005; Shaw, 2020; Van Mullem, 2009). The pedagogy must lead students to deep thinking and meaningful application, especially for topics that are not commonly considered. The salience of appropriate pedagogy is highlighted in the present study through the findings on commitment (no difference in objective commitment, significant difference on subjective commitment). If someone has played basketball since they were five-years old, they know the values of the game to be objective (e.g., winning, develop motor skills, fitness, leadership, friendship, etc.) because that is what society expects. Objective values are the foundation of modern sport/PA. The same person, asked at 19 to discuss the value of sport from a different lens may have a difficult time doing so because the idea is likely foreign to them. Guidance, time, and reflection are needed (Gill, 1993).

Unfortunately, the subjective experience is rarely taught in kinesiology programs and professions and the current kinesiology curriculum fails to stimulate deep commitment to sport/PA. Participants in the control group in the present study engaged in *fun* physical activity for an entire semester and were taught by proficiently trained, experienced kinesiology professionals. Yet, no change occurred in how committed or motivated they were to sport/PA. To know fully the value and meaning of sport/PA, the subjective should be the foundation of participation. Yet, kinesiology professionals are failing to teach this underlying value. Educators should tune curriculum and pedagogy to enhance subjective experiences, which should kindle both objective and subjective commitment and prepare future kinesiology professionals to inspire meaningful PA in others. Curriculum and pedagogy that value the subjective give merit to sport/PA, to the very human experience of moving our bodies through sport/PA. As Kretchmar (2000) said, "When we fail to distinguish rich from impoverished meaning, we miss a marvelous opportunity to strengthen our pedagogy and win more converts to the active lifestyle" (p. 261).

Discovering the suggested change in curriculum and pedagogy will require training current and future kinesiology professionals in philosophy. Kinesiologists and students could start with the ASE curriculum to consider why sport/PA is valuable. However, the results of the present study show that students must be led by trained teachers to elicit change. Current kinesiology professionals also likely require similar guidance. Therefore, professional development focused on philosophical foundations that emphasize the value and purpose of sport/PA are needed. Further, kinesiology departments must give credence to the oftenneglected philosophical areas and work to make the subjective value of sport/PA the foundation of their curriculum. To promote bountiful flourishing (Garrison, 2010), space and time to learn the aesthetic, qualitative aspects of sport/PA must be given.

The Subjective and Social Motivation

An important finding from the present study was higher social motivation among the treatment group. Something in the ASE curriculum and/or class helped treatment participants recognize the importance of social connection and/or identity. Therefore, the social aspects of sport/PA likely tie to the individual "lived experience" and may influence subjective commitment. Pilot study one revealed that group acceptance motivated performance and created treasured experiences (Foster & Stoll, 2020). Further, participants in that study associated accomplishment and pride with social identity indicating a deeper meaning of wearing a sports uniform. Therefore, social identity could be used as a pathway to recognize the subjective experience and improving subjective commitment.

The social experience also has possibility for influencing moral development; "Character doesn't function in a vacuum; it functions in a social environment" (Lickona, 1991, p. 63). In belonging to a sport/PA group participants must act, behave, and perform in a certain way; the athlete has the "...burden of identification" (Novak, 1994, p. 141) and must "...adhere to group norms and standardized roles..." (Joseph & Alex, 1972, p. 723). Sport/PA, therefore, can be used to support moral (or non-moral) behaviors²⁴. Therefore,

²⁴ David Wiggins (2008) relays the historical treatment of African American athletes in his book *Out of the Shadows: A Biographical History of African American Athletes*, while Billy Hawkins (*The New Plantation: Black Athletes, College Sports, and Predominantly White NCAA Institutions*, 2010) and Ijeoma Oluo (*Mediocre*, 2020) discuss current racial issues in American football. Jamie Schultz (2018) discusses the historical and current presence women are allotted in sport/PA in *Women's Sports: What Everyone Needs to Know.* Aubrey Shaw (2020) discusses the exclusion of people with disabilities in her dissertation *The effects of a perspective taking intervention on pre-service kinesiology professionals towards people with physical disabilities*.

kinesiology professionals (including coaches) have an ethical imperative to use social identity to teach moral behavior. Importantly, as sport/PA becomes part of social identity, personal, subjective meaning develops (Kretchmar, 2006). Moral development may be stimulated through teaching the subjective.

As a microcosm of society, sport often reflects the values of society. Further, sport has been used as tool for social influence. Kretchmar et al. (2017) indicate, "Soccer has spread farther than the English language, the writings of Shakespeare, and the British legal and judiciary system" (p. 198). Sport has historically served as a tool for colonialism, religious establishment, social hierarchy, and national prestige (Kretchmar et al., 2017). Unfortunately, the social environment where character forms often "...suppresses moral concern" (Lickona, 1991, p. 63). However, sport can also be a platform for social change thich highlights the importance of stimulating moral development in sport/PA settings. Emphasizing the subjective over the objective may have potential for the social importance of sport/PA to stimulate moral development and lead to social change. Kinesiology curriculum founded on the subjective that includes course in cultural, philosophical, and ethical topics may be instrumental in promoting positive social change within and through sport/PA.

Gender

The disparity between males and females in this study highlight the need for additional research on gender and sport/PA experiences. Within the qualitative responses, gender did not appear to be a factor, yet females scored lower in many areas. The ASE curriculum did not discuss gendered experiences, which may explain the lack of responses on this topic. However, the gender differences that arose on the instruments highlights the potential influence of gender on experience. The conclusions are limited by the disproportion of males and females in the study; therefore, additional research is needed to understand this finding.

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²⁵ Sport is often used as an advocacy tool and platform for social justice. Susan B. Anthony is believed to have said that the bicycle did more to emancipate women than anything else (Dawson, 2011). Olympic athletes recently used their visibility to highlight injustices, such as Raven Saunders making an X with her arms while on the 2020 medal podium in support of racial justice.

As gender is a critical factor in how a person experiences the world it is part of the "lived experience" in sport/PA²⁶. Researchers have long studied gender differences, specifically between males and females, in PA settings, which reveal the sociocultural influence on individual experience. As with other social issues previously discussed, there is potential to positively influence moral development by emphasizing and teaching the subjective.

