



University of Thessaly
Department of Physical Education and Sport Sciences

**A Qualitative Study of Athletes' Gained
Life Skills in Retrospect**

by

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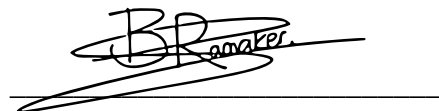
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Abstract

This qualitative study explored the development and transfers of life skills in former athletes as well as their perceived qualities of life skills. Previous research has studied the development of life skills mostly in formal life skills programs using high school athletes. Just a handful of studies researched the development and transfers using former athletes. Six (former) speed skaters involved in different competition levels were interviewed by using semi-structured interviews and a phenomenological approach. Several external influential factors on the development of life skills were identified as well as a variety of developed life skills. The athletes described experiencing positive and negative qualities of life skills. They also transferred skills to other domains using different strategies. Elite athletes seemed to be more aware of the development and transfer processes than the regional and national athletes. The findings replicate and extend the existing body of life skills research by proposing a retrospective point of view as a fourth line of research. As a first, this study looks at differences in competition levels, strategies to transfer skills, and experienced qualities of life skills. The limitations, implications, and directions for future research are given.

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INTRODUCTION

“Because everything that I have learned from being a figure skater will never only affect my identity as a skater. It will affect me as a person, in everything that I do (...) Everything that I have gained from figure skating will benefit me.”
– Mira Kaufman, American figure skater (TED Talk)

Over the last years, researchers have been examining sport's potential to positively influence the development of youth. It is namely often assumed that sport has a positive nature, which thus can bring positive changes to those who engage in it (Coakley, 2011). Therefore, these popular beliefs about the benefits of sport and youth's development are examined.

Coalter (2007) claims that sport participation firstly impacts youth development because it contributes to motor and sport-specific skills, improves one's physical well-being by improving one's health and fitness, can increase self-confidence and self-esteem, and develops character through discipline, teamwork, and sense of responsibility. Secondly, sport participation can reform 'at-risk' youth by providing structure and teaching them characteristics such as self-control and conformity to set rules. Sport allows them to become more acceptable in society. Thirdly, sport participation allows youth to be successful and engaged in society through inspiring educational achievement, facilitating social networks, and fostering aspirations to transcend sport. Therefore, the positive impacts of sport participation on youth development can be divided into three major categories: personal character development, reforming 'at-risk' populations, and fostering social relationships leading to personal success and engagement in society.

The research until now mainly focused on the positives sport participation brings by incorporating structured programs in for example PE classes and regular sport programs. However, sport participation might also have negative outcomes, which not have been explored extensively (Coakley, 2011). Also, he argued that much caution is needed with the belief that sport is good in itself and those who engage in sport will automatically experience it. Fraser-Thomas, Côté, and Deakin (2005) similarly argued to be cautious with assumptions about positive and negative outcomes of sport. Moreover, attention is needed in terms of how learned skills and outcomes might be transferred into other non-sport contexts. One could namely benefit

from the positives of sport participation by transferring skills learned from sport. However, one needs to be aware of the similarities of several contexts before one is able to apply those learned skills across domains. This may not happen automatically but coaches and teachers rather need to make youth aware by drawing attention to the similarities of contexts and usefulness of the skills.

Because of the possibilities sport offers, it is an often-used means for developmental practices in children. Physical education especially provides an environment in which children can learn positive skills they could use in the rest of their lives (Goudas, Dermitzaki, Leondari, & Danish, 2006). This also has to do with its accessible nature for all children, so that every kid will be involved in PE at school at one point. Even though physical education classes may provide an environment for children to learn these skills, a lot of children are also involved in regular and competitive sports that do not follow such a structured life skills program.

One could question whether athletes who are involved in competitive sports can learn similar skills and undergo the same positive development without being part of a formal program as one would in for example a PE class. The majority of the youth involved in sport are namely not part of such a structured program and just a small portion of the youth will become professional athletes, who can make a living of their sport participation. What is then the value of sport participation for the majority, who will not make it to the elite level? Anyone, especially those who will not make it to the elite level, may benefit from their sport participation because they might undergo personal development and develop skills, which are useful across all their life domains.

How is the learning process of life skills in a competitive sport context? When competitive athletes do learn life skills via their sport, how do they do so, can they transfer the skills to non-sport contexts, and more importantly, how do these skills affect their daily lives outside of their sports career? Trying to answer those questions, the current study will be exploring what athletes learn from their competitive sport participation and how they can use this in non-sport settings. In addition, examining the used strategies that are involved in the learning, using, and transferring process, and who has had an influence on this. As argued before, sport participation might not just know positive effects but possibly negatives as well. Therefore, attention will be paid to the positive and negative qualities that life skills learned in sport might have.

REVIEW OF LITERATURE

The following paragraphs illustrate and review the previous literature that forms the background leading up to the current study. First, the concept of positive youth development is described and how this could affect one's development. In particular, this will be reviewed from a sport's perspective. Second, life skills will be reviewed as tools that may foster positive youth development. In this section formal life skills programs will be discussed that are used in physical education classes and structured sports programs. Following, the development of life skills will be discussed from the perspective of coaches and athletes. Finally, literature examining former athletes' experiences of developing and transferring life skills into other life domains will be reviewed.

Positive Youth Development

What is positive youth development (PYD) and what is it about? Positive youth development is an overarching term that can be implemented in a variety of disciplines, such as developmental psychology, social work, health promotion, sociology, and education (Benson, Scales, Hamilton, & Sesma, 2006). It refers to a developmental process youth can experience, which will help them to function well in life.

The following principles stand at the core of positive youth development (Benson et al., 2006). First, all youth have the capacity for growth and development. Second, positive development is enabled when one is involved in relationships, contexts, and environments that nurture their development. Third, the development is further enabled when one participates actively in those relationships, contexts, and environments. Fourth, youth can benefit from those relationships, contexts, and environments. Fifth, the community in which the youth are involved is critical for the development. Sixth, youth themselves are crucial to their own development because they can create the type of relationships, contexts, environments, and communities that enable such positive development.

Therefore, the core ideas in positive youth development include (a) factors as the developmental contexts in which one is involved, (b) one's characteristics regarding the capacity to grow and excel, (c) one's developmental strengths, and then two developmental outcomes one could experience, namely (d) the reduction in risky behaviors and (e) the fostering of behaviors

promoting health and well-being (Benson et al., 2006). Thus, positive youth development focuses on youth becoming competent, healthy, and successful people.

The many suggested definitions are another indicator for its overarching nature. Until today there is no real consensus on one definition that is universal. For example, Roth, Brooks-Gunn, Murray, and Foster (1998) defined positive youth development as 'the engagement in prosocial behaviors and avoidance of health compromising behaviors and future jeopardizing behaviors' (p. 426). Positive youth development is thus a term referring to the promotion of desirable competencies or outcomes in young people.

Frameworks of PYD are proposed such as Lerner, Fisher, and Weinberg (2000) suggested that PYD has five desirable outcomes in youth, namely competence, connection, character, confidence, and caring or compassion. Each outcome represents clusters of individual attributes respectively. First, competence refers to one's cognitive ability and social and behavioral skills, for example conflict resolution. Second, connection refers to one's positive bonds with others and institutions. Third, character refers to one's integrity and moral behavior. Fourth, confidence refers to one's overall self-esteem, self-efficacy, and courage. Lastly, caring (or compassion) refers to one's values and sense of social justice. It is necessary that public policies can ensure families the capacity to provide their children the required resources to achieve these outcomes. When youth experience these five outcomes and their surrounding support system fosters its development, a possible sixth outcome may occur: contribution. This expresses the idea that these youngsters will contribute to society once they are adults. The model suggests that the enhancement of society is therefore ongoing through nurturing the same outcomes in their own children and families.

In the line of PYD research, developmental researchers have begun to investigate how extracurricular activities, one of which is sport, may foster positive developmental outcomes (e.g., initiative) (Larson, 2000). Developing initiative is the capacity to direct attention and effort to a challenging goal. He argued that youth who were active in voluntary but structured youth activities experienced high amounts of intrinsic motivation and concentration, which is the combination that is required for the development of initiative. Therefore, extracurricular and after-school activities provide youth the opportunities to develop positive skills. Youth involved in different types of youth activities (sport, performance and fine arts, or club and organization) reported that they see themselves as the agents of their own development (Dworkin, Larson, &

Hansen, 2003). They reported to have gained a variety of skills, including initiative, emotional regulation, developing peer relationships, and social skills with their peers and adults.

The following studies examine the influences of extracurricular activities, including sport, on youth's developmental outcomes. These studies examined developmental outcomes by using the Youth Experiences Survey (YES). This survey examines one's positive and negative experiences in a certain activity. The experiences of high school students involved in organized extracurricular and community-based activities were studied (Hansen, Larson, & Dworkin, 2003). The results showed that youth involved in the extracurricular activity sport reported both positive and negative experiences. The majority of athletes reported experiences that relate to personal development, such as self-knowledge, emotional regulation, and physical skills. However, negative interactions with peers and inappropriate adult behavior were also reported. The researchers concluded that sport could simultaneously build and challenge one's character.

Larson, Hansen, and Moneta (2006) examined extracurricular and community-based activities further using the YES 2.0, which consists of 70 items regarding six domains of personal and interpersonal developmental experiences and five domains of negative experiences. The researchers had two objectives, namely to compare the developmental and negative experiences among the organized activities and to compare the developmental experiences in organized activities (sports, performance and fine arts, academic clubs, community-oriented, service, and faith-based youth groups) with comparison activities (academic class, hanging out with friends, and working at a job).

Firstly, the students involved in sports reported higher rates on the initiative, emotional regulation, and teamwork experiences (Larson et al., 2006). However, they reported much lower on the scales of identity work, positive relationship, and adult network experiences in comparison to the students involved in the other organized activities. Also, the students involved in sports reported higher levels of stress as being a negative experience. Secondly, the findings show that sports stood out regarding the development of initiative.

The researchers therefore conclude that sports was a context that fostered the development of initiative behaviors, such as setting goals, applying effort, and learning time management (Larson et al., 2006). In addition, the development of emotional regulation was also nurtured. The students did report higher stress ratings but those were not higher than the ratings of other contexts they were involved in. Sport appears to be an environment in which positive

experiences and skills such as time management, emotion regulation, and pursuing goals are fostered but because of its competitive nature can also bring out stress factors.

Phelps et al. (2009) examined the course of positive youth development as well as the relationship of positive youth development to other measures of adolescent functioning over time. They used longitudinal data of youth in grades 5, 6, and 7. They predicted that positive youth development would influence five constructs, namely competence, confidence, connection, character, and caring. Their findings showed that positive youth development is a process that is similar across the three grades. This means that there is continuity in the structure of positive youth development and therefore it can be approached the same way for those ages. In addition, the researchers found, in contrast with their expectations, that the levels of positive youth development decreased slightly when they passed on to the grades 6 and 7. This decreasing trend naturally needs researchers' attention.

Thus, positive youth development is a concept that is used by many professionals working in different areas to refer to fostering positive outcomes and reducing jeopardizing behaviors in youth. The YES scale has been used to evaluate extracurricular activities, one of which is sport. The findings of the studies show that the effects of those extracurricular activities positively influence the developmental experiences of youth. How these developmental experiences exactly come about has been proposed in multiple frameworks by researchers. These frameworks will be discussed next.

Positive Youth Development through Sport

Before developing frameworks that capture the developmental experiences of youth in sport, it is necessary to define youth sport programs. Petitpas, Cornelius, Van Raalte, and Jones (2005) came to a definition for youth sport programs, namely youth sport programs promote psychosocial development while using sport as a means to provide experiences that promote self-discovery and teach participants life skills in an intentional and structured manner. They examined settings in which youth can learn life skills. Their framework proposes that youth are most likely to benefit from sport participation when they (a) can engage in the activity in an appropriate environment, (b) have caring adults supporting them, (c) can learn actual skills that are also useful in other life domains, and (d) can benefit from evaluation and research. The next paragraphs will discuss the examination of a high school sport program using this framework,

followed by a proposed applied model for sport programming based on other existing frameworks of youth sport.

