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**COACHING LEADERSHIP APPROACH,
CHILDREN'S PERFORMANCE AND
MOTIVATION TO CONTINUE FOOTBALL
TRAINING**



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ABSTRACT

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Football is the most widespread sport not only in the world but in Greece as well. It is a team sport played with a ball trying to score at the goals. Nowadays it is the most popular sport among children. They join the sport at early ages in football academies and clubs. Due to dropout of young athletes from sports as they grow, there is a need to explore how coaches can promote adherence and increase athletes' motivation. Coaches for these ages do not always have a solid sport science background, they are mostly volunteers, ex-athletes or novices with limited previous training to lead the youngsters. The topic of my thesis is about a small-scale quantitative, field experiment that tests two different leadership-coaching approaches (democratic/autonomy supportive versus autocratic/controlling), on teaching football skills to young footballers and examine the effects on their performance, intrinsic motivation and intention to continue football training for the next training season. The commissioning party was chosen to be the football club "Ippokrates" and their academies, which promotes wellbeing and football in Athens, Greece and more specifically in the region of Peristeri, a municipality in Athens with many local football clubs. Twenty-two young footballers, aged 6-9, assigned equally in 2 groups. Group A: Democratic/autonomy support and group B Autocratic/controlling. Their coach is instructed to apply different techniques to each group that corresponded to the different respective approaches. Both groups practiced the same passing and shooting skills for four training sessions. Results showed that there were no significant improvements on both skill tests, however mean observations favored the democratic/autonomy supportive group. Moreover, the democratic/autonomy supportive group scored significantly higher on intrinsic motivation and intention to continue football training. Finally, I discuss my results as well as limitations of my thesis and practical implications on how coaches can lead young athletes during training to learn, enjoy and adhere to sports.

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1 Introduction

The Ancient Greeks were known to have played many ball games, some of which involved the use of the feet. The Roman game *harpastum* is believed to have been adapted from a Greek team game known as “*Episkyros*” or “*phaininda*”, which is mentioned by a Greek playwright, Antiphanes (388–311 BC) and later referred to by the Christian theologian Clement of Alexandria (c.150-c.215 AD). These games appear to have resembled more a rugby style football. In the modern era, however, association football was introduced to the Greeks by expatriate British communities and military personnel. The first Greek football teams were created as part of long-established athletic and gymnastic clubs in the major port cities of Athens and Thessaloniki, as well as among the large Greek communities of the Ottoman Empire, such as Constantinople and Smyrna, in the early 1900s. (Greek *Episkyros*, 2019)

Nowadays in Greece, football is the most popular sport and there are millions of youth sport participants of all ages, the majority of which start playing under the age of nine. Nevertheless, participation rates decline sharply by the time children become teenagers up to 75%. Motivation is considered among the main determinants of dropout from sports (Gardner, Vella, & Magee, 2016). Although many factors may influence athletes’ motivation, the coach–athlete relationship is one of the most important influences on athletes’ motivation and subsequent performance. Coaches and peers in training and competitions create an atmosphere that highly affect athlete’s motivation to participate in sports (Burton, 1988). The drop out of youngsters from sports relates highly to the coach-athlete relationships (Quested et al., 2013). Therefore, coaches need to know how to motivate young athletes to keep training and enjoy the health and psychosocial benefits of sport participation.

Because most youth sports coaches are volunteers, ex-football athletes with little or no formal training in coaching and child development, they cannot be expected to correctly match demands of a sport with a child's readiness to participate. Thus, how to keep high motivation to young footballers is among the crucial coach education topics for football coaches who have no previous formal sport education e.g. volunteers or novice coaches in football academies and clubs.

The topic of my thesis is about a small scale, field experiment of two different leadership-coaching approaches on teaching football skills to young footballers and explore the effects on their

performance, intrinsic motivation and intention to continue football training for the next training season. The research approach I used was quantitative with an experimental design.

This thesis topic supports the development of my expertise as a football coach for young kids and adolescents. How the coach leads the group of athletes affects the relationships not only between coach and athlete but also the athlete-to-athlete relationships and as a result, the environment of the team. Therefore, I believe that the topic I chose will give me the opportunity to develop further my coaching skills and to help my future young athletes to not only learn skills and perform better but also to keep them motivated about their favorite sport.

Previous research, theories and applied frameworks on how to better motivate athletes to avoid dropout are reviewed. Based on this reviewed previous knowledge, a training program aiming to increase motivation has been developed and then tested to young footballers.

2 The Commissioning Party Football Club “Ippokrates”

‘Ippokrates’ is a football team located in Peristeri, Athens in Greece. Peristeri is one of the largest in population municipalities which allows the area to have multiple athletic facilities and many athletes in many sports. ‘Ippokrates’ is a well-respected and known club in the area and was founded in 1981. The club owns one training facility for their youth academies and shares with other local teams another for their men’s team. The facility for their academies gives them an advantage from the other local clubs which must share their facilities and hours of use as ‘Ippokrates’ does not. This is one of the reasons why they have hundreds of young aspiring footballers join this club.

As the growth usually has been constant in athletes signing up each year to play football, in the past years that number has fallen greatly and dropouts of athletes that have practiced for at least 2-3 years have also been noticed. While this may seem normal due to the country’s financial situation, people in charge of athletic academies have reasons to believe otherwise.

Having worked closely with ‘Ippokrates’ the past years due to my practical trainings, discussions have been made of what are the reasons for the noticed dropouts. One of conclusions was due to the coaching mentalities. This is how the idea of this topic was born and due to my good relations with the club and the people who run it, it was possible to use their facilities and work with their athletes and coaches.

3 THEORETICAL FOUNDATIONS / CONCEPTUAL PREMISES

This chapter describes the theoretical foundations of this thesis topic, as well as the conceptual basis on which is grounded. Firstly, a description of the motivational theory is presented as well as previous studies that have used and tested its effects on the motivation of athletes. Secondly, I describe a coaching leadership applied framework, and how leadership is related to motivation of athletes of various sports. Finally, I present the importance of coach behaviors on athletes' motivation.

3.1 Motivational theoretical framework

The theoretical framework of this topic is based on Self-determination theory (SDT). Self-determination theory is a prominent motivational theory adopted to identify the contextual and interpersonal factors that underpin on human behavior. Self-determination theory seek to explain human motivation and behavior on the basis of individual differences in motivational orientations, contextual predictors of motivation, and interpersonal perceptions. Central to self-determination theory is the distinction between self-determined or autonomous forms of motivation relative to non-self-determined or controlling forms of motivation. The extent to which people experience motivation to engage in activities and behaviors as autonomous or controlling will determine their persistence with the behavior in future and whether they gain certain adaptive outcomes such as satisfaction, enjoyment, and psychological well-being. (Deci & Ryan, 1985, 2000, 2007)