Moving Forward

Bill Watterson is the brain behind the famous Calvin and Hobbes comic strip. In one scene, Calvin beats Hobbes in a game of checkers and exclaims "I won! I did it! I won! I won!" (Watterson, 2022). Calvin wallows in his success, but as his elation subsides something changes in him. The final scene is Calvin looking around with a confused expression asking, "Is this all there is??" Focusing on objective outcomes (such as winning) leaves us wanting for something more.

As demonstrated in pilot studies one and two, and the present study (pilot study three), the value of the subjective, qualitative, aesthetic aspects of sport/PA for the participants is important. The title of this dissertation comes from a student of the author who wrote about her aesthetic sport experience. She said of her experience playing soccer, "It's just me and the ball getting lost with each other." The value of her sport was not objective, but in experiencing the sensuousness of her body creating movement with a rubber ball. Such experience is part of being human; in movement we have the freedom to "...express... explore... discover... invent... and create" (Kretchmar, 2006, p. 6). Therefore, as kinesiology professionals, it is our ethical responsibility to base our work in the subjective. Great potential exists for sport/PA to elevate our human condition to "...the far better stuff that lies beyond" (Kretchmar, 2001, p. 322).

The theoretical framework of ASEs lies within existentialism, that existence precedes essence. Therefore, human are *beings-in-the-world* or *lived-bodies* rather than a dichotomous objective body and subjective mind (Marcel, 1952/1995; Meier, 1979/1995; Merleau-Ponty,

²⁶ According to the Gender Spectrum organization (2019), "A person's gender is the complex interrelationship between three dimensions: body, identity, and social gender" (para 2). Each of these components likely contributes to one's experience in sport/PA. Gender within sport is often debated and has recently surfaced over the inclusion/exclusion of transgender individuals in sport/PA.

1948/2004). As Meier (1979/1995) said, "Meaning arises, is created, and is constituted by the interaction of the 'body-subject' and the world through the body's power of expression" (p. 92). The present study applies sport/PA to these well-established existential ideas.

The remaining question is how to value, teach, and understand the ASE. Although the ASE curriculum presented in this study is a starting point, much more work is needed. Better representative data samples are needed and focus on social aspects is pertinent. More discussion and research on ASE through conferences and journals is imperative. Further, accessible curriculum for sport/PA leaders through a trade book could be useful. Overall, if kineiologists are to fulfill their mission to enhance the *quality* of life through healthy active living (American Kinesiology Association, 2021), the subjective cannot be overlooked and must become intergral in curriculum and pedagogy.

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Appendix A: IRB Approval



Institutional Review Board 875 Perimeter Drive, MS 3010 Moscow, ID 83844-3010 Phone: 208-885-6162 Fax: 208-885-6014 Email: irb@uidaho.edu

August 09, 2021

To: Sharon K. Stoll

Cc: Elaine Foster

From: University of Idaho Institutional Review Board

Title: Aesthetic Sport Experience and Value of Sport

Protocol: 20-180, Reference: 014242

Review Type: Exempt

Protocol Approval Date: 12/03/2020

Amendment Approval Date: 08/09/2021

The Institutional Review Board has reviewed and **approved** the amendment to your above referenced Protocol.

This amendment is approved for the following modifications:

 Expansion of participant pool to (Kinesiology students) from the University of Idaho, Washington State University and Idaho State University.

Should there be significant changes in the protocol anticipated for this project, you are required to submit another protocol amendment request for review by the committee. Any unanticipated/adverse events or problems resulting from this investigation must be reported immediately to the University's Institutional Review Board.

Forms can be found at https://veras.uidaho.edu

Templates can be found at https://www.uidaho.edu/research/faculty/research-assurances/human-protections/forms

Your approved internal personnel on this protocol are: Foster, Elaine; Stoll, Sharon K.

IRB Exempt Category (Categories) for this submission:

Category 1: Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

Category 2: Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including



Institutional Review Board

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visual or auditory recording) if at least one of the following criteria is met: i. The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; ii. Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or iii. The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by .111(a)(7).

Appendix B: Aesthetic Sport Experience Curriculum

Lesson 1: Why is Sport Valuable?

Theoretical Support for the Topic/Content

During the first lesson, participants will reflect on the value and purpose of sport in society and in their own lives (Kretchmar, 2005). The lesson is constructed from Kretchmar's (2005) discussion of value choices within PA/sport. Through lesson one, participants will first consider the objective value choices within sport. The objective values of sport are commonly known and taught with sport. Therefore, participants should understand and have experience with objective values. Next, participants will be introduced to the subjective values available through sport.

Theoretical Support for Questioning Format (Reimer et al., 1983)

Initial strategy. The first three questions should be easily answered. The descriptive questions introduce the topic of the lesson and apply the topic to the participant's lives. Using *why* questions requires participants to give reasons for their stance, known as first order questions (p. 159). Further, by making the topic personal, interest and investment should be piqued (p. 161). The strategy with these first three questions is to meet the participant where they are knowledge-wise and give credence to their person sport experiences.

Question 1

Sport is valuable for many reasons to different people. Consider your experiences in sport as a child. Why was sport valuable to you as a child?

Question 2

Now consider the present. Why is sport currently valuable to you?

Question 3

Finally, think about how you will be involved in sport in the future. Why will sport be valuable to you in your future?

In-depth strategy. Question four presents information that supports the notion that sport has important psychological and physiological benefits. After recognizing these benefits, the participants are asked to consider where the value of such benefits lies (i.e., objective), and describe their thoughts. Through this strategy, the participants should begin to recognize objective values common in sport, which sets a foundation for understanding the less-commonly recognized subjective values (p. 156).

Question five provides higher level knowing by exploring less commonly known, subjective perspectives about the value of sport and again asks the participants to explain whether they agree or disagree. Because the subjective values are ignored in mainstream sport experiences, and therefore *complicate* the situation, the participants must be provided with enough background information to begin understanding the ideas (p. 160). Using other athletes as examples can help participants discover language to describe their own subjective experiences. Further, by providing perspectives outside of the self, the participants engage in internal dialogue and must reconcile inconsistencies (170-171). In this lesson, participants initiate their internal dialogue and begin to use subjective language as they explain their positions.