Camiré, Trudel, and Bernard (2013) examined a high school sport program supposed to teach athletes life skills using Petitpas and colleagues' (2005) proposed framework. The researchers were specifically focused on determining the strengths and challenges of this program from the perspectives of the administrators, coaches, parents, and players. The program knew a sport-study format, in which the athletes go to class in the morning and do sports in the afternoon. The results indicated that the approach of the high school sport program was in line with Petitpas et al. (2005) research and showed that the coaches were able to spend large amounts of time with their athletes. This allowed the coaches to nurture quality relationships and implement effective strategies to teach their athletes life skills.

Youth can thus benefit from sport participation in terms of their development. Therefore, a model would be beneficial that outlines how youth development can be fostered through youth sport outside of the school setting. Fraser-Thomas et al. (2005) reviewed existing frameworks of youth sport and PYD to propose an applied model for sport-programming aiming for youth development. Special attention is brought to the development of physical, social, psychological and emotional, and intellectual aspects (NRCIM, 2002). The physical benefits of sports are relatively visible as it stimulates normal growth and development in children (Bar-Or, 1983). Cardiovascular health and weight control are two of the most important physical benefits of physical activity but muscular fitness, flexibility, and reducing the risk of developing diseases are also known benefits (e.g., Health Canada, 2003).

Psychological and emotional development was fostered through physical activity because it is known for the positive effects on one's well-being and life satisfaction. Participants who engage in physical activity also develop social skills such as citizenship and leadership (e.g., Wright & Côté, 2003). One of the important social skills that youth can learn is initiative, which can be learned through structured activities such as physical activity but is not limited to that (Larson, 2000). Moreover, the intellectual development is also related to physical activity and may play a role in the cognitive development in youth (Fraser-Thomas et al., 2005).

However, Fraser-Thomas and colleagues (2005) also reported the possible negative experiences associated with sport participation on the same three levels as the positive experiences. Physical injuries or eating disorders could impact one's physical development.

Examples of negative psychological and emotional development are reduced self-esteem, burnout, and even dropout. Lastly, effects such as poor sportsmanship and aggression can negatively impact one's behavior. Thus, the authors conclude that physical activity can contribute to the quality of life and development of several social skills when it is constructed in the right way.

In sum, engagement in sport may foster one's physical, social, psychological and emotional, and intellectual aspects when it has been constructed in the correct way. The previously discussed research was based on the results of the YES scale, which is a general survey to examine one's experiences in a certain activity. To improve the applicability of this survey in sport the scale has been revised to be sport-specific. The survey and the results of studies using this revised sport-specific survey are discussed in the paragraphs below.

Positive and Negative Experiences in Sport: 5C Sport and YES-Sport

In the following paragraphs, studies examining positive and negative experiences in sport will be discussed. First, a proposed shortened version of Phelps et al.'s (2009) instrument to measure the 5Cs in sport is described, followed by studies using the sport-revised YES scale to measure experiences in sport.

Jones, Dunn, Holt, Sullivan, and Bloom (2011) argued the need for examination of the degree of contribution of the 5Cs of PYD (competence, confidence, connection, character, and caring/compassion) in specific domains. They specifically examined the outcomes youth could gain through sport participation. They used a shortened measure of Phelps et al.'s (2009) study, consisting of 30-items in the PYD-Sport measure in contrast to 78 items. Their findings showed the existence of only two factors, namely pro-social values and confidence/competence. They argued this was the case because of the relative similarity of the constructs. Even though just two factors were identified the researchers state that those two do reflect quality experiences of development through sport. The researchers emphasized that sport participation may promote PYD but it is still unclear how this occurs. Therefore, research in sport activities specifically is required that examines the developmental experiences.

Previously, the YES scale has been used to examine experiences in organized activities and later also in the sport context. The YES scale now has been revised into a new sport-specific survey, the Youth Experience Survey for Sport (YES-S), to enable the examination of positive

and negative experiences in sport specifically (MacDonald, Côté, Eys, & Deakin, 2012). The YES-S consists of five factors, namely (1) Personal and Social Skills, (2) Cognitive Skills, (3) Goal Setting, (4) Initiative, and (5) Negative Experiences.

The first factor concerns all issues of personal and social development. Personal development refers to for example knowing that emotions affect behavior and becoming better at taking feedback. Social development refers to for example establishing new friendships and the ability to make compromises while working together with others. Youth who undergo these types of experiences in sport can also use those in other life domains outside of sport. The researchers suggested that this first factor is similar to the responsibility concept Hellison (2003) proposed. The second factor refers to the cognitive skills athletes learn through their sport participation besides the physical abilities. Examples of such cognitive skills are creative skills learned through trying several positions or tactics. In addition, youth involved in sport show higher academic performance and desire to stay in school, which may be related to learning required time management skills to be able to balance their sports and academics. The third factor refers to goal setting in and outside of the sports domain. Naturally, in sports the goals are sport-specific, whereas one could also set goals regarding for example academics. The fourth factor represents the term initiative as Larson (2000) had defined it: Initiative is intrinsic motivation used to put forth effort and attention toward a goal and leads to critical thinking and knowledge searching skills in youth. Lastly, the fifth factor combines all negative experiences one may experience through their sport participation. Researchers can use this survey to understand young athletes' positive and negative experiences in sport. The following studies in this section are examples that utilized the YES-S (MacDonald et al., 2012) to examine developmental experiences.

Bruner, Eys, Wilson, and Côté (2014) examined group cohesion and the perception of positive youth development in team sport athletes using the YES-S. 424 Canadian team sport athletes of about 15 years old from a diverse selection of sports participated in the study. The results indicated that group cohesion was associated with PYD in a way that on individual level perceptions of task and social cohesion were associated with greater levels of PYD. Both task and social cohesion were namely strong predictors of two factors of PYD: personal and social skills and goal setting. In addition, task cohesion strongly predicted initiative and decreased negative experiences. Social cohesion on the other hand significantly predicted cognitive skills

gained through sport participation. The results of the variability in athletes' perceptions of cohesion at individual and group level require attention because of the interdependent nature and influence of the social context on PYD.

The positive impact of the invested time by the coach on the relationship with their athletes and strategies in teaching life skills (Camiré et al., 2013) is further examined. Vella, Oades, and Crowe (2013) examined the influences of coaches' leadership behaviors and the quality of the coach-athlete relationship on PYD utilizing the YES-S in 455 Australian soccer players with an average age of 15 years. The results indicated that coaches' transformational leadership behaviors were positively associated with PYD, specifically with personal and social skills, goal setting, and initiative. In addition, the perceived coach-athlete relationship was also positively associated with PYD. The combination of the two formed the strongest predictor of PYD. The team success factor however was not associated with developmental experiences but only with the factor of personal and social skills. The researchers argued that coaches are incredibly valuable sources for youth to experience positive developmental experiences.

Gould, Flett, and Lauer (2012) found similar results regarding the influence of coaches on PYD. They examined the developmental outcomes underserved youth reported from their sport participation using the YES 2.0, their perceptions of the coach-created sports climate, and the relationship between the youth's reported development and perceptions of the climate. 239 middle and high school students involved in baseball and softball leagues were included in this study. The youth reported to perceive teamwork and social skills, the development of physical skills, and initiative as the positive outcomes from their sport participation. One of the most experienced negatives was stress. These findings also compliment Larson et al.'s results (2006) that indicated the most experienced positive experiences were those of initiative, emotional regulation, and teamwork experiences, and the most experienced negative experience was stress. Moreover, the findings indicate that the creation of a caring, mastery-oriented sport environment will foster PYD, whereas an ego-orientated climate would be detrimental for PYD. Therefore, it is crucial for coaches to stimulate a mastery-oriented and caring climate and avoid an ego-orientated climate.

When coaches are such valuable resources, do coaches who are untrained in positive youth development differ from trained coaches in the impact they make on the personal development of youth? MacDonald, Côté, and Deakin (2010) examined these differences in their

study. The results indicated that the athletes significantly differed in only one factor of the used YES-S: personal and social skills. However, these skills were also improved in the group of the untrained coaches, which indicates that one may not have to be formally trained to be able to foster these positive skills in athletes.

Overall, youth appear to experience beneficial aspects for their development through sport participation and interactions with coaches and peers in an actual sport context. Positive youth development thus focuses on promoting desirable competencies in youth. It includes the development of positive psychological attributes, dispositions, and specific skills. Skills are anything that is taught, practiced, and transferred in other domains, environments, and situations than the skill is originally learned (Danish & Nellen, 1997). Looking at the concept of skills, it could be argued that one could learn skills that are useful and will help one to live their life in a successful manner. Therefore, skills can be seen as tools that can be used to help one function across life domains. Particular skills could lead to outcomes such as positive youth development when the skills are used appropriately in the right contexts. These skills are called life skills. These skills can thus contribute to positive youth development because they can help one to succeed in different environments, as one would have learned for example how to perform under pressure and solve problems. Those types of skills essentially prepare youth to live in a social environment that continually and rapidly changes. Consequently, life skills may facilitate this positive development and help youth become successful and competent adults. Life skills will be discussed in-depth in the next section.

Life Skills

In the following paragraphs, the concept of life skills will be discussed in more detail. A definition of life skills will be identified, formal life skills programs will be discussed, and the three lines of research in sport and physical education settings that Goudas (2010) has identified will be presented. These three lines of research are (a) identification of athletes' and students' life skills needs, (b) factors contributing to life skill development, and (c) evaluation of the effectiveness of life skills programs. After discussing those lines of research, a fourth more recent line of research will be identified.

Definition

To discuss the concept of life skills, it is important to identify what life skills actually are. Life skills know the same inconsistencies in terms of definitions as the term PYD does. The World Health Organization (1999), for example, defined life skills as the ability for adaptive and positive behavior that enables individuals to deal effectively with the demands and challenges of everyday life. Another definition for life skills and simultaneously the one that will be used throughout the current research is from Danish, Taylor, Hodge, and Heke (2004) who defined life skills as those learned skills that allow individuals to succeed in the different environments in which they live, such as school, home, and in their neighborhoods. It is crucial to acknowledge that a skill can only be classified as a life skill when it can be successfully transferred into other life domains than the setting in which the skill is learned (Gould & Carson, 2008).

Brooks (1984) created a life skills taxonomy defining life skills as learned behaviors that are necessary for effective living, including essential knowledge or conditions for the development or acquisition of such behaviors. The life skills taxonomy consists of four categories: interpersonal communication and human relations skills, problem solving and decision-making skills, physical fitness and health maintenance skills, and identity development and purpose-in-life skills. For each category he described life skills descriptors for three stages in life, namely childhood, adolescence, and adulthood. The number of life skills is innumerable but examples of life skills are communicating effectively and working together with others, being assertive, being self-aware, setting goals, performing under and coping with pressure, effectively handling success and failure, positive thinking, focus, and time management.

Researchers have stressed why life skills are important to learn and have. Life skills contribute namely to the positive youth development allowing youngsters to be competent, healthy, and successful (Benson et al., 2006). Plus, they are related to experiences and opportunities known to enhance the overall positive developmental outcomes. Life skills can be transferred to other life contexts and therefore prepare youngsters to deal effectively with social demands, adopt healthy behaviors, and can be useful on the job market. Since the number of environments grows as we become older, life skills also become seemingly more important over time (Danish & Nellen, 1997).

Now a definition and categories for which life skills can play an important role are identified. Seen the importance of life skills, the influence on developmental outcomes, and the

perception that life skills are taught and not caught (Gould & Carson, 2008), it is argued that one could learn these skills through a formal program. These formal sport programs teaching life skills are discussed in the following paragraphs.

Life Skills Programs

Several intervention programs have been developed to actively foster positive youth development in both PE classes and sport programs. For example, the Going for the Goal (GOAL) program (Danish et al., 1998) consists of ten one-hour sessions taught by trained high school students to middle school and junior high school students. The aim of GOAL is to teach young adults a sense of personal control and confidence about their own future so they can become better decision-makers and become better citizens overall. The students are taught by the use of metaphors in a classroom setting.