Organismic integration theory (OIT), a sub-theory of self-determination, that seeks to provide an explanation for the processes by which people assimilate behaviors that are externally regulated and incorporate them into their repertoire of behaviors that are self-determined and integrated into their personal system. OIT differentiates between different qualities of motivation conceptualized along a graduated continuum of motivational styles or regulations. The continuum, known as the perceived locus of causality, is characterized by two autonomous forms of motivation. The first one intrinsic motivation and the second one identified regulation. There are also two relatively controlling motivational designs. The external and the introjected regulation. (Ryan & Connell, 1989). Intrinsic motivation refers to engaging in behavior for motives that emanate

from the self, such as for the enjoyment, satisfaction, and fulfilment that behavioral engagement provides. Identified regulation represents engaging in a behavior for reasons that are highly valued albeit external to the self. Introjected regulation describes engaging in a behavior for contingent self-worth or to avoid negative outcomes such as guilt and shame. Introjected regulation has been described as involving internal prods and pressures arising from conflict between the demand of the regulation and the individual's lack of interest in the behavior itself. External regulation is the prototypical form of extrinsic motivation and refers to engaging in behavior for the acquisition of rewards or avoidance of punishment. Important for researchers and practitioners in the field of physical activity, individuals who act for autonomous reasons, intrinsic motivation and identified regulation, are more likely to persist in the absence of discernable external rewards or contingencies. Therefore, if interventions can promote autonomous motives for engaging in a sporting activity among individuals it is likely to lead to persistence over time and cede the health benefits of physical activity to those individuals. (Deci & Ryan, 2000).

Another fundamental sub-theory of self-determination theory is Basic Needs Theory (Deci & Ryan 2000) suggesting that the origins of self-determined motivation stem from individual's innate propensity to satisfy three basic psychological needs: autonomy, competence, and relatedness, defined as:

- a) Autonomy: the psychological need to feel a sense of volition, choice and decision-making and an internal locus of control;
- b) Relatedness: the need of feeling that one is respected, connected and cared for by others in the context;
- c) Competence: the need that describes feeling efficacious and effective with regard to the tasks at hand (Figure 1.).

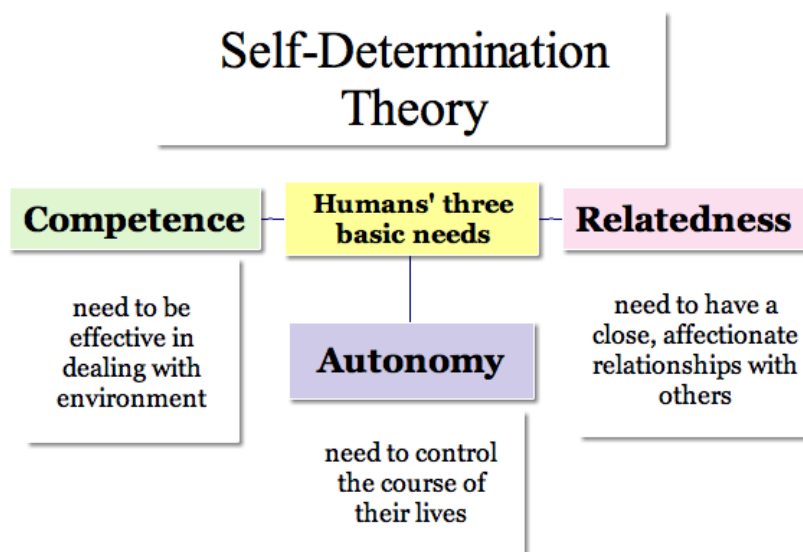


Figure 1. Deci & Ryan (1985): The self-determination theory

These needs are perceived to be fundamental to all humans and people approach behaviors for autonomous reasons because they perceive it as being efficacious in satisfying psychological needs. Basic needs theory is linked with OIT because it charts the origins of autonomous or self-determined motivational regulations. The perceived locus of causality is proposed to reflect the degree to which behaviors have become internalized or 'taken in'. Behaviors that have the propensity to fulfil personally relevant goals that are valued by individuals are perceived as efficacious in satisfying psychological needs. Increased participation in such behaviors will likely lead to the behavior being internalized and, finally, integrated into the person's repertoire of behaviors that satisfy these needs. As a result, people may not perform a sport for the activity itself as in the 'classic' definition of intrinsic motivation. Rather, they perform it to achieve an intrinsic 'outcome' which is highly valued and perceived as part of the person's 'true self'. This is consistent with integrated regulation, which is an autonomous form of motivation on the perceived locus of causality from OIT. It is also important to note that the three basic needs are complimentary – that is, optimal functioning and truly integrated behavior can only result if all three psychological needs are supported. For example, competence alone, i.e. mastering a technique or skilled action alone is not sufficient for a behavior to be perceived to be need satisfying. Competence along with a perception that the behavior is performed out of a true sense of self, without external contingency, perceived or real, and out of choice and volition (i.e., autonomously motivated) and that behavioral engagement is supported by others in an autonomous fashion (i.e., relatedness)

is necessary for an action to be fully integrated and to support psychological needs. (Deci & Ryan, 2000).

Research has suggested that the basic needs tend to be strongly correlated and can be subsumed by a single global factor (Hagger et al., 2006; Ntoumanis, 2005; Standage et al., 2005) and interventions that provide synergistic support for the needs of autonomy, competence, and relatedness tend to result in greater behavioral engagement than support for each individual need alone (Deci et al., 1994). Overall, the satisfaction of basic psychological needs has been shown to be related to autonomous forms of motivation in health-related behavioral contexts from the perceived locus of causality consistent with self-determination theory (Edmunds et al., 2007; Hagger et al., 2006; Standage, Gillison, & Treasure, 2007) and interventions supporting autonomous motivation were found to increase psychological need satisfaction as well as motivational regulations (Edmunds et al., 2007).

Recent reviews of the literature on SDT theory and its applications in exercise and sport settings provide good evidence for the value of SDT in understanding exercise behavior (Ntoumanis, 2012; Teixeira, 2012). A more recent study with youth soccer teams in five countries England, France, Greece, Norway, and Spain completed a questionnaire tapping perceptions of coach-provided autonomy support, basic psychological need satisfaction (i.e. autonomy, competence and relatedness), soccer enjoyment, and intentions to drop out of soccer in the next season. Findings supported a model for future interventions that could affect children's enjoyment of, and intentions to continue, playing soccer. The hypothesized model that predicted youth sport dropout across these five European countries was autonomy supportive coaching → satisfaction of basic needs → increased enjoyment → decreased intentions to drop out of soccer. (Quested et al., 2013).

3.2 Coaching leadership applied framework

In the applied field of sports environments, leadership styles of coaches have frequently applied leadership frameworks and instruments to measure leadership styles in sport organizations. The most popular of Chelladurai and Saleh (1980), tried to explain leadership models in sport context. According to Chelladurai and Saleh (1980) "leadership provided by the coach is mainly instrumental in enhancing the motivational state of the group and because, in turn, the motivational state

of the group is the ultimate basis of performance effectiveness, research in leadership process in sports may significantly contribute to the understanding of sport performance”.

Chelladurai and Saleh (1980) developed the Leadership Scale for Sport (LSS) for measuring leadership in research in sport. The LSS is made up of five subscales, two of which assess the coach’s decision-making style democratic and autocratic, two assess the coach’s motivational tendencies social support and positive feedback, and one assesses the coach’s instructional tendencies for training and instruction.