Question 4

Numerous organizations and professionals have identified important benefits of sport participation. For example, the Aspen Institute states that children can experience:

- Health Benefits: Builds healthy bones, muscles & joints; aid in controlling weight; prevents chronic diseases
- Educational Benefits: Improves cognitive skills, increases likelihood of attending college, may contribute to career success.
- Psychological Benefits: Improves mental health, positively affects personal development, decreases loneliness and low self-esteem, psychosocial benefits.
- Financial Benefits: Reduces medical costs.
- https://www.aspenprojectplay.org/youth-sports-facts/benefits

The US Military Academy & US Navy Academy says adults can:

- Learn important values such as social interaction, team perspective, responsibility, acceptance of failure, cooperation, and leadership
- Achieve more from life including higher wages
- https://armyandnavyacademy.org/blog/beyond-physical-fitness-the-benefitsof-playing-team-sports/

And, *Sport Psychology Today* identifies numerous benefits of sports participation among the elderly, including:

- Prolonged life
- Improved physical & Mental Health

- Relaxation
- Improved social life
- Body weight control
- Independence
- Improved pleasure & happiness
- http://www.sportpsychologytoday.com/sport-psychology-for-parents/7benefits-of-sport-and-fitness-activities-for-the-elderly/

Engaging in sports and physical activity for physical and mental health, cognitive improvement, or to learn important social values are worthy endeavors and important to the overall sport experience. However, these outcomes are objectively focused, placing the value of sports on the end rather than the experience. Meier (1979/1995) called this focus "...the objectified, treadmill image of sport..." which is "...predominantly centered upon the development and attainment of physical strength, motor skills, and technical efficiency..." (p. 94)

Do you think that sport should be pursued for the health, psychological, educational, and financial benefits for the attainment of physical skills and efficiency? Explain.

Question 5

Meier believed that the objectified, treadmill image of sport was only part of why sport is valuable. The other part is the subjective, personal experiences that sport participants have. Consider what sport philosopher R. Scott Kretchmar (2006) said about sport and physical activity:

- Physical activity is fun
- It is also delightful
- It is personally meaningful
- It is a primary source of identify, of who one is
- It offers a refreshing playground, a respite, something to look forward to
- The freedom to express
- The freedom to explore
- The freedom to discover
- The freedom to invent
- The freedom to create

Although sport participants can obtain health, psychological, educational, and financial benefits, as well as attain physical skill and efficiency, perhaps there is more that sport has to offer. Johnson (2020) described his love for golf this way:

"...I play golf two to three times per week not because I have to, but because I want to. It is an intrinsically satisfying activity to me. I love the anticipation I feel leaving my office on a sunny afternoon to play a round. The task of getting that little white ball into a 4-inch hole 9 or 18 times provides an optimal challenge that continues to bring me back over and over again. I love the experience of hitting a crisp tee shot down the middle of the fairway or compressing the ball with a wedge and watching it spin back toward the hole after hitting the green. It is the challenge golf provides that brings" (p. 5).

For other athletes, it is about exploring possibilities. Professional trail runner, Luke Nelson described why he runs in this video:

https://www.youtube.com/watch?v=LVbzN1VK0L8

And, Olympian Tatyana McFadden describe why she plays in this video: https://www.youtube.com/watch?v=oF6AKoII5DI

Do you agree with the views of Johnson, Nelson, and McFadden? Explain.

Further consideration. Giving sufficient time to avoid overstimulation is a crucial step in development, especially when new information is presented (p. 176). Therefore, at the end of each lesson participants are asked to consider the topic discussed as they continue with life for the following week. This strategy also allows the participants to apply the material more fully to their personal situation, hopefully inspiring interest and investment in the topic.

Questions 6

Take Action! Before the next lesson, consider if sport is valuable to you beyond the "objectified, treadmill image". Each time you engage in sport this week, pay attention to your experience participating in sport:

- Is it fun?
- Is it delightful?
- Is it personally meaningful?
- Is it a primary source of your identity?

- Does it provide a refreshing playground, a respite, and something to look forward to?

Will you consider your sport experiences over the week?

Lesson 2: Sight, Sound, Smell, and Touch in Sport

Follow-up (Reimer et al., 1983)

At the end of lesson one, participants were asked to ponder on the value of sport in their lives throughout the week. This strategy is used to personalize the information and provide time to think deeply about the topic before encountering new information (p. 156). Therefore, participants will begin lesson two by rating their beliefs about those values. The follow-up questions are again seemingly simple, descriptive questions that should bridge lesson one with lesson two.

Questions 1 (L1 Follow-up)

At the end of lesson one we asked you to consider if sport is valuable to you beyond the "objectified, treadmill image" and to consider your experience participating in sport throughout the week. On a scale of 1-5 with 1 being "not at all" and 5 being "extremely", Was your sport experience this week fun?

Questions 2 (L1 Follow-up)

On a scale of 1-5 with 1 being "not at all" and 5 being "extremely", Was your sport experience delightful?

Questions 3 (L1 Follow-up)

On a scale of 1-5 with 1 being "not at all" and 5 being "extremely", Was your sport experience personally meaningful?

Questions 4 (L1 Follow-up)

On a scale of 1-5 with 1 being "not at all" and 5 being "extremely", Was your sport experience a primary source of your identity?

Questions 5 (L1 Follow-up)

On a scale of 1-5 with 1 being "not at all" and 5 being "extremely", Did your sport experience provide a refreshing playground, a respite, and something to look forward to?

Questions 6 (L1 Follow-up). Describe your experiences participating in sport during the past week.

Theoretical Support for the Topic/Content

During the second lesson, participants will learn about and consider the sensuous experiences present in sport. The lesson is based on Thomas (1983), Giamatti (1989) and

Wacquant's (2004) discussions of the involvement of the senses of sight, sound, smell, and touch in sport. Lesson two begins with these four senses because they are likely understandable and likely to be part of the participant's personal experience.

Theoretical Support for Questioning Format (Reimer et al., 1983)

Initial strategy. Question seven first presents background information about the involvement of the senses in sport by offering the perspectives of two individuals. The background information is essential for participants to grasp the idea of the aesthetic dimension in sport. Further, providing experiences from fellow athletes helps participants relate to another even if their experiences are somewhat dissimilar (p. 159).