Danish (2002) adapted the GOAL program to a more sport-based intervention called Sports United to Promote Education and Recreation (SUPER). In this intervention the athletes learn the life skills besides the actual physical aspects of the sport. The program is divided in clinics so that the athletes learn in three stages: first the physical skills of the sport, second the life skills that are related to sport in general, and third playing the sport.

Sport-specific intervention programs that especially aim to teach life skills focused on a particular sport are also on the market. The golf-oriented First Tee program (Petlichkoff, 2004) teaches life skills besides the golf essentials. A football-oriented program called Play It Smart (Petitpas, Van Raalte, Cornelius, & Presbrey, 2004) has a collaborative nature between coaches, parents, school staff, and community leaders to teach football players to identify which life skills they possess and how to transfer them into their academics. A program aimed more toward physical education is Hellison's model (2003), which teaches students to develop responsibility by integrating the education of life skills with the physical aspects of PE.

The formal life skills programs aim to not only teach athletes life skills but also to transfer the skills to other settings. The research on the transferability of life skills is lacking. In particular, whether one actually does transfer them into other life domains and especially how one does so. Martinek, Schilling, and Johnson (2001) found that the majority of the students who were involved in an after school sports program, the Project Effort, did not transfer the learned goal setting to the classroom setting. They therefore argued that the transfer of learned life skills

into another contexts requires certain conditions and may not be done automatically. What these potential conditions are is still unclear.

The abovementioned programs teach youth skills allowing them to learn and improve their sport performances through for example goal setting and taking responsibility. These programs have the potential to teach these skills but first it's necessary to know which skills students and athletes actually need. This is the first line of research that Goudas (2010) identified, which will be discussed next.

Identification of Life Skills Needs

High school sport coaches were surveyed regarding the problems they encounter while working with athletes (Gould, Chung, Smith, & White, 2006). The coaches reported encountering the following three issues the most frequently (a) failure to take personal responsibility, (b) lack of motivation/work ethic, and (c) poor communication/listening skills. These high school sport coaches recognized their important role in facilitating the development of personal and social skills through sport participation for their student-athletes but were also capable of identifying which issues they faced often. Similar issues were identified through interviews with coaches, athletic directors, school principals, and parents of high school athletes (Gould, Carson, Fifer, Lauer, & Benham, 2009a). They reported issues to do with coping with pressure, dealing with parental involvement, and counteracting expectations about results.

Jones and Lavalley (2009a) interviewed athletes, coaches, experts, and graduate students to explore how they defined life skills, which skills they thought British adolescents need, and which life skills are the most important. Several definitions of life skills occurred but the named examples were categorized in social skills, respect, leadership skills, family interactions skills, communication skills, and organizational skills. The participants identified the social and communication skills as the most crucial life skills for British athletes to learn.

A diverse group of participants (athletic directors, principals, coaches, parents, and athletes) were interviewed to identify issues and concerns that influence sport's potential to achieve educational and developmental objectives, in particular the development of psychosocial and life skills (Gould, Carson, Fifer, Lauer, & Benham, 2009b). A variety of issues were identified that might threaten athletes' positive development, namely an overemphasis placed on results and outcomes, increased pressure and expectations on the young athletes, early sports

specialization, parental issues including overinvolvement and poor sportsmanship, inappropriate attitudes, and the striving for professionalization. Therefore, the development of self-regulation strategies (e.g., goal setting, prioritizing, and time management) and emotional control strategies would be beneficial for athletes to counteract the detrimental impact of those demands and still experience personal growth.

Factors Contributing to Life Skills Development

The previously mentioned life skills intervention programs are built on the assumption that one can teach and learn life skills through a systematic program. However, the vast majority of athletes do not go through a formal life skills program but rather learn life skills, if they do, by their coaches and their environment. The following section will discuss factors that contribute to life skills development, which is the second line in the life skills research (Goudas, 2010). How can one develop life skills through sport and which factors are influential in this process? First, this is discussed from the perspective of coaches and is followed by the perspectives of athletes.

Life skills development: Coaches' perspectives. How do coaches try to develop values and mental skills in youth? McCallister, Blinde, and Weiss (2000) interviewed volunteer softball and baseball coaches without any formal training but on average 11 years of experience, which life skills they thought were important and how they taught these skills. The coaches were able to describe some skills they felt were important but were unable to clearly describe their teaching methods for these values and life skills. It appeared the coaches assumed that merely participating in sports automatically taught the athletes these skills and values.

Experienced, on average 9 years, and formally trained competitive ice hockey and soccer coaches seemed to use more well-thought-out and intentional strategies to influence athlete behavior and personal characteristics (Gilbert, Gilbert, & Trudel, 2001a, 2001b). Leadership is a personal characteristic that is simultaneously a life skill. Varsity athletes described how their coaches used four strategies to foster leadership skills in them. The coaches did so by being general nice people with a genuine interest in their athletes, engaging athletes in mature conversations, providing clear leadership roles and opportunities, and employing a stimulating environment (Wright & Côté, 2001).

Gould, Collins, Lauer, and Chung (2007) examined highly successful coaches' specific methods and strategies to develop personal characteristics and life skills in their athletes. These extremely experienced (on average 30 years) and formally trained football coaches viewed coaching general sport skills and coaching life skills as an intertwined constantly ongoing process. They were able to articulate thought-out processes and strategies, for example, establishing relationships with players by treating them as young adults and showing them they are cared about as people. They also incorporated consistent reinforcement that was individualized for each athlete. The coaches indicated that an important strategy for coaching sport and life skills is to keep high expectations and performance standards while holding the athletes accountable for the set standard and consistently doing so throughout the whole season.

In sum, inexperienced coaches were able to describe skills they found important for their athletes but were seemingly unaware of their teaching methods to achieve the development of these life skills with their athletes. More experienced and successful coaches on the other hand seem to have more well-thought-out strategies and approach teaching sport and life skills as one process. This suggests that coaches overall may interpret the development of life skills as an automatic process that is inherent to sport participation.

Life skills development: Athletes' perspectives. The development of life skills and their transferability to other life domains are recently more frequently researched from athletes' perspectives. The athletes involved in the next studies were actively competing in their sports. If athletes learn life skills, how do they develop these and how do they transfer them to other contexts?

Holt, Tink, Mandigo, and Fox (2008) examined in a case study of a Canadian high school soccer team whether and how the youth learned life skills through their sport involvement. The soccer team existed of 12 male athletes who were all around 17 years old and had about 11 years of experience in the sport. The researchers examined through fieldwork and interviews with the athletes and the head coach if and how the athletes gained life skills through involvement in the soccer team. The high school was known for their athletic performances and the head coach as an effective youth leader.

Their findings (Holt et al., 2008) showed that the majority of the athletes learned to take initiative and to demonstrate personal responsibility. However, the athletes did not learn these

skills because they were taught or learned the skills through soccer itself. Rather the researchers suggested that taking personal responsibility might have been a prerequisite to be involved in this level of football. It seemed that the skill of taking initiative was not transferred to other life domains. Besides the skill initiative, the players reported the skill of showing and having respect (for others). Again, this skill was not directly transferred to other non-sport contexts. It could be argued that respect was taught through soccer because the school athletic program valued respect to such an extent that the athletes were punished when they did not act upon this virtue. Lastly, the athletes reported teamwork and leadership as life skills. Even though the coach did not directly teach these skills, the athletes believed it was the only skill that transferred to other life contexts than sport. Holt and his colleagues concluded that none of the reported skills were directly taught by the coach. However, the coach did create an environment that provided his athletes with opportunities to gain these skills.

Besides the external factors that contribute to one's development, individual factors could also impact this development. Each individual participating in sport has his or her own pre-existing set of already learned skills, physical abilities, and personality characteristics (Benson, 1997). These internal assets could be divided into four categories (a) commitment to learning (e.g., achievement, motivation, school engagement), (b) positive values (e.g., caring, equity, responsibility), (c) social competencies (e.g., planning and decision-making), and (d) positive identity (e.g., self-esteem, sense of purpose) (Benson, Leffert, Scales, & Blyth, 1998). Youth who have more developmental assets are more likely to become successful in all their life domains and show for example more resilience. Therefore, these existing skills and dispositions might influence one's overall learning of life skills.

In sum, coaches believe they play an important role in teaching their athletes life skills but they are relatively unaware of how they do so. Athletes are also positive about gaining life skills through sport but do not transfer all the learned skills into non-sport settings. These results suggest that sport informally contributes to athletes' development of some life skills but do specific organized life skills programs provide better results? This question will be addressed in the next section.

Evaluation of Life Skills Programs

The third line in the research of life skills is on the effectiveness of life skills programs (Goudas, 2010). Only a few studies have examined the effectiveness of life skills programs, which will be discussed in the following paragraphs. The effectiveness of a variant of the life skills program SUPER was tested in sport clubs (volleyball and soccer) that examined the participants' knowledge about life skills, their (self-assessed) ability to use these skills, and their performance in sport skills (Papacharisis, Goudas, Danish, & Theodorakis, 2005).

The abbreviated form was taught in a period of 8 weeks, consisted of shorter sessions that took place during practice times and started with a sport skills test. The findings showed that the participants involved in the life skills program showed more knowledge of life skills (goal setting, problem solving, and positive thinking skills), reported higher self-beliefs in their own abilities to use these skills, and higher sport performance. This indicates that not only life skills can be taught alongside sport-specific skills but also enhance sport performance. The program provided the athletes with the knowledge and skills to successfully cope with challenges they might face in their lives.

Goudas et al. (2006) conducted a similar study but in a physical education context. They again examined the effectiveness of a shortened life skills program that was now delivered in physical education focusing on goal setting and positive thinking. They tested participants' performance, knowledge of life skills, and their self-reported ability to use the skills. The results are also similar, the participants who received the life skills training during their regular trainings reported greater knowledge of life skills, higher self-belief in goal setting, and higher physical fitness. Goudas et al. (2006) add to the abovementioned study that learning life skills does not hinder the learning of sport skills but students can actually improve them by applying the taught skills. The researchers argue that appropriate embedding of life skills is important to stimulate the learning of sport and life skills simultaneously.

Furthermore, Goudas and Giannoudis (2008) did a study examining the effectiveness of a life skills program in physical education but focused specifically on a team-sport-based program. This study tested goal setting, problem solving, and positive thinking, which now included the component of changing negative thoughts as well. During the in total 17 sessions, the participants learned sport-specific skills of basketball and volleyball and 10 minutes per session were dedicated to lectures of life skills. Again, the participants reported greater knowledge about

life skills and had higher self-beliefs for changing negative to positive thoughts. The self-beliefs for the other three did not change significantly. Their performance did improve. Learning life skills can therefore be seen as a valuable addition to gaining sport skills. This study did not specifically examine the transfer of skills to other life domains but in previous applications of the same program, the athletes were able to transfer the learned life skills.

Gould and Carson (2008) argued that the effects of formal life skills programs are rarely examined and therefore it may be hard for coaches and PE teachers to actively and successfully teach life skills. The lack of theoretical explanations of the development of life skills in sport may contribute to these few examinations. Practitioners experience practical difficulties because they cannot use an overarching theoretical framework of the development of life skills. Therefore, Gould and Carson developed a preliminary model that describes how life skills can be coached through sport. The model consists of five components. The first component consists of the athletes' personal characteristics. Internal and external, as both influence the coaches' ability to coach life skills. The second component focuses on the sport experience itself, especially on the actual coaching of life skills. The third component consists of possible explanations of how life skills development occurs and how it influences athletes' behaviors. The fourth component contains the positive and negative outcomes of sport participation that an athlete could experience after successfully or failing to learn the according life skills, respectively. The last component focuses on the transferability of the life skills to settings outside of sport. This transferability component is crucial as it is one of the prerequisites for a skill to be a life skill.

