MASS TRIATHLON PARTICIPATION AS A HUMAN NEED TO SET THE GOALS AND CROSS THE BORDERS. HOW TO UNDERSTAND THE TRIATHLETE?

Abstract – Buchholz and Artinian (2009) defined physical activity and categorized it into three levels: low, moderate, and high. Triathlon as an activity that typically combines swimming, cycling and running in one event, belongs to high level and is considered as a hard discipline, requiring frequent, well-planned training. The three sports are performed consecutively with no breaks. As recreational athletes show a growing interest in long-distance events, and the participation in triathlon is increasing, the aim of this article is to try to understand the popularization of such a difficult sport as triathlon. The research question is what motivates people to participate in triathlon and why people feel this strong need to participate in such exhausting sports competition? It was decided to look for answers to the research questions in the available literature on the problem and in the review of research on participation in triathlon. It turns out that the basis of most of the considerations was the Self Determination Theory. Many authors have referred in their research to the Motivations of Marathoners Scale (MOMS).

Keywords: triathlon; sport participation; motivation; human needs.

PARTICIPAÇÃO NO TRIATLO COMO NECESSIDADE HUMANA PARA DEFINIR METAS E ULTRAPASSAR FRONTEIRAS. COMO COMPREENDER O TRIATLETA?

Resumo - Buchholz e Artinian (2009) definiram a atividade física e a categorizaram em três níveis: baixo, moderado e alto. O triatlo é uma atividade que normalmente combina natação, ciclismo e corrida em uma única prova, portanto é de nível alto e é considerada uma modalidade difícil, exigindo planejamento e treinamentos intensos. Os três esportes são realizados consecutivamente sem interrupções. Como os atletas amadores demonstram um interesse crescente por eventos de longa distância e a participação no triatlo está aumentando, o objetivo deste artigo é tentar compreender a popularização de um esporte tão difícil como o triatlo. A questão de pesquisa é o que motiva as pessoas a participarem do triatlo e por que as pessoas sentem a necessidade de participar de uma competição esportiva tão exaustiva? Optou-se por buscar respostas para as questões de pesquisa um uma revisão de literatura sobre o problema e sobre participação no triatlo. Encontrou-se que base da maioria das pesquisas é Teoria da Autodeterminação. Muitos autores referiram em suas pesquisas a Escala de Motivações dos Maratonistas (MOMS).

Palavras-chave: triatlo; participação esportiva; motivação; necessidades humanas.

LA PARTICIPACIÓN EN EL TRIATLÓN COMO NECESIDAD HUMANA DE DEFINIR METAS Y EXCEDER FRONTERAS. ¿CÓMO ENTENDER EL TRIATLETA?

Resumen - Buchholz y Artinian (2009) definieron la actividad física y la categorizaron en tres niveles: bajo, moderado y alto. El triatlón es una actividad que normalmente combina la natación, el ciclismo y la carrera en una sola prueba, por lo que es de nivel alto y se considera una modalidad difícil, que requiere una intensa planificación y entrenamiento. Los tres deportes se realizan de forma consecutiva sin interrupción. A medida que los deportistas aficionados muestran un interés creciente por los eventos de larga distancia y la participación en el triatlón es cada vez mayor, el objetivo de este artículo es intentar comprender la popularización de un deporte tan difícil como el triatlón. La pregunta de investigación es ¿qué motiva a la gente a participar en el triatlón y por qué la gente siente la necesidad de participar en una competición deportiva tan exhaustiva? Se decidió buscar respuestas a las preguntas de investigación con una revisión de la literatura sobre el problema y sobre la participación en el triatlón. Se encontró que la base de la mayoría de las investigaciones es la teoría de la autodeterminación. Muchos autores mencionaron en su investigación la Escala de motivación de maratón (MOMS).

Palabras-clave: triatlón participación deportiva; motivación; necesidades humanas.