In-depth strategy. Next, through the second half of question seven through question ten, participants apply the topic to their own experiences by describing memories associated with each of the four senses presented in this lesson. Asking the participants to identify memories extends their thinking beyond descriptive and *why* questions, creating personal meaning to the topic (p. 164).

Question 7

Our senses are very active when we participate in sport! However, sports usually play-out quickly, leaving the participant with little time during the sport to recognize the activity of their senses (Thomas, 1983). Yet, what we experience through our senses stays with us forever. For example, watch this video clip of me shooting a basketball:

https://www.youtube.com/watch?v=Ct0nEhxKJwI&feature=youtu.be Although that experience occurred over 10 years ago, I can still smell the green jersey I was wearing, the open, crisp air of that particular venue, and my stinky shoes after the game. I can still picture the ball arching toward the hoop and falling, beautifully through the net. I can still hear that glorious sound of a swish and shoes squeaking across the floor. I can still feel the weight of the ball in my hands and the pressure on my feet as I moved to get open.

All sport participants can likely describe a sport experience in the same way. The amalgamation of smells from freshly clipped grass, carefully raked dirt, and sweaty

uniforms can carry a baseball player back to their hometown baseball field. A swimmer can likely smell the chlorine of the pool and feel the water moving over their body. Being fully part of the sport occurs when all the senses are involved. Like Wacquant (2006) said about boxing "...it is with all of one's senses that one gradually converts to the world of prizefighting and its stakes..." (p. 70); a statement that can be applied to any sport.

Consider what sights, sounds, smells, and touch are associated with your personal sport experiences. Think of your favorite sport or physical activity. What memories arise when you think of the smell of your sport?

Question 8

Again, thinking of your favorite sport or physical activity, what memories arise when you think of the sound of your sport?

Question 9

What visual memories arise when you think of your sport?

Question 10

What memories arise when you think of the things you touch in your sport?

Further consideration. To conclude lesson two, participants are asked to consider their sensuous experiences in sport through the following week, giving them ample time to apply the information to their own lives.

Question 11

Take Action! Before the next lesson, consider what you can hear, see, smell, and touch while participating in sport. Will you consider your sport experiences over the week?

Lesson 3: The Feel of Doing Sport

Follow-up (Reimer et al., 1983)

At the end of lesson two, participants were asked to recognize their senses while engaged in sports throughout the week. Participants will begin lesson three (questions one through four) by identifying those sensuous experiences; a strategy used to guide the participants in recognizing the topic in their own lives (p. 164). Question five is an in-depth, probing question requiring the participants to extend the descriptions of their senses to the value those senses have to them individually (p. 164). Recounting the information from lesson two will facilitate the transition to the new information presented in lesson three. The follow-up questions serve as the *initial strategy* for lesson three.

Questions 1 (L2 Follow-up)

At the end of the last lesson, we asked you to try to notice the smells, sounds, sights, and touch present when you were participating in sports this week. What smells were a part of your sports?

Questions 2 (L2 Follow-up)

What sounds were a part of your sport?

Questions 3 (L2 Follow-up)

What sights were a part of your sport?

Questions 4 (L2 Follow-up)

What did you touch during your sport?

Questions 5 (L2 Follow-up)

What do the smells, sounds, sights, and touch of your sport mean to you?

Theoretical Support for the Topic/Content

During the third lesson, participants will explore what their bodies experience while engaging in sport. The lesson is supported by Thomas (1983), Meier (1979/1995), and Saint Sing's (2004) discussions of the bodily experience of moving in sport. As Meier (1980/1995) describes:

...the texture of the being of the participant arises, by means of the body's power of expression. The player, through exuberant, delightful, joyous and spontaneous movement, gestures, and actions, confronts the world in a fresh manner, engages in

dialog with it, and explores it and [self] in a manner pregnant with individual significance. (p. 125)

Theoretical Support for Questioning Format (Reimer et al., 1983)

In-depth strategy. Questions seven through nine will require that participants to engage in a type of *role-play* (p. 170-171). First, participants will find and watch a video clip of their sport being played by others and note the bodily movements of the athletes. Participants will then imagine themselves performing the movements from the video and consider how they would feel. This process should guide the participants into the subjective feelings their bodies experience during sport, an experience that may be difficult to describe and take time to understand (p. 176).

Question 6

Part of the experience of participating in sport is the experience of your body engaging in the movements the sport requires. Through practice and repetition, these actions become ingrained in the participant. For example, when I think of my time playing volleyball, I can remember within my body the movements of a perfectly executed spike; *left- right-left- squat- jump- arms up- bow* and arrow- track- swing- snap- follow-through. Because my body knows that movement, I can also watch others perform the skill and understand what they are experiencing. Wacquant (2004) describes this knowing: "...you do not truly see what they are doing unless you have already understood a little with your eyes, that is to say, with your body" (p. 118).

Find a video clip of others (or another) participating in your sport. While watching that clip, notice how the participant(s) bodies move through space, and how they perform the skills of the sport. Provide a copy to the video in the space provided and respond to this question: How do you relate to the movements of those you watched?

Question 7

Now, close your eyes and imagine yourself performing the movement from the video you just watched. How do you imagine yourself?

Question 8

Again, close your eyes and imagine yourself performing the movement from the video you just watched. How does your body know how to perform those movements?

Question 9

Your body knows how to perform the movements you saw in the video. What does that feel like, for your body to know how to perform those movements?

Further consideration. Again, participants are asked to consider the lesson topic (i.e., the feel of the body in sport) throughout the following week. Providing sufficient reflection time of new content develops understanding and personal application without overstimulating the participant (p. 176).

Question 10

Take Action! During the upcoming week, notice how your body *feels* while engaging in the movements that you perform in your sport. Will you do this?

Lesson 4: The Sport Uniform

Follow-up (Reimer et al., 1983)

To being lesson four, participants will have space to describe the bodily experiences in sport they had during the week. Expressing their experiences should contribute to expanded awareness of the subjective, bodily experiences available in sport (p. 162).

Questions 1 (L3 Follow-up)

During the last lesson you considered the feel of doing your sport. We then asked you to notice how your body feels while engaged in the movements of your sport during the week. What did you observe/experience?