The focus in the current research is mainly on the two decision-making styles of autocratic and democratic coaching behaviors. Autocratic behavior describes a coach who displays a rigid decision-making style and demands stringent obedience from the athletes regarding those decisions. On the other hand, democratic behavior reflects a coach whose leadership style includes and encourages athletes’ opinions regarding goals, decisions and tactics. (Chelladurai & Saleh 1980).

According to previous research, motivational factors are related to the democratic and autocratic coaching leadership behaviors. For example, a more democratic coaching leadership approach is linked with the basic psychological needs (Sari et al., 2012), intrinsic motivation (Amorose & Horn, 2000; Hollembeak & Amorose, 2005), need satisfaction (Reinboth, Duda & Ntoumanis, 2004), skill development (Alfermann, Lee & Würth, 2005), and player satisfaction (Khalaj, Khabiri, & Sajjadi, 2011, Bahrami, Zardoshtian, & Jourkesh, 2011), as mentioned by Soyer et al., (2014).

3.3 The importance of the motivational influence of the coach

The actions of coaches might be one of the more critical motivational influences in the sport setting according to Mageau and Vallerand (2003). The importance of the coaches is apparent, because they are able to influence most of the factors identified as affecting motivational outcomes. For example, coaches are in the position to provide performance-related feedback, to give out rewards, and to involve athletes in the decision-making process. Research has shown that athletes’ perceptions of various behaviors exhibited by their coaches are associated with the athletes’ motivation (Horn, 2002; Mageau & Vallerand, 2003; Vallerand & Losier, 1999). For example, college athletes perceived their coaches to exhibit a leadership style that proved to have higher levels of intrinsic motivation. To manage this outcome, the leadership approach was lower in

autocratic behavior and greater in democratic/supportive behavior. Further, high levels of intrinsic motivation were associated with the perception that coaches provided frequent positive and informationally based feedback (i.e., technical instruction) and low frequencies of punishment-oriented feedback and ignoring behaviors. (Amorose & Horn, 2000).

Other studies have provided specific evidence that the relationship between coaching behaviors and motivation is mediated by the needs for competence, autonomy, and relatedness. The behaviors exhibited by coaches influence athletes' perceptions of competence, sense of autonomy, and feelings of relatedness, which, in turn, influences the athletes' motivation. (Hollembeak & Amorose, 2005; Sarrazin, Vallerand, Guillet, Pelletier, & Cury, 2002).

While many dimensions of a coach's behavior may affect athletes' motivation, one that would appear particularly relevant is the extent to which athletes perceive their coach to be autonomy-supportive versus controlling in their interactions with the athletes (Mageau & Vallerand, 2003). For instance, Hollembeak and Amorose (2005) revealed that the perceived leadership styles of coaches were associated with college athletes' intrinsic motivation through their influence on the athletes' needs. Athletes, for example, who perceived their coaches possessed an autocratic decision-making style felt lower levels of autonomy and relatedness, and subsequently reported less intrinsic motivation. Athletes who perceived their coach to have a democratic decision-making style, conversely, reported high levels of autonomy and intrinsic motivation. An authority figure, such as a coach, who uses an autonomy/supportive approach can accept others' thoughts and feelings, promote their own decision making and eagerness to start something by themselves. He also assists them on controlling their own actions and attitude. Furthermore, he reduces the amount of pressure he puts on others and his own need of controlling. Conversely, pressuring others to think, feel and act in a way consistent with the needs and wants of the authority figure characterizes a controlling interpersonal style. Basically, then, authority figures who are autonomy-supportive help to satisfy the needs of those with whom they work, whereas controlling behaviors serve to diminish need satisfaction and subsequent self-determined motivation (Mageau & Vallerand, 2003).

Considerable research outside the physical domain has shown an autonomy-supportive interpersonal style is an extremely effective motivational technique (Reeve, 2002). A growing body of research has also shown the motivational implications of perceived autonomy support in physical education settings (Hagger, Chatzisarantis, Culverhouse, & Biddle, 2003; Standage, Duda, &

Ntoumanis, 2005). While research in physical education clearly shows that autonomy support from a teacher affects students' motivation, there has only been a few studies that have specifically assessed athletes' perceptions of their coaches' autonomy-supportive interpersonal style and the resultant outcomes associated with those perceptions (Mageau & Vallerand, 2003). These studies, nevertheless, have similarly found positive outcomes associated with more autonomy-supportive coaching styles. For example, Reinboth, Duda, and Ntoumanis (2004) found that adolescent soccer and cricket players who perceived their coaches to be autonomy-supportive (i.e., provided athletes with choices and options), promoted a mastery motivational climate, and provided social support, positively influenced the athletes' perceptions of autonomy, competence, and relatedness, respectively. In turn, perceived competence and autonomy positively related to the athletes' psychological and physical well-being. Research has also supported the link between perceived autonomy support from coaches and athletes' motives for participating (Gagné, Ryan, & Bargmann, 2003; Pelletier, Fortier, Vallerand, & Bri re, 2001; Pelletier et al., 1995). Gagne and colleagues (2003), for instance, identified that gymnasts who convinced their coaches and parents to use an autonomy-supportive approach and assist in their participation roughly recorded to have a more autonomous motivation for the athletes. Similarly, Pelletier and colleagues (2001) found positive associations between perceived autonomy support and self-determined forms of motivation, whereas controlling coaching behaviors related to less self-determined forms of motivation in a sample of 13–22-year-old swimmers.

Although there is evidence that an autonomy-supportive interpersonal style is associated with positive cognitive, affective, and behavioral outcomes (Gillet, et al., 2010; Mageau & Vallerand, 2003). Few studies examining the influence of coaching behavior on athletes' motivation have specifically examined whether the pattern of relationships is similar across diverse groups of athletes (e.g., gender, age, competitive level). Therefore, in this study, it has been tested if an autonomy-supportive coaching style had an influence on motivation and performance of young athletes (6-9 years old).

3.4 The football coaching education and practice in Greece

Having practiced as a football coach for youngsters in three different countries, before, during and after my university studies (USA, Finland and Greece), made me realize these different

approaches and motivated me to improve my coaching skills for my future career as a coach. In Greece, football coaching education is provided by either universities or football associations. Graduates of the University departments are not enough, or they do not choose to practice football coaching. Therefore, the need for football coaches is not met in this “market”. This need is covered by “acting as coaches” who usually are either un-educated practitioners or ex-football athletes, or poorly educated through short courses. The short coaching education courses usually focuses mainly on technical issues regarding how to teach the skills of the game and tactical and bio-scientific information. Moreover, coaching in football sport clubs and academies is commonly perceived as a non-educational practice, where learning skills and tactics is performance oriented. The model of these short coach education (or training) programs is one of standardized curricula presenting a ‘tool-box’ of professional knowledge and a ‘gold standard’ model coach which learners are expected to mimic (Cushion et al., 2010). Poorly educated coaches lack training on updated educational practices and as a result, young kids drop out from trainings.