Camiré, Trudel, and Forneris (2012) used this preliminary model of coaching life skills through sport (Gould & Carson, 2008) to study how 10 successful high school football coaches taught and encouraged the transfer of life skills by conducting interviews with both the coaches and the athletes. They concluded that these coaches made a conscious effort of teaching life skills, while indicating that there are some differences in-between athletes in terms of transferability. There were some discrepancies in perspectives whether the athletes transferred life skills to other areas of life, due to differences in for example maturity. In addition, the findings supported the vision that life skills need purposeful attention from not only the coach but also from the athlete to be transferred into non-sport settings, as this might not be an automatic process. The process of transferability still demands further research (Goudas, 2010).

In sum, efforts have been made to examine the effectiveness of formal life skills programs on the development and transfers of life skills. The findings indicate that the programs seem to be effective in both sport and physical education contexts. However, those studies did not account for other influential factors, which were later included in the proposed model of coaching life skills through sport. In addition, there has been a lack of research of athletes' perceptions of life skills and their transferability. This leads to the newly proposed line of research in the following paragraphs.

Life Skills in Retrospect

A fourth line in the life skills research is proposed, namely athletes' perceptions of their learned life skills and how they can use these in non-sport contexts in retrospect. This aspect is an important characteristic of the current research as well. Until now, many studies have used athletes who were still actively participating in sport to study the development and transfers of life skills. However, it may be more meaningful for the research to examine athletes who are not active anymore in their sport. They will be able to reflect on their sport participation, the things they have learned during their sport career, and indicate what is useful for them today and for their daily functioning and strivings out of sport. In the following paragraphs, studies will be discussed that examine the development and transfers of life skills in (former) high school athletes, followed by studies examining this in former athletes who were involved in regular sport programs.

High school athletes. Camiré, Trudel, and Forneris (2009) interviewed 20 athletes, ranging between 13 and 17 years old, to explore their perspectives on whether they could negotiate their sport participation with their parents and their coaches. More importantly, the researchers explored whether the high school athletes believed they learned life skills through their sport and could transfer those to other life domains. The athletes were involved in regular sport programs (basketball, volleyball, soccer, and badminton) that were not structured to systematically teach life skills. Neither had the coaches received actual training related to PYD or to teaching life skills.

The majority of the athletes mentioned they negotiated their participation in high school sport with their parents (Camiré et al., 2009). Also, the majority mentioned that they received

several kinds of support from their parents, including emotional, logistical, and financial support. Most athletes stated to have had the opportunity to be involved in forming the team goals. Moreover, the athletes believed that their sport participation allowed them to develop several life skills, such as time management skills through balancing school and sports, personal dispositions (e.g., self-efficacy, confidence, and leadership), and social skills. All athletes mentioned that through sport they had expanded their social networks and learned working together. However, only a portion of the athletes mentioned to be able to use these social skills in various life domains, especially working together with others in for example academia. Since only a portion of the athletes mentioned transferring the skills, the other athletes might need more direction in this transferring process from for example their coaches.

These findings (Camiré et al., 2009) suggest that athletes need an appropriate sports context, supportive parents, and opportunities to develop life skills. They suggest that coaches and parents can stimulate athletes by making the athletes aware of the opportunity to learn these skills and possible transfers to other life domains. These results compliment the findings of Holt et al. (2008) because the high school athletes were able to learn and demonstrate initiative through sport participation like the previously interviewed soccer players did. Moreover, the athletes reported to have gained life skills such as confidence, leadership, time management skills, and other social skills like expanding social networks with meaningful relationships and working together with others.

Camiré and Trudel (2010) argued little is known about athletes' perspectives on character development through sport, which is why they examined this by interviewing athletes asking for descriptions of actual experiences in their sport. They interviewed 20 high school athletes, who were involved in one of the four sports that the high school offered (basketball, volleyball, soccer, and badminton) for at least one to five years. The athletes were asked to describe their perspectives on the coaching and the development of character in their high school sport. The researchers were specifically interested in the development of social and moral character through sport participation.

The athletes indicated how sport participation was an opportunity for them to learn social values such as teamwork, perseverance, and loyalty (Camiré & Trudel, 2010). Teamwork was mentioned by the majority as one of the most important values one developed through their sport. Team sport athletes seemed to place more importance on social values, whereas the

individual athletes did so on moral values. An interesting note of this study was that the athletes actually did not report learning moral values through sport. The athletes mentioned how they rather learned these values in other life domains, such as at home, and sport provided them an opportunity to apply these values. Therefore, the researchers argued sport could be an environment in which youth can develop and apply social and moral values. However, school administrators and coaches need to take an active role and implement this character development into their programs.

Kendellen and Camiré (2015) interviewed 14 former high school athletes of about 23 years old. The former athletes had been involved in multiple sport disciplines (individual and team sports) over the course of one to five years. The purpose was to examine athletes' perspectives on their developmental experiences in high school sport. In particular, exploring athletes' positive and negative experiences with their coaches during their sport participation in high school.

Athletes mentioned two types of positive experiences in their sport participation (Kendellen & Camiré, 2015). Firstly, the majority of the athletes mentioned learning new life skills through sport. Several mentioned to have learned the skills to be effective leaders. Also, the development of social skills, such as the ability to develop relationships with other people, was mentioned. Several athletes believed they gained time management skills. However, they did not believe actual sport taught them time management but rather the interaction of the demands of school and sport at the same time. Secondly, athletes indicated to be able to practice and refine previously acquired life skills through their high school sport participation. The athletes mentioned skills they had already learned before going to high school, such as coping skills, responsibility, and good work ethic. However, they mentioned how the sport environment provided them the opportunity to apply these skills again. Like the athletes in Camiré and Trudel's (2010) study, these athletes had gained skills in other life domains but were able to use them in the sport context. Moreover, these results compliment the suggestion Gould and Carson (2008) made that athletes come with a certain already existing skill set to sports or PE class, which makes the process of sport participation more complex as experiences are not identical for everyone involved.

Besides the positive experiences, the high school athletes also described experiences that could have a negative impact on their positive youth development (Kendellen & Camiré, 2015).

Firstly, athletes involved in contact sports mentioned incidences in which they witnessed aggressive behaviors. Two origins of the aggressive behaviors were described, namely a lack of emotional control skills and as a manner to show others power and influence. The latter was also interpreted as a subculture to ice hockey. Secondly, many high school athletes described experiences of stress because of the pressure to balance school and sport but some also because they were scared to make mistakes. Thirdly, athletes mentioned that many of their negative experiences were because of their interactions with their coaches. The incidences of dealing with favoritism and coaches' superiority made the athletes perceive the social interactions as inappropriate. Lastly, a couple athletes believed their academic careers suffered because they prioritized sport over their academic careers.

Kendellen and Camiré (2015) therefore argue that high school sport is not only an environment in which athletes can learn new life skills but can also apply already acquired skills. Coaches need to be aware of the potential for athletes to develop skills through sport, how they can adapt the sport environment to foster the positive development the youth would need and counteract the negative experiences athletes may have in sport.

As Kendellen and Camiré's (2015) study was specifically focused on experiences in high school sports, these experiences may differ to other types of competitive sport and age groups. Therefore, in the next section, studies will be discussed that explore life skills of athletes who were involved in competitive sport settings.

Competitive athletes. Holt, Tamminen, Tink, and Black (2009) conducted a study to answer questions if and how athletes learned life skills through participation in regular competitive sports. Forty young adults of about 22 years old, who had played regular competitive youth sport and had been involved across a range of team and individual sports, were interviewed. Participants needed to explain in detail what life skills they believed they learned through sport.

The findings suggested that the athletes did not learn life skills through the sport itself but rather through the social interactions that were involved (Holt et al., 2009). Three types of impactful interactions were identified, namely with peers, parents, and coaches. Firstly, the interaction with peers appeared to be the most meaningful. Through this interaction all athletes learned to develop friendships, peer networks, and most importantly the ability to work with

others. The latter retained meaningful in their adult lives. Secondly, the interaction with parents was meaningful for athletes because certain personal values, such as sportspersonship and personal responsibility, were instilled through this relationship. Lastly, the interaction with the coach appeared to be meaningful even though athletes mentioned positive and negative interactions. Positive interactions were those emphasizing persistence and effort, whereas negative interactions overemphasized winning.

Holt et al. (2009) therefore stressed that the interactions in sport facilitated the acquisition of life skills rather than the sport itself whereby the interactions with peers were the most influential on athletes' social skills. Similar to the results of Camiré and Trudel (2010) the parents played a role in the development of moral values and skills and used teachable moments provided by sport to instill these values. The findings also relate to the proposed life skills coaching model (Gould & Carson, 2008), in which coaches are placed in the most central teaching position, but now it seems that actually parents and especially peers may be more central to the youth sport experience than originally suggested.

In a single case study, a 22 year-old former regional and national successful female tennis player was interviewed about her experiences and her perspective on life skills in her sport (Jones & Lavallee, 2009b). The researchers purposefully chose this particular former tennis player as she had strong life skills and was open to share her experiences about the development. The study explored through multiple interviews how her general lived experience with tennis was and in detail how she had developed perceived life skills.

She described that she became the person she is today because of the integration of her own personal characteristics and the learning associated with playing tennis. Tennis had taught her many skills, such as communication, leadership, time management, and goal setting. However, she also mentioned that she did not develop certain skills, for example confidence in social situations. She argued that the learned skills were a reflection of the sport's requirements and her own individual experiences. These together emphasized specific skills, which resulted in her developing in this specific way.

She mentioned further developing skills that she was born with through her participation in tennis. These skills were namely refined and reinforced through her sport experiences. Crucial is to recognize that she explains that the requirements of the situation triggered her to use and further develop these already existing skills. For example, she described how she has

perfectionistic tendencies and tennis put her in situations where she could use these tendencies to keep going and manage the experience. Moreover, she mentioned that the development of life skills was implicit because no one ever taught her life skills. However, her parents did stimulate her in learning life skills through structuring her sport experiences. They encouraged her to take initiative and be independent by for example filling out her own forms for competitions.

The former tennis player also described that life skills can be transferred between life domains. For example, she mentioned how tennis allows her to be successful in academics. She is aware of factors that help her to transfer the skills she needs, such as the similarity in contexts, feeling confident in using the skills, and being successful doing so.

Overall, experiential factors triggered the actual development of life skills for her. The interaction of her own character dispositions, the environment demanding such skills, and a certain awareness of those requirements made her feel as if she could learn the skills to be successful. These findings are in contrast to the suggestion that life skills are 'taught and not caught'. Jones and Lavallee (2009b) namely argue that encouraging the awareness of situational requirements and structuring sport experiences to be in line with positive youth development will allow young athletes to learn life skills. Thus, the described learning process of life skills in their study was more implicit and unconscious, which needs to be further explored.

Adding to the research of the development of life skills and more importantly the process of transferability, Hayball and Jones (2016) interviewed eight female athletes of 15 and 16 years old, who had withdrawn from their competitive sport within a period of six months to one year before the interviews. Hayball and Jones explored whether these former athletes believed they could use their gained life skills from sport in a non-sport context and explored the perceived transfer process of these skills. The findings are similar to the earlier mentioned results (e.g., Jones & Lavallee, 2009b).

The former athletes indicated to have learned and refined existing life skills through their sport and that this happened through experiential learning (Hayball & Jones, 2016). The knowledge that was gained stayed after withdrawing from sports including conflict resolution, positive attitude, awareness of consequences of action, mental toughness, coping with stress, time management skills, self-esteem, confidence, and (social) competence. The former athletes also mentioned some examples in which they transferred life skills into non-sport settings. One

of them described conflict resolution for solving a conflict with a peer by asking to speak to her quietly instead of starting to yell.

Hayball and Jones (2016) argue that the transfer of the life skills was facilitated by an experience or series of experiences in sport that were memorable, experiential learning to manage the developmental experience of sport, appraising the event(s) as valuable, and the awareness that the skill or experience is also useful outside sport or at another time. Also, the refinement in personality allows life skills to stay over time and across situations.