Theoretical Support for the Topic/Content

Within lesson four, participants will consider the role uniforms have in their subjective sport experience. The lesson is supported by Craik's (2005) work on the role of uniforms in shaping people's identities. Further, Novak (1994) and Foster and Stoll's (2020) discussions of the subjective experience of wearing sport uniforms informed the content. Although uniforms are objects, they are a fundamental requirement to sports involvement and therefore may be an integral part of the subjective meaning of the sports experience.

Theoretical Support for Questioning Format (Reimer et al., 1983)

Initial strategy. To introduce the subjective importance of sport uniforms, participants will consider, in question two, the first uniform they can remember wearing. The purpose of this strategy is twofold; first, the question is a dialogue starter (p. 157); second, the question personalizes the topic (p. 161).

Question 2

Objects are an important part of sports, from equipment necessary to play the sport (such as a bat and ball) to clothing worn for the sport. Sport uniforms are particularly important to sports. In formal competitions and events, uniforms serve to distinguish participants or teams, identify roles among athletes, create an aesthetic appeal for the audience, and provide protection. Although uniforms have outward meanings, they may also create a personal experience for the wearer (Craik, 2005). Novak (1994) said: "Pulling on the uniform of a team one admires is a ritual of election. One has been accepted. More than that, it signifies an opportunity to act in a special kind of

world: a world of record and legend and cherished significance" (p. 140). Can you remember the first uniform you ever wore? What did it look like? What sport was it for? Describe your first uniform.

In-depth strategy. The next four questions *complicate* the topic (i.e., sport uniforms) by connecting it to the previous lessons (i.e., value, senses, and bodily feel). Because the participants have been given ample time to consider these other topics, they should be ready to move forward (p. 176). Probing deeper into the participant's experience with their uniform should guide the participant in thinking beyond the first-order reasoning (i.e., the uniform as an object) into third-order reasoning (i.e., the uniform as an experience; p. 164).

Question 3

Again, thinking of your first uniform, was that uniform special to you? Why?

Question 4

Can you remember the smell of your first uniform? Describe it.

Question 5

Can you remember the feel of your first uniform? Describe it.

Question 6

Did you ever wear your uniform(s) outside of sport? Why? What did it mean to you or how did you feel about displaying your uniform in this way?

Further consideration. Lesson four concludes by asking participants to take time throughout their week to reflect on and explore their experiences with their current sport uniforms. The reflection time should help the participants personally apply the lesson ideas (p. 176).

Question 7

During the upcoming week, think about the uniform that you wear while doing sport. How does it feel on you? Are the colors important? Do you have a special relationship with that uniform? What does your uniform display to others about you? Will you do this?

Lesson 5: Why is Sport Valuable to You?

Follow-up (Reimer et al., 1983)

The follow-up questions to lesson four allow participants to articulate the experiences they had with their sport uniforms throughout the week. The questions help the participants clarify their thoughts as they have been contemplating how to subjectively experience sport (p. 164).

Questions 1 (L4 Follow-up)

After the last lesson we asked you to think about the uniform that you wear while doing sport over the week. How did your uniform feel when you played your sport this week?

Questions 2 (L4 Follow-up)

Again, thinking of your uniform that you wore this week, what relationship did you have with that uniform?

Questions 3 (L4 Follow-up)

What did your uniform display to others about you?

Theoretical Support for the Topic/Content

Through lessons one through four, participants were presented with content and engaged in activities that hopefully guided them to recognize the subjective, aesthetic experiences available in sport. They consider themselves as embodied beings interacting with the world, and expectantly gain personal meaning of their sport experiences. Further, the participants explored the language of the subjective. Doing so should help them "...formulate new perspectives within which to enjoy, to interpret, and to understand the nature and conditions of [their]-being-in-the-world..." (Meier, 1980/1995, p. 127). Therefore, lesson five revisits the value of sport in their lives. Lesson five was informed by the works of Giamatti (1989), Kretchmar (1994, 2005, 2006), and Meier (1980/1995).

Theoretical Support for Questioning Format (Reimer et al., 1983)

Initial strategy. Lesson five begins by introducing the idea of autotelic activities. To illustrate the idea, participants will read an account of an athlete describing an autotelic experience (p. 158). Participants will then consider their own autotelic experiences in sport. This strategy starts the dialogue and elicits fuller awareness of the concept (p. 161).

Question 4

Although I can remember many wonderful experiences playing sports, one experience stands apart from the rest. I was in the 10th grade and was participating in a spring basketball league. Every Saturday for 8 weeks, my team traveled to the big city and played one to two games. The thing that made this experience unique is that there was no pressure as we played, it was 100% fun! When I say it was "fun", I don't mean that we goofed around or did not try to win. We worked very hard to be our best, and we also respected our opponents as they too were trying their best. We were playing for the sake of playing. The term for this condition is *autotelic*- that is, the goal of the sport "...is the full exercise of themselves, for their own sake..."

(Giamatti, 1989). Because my basketball experience was an *autotelic* activity, I found so much joy in participating, in working hard, in succeeding, and in learning from mistakes. Further, I could not wait for our next game, for the next opportunity to lace-up my shoes and experience it all over again!

Think of a time that your sport felt autotelic and was so enjoyable that you wanted to participate again, and again. Describe that experience.

In-depth strategy. The final step in the curriculum is applying the knowledge from each of the lessons to a practical situation. During questions five through eight, participants engage in a *role-switch* (p. 166). Within lesson one, the participants considered the views of three athletes as they described their subjective reasons for participating in sport. For lesson five, participants will take the role of the athlete and *create* a video depicting themselves engaged in their sport. Through this strategy, rather than encountering new information to respond to, the participants must expand their interpretation of the curriculum content (p. 176).

Question 5

In lesson 1, you watched two videos and read one description of three different athletes who described why they participate in sport. If you were to create a video that described why you participate in sport, what would you discuss?

Question 6

What images would you show in your video describing why you participate in sport?

Question 7

What sounds would you include in your video?

Question 8

Finally, what message would you want to be expressed to those who watch your video?

Appendix C: The Rickel Exercise Value Inventory

The following statements involve your values and commitment to exercise, physical play and human movement activity. Carefully read the comments and respond in one of five ways: **Great, Much, Some, Little, or No. CIRCLE ONLY ONE ANSWER**. At the end of the 17 items, you will be asked to rank the 3 most important to you.