3.5 The research perspective of the thesis

Based on the above review of the literature I plan to apply a list of motivational techniques that I want to test in young footballers. I hypothesize that by applying the theory based motivational techniques, the young footballers’ basic need of autonomy support will be satisfied and as a result their intrinsic motivation will increase and their intention to continue football training will increase. The figure 2 below illustrates the referential framework of this thesis:



Figure 2. Deci & Ryan (1985). Hypothesized referential framework

The list of techniques I will apply are: (a) providing choices within limits, (b) offering rationales for activity structures, (c) recognizing athletes' feelings and perspectives, (d) creating opportunities for athletes to demonstrate initiative, (e) providing informational feedback, (f) avoiding overt control and criticism, and (g) structuring reward systems thoughtfully, (h) limiting athletes' ego-involvement in the activity.

From a practical point of view, the problem that this thesis is trying to explore is the drop out of young athletes from football training. By applying a training program that facilitates young athletes' satisfaction of their basic psychological needs, it is assumed that their intrinsic motivation will increase and as a result, they will keep training in the football team.

4 RESEARCH PROBLEMS

The aim of the thesis was to compare the effectiveness of two different coaching leadership approaches, autocratic/controlling versus democratic/basic needs supportive on learning football skills such as passing and shooting accuracy. The targeted age group was six to nine- year-old young footballers and their effects on intrinsic motivation and intention to continue football training for the next training season.

The main question I am looking for an answer is:

1. “Does participants of the democratic/basic needs supportive treatment condition will score higher on skills tests than autocratic/controlling”?
2. Does participants of the democratic/basic score higher on motivational questions than autocratic/controlling”?
3. Does participants of the democratic/basic score higher on intention to continue football training than autocratic/controlling”?

According to Self-determination Theory (SDT) the proposed motivational framework applies to a wide range of phenomena across gender, culture, age, and socioeconomic status. Therefore, I assume it also applies to our setting and age range, which is a football club setting for kids 6 to 9 years old. This age range is best to apply these techniques, since their motivation will form a more solid base for the future, and they start to build their motivational profile for football and sports in general. Also, this is the age where due to understanding some concepts they start to develop a practice and playing philosophy. (Gratton et al., 2011).

Based on the previously chapters’ review on motivation theory, coaching leadership framework and previous applications in past research, the objective of this thesis is to obtain and practice on coaching leadership skills and develop further on those skills needed for my coaching career that I wish to follow in the field of football. The research assignment will help me to figure out what is important when teaching football skills to young footballers to maintain their motivation to practice in the future. Furthermore, to influence young kids to learn football skills in a healthy and

wellbeing manner. Finally, to personally develop a coaching leadership philosophy which I will adopt and build my future as a coach on.

5 RESEARCH PROCESS

The research approach I used was quantitative with an experimental design. Quantitative research is a structured way of collecting and analyzing data and involves the use of statistical and mathematical tools to derive results (Veal & Darcy, 2014). I used experimental research to compare two groups on measures of performance skills tests and motivational questions. The coaching approach of the passing and shooting skills were manipulated to see if this influences our measures. This way I answered my hypothesis that the one method is superior to the other. The results will then support or disprove my hypothesis.

5.1 Connection between theory and practice

To connect the theory with the coaching practice, Mageau and Vallerand (2003) have specified some of the key behaviors that in combination contribute to an autonomy-supportive interpersonal style. Specifically, they argue that autonomy-supportive coaches will:

(a) provide choice to their athletes within specific limits and rules. Providing opportunities for choice and by using neutral language (e.g. use modal operators such as 'may' and 'could' rather than 'shoulds' and 'musts') during inter-personal communication, a coach satisfies athletes' need for autonomy (Deci et al., 1994)

(b) provide athletes with a meaningful rationale for the activities, limits, and rules. Provision of meaningful rationale can facilitate a sense of direction and enhance sense of athletes' competence when it is coupled with a positive feedback from the coach (Ryan & Deci, 2000)

(c) ask about and acknowledge the athletes' feelings

(d) provide the opportunity for athletes to take initiative and act independently

(e) provide non-controlling performance feedback

(f) avoid overt control, guilt-induced criticism, controlling statements, and limit the use of tangible rewards

(g) takes the perspective of the athletes into consideration. Perspective taking satisfies need for relatedness and enhances a sense of belongingness (Deci, Eghrari, Patrick, & Leone, 1994; Ryan & Deci, 2000).

Athletes who participate for coaches who demonstrate these behaviors are likely to develop a general sense or feeling that their coach is supportive of their needs for competence, autonomy, and relatedness, and thus believe their coach has a more autonomy-supportive interpersonal style.

The environment is said to be controlling when the critical factors making up autonomous environments (e.g., rationale, choice or perspective taking) are absent from the environment (Deci et al., 1994). For example, the environment is controlling when the coach does not provide meaningful rationale, use pressuring language during inter-personal communication (e.g. you 'should do' and 'must do'), and/or when the coach pressures athletes to accept their points of view (Deci et al., 1994). Below, I describe the two treatment conditions I test, which are based to the above practical guidelines.

5.2 Treatment conditions

Treatment condition of group A: Democratic leadership / basic needs supportive approach. In this condition, the coach-researcher adopt the democratic / autonomy supportive leadership approach. Examples of each motivational technique of this theoretical approach are:

(a) Providing choices within limits: When I introduced the drills that they practice for each skill, I offered the option to choose the level of difficulty they want to start each exercise. For example, they were instructed to change difficulty parameters distance, speed, size of target etc. during the practice time of each drill (supporting their autonomy).

(b) Offering rationales for exercises: When delivering instructions for a drill I used explanatory statements as to why a particular exercise might be useful, such as "How about we try the shorter distance for shooting the ball to goal posts, because it will help you to master the technique better."

(c) Recognizing athletes' feelings and perspectives: When young athletes were facing difficulties during an exercise, I used empathic statements to acknowledge their perspective or experience, such as "Yes, this one is difficult" and "I know it is a sort of difficult one."

(d) Creating opportunities for athletes to demonstrate initiative: When young athletes were facing difficulties during an exercise, I avoided to tell them immediately exactly what to correct, but I was giving the opportunity to take initiative on finding the solution, for example, "What you think you should change on how you place your foot to the ball, in order to avoid missing the target?"

(e) providing informational feedback: During the practice of each drill, I tried to give informational positive feedback individually to each young athlete at least 2 times for each drill such as: "Nice way to control the ball!" (supporting their competence).

(f) Avoiding overt control and criticism: I tried to avoid any verbal disapprovals of the kids or their lack of compliance with my directions, such as "No, no, no, you shouldn't do that."

(g) structuring reward systems thoughtfully: During practicing the exercises I was moving around and offering praise and encouragement statements to young athletes when they were showing improvement, for example, "Good job", "That's great" or "Almost," "You're close," and "You can do it."

(h) Limiting athletes' ego-involvement in the activity: Organize the drills' practice in small groups and emphasize as goals of the activity the personal development (compare themselves with their own previous performance) and avoid comparing themselves with the performance of other kids' performance.

Treatment condition of group B: Autocratic leadership / Controlling approach. In this condition, the coach-researcher adopts the autocratic / controlling leadership approach. Examples of the motivational techniques of this approach include:

- When the coach introduced the drills that they practice for each skill, young athletes were asked to do exactly as have been instructed (autonomy).
- During the practice of each drill the coach gave general feedback either individually or to the all group e.g. Nice job, Good, etc. (competence).