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Introduction

Endurance sports can consume vast amounts of leisure time in preparation and training, particularly among non-professional participants[1]. Triathlon is an example of multi-sport endurance event involving swimming, running, and cycling. Racers are designated as either amateur or professional categories. Plant[2] claimed that the level of experience, distance of race, age, gender, and weight are categories which allow for accessibility for different types of triathletes that may compete. Amateurs are the majority of triathletes and are placed into the same age and gender for the opportunity to compete against others who are in the same range[3]. The most of triathlons follow the same format, and have four distances[3]:

- Sprint: 750m (0.5 mile) swim, 20k (12.4 mile) bike, 5k (3.1 mile) run,
- Olympic: 1.5k (0.93 mile) swim, 40k (24.8 mile) bike, 10k (6.2 mile) run,
- Long Course (Half-Ironman or 70.3): 1.9k (1.2mi) swim, 90k (56 mile) bike, 21.09k (13.1 mile) run,
- Full Course (Ironman): 3.8k (2.4 mile) swim, 180k (112 mile) bike, 42.195k (26.2 mile) run.

There are several organizations governing for triathlon events. The one of the most important is The World Triathlon Corporation (WTC) hosts triathlon events, including an Olympic distance triathlon series, the Ironman World Championship, and the USA Triathlon (USAT). The second one is The International Triathlon Union (ITU) responsible for the international governing body of the sport and supports triathletes vying for the Olympics, and USAT - the sanctioning authority for triathlon focused events including races, programs, camps, and clinics[4].

Physical activity when skeletal muscles producing bodily movement has been categorized into three levels of intensity of low, moderate, and high[5-6]. This division defines it in three different ways (Table 1).

Table 1. Levels of intensity of physical activity

	Level of Intensity	Features	Time to be Active
1.	High	Active	More than 30 minutes per day

2.	Moderate	Insufficient exerciser	More than 10 minutes per day Less than 30 minutes per day
3.	Low	Inactive	Less than 10 minutes per week

Source: CDC, Physical activity, 2012[7]

According to this approach, active persons engage in moderate to high intense physical activity 30 minutes or more per day. The low intensity concerning insufficient exercisers perform more than 10 minutes but less than 30 minutes per day of moderate to high intense physical activity. Third group of people, individuals who are inactive, engage in less than 10 minutes total per week of moderate or vigorous-intensity activities[8]. Triathletes are people who do the recommended moderate levels of exercise or more. Between them are extreme exercisers who choose to exercise for an extended period of time, usually for the purpose of competing in sporting events that go beyond traditional distances[8]. Successfully participating in a triathlon requires hard work and a training plan. The most desirable features of a triathlete are increases in strength, mobility and stamina. Before the competition they want to achieve already at the training level the following[9]:

- increase general work capacity (force x distance/time) and power (work/time),
- improve the ability to tolerate increasing levels of muscular fatigue,
- upgrade cardiorespiratory capacity,
- enhance the strength and resiliency of muscles, tendons and ligaments,
- improve the body awareness, balance and coordination,
- decrease fat mass levels and increase lean mass.

In most triathlons, the events (swim-bike-run) are placed back-to-back in immediate sequence. Proficiency in swimming, cycling and running alone are not sufficient to guarantee a triathlete a competitive time because a competitor's official time includes the time required to ‘transition’ between the individual legs of the race. It includes any time necessary for changing clothes/shoes, eating/drinking, etc. Trained triathletes have learned to race each stage in a way that preserves their energy for subsequent stages. Trained triathletes have learned to race each stage in a way that

preserves their energy for subsequent stages[10]. Achieving these goals requires discipline and sacrifice.

The observed dynamic development of mass sporting events comes with questions about the motivations to participate in them. Researchers have proffered a number of studies connected with the motivations of endurance sport participants, including marketing the activity in question, construction of and adherence to training programs, promotion of regular exercise and a healthy lifestyle to the general public[11]. The research question in this article is what motivates people to participate in triathlon and why people feel this strong need to participate in such exhausting sports competition? The Authors of these study look for the answers in the available literature and in the review of the research on participation in triathlon.