Little Little Little Little Little Little	No No
Little Little	No
Little	
	No
Little	
	No
Little	No
ience.	
	Little

Open ended question

18. Describe what motivates you to participate in exercise, play, or be in movement activities.

Appendix D: Motives for Physical Activities Measure – Revised (MPAM-R)

The following is a list of reasons why people engage in physical activities, sports and exercise. Keeping in mind your primary physical activity/sport, respond to each question (using the scale given), on the basis of how true that response is for you. 1234567 not at all very true for me true for me ____ 1. Because I want to be physically fit. ____ 2. Because it's fun. ____ 3. Because I like engaging in activities which physically challenge me. ____ 4. Because I want to obtain new skills. ____ 5. Because I want to look or maintain weight so I look better. ____ 6. Because I want to be with my friends. ____ 7. Because I like to do this activity. ____ 8. Because I want to improve existing skills. ____ 9. Because I like the challenge. ____ 10. Because I want to define my muscles so I look better. ____ 11. Because it makes me happy. ____ 12. Because I want to keep up my current skill level. ____ 13. Because I want to have more energy ____ 14. Because I like activities which are physically challenging. ____ 15. Because I like to be with others who are interested in this activity. ____ 16. Because I want to improve my cardiovascular fitness. ____ 17. Because I want to improve my appearance. ____ 18. Because I think it's interesting. 19. Because I want to maintain my physical strength to live a healthy life. ____ 20. Because I want to be attractive to others. ____ 21. Because I want to meet new people. ____ 22. Because I enjoy this activity. 23. Because I want to maintain my physical health and well-being. ____ 24. Because I want to improve my body shape. ____ 25. Because I want to get better at my activity. ____ 26. Because I find this activity stimulating. ____ 27. Because I will feel physically unattractive if I don't. ____ 28. Because my friends want me to. ____ 29. Because I like the excitement of participation.

Scoring Information

Interest/Enjoyment: 2, 7, 11, 18, 22, 26, 29

____ 30. Because I enjoy spending time with others doing this activity.

Competence: 3, 4, 8, 9, 12, 14, 25 Appearance: 5, 10, 17, 20, 24, 27

Fitness: 1, 13, 16, 19, 23 Social: 6, 15, 21, 28, 30

Appendix E: Interviews with Instructors

Instructor 1	Instructor 2	Instructor 3	Instructor 4
How many students in	your class were Kinesic	ology majors/minors (estim	aate)?
50%	50%	44%	50%
Did students discuss p	hilosophical topics in yo	ur class?	
Yes, in class discussions	Yes.	Yes.	Yes, the course was discussion based
	ter the lessons in your class)?	ass (students completed the	em on their own, outside
Completed the lessons and pre/post-tests in-class on Thursdays for the first 30 minutes of class. Two lessons during November were done at home because the instructor was out of town	Spent time talking about the importance of participation in research, emphasize the importance of the study at the beginning of the semester. On Tuesdays, gave them the first 30ish minutes of class to do the study, but they were not due until Thursday	Completed the lessons and post-tests in-class on Thursdays for the first 30 minutes of class.	Completed the lessons and post-tests in-class on Thursdays for the first 30 minutes of class. The students could turn in later.
•	ontent of the lessons (or t	he lesson topics) during yo	T
After each lesson, the class discussed at least one part of the lesson during that class or the following Tuesday.	Did not discuss the study content particularly, but discussed embodiment quite a bit, and other	Discussed some of the questions from the lessons afterward for 5-10 minutes.	Instructor ensured students knew what to do before each lesson, especially if there were videos to watch.
The instructor read everything the students submitted and commented to each of the students	aesthetic topics throughout the semester. Did not comment to the student's	Did not comment to the student's responses.	Struggled getting the students to engage more in class about halfway through the semester, class in general.
	responses.		Did not comment to the student's responses.

Did the students witte	papers about this topic (ADL):	
Not really- one paper was done on the mind-body connection, which could have been influenced by the ASE material.	On paper called "Dear Sport", aligned somewhat with lesson 2 & 3 of the study. Some students discussed the aesthetic, subjective relationship between them and their sport.	One paper on mind body connection- the students do an activity and think about their mind-body connection. Instructor asked them to think about the aesthetic connection by taking a minute to pay attention to each sense they experience in sport.	Some of the aesthetic topic was reflected in their papers, but nothing specific on the topic.
How did the students i	respond to the lessons, to	the tasks?	
Positive, they never considered the importance of the aesthetics before. It gave them a space to think of their movement in a different way.	Nothing specific.	Thought it would be stupid but once paid attention to it, they realized how much a part of the experience it is. Definitely got people thinking.	A few students indicated they thought more about the aesthetic stuff and what their movement goals might be-deeper thinking about them. The lesson on uniforms was specifically mentioned.
What is your education	nal background? Philoso	phy? Pedagogy?	
Currently in third year of doctoral program working with the same major professor as the student researcher, studying sport pedagogy and moral development. Significant study of philosophy and pedagogy. Significant coaching and athletic background.	Currently in fifth year of doctoral program working with the same major professor as the student researcher, studying sport pedagogy and moral development. Significant study of philosophy and pedagogy. Significant coaching and athletic background.	Currently in second year of doctoral program working with the same major professor as the student researcher, studying sport pedagogy and moral development. Significant athletic background.	Exercise physiology; PhD prevention science, studied overall health and wellbeing of vulnerable populations, very research heavy background. Try to stimulate curiosity, and learning in classes. Provides different ways to learn- flipped classroom rather than straight-up lectures, doing activities during class to keep them

Appendix F: Rickel Values Inventory Data at Pretest

Objective Commitment

Table F.1.Group Statistics: Pretest on RVI, Objective Commitment

Groups	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	35.92647	5.456247	0.661667
Control	26	36.57692	6.842064	1.341839

Table F.2.Independent Samples t Test with Levene's Test for Equality of Variance, Objective Commitment

Equal Variance	F	Sig.	t	df	P	Mean Diff.	SE Diff.	95% CI
Assumed	2.905	0.092	-0.481	92	.632	650	1.35	[-3.336, 2.036]
Not Assumed			-0.435	38	.666	650	1.496	[-3.680, 2.379]