- Practice and assessment games were organized either in the all group or individually and it were the same for all (relatedness).

5.3 Experiment process and evaluation of the implementation

Participants were twenty-two, six to nine-year old, footballers. The young footballers were grouped in two conditions, 11 in condition A and 11 in condition B. They were recruited from a football academy in Athens, Peristeri Football Club "Ippokrates". Permission to collect data was asked from coaches and parents. Athletes' participation was completely voluntary.

Young footballers formed two groups. The intervention group A received the democratic leadership / autonomy supportive approach program while, the group B received the autocratic leadership / controlling approach. The two performance tests, which were a passing, and a shooting accuracy test assessed both group young footballers' skills before and after the one-week implementation of the program. After the baseline skill assessment, two training sessions took place in a one-week period. After the one-week implementation period, the final assessment took place, which included both the performance tests and the questionnaire assessments.

Both groups practiced, separately, the same two passing and two shooting exercises in 2 sessions for 40 min to 1 hour each time. The researcher performed all four training sessions 2 sessions of group A and 2 sessions of group B. The only difference between the two treatment conditions was the leadership approach that the coach-researcher used during the training.

In order to evaluate the implementation of the intervention two skill assessments and a questionnaire with 11 questions was used. In order to assess the basic motor football skills, we adapted two standardized tests of Malina et al., (2005) widely used in football skills assessment. Because our age group, six to nine-years old, young footballers are not yet developmentally ready to use these tests, we: a) introduced them the skills assessments as a game to collect points and not as an evaluation test and b) we made changes in distance, size and attempts to the original tests, to make it much easier for the participants to collect points.

Passing accuracy test: The original test: Five targets are placed 2.5 m apart at the end line of the 9X9 m square. The athlete is standing outside of the square at the opposite line of the target. Two

attempts at each target are allowed for a total of 10 attempts. The objective is to hit the targets with the kicked ball in succession from one to five; two attempts are permitted for each target. The score was the number of successful target hits; the maximum score is 10 points. (Malina et al., 2005). The passing accuracy adapted game-test: To make the test more appealing and easier to carry out various modifications were made. The passing distance was set at 7 m distance and 8 m width. Two attempts at each target were allowed for a total of 10 attempts. The objective was the same, to hit the targets with the kicked ball; which there was a picture of interest to induce focus. The maximum score now being set at 10 (appendix 1).

Shooting accuracy test: The original test: A 2X3 m goal is set up at the end line of a 9X9 m square. The target is divided by ropes into six sections. One rope is placed horizontally between the posts at a height of 1.5 m. Two ropes are dropped from the crossbar, 0.5 m from each post. Five points are allocated for the upper right and left sections, and two points for the upper middle section. Three points are allocated for the lower right and left sections, and one point for the lower middle section. While standing outside of the square at the opposite line of the goal, the player has five attempts at kicking the ball into the goal. The maximum score is 25 points (Malina et al., 2005). The shooting accuracy adapted game-test: To make this test more fit for the age group given the target was altered from the original test. A 2X3 m goal was set up at the end of a 9X9 m square. The target was divided by ropes and cones into 4 sections. Tape was placed horizontally between the posts at a height of 1 m. Another tape was dropped from the crossbar in the middle of the goal 1.5 m from each side-post. Five points were allocated to the upper right and left section and three points were allocated to the lower right or left sections. While standing outside of the square at the opposite line of the goal, the player had five attempts at kicking the ball into the goal. The maximum score is 25 points (appendix 1).

Finally, athletes completed a short one-page questionnaire with eleven questions assessing young athletes' motivation and intention to continue football training at the end (appendix 2). Ten questions assess six intrinsic motivation dimensions with two items for each dimension: Interest/enjoyment, Perceived Competence, Effort/Importance, Perceived Choice, and Value/Usefulness. These questions have been selected from the original full questionnaire that assess intrinsic motivation (McAuley, Duncan & Tammen, 1987). One more item was used to assess young athletes' intention to continue football training for the next training season (Francis et al., 2004).

Data analysis was performed using independent samples T-tests and paired samples T-tests in order to track the improvement on passing and shooting accuracy before after and by group. Moreover, an independent groups t-test comparing the young athletes' questionnaire scores by group was performed to detect differences between the groups at the end of the intervention.

5.4 Ethical permits

In order to safeguard and promote the rights, dignity and wellbeing of children in and through research, researchers should be aware of the research ethics guidelines for conducting research with children. According to Morrow & Richards (1996), children are positioned as vulnerable, incompetent and relatively powerless in society in general, and this needs to be taken into account in social research. Therefore, every research that involves children should follow the core ethical principles of respect, benefit and justice. In this thesis study I follow the general ethical guidelines for research (Declaration of Helsinki. World Medical Association), as well as the ethical guidelines for children (Graham et al., 2013). For that purpose, an information sheet with a consent form that was signed by young athletes and their parents were distributed to all participants (appendix 3). Young athletes and their parents were assured that their participation would be voluntary, their data confidential, and their identifying information will not be made available to anyone who is not directly involved in the study. Moreover, there will be no risk or harm because of their participation. Finally, their anonymity was assured by assigning a code number for each participant and the list of names with their corresponding identification numbers were kept secured and separate from the data file.

Since this study design is an intervention experiment, in order to secure that there will be equal benefits to both groups, we made sure that all children will practice exactly the same drills during practice. The differences were on the communication style of the exercises and group management (group or individual formations). Moreover, to secure that the autocratic/controlling group will follow the traditional command style that their coach applied already, the researcher observed previous practices in order to follow the same communication style as their own coach use. Therefore, this group is considered as a control group (common coaching practice) versus the experimental autonomy supportive group.

6 Results

6.1 Results of Passing accuracy tests

An independent-samples t-test was conducted to compare the passing accuracy test differences for group A and B, before and after the training period. There were significant differences in passing accuracy scores for both groups, before ($t(20) = -2.35$, $p = .029$, two-tailed) and after ($t(20) = -3.46$, $p = .003$, two-tailed) the training period (table 1).

A paired-samples t-test was conducted to evaluate the impact of the intervention on young footballers' scores on the passing accuracy test. There was no statistically significant difference in passing accuracy scores for the Group A (Democratic/autonomy supportive), from Time 1-before ($M = 4.81$, $SD = 1.88$) to Time 2-after ($M = 5.36$, $SD = 1.68$); $t(10) = -.820$, $p = .43$; two-tailed). Similarly, there was no statistically significant difference for the Group B (Autocratic/Controlling), from Time 1-before ($M = 3.18$, $SD = 1.32$) to Time 2-after ($M = 3.09$, $SD = 1.37$; $t(10) = -3.46$, $p = .84$; two-tailed). However, mean observation indicates that young footballers of group A (Democratic / autonomy supportive) improved their scores after the training (from $M = 4.81$ to $M = 5.36$), whereas, the group B (Autocratic / Controlling) decreased their scores after the training period (from $M = 3.18$ to $M = 3.09$).