In line with Camiré et al. (2009) those results suggest that athletes do not need a structured life skills program to gain and transfer life skills but rather the appraisal of the experiences is important. In addition, the demands of the situation allow participants to develop skills and apply these (Jones & Lavalée, 2009b). Therefore, Hayball and Jones (2016) argued that the awareness of usefulness of life skills in other domains is critical and coaches may have to adopt an active role in making their athletes aware of this. Lastly, they suggested future researchers to explore experiences of older participants who naturally have more life experience and had longer to consider how their experiences in sport transfer to other life domains.

Overall, both high school athletes and athletes involved in competitive sports mentioned instances of developing life skills through their sport participation. They described gaining new life skills or refining already existing skills not because their coaches directly taught them but rather because of the demands of the situation they were in. This implies again that sport brings coaches the opportunity to use the environment as a facilitator by making their athletes aware of the potential to learn life skills. Several athletes have mentioned to use these skills in other life domains outside of sport, especially in their academics. However, how they actually use these skills in other settings than sport remains unclear. In addition, the role of others (e.g., coaches, parents, and peers) in the learning and transfer processes is relatively undefined. Also, only a handful of studies use former athletes but it would be desirable to create a more complete picture of the development and transfer processes of life skills. Thus, these aspects demand further exploration.

The Current Research

In the following paragraphs, the purpose and justification of the current study are discussed. The purpose of the current study is namely to describe the life skills (former) athletes

have gained over the years they were involved in competitive sport, to explore how and which strategies they use to transfer the life skills into non-sports contexts, and who influenced the learning and transferring processes. Lastly, the positive and negative qualities that certain life skills may have are explored.

Since the environment seems to bring the opportunity to develop life skills, it is interesting to study specific sports separately. Focusing on only one sport environment will allow the researcher to make sure the athletes were involved in the same sport culture. This naturally eliminates differences one could experience across sports. In the current study, Dutch speed skaters will be interviewed to explore the proposed research questions. Speed skating has a long history and enjoys large popularity in the Netherlands. In contrast to previous studies, the athletes in the current study have been involved in three different competition levels, namely regional, national, and elite level.

This will allow for comparing the development and transfer processes of life skills across those three competition levels. The athletes are slightly older compared to existing studies, which will allow the athletes to have more insightful reflections of their speed skating careers. In addition, the majority of the athletes involved in the current study are former athletes, who have now ended their competitive speed skating careers.

To my knowledge no research has been published to date that addressed athletes' use of specific strategies to transfer and use life skills in other settings, the possible negative qualities of life skills, or the differences between competition levels, for which this study would be the first. The current study adds to the existing literature examining mainly former athletes. Therefore, this study might provide valuable implications for athletes and coaches in terms of how sport can be utilized as a tool to gain life skills, how to transfer life skills in non-sport settings in a positive manner, and maximize the transferable nature of life skills by increasing awareness of this process itself and who might be influential in this process.

METHODS

In the following paragraphs, the used methods for the current study will be described and the chosen approach will be explained. Information is provided about the participants, including short descriptions of each athlete. In this section the processes of the data collection and the data analysis are described as well as how trustworthiness was established.

Qualitative Analysis and Phenomenological Approach

A qualitative and specifically a phenomenological approach (Creswell, 2007) were chosen for the current study. The phenomenological approach was chosen because this approach allows the researcher to describe the meaning for several individuals of their lived experiences of a certain concept. The description provides information about *what* the participants have experienced and *how* they did so (Moustakas, 1994). Therefore, this approach fits the purpose of the study allowing the researcher to explore the experiences of how the athletes have gained life skills through sport, whether and how these were used in other life domains, and which life skills' qualities the athletes have experienced in their life outside of sport.

Participants

Several criteria were determined to ensure all speed skaters were eligible for participation in this study. The first criterion was a minimum age of 21 years. This would ensure that all participants had some life experience and were able to reflect on previous experiences. The second criterion was a minimum of five years of competitive experience in speed skating. This would mean that the participants had a respectable amount of experience in the sport to be able to reflect on potential developmental experiences in their speed skating career. The third criterion was participation in a track team for a minimum period of one year (i.e., one speed skating season is from May to April the next year). This would ensure that all participants had a relatively similar upbringing in the sport in terms of facilities and level of coaches. Lastly, the speed skaters had to fit into one of the competition levels, regional, national, or elite level.

Purposeful sampling was used to ensure the participants met the set criteria. The researcher was able to get in contact with these athletes to recruit them. Six speed skaters, two male and four female, were contacted and all were willing to participate in the study. The age

range was between 21 and 48 years ($M = 29.83$, $SD = 10.30$). Four participants have ended their competitive speed skating career while two participants are still actively competing, one of which only in recreational competitions. The amount of experience in competitive speed skating ranged between 11 and 26 years, averaging at 17 years ($SD = 5.87$). In the following paragraphs, short descriptions of each participant are given to provide more information about their speed skating career and at which competition level they were active.

Athlete 1. Athlete 1 is a 21 year-old male, who is currently finalizing his studies in physical therapy. He started speed skating at 6 years old and raced competitively for 11 years. He was part of two track teams, each for one year. Afterwards, he became part of a privately funded competitive team for four years. In his career, he competed in several national competitions (in his age categories): National Championships All Round, National Championships Short Distance on natural ice, and twice at Holland Cup. He ended his speed skating career and is now actively competing in triathlons.

Athlete 2. Athlete 2 is a 48 year-old female and mother of three children. She has been racing competitively since the age of 7. She was involved in *Jong Oranje* (Youth National Team), *Kernploeg* (National Team), and later a commercial team. She has competed in National Championships in all age categories and twice in European Championships. Currently, she is still competing in recreational competitions.

Athlete 3. Athlete 3 is a 23 year-old female, who is currently combining her law studies and work. She started speed skating at the age of 6 and raced competitively for 16 years. She was part of a track team for one year and competed at regional level.

Athlete 4. Athlete 4 is a 26 year-old female, currently trainer and working towards a second master degree in manual therapy. She started speed skating at the age of 5 and raced competitively for 12 years. She was part of two track teams for a total of four years and competed in several National Championships.

Athlete 5. Athlete 5 is a 25 year-old male. He has been competing since he was 10 years old. He has been involved in track teams, *Jong Oranje*, and commercial teams. He participated in National Championships, European Championships, World Championships, and the Olympic Games. Currently, he is training for the next Olympic cycle.

Athlete 6. Athlete 6 is a 36 year-old female, mother of three children and trainer. She started speed skating at the age of 5, started racing competitively at 10 years old and did so for 22 years. She was part of a track team for one year and competed at regional level.

Data Collection

Participants who met the inclusion criteria were approached and invited to participate. All six participants took part in one face-to-face semi-structured interview (see Appendix A). The interview guide consisted of four main sections, namely demographics (e.g., How old are you now? What is the best way to reach you?), questions regarding their career itself (e.g., When did you start speed skating? How long have you been involved in competitive speed skating?), skills they had learned through sport that may be useful in life (e.g., What have you learned as a competitive speed skater? Do you find these skills helpful and can you use these outside sport?), and effects of these skills (e.g., Can you tell something about positive experiences you have had because you gained these skills?). Paraphrasing and follow-up questions were used to gather more detailed information. Five of the interviews took place at the participants' home and one in a quiet coffee café. All interviews were audio-recorded with the athletes' permission and transcribed verbatim. The interviews lasted between 50 and 90 minutes. After the interviews were transcribed verbatim, they were sent to the participant together with a summary of the interview regarding the purpose of the study. This way, the participants had the opportunity to verify the accuracy of the given information. All participants signed an informed consent form (see Appendix B) before actual participation. The study was reviewed and approved by the University of Thessaly's Ethics Committee.

Data Analysis

An inductive thematic analysis is used to analyze the data by following the six phases Braun and Clarke (2006) described. Thematic analysis is a method to identify, analyze, and report themes within data. For this study, a realist method is adopted to report experiences, meanings, and reality described by the participants. The inductive nature of the thematic analysis refers to identifying themes based on the obtained data, which is used in the current study.

Braun and Clarke (2006) described six phases for thematic analysis. Firstly, the researcher needs to familiarize themselves with the data. In the current study, the researcher did so by conducting the interviews, transcribing the interviews, and reading the data multiple times. Secondly, initial codes are generated. This was done first by hand using different colored pens, later this was entered into a Word-document. Thirdly, the researcher can start to look for themes and how these might relate to each other. Fourthly, the candidate themes are reviewed to check whether the codes fit together and subsequently whether the themes work with all data. Fifthly, the researcher can define and name the final themes. Here it is important to identify the core of each theme, how all themes work together, and whether themes might contain subthemes. At this stage the researcher wrote articulated descriptions of each theme and subtheme. The sixth and last step is to produce the report.

Establishing Trustworthiness

The researcher was previously acquainted with all six participants. The extent to which this was the case differed per participant. The researcher is acquainted with Athlete 1 from face-to-face contact at the ice rink both were actively skating at and training together. Athlete 2 is a member at the same speed skating club as the researcher and they see each other at social events of the club. The acquaintance with Athlete 3 is one with different angles: she was a peer in speed skating, went to the same high school and university as the researcher. The researcher is acquainted with Athlete 4 from face-to-face contact at the ice rink. The researcher skated together with Athlete 5 around the age of 10 at the small local speed skating club, now he is more a friend of the family. The acquaintance with Athlete 6 was also more developed, she is member of the same speed skating club, was the researcher's trainer at one point, and has now adopted more the role of a friend. Therefore, the researcher approached the participants either directly face-to-face, called them, or sent them a message via WhatsApp or Facebook. Moreover,

through being previously acquainted the participants might have felt more comfortable talking to the researcher and provided them the opportunity to be open.

In addition for establishing trustworthiness, all participants were given the verbatim-transcribed interviews including a summary of the interview regarding the purpose of the study to verify the accuracy of the given information. The participants were given an interview summary as a method to enhance the comprehensibility of the data. All participants agreed with how the information was presented in their transcription and summary.

Paraphrasing and follow-up questions during the interviews were methods to check whether the researcher understood the athletes correctly. Lastly, a second individual, the supervising professor, checked the coding and themes once those were established and corrections were made through mutual agreement.

RESULTS AND DISCUSSION

The interviews have been analyzed by inductive thematic analysis. Three key themes are identified: (1) Development of Life Skills, (2) Developed Life Skills and (3) Transfers of Life Skills. All three key themes have second- and third-order themes. The first key theme has six second-order themes, one of which consists of two third-order themes. The second key theme has two second-order themes, one of which consists of three third-order themes. The last key theme has two second-order themes: the first consists of four third-order themes and the second of two third-order themes. The thematic map of the current study is included in Appendix C.

In the following sections, the development of life skills including external influences and how speed skating is a lifestyle, the life skills the athletes developed, the experienced positive and negative qualities of life skills, and the used strategies to transfer those life skills into non-sport contexts will be illustrated by quotes of the athletes. First, the development of life skills will be described. Second, a description is provided of which life skills the athletes developed including descriptions of the experienced qualities. Finally, the transfers of life skills will be described including the non-sport contexts the athletes used the gained life skills and which strategies they used to do so.

Development of Life Skills

One part of the purpose of this study was to explore how athletes developed life skills over the course of their speed skating career. This is captured by the first key theme: Development of Life Skills. During the interviews athletes described external factors that influenced the development of their life skills, such as influences of their environment, their home situation, and their coaches. In addition, they were able to identify the impact of speed skating itself on their lives. This is also included in this theme. The descriptions of external influential factors and speed skating as a lifestyle will be discussed respectively in the following paragraphs.

External Factors

In this first subtheme of Development of Life Skills are descriptions included that refer to external influential factors in developing and transferring life skills. One's own interest is also included as external factor because others may have an influence on one's interest. The athletes mentioned how their environment, parents, coaches and teachers have influenced developmental processes. These are respectively the third-order themes of this subtheme.