Subjective Commitment

Table F.3. *Group Statistics: Pretest on RVI, Subjective Commitment*

Groups	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	24.29412	4.044745	0.490497
Control	26	22.46154	6.598368	1.294046

Table F.4. *Independent Samples t Test with Levene's Test for Equality of Variance, Subjective Commitment*

Equal Variance	F	Sig.	t	df	P	Mean Diff.	SE Diff.	95% CI
Assumed	15.13	.000	1.631	92	.106	1.833	1.124	[399, 4.064]
Not Assumed			1.324	32.45	.195	1.833	1.384	[985, 4.650]

Appendix G: Motivation of Physical Activity Measure Revised (MPAM-R) Data at Pretest

Fitness Motivation

Table G.1.Group Statistics: Pretest on the MPAM-R, Fitness Motivation

Groups	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	5.96	.734	.088
Control	26	3.108	.660	.129

Table G.2. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	P	Mean Diff.	SE Diff.	95% CI
Assumed	.286	.594	877	92	.383	143	.163	[467, .181]
Not Assumed			914	49	.365	143	.156	[457, .171]

Interest & Enjoyment Motivation

Table G.3.Group Statistics: Pretest on the MPAM, Interest & Enjoyment Motivation

Groups	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	5.63	.987	.120
Control	26	5.83	.789	.155

Table G.4. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	T	df	Р	Mean Diff.	SE Diff.	95% CI
Assumed	1.807	.1821	932	92	.354	202	.216	[631, .228]
Not Assumed			-1.03	56.38	.307	202	.196	[593, .190]

Competence Motivation

Table G.5.Group Statistics: Pretest on the MPAM, Competence Motivation

Groups	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	5.56	.976	.118
Control	26	5.84	.974	.191

Table G.6. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	P	Mean Diff.	SE Diff.	95% CI
Assumed	.090	.7645	-1.219	92	.226	274	.225	[721, .172]
Not Assumed			-1.221	45.394	.228	274	.225	[727, .178]

Appearance Motivation

Table G.7. *Group Statistics: Pretest on the MPAM, Appearance Motivation*

Groups	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	5.29	1.10	.133
Control	26	5.38	1.31	.256

Table G.8. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	P	Mean Diff.	SE Diff.	95% CI
Assumed	2.085	.1522	-1.219	92	.721	095	.267	[625, .434]
Not Assumed			3305	39.172	.743	095	.289	[679, .488]

Social Motivation

Table G.9.

Group Statistics: Pretest on the MPAM, Social Motivation

Groups	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	4.3	1.37	.166
Control	26	4.14	1.41	.276

Table G.10. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	Df	P	Mean Diff.	SE Diff.	95% CI
Assumed	.201	.6553	.517	92	.606	.164	.318	[467, .796]
Not Assumed			.511	44.171	.612	.164	.322	[484, .813]

Appendix H: Rickel Value Inventory Data at Posttest

Objective Commitment, Analysis by Group

Table H.1.

Group Statistics: Posttest on the Rickel, Objective Commitment

Group	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	37.556	5.21	.632
Control	47	36.02	6.34	.925

Table H.2. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	p	Mean Diff.	SE Diff.	95% CI
Assumed	2.406	.124	1.422	113	.158	1.538	1.081	[604, 3.679]
Not Assumed			1.373	86.12	.173	1.538	1.120	[689, 3.764]

Objective Commitment, Analysis by Gender Regardless of Group

Table H.3.

Gender Statistics: Posttest on the Rickel, Objective Commitment

Group	N	Mean	Std. Deviation	Std. Error Mean
Males	70	37.50	5.70	.682
Females	45	36.04	5.71	.851

Table H.4. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	p	Mean Diff.	SE Diff.	95% CI
Assumed	.014	.906	1.34	113	.18	1.456	1.09	[704, 3.62]
Not Assumed			1.34	93.91	.19	1.456	1.09	[709, 3.62]

Subjective Commitment, Analysis by Group

Table H.5. *Group Statistics: Posttest for the Rickel, Subjective Commitment*

Group	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	25.51471	4.63759	0.56239
Control	47	23.09	5.838	0.852

Table H.6. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	Df	p	Mean Diff.	SE Diff.	95% CI
Assumed	4.571	.035	2.482	113	.015	2.430	.979	[.490, 4.369]
Not Assumed			2.381	83.920	.020	2.430	1.020	[.400, 4.459]

Subjective Commitment, Analysis by Gender Regardless of Group Table H.7.

Gender Statistics: Posttest on the Rickel, Subjective Commitment

Group	N	Mean	Std. Deviation	Std. Error Mean
Males	70	25.57	5.2	.621
Females	45	22.89	5.02	.749

Table H.8. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	p	Mean Diff.	SE Diff.	95% CI
Assumed	.062	.803	2.74	113	.007	2.683	.980	[740, 4.625]
Not Assumed			2.76	96.33	.007	2.683	.973	[751, 4.614]

Appendix I: Motivation of Physical Activity Measure Revised (MPAM-R) Data at Posttest

Fitness Motivation, Analysis by Group

Table I.1. *Group Statistics: Fitness Motivation Posttest for the MPAPM-R*

Group	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	5.98	.732	.089
Control	47	6.06	.822	.120

Table I.2. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	p	Mean Diff.	SE Diff.	95% CI
Assumed	.311	.578	569	113	.571	0831	.146	[372, .206]
Not Assumed			557	91.344	.579	0831	.149	[379, .213]

Fitness Motivation, Analysis by Gender Regardless of Group

Table I.3.

Gender Statistics: Fitness Motivation Posttest for the MPAPM-R

Group	N	Mean	Std. Deviation	Std. Error Mean
Treatment	70	6.06	.703	.084
Control	45	5.93	.860	.128

Table I.4. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	p	Mean Diff.	SE Diff.	95% CI
Assumed	2.831	.095	.913	113	.363	.134	.147	[157, .425]
Not Assumed			.874	80.45	.365	.134	.153	[171, .439]

Interest & Enjoyment Motivation, Analysis by Group

Table I.5. *Group Statistics: Interest & Enjoyment Motivation Posttest for the MPAPM-R*

Groups	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	5.75	.928	.113
Control	47	5.81	1.00	.146

Table I.6. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	p	Mean Diff.	SE Diff.	95% CI
Assumed	.069	.793	378	113	.706	069	.182	[430, .292]
Not Assumed			372	93.921	.710	069	.185	[436, .298]

Interest and Enjoyment Motivation, Analysis by Gender Regardless of Group Table I.7.