Table 1. Results of Passing accuracy tests

Passing accuracy test (Total N =22)	Before		After		Impact of the intervention
	Mean (SD)	Independent samples T-test	Mean (SD)	Independent samples T-test	
Group A: Democratic/autonomy supportive N= (11)	4.81 (1.88)	$t(20) = -2.35$, $p = .029$	5.36 (1.68)	$t(20) = -3.46$, $p = .003$	$t(10) = -.820$, $p = .43$
Group B: Autocratic/Controlling N= (11)	3.18 (1.32)		3.09 (1.37)		$t(10) = -3.46$, $p = .84$

6.2 Results of Shooting accuracy tests

Similarly, an independent-samples t-test was conducted to compare the shooting accuracy test differences for group A and B, before and after the training period. There were no significant differences in shooting accuracy scores for both groups, before ($t(20) = 1.13$, $p = .271$, two-tailed) and after ($t(20) = .13$, $p = .899$, two-tailed) the training period (table 2).

A paired-samples t-test was conducted to evaluate the impact of the intervention on young footballers' scores on the shooting accuracy test. There was no statistically significant difference in shooting accuracy scores for the Group A (Democratic/autonomy supportive), from Time 1-before ($M = 13.45$, $SD = 5.10$) to Time 2-after ($M = 14.63$, $SD = 3.52$); $t(10) = -.707$, $p = .49$; two-tailed). Similarly, there was no statistically significant difference for the Group B (Autocratic/Controlling), from Time 1-before ($M = 15.72$, $SD = 4.26$) to Time 2-after ($M = 14.81$, $SD = 3.12$; $t(10) = 1.047$, $p = .32$; two-tailed). However, mean observation indicates that young footballers of group A (Democratic / autonomy supportive) improved their scores after the training (from $M = 13.45$ to $M = 14.63$), whereas, the group B (Autocratic / Controlling) decreased their scores after the training period (from $M = 15.72$ to $M = 14.81$).

Table 2. Results of Shooting accuracy tests

Shooting accuracy test (Total N =22)	Before		After		Impact of the intervention
	Mean (SD)	Independent samples T-test	Mean (SD)	Independent samples T-test	
Group A: Demo- cratic/autonomy sup- portive N= (11)	13.45 (5.10)	$t(20) = 1.13$, $p = .271$	14.63 (3.52)	$t(20) = .13$, $p = .899$	$t(10) = -.707$, $p = .49$
Group B: Auto- cratic/Controlling N= (11)	15.72 (4.26)		14.81 (3.12)		$t(10) = 1.047$, $p = .32$

6.3 Results of Intrinsic Motivation questionnaire

An independent-samples t-test was conducted to compare the intrinsic motivation assessment differences for group A and B at time 2-after the training period. There were significant differences in intrinsic motivation among groups ($t(13) = -.344, p = .004$, two-tailed) after the end of the training period (table 3). Mean observation indicates that young footballers of group A (Democratic / autonomy supportive: $M = 4.63$) were more intrinsically motivated than those of group B (Autocratic/controlling: $M = 4.13$).

Table 3. Results of Intrinsic motivation questionnaire

Intrinsic motivation (Total N=15)	Mean (SD)	Independent samples T-test
Group A: Democratic/autonomy supportive (N=9)	4.63 (.272)	$t(13) = -.344, p = .004$
Group B: Autocratic/Controlling (N=6)	4.13 (.280)	

6.4 Results of intention to continue football training

An independent-samples t-test was conducted to compare the intention to continue football training question differences for group A and B at time 2-after the training period. There were significant differences in intention to continue football training among groups ($t(15) = -3.98, p = .001$, two-tailed) after the end of the training period (table 3). Mean observation indicates that young footballers of group A (Democratic / autonomy supportive: $M = 5$) had higher intention to continue football training than those of group B (Autocratic/controlling: $M = 4$).

Table 4. Results of Intention to continue football training

Intention to continue football training (Total N=17)	Mean (SD)	Independent samples T-test
Group A: Democratic/autonomy supportive (N=9)	5 (0.0)	t (15) =-3.98, p=.001
Group B: Autocratic/Controlling (N=8)	4 (.05)	

7 Discussion

The aim of this small-scale experimental study was to compare the effectiveness of two different coaching leadership approaches, autocratic/controlling versus democratic/basic needs supportive on learning football skills such as passing and shooting accuracy. Moreover, the effects on intrinsic motivation and intention to continue football training for the next training season were also examined. The first hypothesis, that the democratic/autonomy supportive group will have a greater improvement on passing and shooting skills test was not supported by the analysis of the data. The second hypothesis that the democratic/autonomy supportive group will have higher intrinsic motivation and intention to continue football training compared to the autocratic/controlling group was confirmed by the data analysis.

Regarding the hypothesized performance improvement of the young footballers, the mean observation of their skill tests before and after the training period, the direction of mean change was on the hypothesized direction. However, the t-tests analyses indicated that these changes were not statistically significant. This result might be explained either by the small number of participants or by the short training period. Therefore, in future studies it is suggested to have larger number of participants and longer training period, in order the changes to be able to happen. For example, a relevant previous study with longer intervention period and larger number of participants, revealed that coaches' autonomy support facilitates athletes' self-determined motivation towards judo, that in turn, predicted their sport performance (Gillet, Vallerand, Amoura & Baldes, 2010).

The impact of the autonomy supportive/democratic approach, on the other hand, was evident on young footballers' motivation and intention to continue football training, according to our respective hypotheses and data analysis results. These results are promising, and they confirm both the theory and previous findings, that the autonomy supportive /democratic approach had an impact both on the motivation, as a determinant, and on the intention to keep training in football, as a result.

On the other hand, the fact that there were no differences among groups on performance tests, and there were significant differences on motivational variables, indicates that the hypothetical mechanism of the motivational referential framework of this thesis (figure 2) worked as planned.

Therefore, through this study we confirmed that this motivational framework applies also to as young football athletes as in our study (6 to 9 years old) as several previous studies who used this motivational framework in different settings (Amorose et al., 2007; Gagne et al., 2003; Gillet et al., 2010; Pelletier et al., 2001; Quested et al., 2013; Reinboth et al., 2004; Sari et al., 2012; Spence et al., 2013).

7.1 Strengths and weaknesses

Among the strengths of this thesis is that the design, application and evaluation was able to support the theoretical hypothesized model, by revealing the positive results on athletes' motivation and intention to continue football training when they had been instructed according to the autonomy supportive/democratic approach. Our limitations were the small number of participants and the short intervention period, which limited our analyses results to reveal performance improvements on the skills test. Therefore, the reliability of this research is considered limited, but promising for future replications.

7.2 Implications for practice

An implication for future practice of this study is that by educating football coaches to be more autonomy supportive when they train their athletes, they can have a significant impact on athletes' motivation to participate and perform well during training and competition. Moreover, they can have an impact on athletes' future involvement in football trainings, which prevents early dropout from sports. More specifically for the commissioning party, "Ippokrates" the results of the current study indicate that training the football teams' coaches to use the autonomy supportive coaching techniques can have a positive impact on athletes' motivation and lower the early dropouts.

7.3 Dissemination / Exploitation of results

My dissemination and communication plan for my results involves sharing my knowledge acquired by this thesis with other football coaches in academies and clubs, as the most direct potential users. This way it will create an impact in the area of training for football coaches. At the same time by educating football coaches the need to decrease dropout rates of young athletes from football will be partially met.