Environment. The following quote is an example of the influence of environmental demands on the development of life skills:

You actually take quite a lot from sport then (...) I was almost forced to do so. There isn't more time to do home work or going to practices. So yeah... You learn [those skills] because you are forced. I wasn't conscious of the fact that I was learning skills at that moment. It just happened because it had to be done like this (...) otherwise I wouldn't be able to go to the ice rink.

This indicates that this athlete felt as if the environment forced her to learn and apply life skills. She was involved in an environment that required her to learn and apply life skills simultaneously to be successful in the perceived important areas of her life, namely high school and speed skating. This result is similar to the findings of Jones and Lavalée (2009b) that indicated how the female tennis player believed tennis put her in situations that enabled her to learn certain skills that she also found useful in other life domains. It can be argued that not sport itself taught her life skills but rather the interaction of the demands of two environments, sport and academia. This matches the findings of Kendellen and Camiré (2015), whose interviewed athletes mentioned this type of interaction of demands specifically.

Home. The home environment seemed to be important to all athletes. They all mentioned instances of how their family (i.e., parents and siblings) supported them in their speed skating careers (e.g., "I got a lot of support from home"). This is in line with the research findings of for example Camiré et al. (2009) who found that athletes mentioned to receive several types of support from their parents. Parents also sometimes enabled the athletes to learn specific skills:

Well, my dad has always been like with trainings or competitions, the night before, [name], prepare your stuff! Discipline, like my dad always said. Living in a structured

way, it is much easier to leave the next morning (...) [Discipline] is something I gained slowly... My dad often drew my attention to it (...) My dad has always been a great example for that (...) I have learned the structure, discipline, uh... He [my dad] showed me that.

Discipline could also be interpreted as a personal value, which is in result comparable to the findings of Holt et al. (2009) who found that the interaction between parents and athletes is valuable for instilling personal values such as taking own responsibility for actions. Both instances indicate that the situation at home and the relationship with parents are very valuable for an athlete to develop life skills.

Coaches and teachers. The following quote is an example of the influence of a teacher: In the beginning, I didn't have that. I think it has been a bit of trial and error. At one point someone said to me at school: 'Hey how do you that in your sport, when you cannot do something?' And from that moment, I have made that connection (...) Maybe it's not such a bad idea to approach my study like I do with my speed skating.

This indicates that people who have a significant role in an athlete's life outside of sport can also influence the transferring process of life skills. Through this question, the athlete was able to make the connection between speed skating and his studies, which as a result allowed him to enhance his academic performance. Therefore, the awareness that a skill may be useful in a different context is crucial, which was also indicated by for example Hayball and Jones (2016) stating that a coach might need to adopt an active role in creating this awareness.

Lifestyle

In this second subtheme of Development of Life Skills are descriptions included that refer to how life skills are learned because of the central role that speed skating had in one's life. Athletes mentioned instances of not being able to picture their life without speed skating, "I will continue speed skating because that flows through my blood. I cannot go without. [Because I enjoy it] that is also why I am trainer now and still skate once a week." One athlete similarly mentioned:

In the end you could see [speed skating] as your complete life of course. Speed skating is obviously a very big part and actually always has been the biggest part of my life.

This indicates that speed skating has had the lead role in his life and has been the major factor in his life in itself. Another athlete argued that she wasn't aware of the development of specific skills when she was younger:

I cannot remember that I was so conscious about [learning life skills]. It just happened that way. We just went to the ice rink. That was self-evident. (...) I just thought it was fun. I thought speed skating was fun. My social life was at the ice rink, friends... And yeah, home... I went to the ice rink with enjoyment.

This indicates that she has the perspective that learning life skills is a natural process that takes place over time besides the environment requirements. These findings are different to previous findings and therefore add to the existing literature.

Overall, athletes described that several external factors influenced the development of life skills in general. In addition, they indicated that speed skating was such a dominant aspect of their lives through which they automatically learned life skills. For the athletes, it seemed to be a natural process to approach tasks and challenges in a certain way because of the central role speed skating had in their lives.

Developed Life Skills

A second part of the purpose of the current study was to describe the life skills athletes have gained during their competitive speed skating career and which qualities of these skills athletes experience. This is captured in the second key theme: Developed Life Skills. During the interviews the athletes mentioned skills and descriptions that qualify as life skills. They described examples of goal directed behaviors, organizational skills, coping skills, focus skills, and developing a certain awareness, which they perceived as useful in other areas of their lives than sport. These descriptions of gained life skills and experienced qualities will be discussed respectively in the following paragraphs.

Goal Directed Behaviors

In this subtheme of Developed Life Skills are descriptions included that refer to goal directed behaviors. The athletes described their competitive attitude in sport and how they strived to be the best they could be. Athletes gave examples of goal setting and striving to win, "Yes that

is quite difficult to really name a skill but I think what I've got ready now is that in participating in sports you always have a goal, which you always work toward", and "Everything was centered around... I had to win. Even though I didn't give it my all, I still had to win." Another athlete mentioned an example of perseverance in her sport participation:

Keep going and whatever comes to you, you just keep going (...) In speed skating I've also had many setbacks but I still succeed. Uh... So, perseverance, I've [shown] that in speed skating... Also in the year when I wasn't in the track team but back at the club but [I] thought 'I will make it!'

These quotes show that athletes are aware of their goal directed behavior and are able to describe a large variety of behaviors that helped them to achieve their desired goals. This included goal setting, determination, perseverance, work ethic, and not giving up. These skills are in concurrence with findings of previous life skills studies showing that sport participation allows athletes to gain skills, for example goal setting (Jones & Lavalley, 2009b) and perseverance (Camiré & Trudel, 2010).

Organizational Skills

In this subtheme of Developed Life Skills are descriptions included that refer to organizational skills. The athletes mentioned using skills such as time management, planning, organizing, and prioritizing as useful skills to manage their speed skating career and any other aspects that were simultaneously important. For example, "I am someone who, kind of, can live really structured because of my elite sport and besides my elite sport." Another athlete mentioned to have learned to prioritize not only in speed skating but also in his studies:

And you learn to give up a lot and to do a lot for [speed skating] And... I also do that for my studies right now for example. I can quite easily cast things aside because it doesn't fit into the route I had planned.

The athletes described that they could not only use these skills in their speed skating career but also in contexts outside of sport, such as their job and study. Time management is one of the more frequently mentioned learned life skills through sport (e.g., Camiré et al., 2009; Hayball & Jones, 2016; Jones & Lavalley, 2009b; Kendellen & Camiré, 2015).

Coping Skills

In this subtheme of Developed Life Skills are descriptions included that refer to coping skills. The athletes described that they have learned how to cope with stress, pressure, setbacks, and expectations. The majority also mentioned they had learned how to put things into perspective. All these skills can be used in other contexts than sport as well. One athlete mentioned, "In sports you can learn to put those setbacks into perspective." This type of coping skills has appeared in previous research (e.g., Hayball & Jones, 2016; Kendellen & Camiré, 2015). Another quote that is illustrative for this subtheme of coping skills is the following:

Acidification, you don't have that when you just do sports... because you're not pushing your boundaries. Because it doesn't matter how fast you run... And that is something that I notice in my daily life, because you know how to suffer, you've learned to be stress resistant. You've learned how to cope with that. (...) And that is something that is very positive for me.

Focus Skills

In this subtheme of Developed Life Skills are descriptions included that refer to skills that helped athletes concentrate or focus on the task at hand. The athletes mentioned instances of adapting their focus and switching between being concentrated first and having attention for the bigger picture second. For example an athlete mentioned:

[Concentration] is something, I always said that... In training, when you do something, when you get an instruction then I will be focused on that and when I am finished with that I don't have to be focused anymore and there is space for a chat, fun, and jokes...

In addition, the athletes named examples of having to focus on themselves in for example competition settings but in exams as well:

That you, kind of, that you do your own thing and that someone else does that in a completely different way and you can still follow your plan and stay in your own thing. If a classmate starts talking before such an exam, then I do not ignore it but I do not get myself involved in it (...) Just like with competitions. There are a lot of people who are really anxious the whole race day, who do not eat and are super nervous... I more or less ignore that. I don't let it influence myself. So in that way you're quite egoistic, in a sense that you do your own thing and that you don't get influenced by others and someone who

has a bad influence on me, you can kind of put a wall up for them. Uh, that you really are busy with yourself (...) you are really focused on yourself.

Awareness

In this subtheme of Developed Life Skills are descriptions included that refer to personal development and self-awareness. The athletes mentioned on several instances how they personally developed through their participation in competitive speed skating:

Mostly that I developed myself and learned a lot about myself. Yes [speed skating] also brought me lot in that way. Uh... I've learned a lot and it brought me a lot that is obviously linked (...) The most important is that I've learned about myself and because of that [I] have a different perspective on life. Strengths and weaknesses also clearly appear then. What you can and cannot handle.

They also described learning about themselves mentally and physically. Another athlete described namely:

But sport did teach me to know and feel what such an emotion is that I can handle. (...)

And I did learn from sport that it isn't good... You get to know your mental and physical state so well that you know exactly where you are.

They could not only use these types of awareness during their sport but also in their daily lives. The development of awareness is closely related to the overall concept of positive youth development and has previously been fostered through organized activities (e.g., Hansen et al., 2003) but has not been directly found in studies examining competitive athletes.

Experienced Qualities

In this subtheme of Developed Life Skills are descriptions included that refer to experiences of positive and negative qualities of life skills. These qualities impact athletes' lives outside of sport because they have and use these life skills. For example, strategies to cope with stress allow athletes to stay calmer in their daily lives, whereas perfectionism might be experienced as debilitating outside of sport.

Positive qualities. Athletes mentioned several instances in which they experience positive qualities of their gained life skills. They were able to describe for example how their approaches allowed them to succeed:

Yeah, I think [having these skills] makes sure... Like what I said about that preparing for an exam that you can do that according to a certain planning and that you can concentrate in a specific way to prepare. Uh... That it actually works and that a lot of things work out. Plus that I know when I cannot do something right now and I invest time in it and work on it, I can become better at it. (...) That faith of investing in something and you handle it in a specific way, you can have confidence that things will work out.

In addition, one athlete described how having and using these skills allow him to be a nicer person:

It sounds very cliché but it makes you a nicer person, that's just how it is. (...) You become a nicer person. And in the end, when you live this way and you can incorporate others in your successes or feelings, you know. What I said, I would get to all those clichés again... When you do what you like and you do that in a structured way and you can take your environment with you. Firstly, it is much nicer for the people around you to work with you and to be with you. You get a certain appreciation or uh... How do you say that? How shall we call it? [Get] love back from someone. [Get] appreciation back and I experience that as really nice.

This is a clear example of how life skills affect one's overall development as a person alongside their qualities in sports.

Negative qualities. Athletes mentioned instances where they experienced negative qualities of normally positive skills. One athlete described for example:

I found myself [through speed skating] and I've learned things and you take those with you in the things that you do now. Sometimes it also works against you. I am very perfectionistic from myself, I've always been like that. That doesn't... It is good but it is also a weakness of course. A pitfall. [I] started driving lessons and [I] thought that after three times I could drive. That doesn't make any sense but that is that perfectionism. Also in my work, I want to do it perfectly. However, that is just impossible. At school, I wanted to do it perfectly, but that is just impossible. So, in my eyes I fail. That really

counteracts me of course (...) I am not doing it like it should be exactly, for me it feels like failing when that is actually not in place. So, you actually get a misplaced fail, if you will.

This quote illustrates that athletes experience perfectionism in some situations as facilitative and it helps them to achieve their goals. However, in other instances, they experience perfectionism as debilitating because they feel as if they failed in their performance, even though this might have been out of place. This particular athlete tried and expected to succeed too quickly and did not allow herself the chance to undergo the developmental process.