Gender Statistics: Interest and Enjoyment Motivation Posttest for the MPAPM-R

Group	N	Mean	Std. Deviation	Std. Error Mean
Treatment	70	5.81	.99	.118
Control	45	5.72	.911	.136

Table I.8. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	p	Mean Diff.	SE Diff.	95% CI
Assumed	.293	.589	.477	113	.634	.088	.183	[276, .451]
Not Assumed			.486	99.56	.628	.088	.180	[270, .445]

Competence Motivation, Analysis by Group

Table I.9. *Group Statistics: Competence Motivation Posttest for the MPAPM-R*

Groups	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	5.63	.858	.104
Control	47	5.63	1.038	.151

Table I.10. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	p	Mean Diff.	SE Diff.	95% CI
Assumed	1.634	.204	.011	113	.991	.002	.177	[350, .354]
Not Assumed			.011	86.45	.991	.002	.184	[363, .367]

Competence Motivation, Analysis by Gender Regardless of Group Table I.11.

Gender Statistics: Competence Motivation Posttest for the MPAPM-R

Group	N	Mean	Std. Deviation	Std. Error Mean
Treatment	70	5.73	.92	.11
Control	45	5.47	.94	.14

Table I.12. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	p	Mean Diff.	SE Diff.	95% CI
Assumed	.001	.976	1.431	113	.155	.254	.177	[097, .604]
Not Assumed			1.425	92.64	.158	.254	.178	[100, .607]

Appearance Motivation, Analysis by Group

Table I.13. *Group Statistics: Appearance Motivation Posttest for the MPAPM-R*

Groups	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	5.44	1.26	.153
Control	47	5.23	1.30	.190

Table I.14. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	p	Mean Diff.	SE Diff.	95% CI
Assumed	.008	.929	.844	113	.400	.205	.242	[276, .685]
Not Assumed			.840	97.20	.403	.205	.244	[279, .688]

Appearance Motivation, Analysis by Gender Regardless of Group Table I.15.

Gender Statistics: Appearance Motivation Posttest for the MPAPM-R

Group	N	Mean	Std. Deviation	Std. Error Mean
Treatment	70	5.58	1.18	.14
Control	45	5.00	1.35	.20

Table I.16. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	p	Mean Diff.	SE Diff.	95% CI
Assumed	.927	.338	2.44	113	.016	.583	.239	[.110, 1.06]
Not Assumed			2.37	84.97	.020	.583	.246	[.095, 1.07]

Social Motivation, Analysis by Group

Table I.17. *Group Statistics: Social Motivation Posttest for the MPAPM-R*

Groups	N	Mean	Std. Deviation	Std. Error Mean
Treatment	68	4.46	1.33	.161
Control	47	3.74	1.58	.230

Table I.18. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	p	Mean Diff.	SE Diff.	95% CI
Assumed	4.27	.041	2.664	113	.009	.726	.272	[.186, 1.27]
Not Assumed			2.583	87.93	.011	.726	.281	[.167, 1.28]

Social Motivation, Analysis by Gender Regardless of Group Table I.19.

Gender Statistics: Social Motivation Posttest for the MPAPM-R

Group	N	Mean	Std. Deviation	Std. Error Mean
Treatment	70	4.19	1.50	.18
Control	45	4.12	1.44	.22

Table I.20. *Independent Samples t Test with Levene's Test for Equality of Variance*

Equal Variance	F	Sig.	t	df	p	Mean Diff.	SE Diff.	95% CI
Assumed	.237	.627	.263	113	.793	.074	.283	[486, .634]
Not Assumed			.265	96.66	.792	.074	.280	[482, .631]

Appendix J: Introduction to the Study

Video Introducing Study

Please contact the author to view the introduction video.

Transcript

Hello everyone! My name is Elaine Foster and I am PhD candidate in the Movement sciences department at the University of Idaho, where I am working with Dr. Sharon Stoll who is the director for the Center for ETHICS* (Ethical Theory and Honor in Competitive Sports).

The Center of ETHICS* was founded in the 1980's and has been involved in cutting edge research around sport and physical activity philosophy and ethics. The Center has been associated with (list from online):

- The United States Naval Academy
- The United States Air Force Academy
- The United States Central Intelligence Agency
- NCAA, NFHSAA, NYSCA
- WADA
- Washington State University, University of Georgia Football Team
- Atlanta Braves

As I am part of the Center for ETHICS*, I too am engaging in important research around the purpose and value PA and sport have in our lives. In particular, for my study, I would like to understand how kinesiology college students' value, are committed to, and are motivated to participate in sport and PA. As the future leaders within sport and PA, understanding this aspect is critical to the future of sport and PA.

Your instructor also recognized the importance of this research and is willing to include my study as a part of your class this semester. So, I'm inviting you all to participate in my dissertation study. Although you may be required to complete the tasks for an assignment in your course, you do not have to consent for me to use your data, though I hope you will consider it, not just for my sake, but to be part of this very important research process. Further, I can assure you that your data will be kept confidential; only your instructor, myself, and my major professor will have access to your responses. Further, I will

not be able to associate any of your data with you because your instructor will replace your name with a number before giving me your responses.

My study includes two instruments and 5 online lessons. IF you are part of the treatment group you will engage in the following:

The first instrument has 18 questions that asks you to identify why you are committed to PA. The second has 30 questions where you will indicate what motivates you to participate in PA. It should take no more than 10 minutes to complete each of these instruments. Within the online lessons, you will read background information, watch video clips, and answer open-ended questions about your experiences in sport and PA. Each lesson takes about 20 minutes to complete.

IF you are part of the control group:

You will complete the consent form and instruments, but not the lessons. However, because the lessons have potential positive benefits for those participating, the control group will have access to those lessons once the study concludes.

Your instructor will guide you through what tasks to complete. If you have any questions, please contact me. And, THANK YOU for your consideration to be part of furthering our understanding of the value of PA and sport.