Moreover, my exploitation plan to use the new knowledge for commercial purposes is, after I get some more experience on practicing these autonomy supportive techniques, to create one day seminar package and try to market it to football academies, clubs and summer football camps. The seminar will have a short presentation of the motivational techniques and then practical demonstrations in the football field. To reach the potential clients I can use social media marketing and personal contacts to start with. The seminars will target the need for a better trained staff.

7.4 Challenges during thesis

There were many challenges that needed a solution to be found so that the data collection could be made. The first and largest issue to overcome was the selection of the team that would be commissioning the research. The original idea was to work with the academy of 'Athletiki Enosi Peristeriou' due to working with them for the researchers practical training and 'Iraklis Peristeriou'. But as the lack of interest and enough participants, it was unable after nearly 3 months of conversations.

The interventions were at first organized to take place in late November to early December but due to continuous bad weather and ongoing flu's parents were reluctant to allow their children to go to practice in fear of them getting sick. Weather conditions like rain and cold was also a major factor and many children were absent from practices. Furthermore, the training field that the team used was shut down for renovations and having to travel from facility to facility again caused many children to miss practices. Even when a new site was found in January the weather

again played a factor in the attendances. It was only during late February when the weather improved significantly, and then enough athletes were available to take part in the research.

Another difficulty was to have meeting with the parents of the athletes to talk about the research and ask for permission. Due to their working hours some parents would have other parents or family members and friends drop off their children for practices. Also, usually after the practices some would leave the facilities as soon as possible to get back to work. To address this problem, multiple meetings were arranged until everyone was informed about the research. Finally, in order to collect the questionnaires after the end of the intervention, and for the athletes who did not have time to answer them after the practice time, I had to allow them to take the questionnaire home and fill it out, to be later returned to the coach/researcher. This influenced some data to be lost, since they were either lost or not return them at all.

7.5 Reflection on professional development

By running this small-scale experiment, I got valuable and useful new knowledge on how to better motivate my athletes to enjoy football training. The benefits of the democratic / autonomy supportive coaching condition were evident to me from the very first day I tried them. Youngs athletes showed more interested and more determined during practice and they were acting more responsible because much of the decisions were taken by them. I also noticed that the relationships among young athletes were improved and It was much easier for me to run the exercises. What I realized after the end of this training period is that maybe it is more important how I teach them skills than what exercises I teach them. As an early career coach, my focus was to find the best exercises that I will use for the next training to help them learn effectively, for example, the passing or shooting. What I realized is that, how I teach the skills, what words I use when I communicate the instructions and feedback with the athletes and my body language (e.g., voice tone and volume) are equally important. For the future, I plan to adopt these new motivational techniques to my everyday coaching practice and to master them much better, in a way that they benefit my athlete's motivation and wellbeing, as well as, my personal professional development.

8 Conclusion

Overall, this study showed that when coaches adopt an autonomy supportive/democratic approach when they teach football skills to young athletes, they have multiple benefits on their intrinsic motivation and avoid early drop out. Therefore, educating football coaches on how to support athletes' basic psychological needs is important in order to have more adaptive outcomes on their athletes learning and performance.

This thesis process helped me develop my learning competences. I have deepened my knowledge base about motivational coaching approaches and how it influences performance and motivation of their athletes. I am confident of that I have improved my ethical competence and can apply when needed with ease for future reference.

I was able to use my previous knowledge acquired and experience that I gained from the courses and the practical trainings in this thesis. Therefore, I developed my innovation competences.

I was able to learn about my current and hopefully future working community competences, and how I need to improve in this area. The thesis helped me identify weaknesses in coaching application and made me realize how important good communication and skills are. I am happy to report that I learned a lot about myself and that the thesis process improved my professional skills, based on the above-mentioned competence development.

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10 LIST OF APPENDICIES

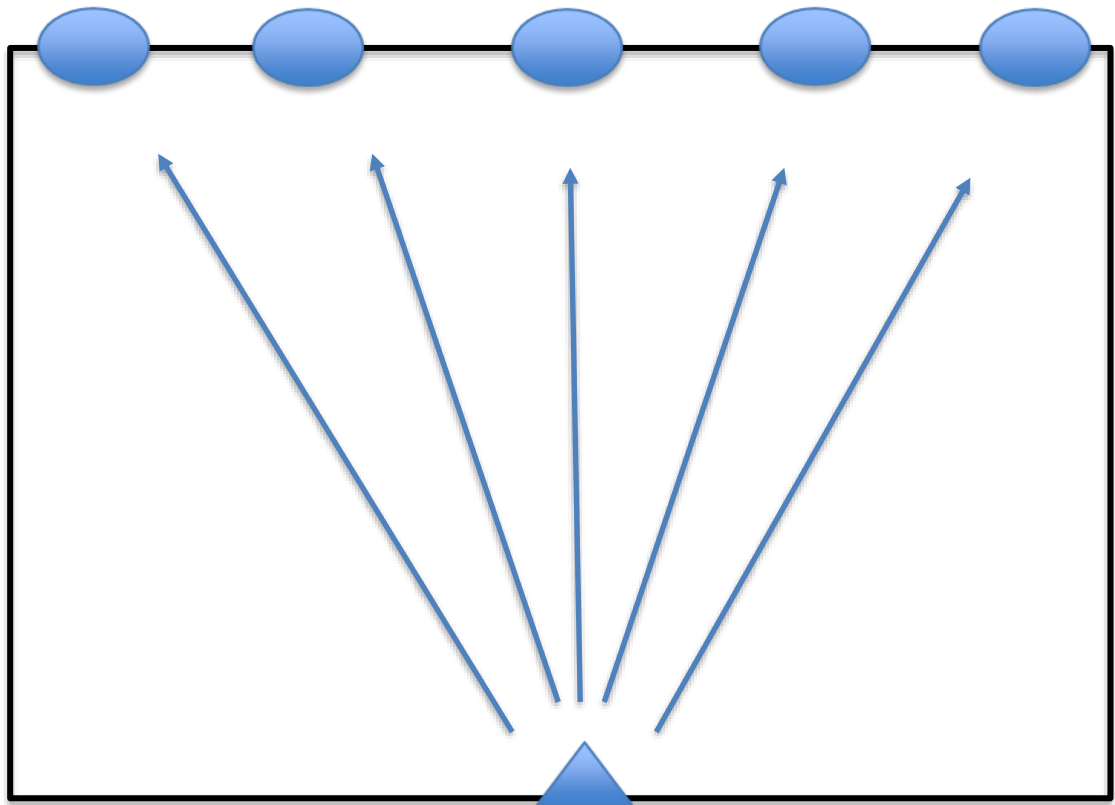
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Appendix 1. Skills tests

Performance test "Passing accuracy"