A second athlete illustrated with the following quote how striving for the best result leads to being impatient and not being able to stop or give up:

And now... I need to learn to give in. That is a min from the sport... You cannot give up. Or you feel like you can't give up. And that is actually not true. (...) But where I struggle a lot is that I don't have much patience toward others. Because I am very strong in that. When I want to do something, I will just put everything in it. But others don't have that. Or at least, other people might not have that point of view. (...) Now I am still pushing boundaries I notice that in my job as well. I don't have a high position. It's more like a supportive position. But I am always trying to perfect and improve the process. And I think that is uh... a part of the past, of my sport past. Always looking for something that can be better, can be improved, maybe can be more efficient... In that time, you've always worked in a team that had the same goal in mind... A coach, the chef, the doctor, you name it... And now you're in a team of people who just come to work from 9 till 5 and they just uh... They don't have the experience to bring something to a success. (...) How simple something is... When I go and work in my garden, so then, what are we talking about, right? But then I still want to finish it properly. I also have that in the house, it just needs to be nice. I don't want to say that it is something compulsive but that originates in my sport. That it just needs to go well. But I think you need that when you want to deliver an elite performance. And it isn't egoism but you're behaving egocentrically. That is something that I need to look out for in my work or in my family life... You place yourself on a higher level but the others are still there (*motions hands into two levels*). That is something I now struggle with. And [I] don't have the patience to let the others do it their way. You expect that they would have the same attitude but they

don't have that (...) And that is in sports, you are so dependent on your own body and your soul that you need to do it yourself. When you think like, 'now I can't anymore', you think, 'now you cannot go back anymore'... That [is something] you encounter everywhere... That is such a pitfall, that you just want way too much.

Overall, the athletes were able to identify a variety of life skills they had gained through their competitive speed skating career. The majority of the mentioned life skills were related to goal directed behaviors, however, a big portion of the named skills had to do with coping with stressors. The athletes were also able to identify and name examples of not only positive but also negative qualities of life skills. The experiences with negative qualities of life skills were most apparent when athletes described taking perfectionism and perseverance a notch too far, which results in (physically and mentally) continuing and not giving up. These findings of experienced positive and negative qualities of life skills add to the existing body of literature in a way that this concept provides a new perspective on life skills.

Transfers of Life Skills

A third part of the purpose of the current study was to describe how athletes transfer life skills into non-sport contexts and which strategies they use to do this. This is captured in the third key theme: Transfers of Life Skills. During the interviews the athletes mentioned a variety of examples of non-sport domains in which they use the learned life skills. In addition, they described several strategies they use to apply life skills not only in sport but also in non-sport settings. In the next paragraphs, the non-sport contexts in which the athletes are able to apply their gained life skills are discussed, followed by the strategies they use to do so.

Contexts

In this first subtheme of Transfers of Life Skills are descriptions included that refer to non-sport contexts in which the athletes apply and can use the learned life skills. The athletes were able to identify and name many examples of various non-sport contexts in which they can apply the skills they have learned in speed skating, such as their study, work, daily and family life. These are respectively the third-order themes of this subtheme.

Academics. One of the contexts athletes mentioned on multiple occasions was the use of a variety of life skills in their studies. One of the athletes mentioned for example the use of planning and perseverance at university:

Like, right now, I will be graduating soon and I have made a planning to be finished at the correct time and to have finished everything. To actually be finished at that time I have also scheduled to finish this topic in that week, that topic in that week. Also according to a certain structure. I am relying on that... if I don't follow that it won't be finished on time. So, through which it is also easier to keep that schedule and not be behind. I also try to see [school and speed skating] as the same. When something doesn't work out in speed skating, that you will train for that... so that you will be able to that. At school, I do the same. When I cannot do something, cannot do YET, I will work on that until I can... and invest time! Not in an unguided manner, just doing something... But really make a planning for it to get that structure in it.

This indicates a direct transfer of the skills planning and perseverance, which are learned in sport and now are used in a non-sport context. The transfer of life skills into academia is a relatively known concept and has been identified by other researchers as well (e.g., Jones & Lavallee, 2009b). The athlete in that study mentioned how her sport allowed her to be successful in her academics because she was able to see the similarities between the contexts.

Work. Another often-mentioned environment in which life skills could be applied was at work. Athletes mentioned for example how they used goal setting at their job to reach specific deadlines, which sometimes were self-made:

Setting goals is now a bit less in my job. But well, certain tasks need to be finished before a specific date. Or that I set that deadline for myself. Like, this needs to be done and I want to have finished that by [this date]. And sometimes other tasks need to make way for [those]. Then I just do that tomorrow, the next day, or next week but I will work this morning or this afternoon just on this. Just because I want to finish that and otherwise you will take that with you in your backpack and that isn't what you want. You just want to finish it.

There were also many examples of how athletes could use coping skills at work:

Yeah, in a competition you need to as well. You need to perform under pressure because that's when it needs to happen, then [your] technique needs to be good, yeah... I think, when I transfer that to my work... also when it is really busy and stress and pressure, you can do your job. I still think that it hard to handle sometimes but I have learned to handle that a bit better (laughs).

This quote indicates that athletes are able to use coping skills in the work setting to function better in their job. These findings of transfers to the work context are fresh, as the existing literature has mainly studied younger athletes who were naturally not at this stage of their lives yet.

Daily and family life. The third non-sport context in which athletes were able to use life skills was in their daily and family life. One athlete specifically mentioned that she uses coping skills in this context:

That is that piece of being stress resistant that I've learned and experienced in sports... Like, when it is windy or it's raining... Oh. Hm. It's not going to be great today. But, we're going to make the best out of it anyway. And I have the same in my family and private life as well. Okay... this is a big setback, what now. You don't panic. I don't want to say that setbacks don't affect you anymore, not at all... But you have learned how to deal with them and how to handle it.

The following quote illustrates how an athlete uses prioritizing in her daily life by comparing a potential world trip and the job she is in right now:

So, I know for example, I also want to do a world trip, that is something that has been on my planning for a very long time now... But I also want to have a good job. So, I know that I need to leave [the world trip] for a bit. You cannot just say: 'Okay, I am leaving for about half a year!' I think that [my job] is more important at the moment and [the world trip] will come later. Prioritizing by achieving this first and going on a world trip is something I per se want to do but that has to wait for now. You cannot spend [money] twice. So, therefore, I find [my job] more important right now and therefore I am also at peace about that.

Similar to the previously discussed subtheme, the athletes in the current study are a bit older and therefore have experiences in for example balancing their own life, work, and having another role in the family such as being a mother in contrast to previous conducted studies.

Other. Besides the abovementioned contexts, the athletes also described other contexts in which they can use their life skills and this miscellaneous bunch of contexts is included in this third-order theme. The athletes were able to describe that they use for example planning in all life domains:

Like I said, speed skating and school, everything else was built around that. Once in a while, I saw someone and that was it. Sometimes you had a family birthday in the weekend but that was it. So [I] absolutely learned how to plan. That is something that you take with you in your whole life actually, I think. That is something that you have learned and that you do well. So, that is something that you take with you.

One of the athletes mentioned that she strives for the best result in all her life domains and not just in sport:

Coming up with things that would make it possible. For example... Now... I am working as a recruiter and I've wanted that for a long time. So then I already know that I will do everything [so] that I would succeed. So I have this very strongly now with jobs to name an example. But I think I have that in everything. When I want something super bad, I just make a complete plan of how I will accomplish that.

Similar to this quote is the following example of another athlete indicating that he uses goal setting in all his life domains:

I am always setting goals. That is one thing you really gain from being an elite athlete. You set a goal, you have something in mind and you work towards that. You first write out how or what. So it actually works the same way as being in shape. Like the basic conditioning, you make a broad base and work towards that top shape. That is the exact same with setting goals. You first make a plan and then you work towards your goal.

Strategies

In this second subtheme of Transfers of Life Skills are descriptions included that refer to strategies to use life skills in either sport or non-sport settings. The athletes were able to provide

clear descriptions of how they use life skills in real life settings. For instance, an athlete described a strategy to not only deal with stress that comes along with competitions but also in exams by interpreting stress positively:

And at the moment when I was at the start, I got the pressure back. But then, I always tried to approach that as that anxiety that I feel right now, I need that, because through [that] my body makes itself ready to perform. So instead of that I let that anxiety hinder me, I kind of postponed the moment of stress to just before the start... And then I knew I needed it. And that it wasn't wrong. In that way, I could cope with that. The same thing, I have that with exams for example. For school, and uhm... With a lot of things that can cause a little bit of stress, I try to approach them the same way. And also the idea that it's not bad to be stressed for something or tense, that it is actually quite good.

Besides coping with stress, he mentioned a strategy for goal setting and planning to make sure his thesis was finished in time:

I will be graduating soon and I have made a planning to be finished at the correct time and to have finished everything. To actually be finished at that time I have also scheduled to finish this topic in that week, that topic in that week. Also according to a certain structure. I am relying on that... if I don't follow that it won't be finished on time. So, through which it is also easier to keep that schedule and not be behind.

The athletes were not only asked about descriptions of life skills but also to what extent the use of their skills was either a conscious or an unconscious process for them. This will be discussed next.

Conscious. Only on a few occasions an athlete mentioned how the use of life skills was a conscious process. This athlete namely described that living structured is a structured process in itself:

It really is a structured process to [live structured and disciplined]. It is also easy to let go of it... A simple example is when... That is the same as organizing and cleaning a room, that is how I compare it. When you put a pile of laundry on the floor, you'll put the second pile next to it and the third will be even easier. While when you clean it, wash it immediately, fold it and put it in your wardrobe. Then it is good. But you got to do that...

It's actually easier to do it immediately every time than that you park it all for a bit and have to do everything at once. I have learned that. I've become conscious of that, yes.

This indicates that he consciously chooses to live in a structured way because he has experienced that this allows him to create an overview in his life, which in result helps him to stay calmer overall.

Unconscious. However, much more examples were given that indicate that athletes are unaware of the use of their life skills. One athlete namely mentioned:

I also think that you do some things just unconsciously. Being involved in sports is really a way of life at one point. Everything else is planned around it. Trainings are at specific times, so you plan school, which is also an obligation, you plan it in such a way that it fits nicely... For example, going out, you plan it around your trainings. So that whole being involved in sports is such a fixed part that you actually are focused on that 24/7. Skills that you get from there... It is like, as if everything you do is for your sport. That is how it feels. That you also use those skills in other things, that is more or less unconscious. Uh... yeah... So that is so much a way of life and such a strategy that you uh... yeah... It is also a type of flow, I think. It is not really conscious, like, these skills I use here and those like this. You kind of grow up in it... Because it is such a lifestyle that it's just the way it is, it is not possible differently. That is how it sometimes feels. Yes, it happens to me a bit, you know. And that I do it that way... that is just logic, I always do it like that. I surely do that in a training as well. Do you think it is weird that you... An exam, it's just logic that you prepare for that?! You also do that for a competition, right? You also adapt your training. Those are very... For me very logical things. Because you always do it like that.

The second example is from another athlete mentioning how she can use coping with stress at her job on the automatic pilot:

You're functioning... Normally you're functioning on the automatic pilot, you don't even think about it anymore. Something that I hear a lot from people is that: 'Yeah but you do that so easily' and uh... 'You put that next to you so easily, when it doesn't go well.' But well, what do I gain when I get stressed out? (...) Well... Automatic pilot... At a certain point, you uh... You work in certain routines. But we still have certain peak moments. At

those times it really is just not thinking and just doing. And I don't get panicked by that. You know, let's say that when your deadline is approaching, I don't panic. People can get very nervous: 'I am not going to make it, not going to make it...' But I have something like: 'Keep calm, we will make it.'

These examples indicate that at one point one might have realized one has certain skills that can be used in non-sport settings but this has turned into such a habit that one doesn't have to think about using the skills anymore. In result, the unconscious use of life skills implies a certain automatic nature of applying life skills in other life domains.

Overall, the athletes were able to identify some strategies they use that allowed them to apply gained life skills in non-sport contexts. It seemed however that the use of life skills is a relatively unconscious process for the athletes. It can be argued that the athletes have become so familiar with the use of these skills that they do not have to think about it anymore and it seems to 'happen' to them. However, it can be valuable for athletes to have coaches who make them aware of the possible transfers. These findings of strategies for transfers of life skills and the (un)conscious nature of them seem to be a first addition to the existing research. This will need to be explored more in-depth.