Theoretical Framework

One of the best known measure used to understand motives for participating in sporting events is the Motivations of Marathoners Scale (MOMS) developed by Masters and co-authors. They develop a questionnaire to measure motivation for marathon running. Their research showed satisfactory psychometric indicators, defining the reliability and accuracy of the questionnaire, as well as the adequacy of the model. In te Table 2, the result was the 56-item MOMS, with 4 motivational measures[13] (physical health, social motives, achievement motives and psychological motives), and nine scales[14] (general health orientation, weight control, affiliation, recognition, competition, personal goal achievement, psychological coping, self-esteem, and life meaning)[14].

Table 2. Motivations of Marathoners Model

Motivation	Physical/General health orientation/Weight concern
	Social/Affiliation/Recognition
	Achievement/competition/Personal goal achievement
	Psychological/psychological coping/Self steem/Life meaning

Source: Masters and Ogles[14]

The MoMS scale has been used in many studies, for example the ones exploring motivation of marathon runners for running marathons due to the level of experience[14],

gender[15], cognitive strategy[16] and age[17]. Doppelmayr and Molkenthin[18] used the MOMS framework and investigated motivational differences between marathon runners, ultramarathoners and adventure ultramarathoners. LaChausse[12] used MOMS to understand the motives between male and female competitive, non-competitive and leisure cyclists.

The first known study in literature to use a modified version of the MOMS with triathletes was completed by Croft, Gray and Duncan[19] who studied elite and non-elite triathletes registered with Triathlon Australia. The elite participants felt as though they had more life purpose for competing in triathlons. Lovett[20] utilized a modified version of the MOMS to understand specific motives for consumption of products and participation in triathlons. The purpose of Lovett's study was to research on variation based on gender, level of activity, and previous experience. Lovett found that females had greater personal goal achievement, affiliation and life meaning scores than males[21].

The second, well known measure which supports understanding individuals' motivation to exercise is a psycho-social model, is the Self Determination Theory[21] . This theory addresses issues such as personality development, self-regulation, psychological needs, life goals and aspirations, energy and vitality, and a host of other issues related to well-being and life domains[22]. The authors use this theory to examine how the processes and structures of rewards, directives, feedback, praise, and regard enhance or diminish self-motivation and outcomes[22]. Motivation constructs are distinct within the SDT as being either autonomous or controlled. When people are autonomous, it is intrinsic motivation that encourages behavior change and increases self-endorsement for action (Table 3).

Table 3. SDT Model of Motive Types and Associated styles.

		External
Controlled	Extrinsic motivation	Introjection
		Integrated
Autonomous	Intrinsic motivation	

Source: Deci and Ryan[21]

According to Brown[4], controlled motives, however, are extrinsic but may also encourage behavior change due to the knowledge of rewards or punishments. Both types of motivations encourage behavior and are contrasts to amotivation or the lack of motivation[22]. Moreover, controlled motives are associated with external, introjected or integrated motives. Autonomous motives are explicitly intrinsic in their regulation and association.

The Self Determination Theory (SDT) has also been used to find the value in the relationship between physical and psychological health, well-being, and motivation and triathlete participation. For example, Lovett[21] identified varied reasons among physical, social, achievement and psychological variables to explain why people choose to participate in triathlons. Lamont and Kennelly[22] designed their qualitative study on triathletes through the SDT theoretical lens. Unlike the study completed by Lovett[21], the participants in the Lamont and Kennelly[23] study found well-being, which included healthy aging, was believed by many interviewees to be achievable because of the training and competing, to be significant. Triathlon training was viewed as a catalyst to maintain health and functionality as they age. Self-reports of lowered levels of stress, due to triathlon training, have been reported among men and women[23]. Some researchers like Youngman and Simpson[23] have studied the identification as a triathlete due to the at-risk possibility of the sport becoming an addiction as opposed to a commitment to exercise[23]. Commitment to the sport requires long hours of preparation. The triathlete can spend between 10-20 hours weekly preparing for a race. This is in addition to their commitments to family, career, and community. However, when there is the opportunity for performance improvement the triathlete will find a way to make it work. For some, this meant temporarily sacrificing certain luxuries. For others, it meant choosing destination vacations that correspond with triathlon races to maximize family and triathlon time. Triathlons, therefore, have been integrated into their lives.