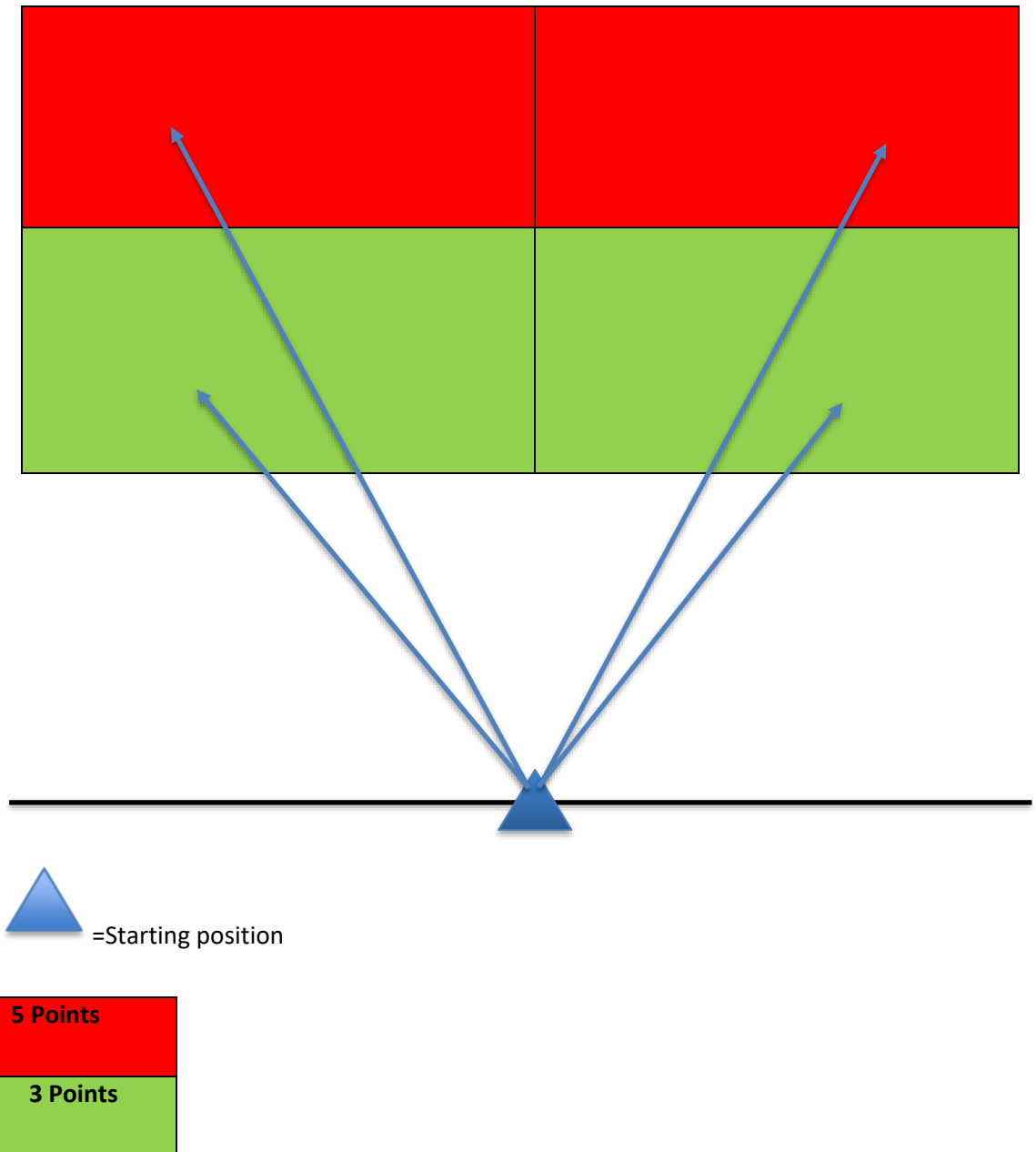
=Targets



=Starting and kicking position

Source, Malina (2005) Adapted for younger aged children

Performance test "Shooting accuracy"



Source, Malina (2005) Adapted for younger aged children

Appendix 2. Questionnaire

The following items concern your experience with the training. Please answer all items. For each item, please indicate how much you agree or disagree for each statement.						
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	I enjoyed doing this activity very much	1	2	3	4	5
2.	I would describe this activity as very interesting.	1	2	3	4	5
3.	I think I did pretty well at this activity, compared to other athletes.	1	2	3	4	5
4.	I am satisfied with my performance at this task.	1	2	3	4	5
5.	I put a lot of effort into this.	1	2	3	4	5
6.	It was important to me to do well at this task.	1	2	3	4	5
7.	I did this activity because I wanted to.	1	2	3	4	5
8.	I did this activity because I had to. (Reversed score)	1	2	3	4	5
9.	I believe this activity could be of some value to me.	1	2	3	4	5
10.	I think this is an important activity.	1	2	3	4	5
11.	I intend to continue football training for the next training season.	1	2	3	4	5

Appendix 3. Information letter and Consent form

INFORMATION LETTER

Identification of Investigators & Purpose of Study

Your child is being asked to participate in a research study conducted by Leonidas Eleftheriadis from the University of Applied Sciences, Kajaani Finland. The purpose of this study is to figure out why more and more young athletes drop out of football and what coaches can do to keep young footballers exercising. This study will contribute to the knowledge of sports coaching and is part of the researcher's completion of his bachelor's thesis.

Research Procedures

Should you decide to allow your child to participate in this research study, you will be asked to sign this consent form once all your questions have been answered to your satisfaction. This study consists of one passing test and one shooting test, applied 2 times approx.10 days apart and one short questionnaire delivered during the second test measures. There is no harm for the young athletes by participating to this study.

Time Required

Participation in this study will require 15 to 30 minutes of your child's training two times during the next 2 weeks.

Confidentiality

The results of this research will be presented on a final thesis report. Your child's name will be replaced by a code number and the key identification paper will be stored separately and accessible only by the researcher. The researcher retains the right to use and publish non-identifiable data. When the results of this research are published no information will be included that would reveal your child's identity. All data will be stored in a secure location accessible only to the researcher. Upon completion of the study, all information that matches up individual respondents with their answers will be destroyed.

Participation & Withdrawal

Your child's participation is entirely voluntary. He/she is free to choose whether to participate. Should you and your child choose to participate, he/she can withdraw at any time without consequences of any kind.

Questions about the Study

If you have questions or concerns during the time of your child's participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Leonidas Eleftheriadis, 6981072512, greecebnd2@yahoo.com

If you want a report of the two performance test results of your child please complete your e-mail or phone number and your name here: _____

CONSENT FORM**PART A TO BE COMPLETED BY THE YOUNG PERSON.**

I agree to take part in this study and would like to take part in the performance tests and complete the questionnaire.

I have read and understood the information letter.

I know what the study is about and the part I will be involved in.

I know that I do not have to answer all of the questions and that I can decide not to continue at any time.

Name _____

Signature _____

Age _____

PART B TO BE COMPLETED BY THE PARENT/GUARDIAN

I have read and understood the accompanying letter and information leaflet and give permission for the child (named above) to be included.

Name _____

Relationship to child _____

Signature _____

THIS FORM MUST BE COMPLETED AND RETURNED TO THE RESEARCH TEAM FOR THE NAMED YOUNG PERSON TO BE INCLUDED IN THIS STUDY. A STAMPED ADDRESSED ENVELOPE HAS BEEN PROVIDED.

Further information about the study is contained in the enclosed letters and information leaflets for young people and parents/guardians.