Brown[4] proposed a link between the MOMS scales and the regulated styles of the SDT to identify how the motives are regulated. First of all, Brown [4] reviewed conclusions from the qualitative study by Lamont and Kennelly[23] to match associated processes within the SDT with scales within the MOMS. Then the researcher matched and interpreted key words which describe the associated processes and the scales (Table 4). For example,

under the SDT regulated style, external motives are processed extrinsically either through external rewards, punishments, or through compliance.

Table 3. Self Determination Theory and MOMS scale Relationship.

Controlled	Extrinsic motivarion	External	Weight control
			Competition
		Introjection	Recognition
			Self etreem
		Intergration	Health orientation
			Personal goals
			Psychological coping
			Afiliation
Autonomous	Intrinsic motivation		Life meaning

Source: Masters and Ogles[13].

Weight control is described within the SDT as having motives to look leaner, control weight, or reduce weight. The rationale for this scale being external was the association of key words producing an external type of reward. The researcher interpreted ‘look’ and ‘reduce’ as visual rewards and ‘control’ was completed through compliance. Table 3 depicts an integrative model that ties the Self Determination Theory and the Motivation for Marathoners Scale. The top portrait describes the controlled motivators while the bottom describes the autonomous motivators. Each of the scales of the MOMS and their proposed links to the SDT are to the right of the model[4].

Conclusions

Several researchers have tried to study and developed the motives to mass triathlon participation. They have reported social, psychological, and physical reasons.

Social motives

Research into motives of participation studies reporting on social motives have indicated a ‘sense of belonging’ among event participants[24]. This concept was discussed as an important aspect to implementation of exercise initiatives[25]. According to

researchers Virnig and McLeod[26] triathletes are likely to train with others significantly more than runners, suggesting a stronger social component to the triathlon subculture. Hendy's and Boyer's[27] research indicate that women triathletes place more importance to social support than men in general and elite women triathletes indicate the importance of support from spouses and family members as key to continuing participation. While Master triathletes demonstrated an understanding that social activity is key to wellness in aging[28], women (ages 30+) who regularly competed with successful outcomes downplay the importance of social support in their success in comparison to psychological and physical aspects[28].

Psychological motives

Researchers Bell and Howe[29] have considered positive psychological health as necessary for successful extreme level sport participation. Research results of Baczurik[30] demonstrates an increase of self-esteem and and increase of self-efficacy as psychological reasons for amputee women to participate. In Cronan and Scott[31] opinion, there was a transformative effect of women participating in a triathlon training program who moved from struggling with their body image to recognizing the strength they embodied.

Physical motives

Brown and Collins[32] proved that improving health was the top motivational response for participation in events sponsored by the triathlon group. Triathletes expressed physical health benefits, including the desire to lose weight or increasing strength and improving coordination were also reasons for participation[23]. Authors recommended resistance exercise, a key part of triathlon training, to increase strength to minimize degenerative muscular function associated with aging[33]. The participants were mostly motivated by their ability to improve health. James, Pobee, Oxidine, and Brown[34], 2012 have studied the perception of women's ability to lose weight and then maintain weight loss among overweight and obese women. They said that cultural ideas which do not closely identify with the majority culture, (e.g. less social pressure to be thin) have been known to effect body image perception, reduce weight[34].

Literature and current research studies have found value in the relationship between physical and psychological health, well-being, and motivation and triathlete

participation[21,23]. Older adults who have stronger social network ties have predicted better health and resources exchanged within a physically active social environment have been associated with positive health[33]. Brown[4] indicated the link between the MOMS scales and the regulated styles of the SDT. It was a brave step but allowed an interesting conclusion. Researche´s matched and interpreted key words which describe the associated processes and the scales (Table 3). One of the MOMS scales hypothesized to be linked to external motives is weight control described within the SDT as having motives to look leaner, control weight, or reduce weight. The rationale for this scale being external was the association of key words producing an external type of reward. The researcher interpreted 'look' and 'reduce' as visual rewards and 'control' was completed through compliance.

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