Competition Levels

A second purpose of the current study was to compare the development and transfer processes of athletes across three competition levels in speed skating. The athletes involved in this study had namely been active at regional, national, or elite competition level. In the following paragraphs, the athletes will be compared based on their competition level in the three identified key themes, Development of Life Skills, Developed Life Skills, and Transfers of Life Skills, respectively.

Development of Life Skills

The comparison of the development of life skills of the athletes in the three competition levels shows that all athletes mentioned how external influences had impacted the development of life skills. The national and elite athletes referred more to the influence and support from their family and their coaches, whereas the regional athletes also mentioned the impact and the demands of the environment. More specifically, one regional athlete mentioned how the

environment 'forced' her to learn specific skills and live in a certain way because there was 'no other way'. Even though she did enjoy spending so much time at the ice rink it implies that she was put in an environment that required her to learn the appropriate skills to be successful across life domains. The other regional athlete however mentioned how the environment's requirements became too much and made her question her choice as being part of the track team. This resulted in her quitting the track team. Later she joined speed skating again and participated in recreational competitions. In contrast, the national and elite athletes mentioned how speed skating was a (very) big part of their lives but they experienced this as something positive and self-evident. This allowed them to experience the use of life skills as natural and logic.

Developed Life Skills

The comparison of athletes' developed life skills indicates that regional level athletes mentioned fewer developed life skills than the athletes active at national or elite level. The elite athletes described to have gained the most life skills throughout their sports career by far. Why do elite athletes describe to have developed more life skills?

It could be argued that athletes involved in elite sports are faced with situations that know higher stakes than regional athletes. They might be faced more often with adversity and setbacks, which they need to learn how to cope with. Even though the amount of years of experience in competitive speed skating was relatively similar across the three levels, for the elite athletes was more at stake during these years than for the regional level athletes. The elite athletes themselves did not mention specifically how the environment had required them to learn skills. However, they both mentioned the impact that speed skating has made on them and others and the major role speed skating had in their lives.

In terms of the experienced qualities of life skills all athletes described experiences of both positive and negative qualities. All athletes mentioned experiencing a variety of positive qualities of life skills such as that certain skills bring a type of calmness and that the skills allow them to be confident in their own capacity. However, there were some differences regarding the experienced negative qualities of life skills. The elite athletes mentioned instances in which they were unable to give up on for example a performance whether that is running a marathon, cleaning up the garden or helping others to become better. The national athletes mentioned perfectionism and planning as pitfalls. One takes perfectionism a notch too far to the point where

it becomes debilitating for her and the other is unable to deviate in the slightest form from his planning. The regional athletes also mention a negative quality of the life skill striving for best, which is also taken too far and doesn't allow for enjoyment of the process.

Transfers of Life Skills

The comparison of the athletes in the three competition levels shows that they do not really differ in terms of their transfer processes of life skills into non-sport settings. It only seems that the elite athletes are somewhat more aware of their skills and they can therefore use these more purposefully in other contexts. The regional athletes on the other hand were less aware of whether and how they use skills in non-sport contexts. However, they did provide examples of transfers of life skills. This implies that they do transfer skills but are just relatively unaware of this process. Therefore, they seem to be less likely to be able to transfer life skills and get the same quality of this transfer as national or elite athletes.

Overall, some differences between the competition levels can be identified in this study for the development and transfer processes of the developed life skills. The elite athletes seem to develop more life skills through the guidance from coaches and parents, which they can purposefully apply in other life domains than sport, more so than regional or national athletes. Moreover, elite athletes seem to be more aware of the experienced positive and negative qualities of life skills and can therefore look out for this. The findings regarding the differences across competition levels add a new concept to the existing body of research and allow for further exploration.

GENERAL DISCUSSION

This study explored how athletes develop and transfer life skills across domains. The findings indicate that athletes are able to describe the influential factors on the development of life skills, a variety of skills and their experienced qualities, and numerous non-sport life domains in which they find the skills useful. Moreover, they described strategies they use to make this transfer.

The findings of the current study are similar to those of existing literature regarding the influences of the environment (e.g., Jones & Lavallee, 2009), parents (e.g., Camiré et al., 2009), and coaches (Hayball & Jones, 2016) on the development of life skills. Athletes indicated namely that the demands of the environment and the support of parents and coaches helped them develop life skills. The types of life skills (goal directed behaviors, organizational skills, coping skills, focus skills, and awareness) the athletes developed were also similar to those studies. An often-mentioned context in which life skills can be used is academia (e.g., Jones & Lavallee, 2009), which the current study was no exception for. Newly identified subthemes in the current study are speed skating as a lifestyle, the experienced life skills' qualities, and the strategies the athletes use to transfer their skills into other life domains either consciously or unconsciously.

Where this study extends the existing body of literature is regarding the finding that athletes describe that their sport had the central role in their lives. This allows them to develop and use skills over time through for them a seemingly natural process. Descriptions of used strategies to transfer life skills and experienced qualities of life skills also add to the previously conducted life skills studies. The athletes of the current study were able to identify that on some occasions transfers happen consciously but more than not this transfer process appears to be automatic. Athletes described how life skills allowed them to experience positive qualities but they were also aware of the negative qualities some life skills have. Strategies used for transferring life skills and the experienced qualities of life skills are two new concepts in the literature that demand further research.

The current study explored the development and transfers of life skills by interviewing (former) athletes using a phenomenological approach. The athletes were all Dutch speed skaters, who had been involved in a certain competition level. The majority of the athletes had ended their competitive speed skating careers. Since these athletes were older, they were at different life stages than athletes involved in previous studies. Neither the athletes nor their coaches had

been involved in any kind of formal life skills program or training. This suggests that the studied athletes developed life skills really from their sport participation and the environment they were in. This reproduces previous findings (e.g., Hayball & Jones, 2016; Jones & Lavallee, 2009b; Kendellen & Camiré, 2015) that indicated that athletes are able to develop life skills because they are faced with interactions of several environmental demands. Coaches and parents pointing to the similarities between sport and academics or other aspects of life would contribute to the awareness and application of skills in other life domains. Hayball and Jones (2016) already suggested that coaches should adopt an active role in creating this type of awareness and the current results point in the same direction.

Since the athletes had been involved in different competition levels, this allowed for comparing their development and use of life skills, which has not been done before. The comparison indicated that elite athletes developed the most life skills, were more aware of them, and therefore may be able to use them more purposefully. This suggests that athletes on lower competition levels may need more direction from their coaches and parents to be made aware of the usefulness of the gained skills in other contexts.

Differences in terms of the used participants to the already existing literature are thus that the athletes had been involved in a specific competition level, the majority had ended their career, and were naturally older. These differences in athletes' characteristics did lead to both similar and different results compared to the existing body of literature. The athletes did mention similar kinds of life skills as previously found (e.g., Camiré et al., 2009; Jones & Lavallee, 2009b), however, they also described which life skills' qualities they experience in their daily lives and which strategies they use to transfer the skills. These results indicate that athletes, who have ended their competitive careers and are more mature, are more capable of reflecting on their developmental processes through their sport participation. In addition, the athletes mentioned different influential factors that were important for their developmental and transfer processes, which may indicate that the different competition levels come along with different needs.

A new line in the life skills research has been proposed, namely life skills in retrospect. In this line of research, former athletes' perceptions of their gained life skills and whether they find these skills useful in other contexts are explored. Until this study, only a few studies have explored this concept with former athletes. This approach brings the opportunity to gain a deeper understanding of life skills development and transfers because athletes who are not actively

competing anymore are more capable of identifying the valuable lessons they have learned during their sports career and indicating what is useful for them today and for their daily functioning and strivings out of sport. In addition, new concepts related to life skills can be identified in this line of research. Former athletes are namely not only more aware of strategies they use to transfer their skills into non-sport settings but they are also much more aware of the qualities that life skills have and how these affect them. This line of research adds a more practical point of view to the already identified three lines in life skills research. The new fourth line has more applicable value for those involved in competitive sports because both athletes and coaches can learn from the experiences of former competitive athletes.

Implications

These results might be valuable for currently competing athletes, their parents, and their coaches. All can benefit from the gained understanding of the development and transfers of life skills. Coaches and parents can play a significant role in both processes. Coaches do not need to explicitly teach their athletes life skills or teach them how to transfer those skills to other life domains. They can however adopt an active standpoint in creating more awareness in their athletes that sport provides them the opportunity to learn such skills that are also useful in other life contexts than sport. This indication will make the athletes more likely to learn and develop the skills they could use across contexts. Moreover, coaches can take an active position in making their athletes aware of the potential qualities of life skills. Athletes could namely experience both positive and negative qualities of life skills. Therefore, it may be important for coaches and parents to provide athletes with accurate support to stimulate experiencing the positive qualities and to prevent experiencing the negative qualities.

Limitations

The comparison between competition levels regarding developing and transferring life skills should be interpreted with caution because of the limited number of participants in each category. All athletes had a similar background in speed skating because they were all part of a track team at one stage of their speed skating career. Therefore, these findings are only relevant for a certain group of athletes for this moment. Also, it appeared that the participants were in

different life stages due to the differences in age, which made comparing the athletes in this study a bit more complicated.

Future Directions

This study is among the first qualitative studies exploring the development and transfers of life skills in former athletes, which tries to compare the athletes based on the competition level they were active in. The similarities and differences in the processes and experienced qualities of life skills can be valuable information for all parties involved. Just a very few athletes will achieve it to compete at elite level, whereas the majority stays to compete at regional or national level. This results in a very few athletes making a living off of sports while the majority needs to do this in other ways, such as working in a 'regular' job, in which life skills can play a valuable role. Future studies can explore those similarities and differences more in-depth to gain a deeper understanding how life skills can be used in different contexts and how athletes involved in all levels can maximize experiencing the positive qualities of life skills, and especially what the role of the coach and parents should be. In addition, future studies could include and explore the influences of individual factors such as personal interests, inclinations, and talents on life skills development to generate a broadened understanding. Lastly, focusing on only former athletes would allow future researchers to create a more complete picture because the athletes will be able to describe their experiences from a retrospective point of view.

Conclusion

This research was set up to explore the development and transfers of life skills into other domains in former speed skaters. The interviewed athletes showed to have developed a variety of life skills through their participation in competitive speed skating and were able to transfer these into other life domains. They were aware of factors influencing the development of life skills and could describe the qualities of life skills they experienced in their lives. Since sport brings one the opportunity to positive youth development, coaches do not need to explicitly teach life skills. However, they need to adopt an active role to make their athletes aware that they can learn skills through their sport and use these outside of sport as well. Elite athletes seem to develop more life skills in their sport careers through the guidance of coaches and parents, they can use these skills

purposefully in other contexts, and they are more aware of the qualities life skills have than the athletes at regional or national level. In general, it is believed that life skills research will benefit from conducting more studies that explore the complexity of the development, transfers, and qualities of life skills by using former athletes.

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APPENDICES

Appendix A

Interview Guide

A Qualitative Study of Athletes' Gained Life Skills Through Sport in Retrospect

I start with thanking the participant for meeting with me. I review the purpose of the interview: to describe the skills athletes have learned through sport that may be useful for life. With a particular emphasis on how those skills can be used in non-sport settings and exploring the effect on athletes' daily lives. I do so to gain further understanding of those learned skills and how coaches and athletes could use them in a positive manner. I ask confirmed consent to participate, inform about the right to withdraw or not to answer a particular question, and permission for audio recording and/or note taking. I inform the participant about the right to say when something is 'off the record'. I turn on recording if permission is given and ask whether there are any questions.

Interview

I conduct the interview with an attitude that is open to hear your stories and your experiences. When appropriate I will follow your lead in exploring the topics of interest. The interview consists of four main parts but is still open to be taken into a specific more detailed direction.

DEMOGRAPHICS

1. Please verify whether this information is correct for use in the written report of the current study and identification of the data:
 - a. Name (Pseudonym)
 - b. Age
 - c. Sport
 - d. Contact details (email address/telephone number)

CAREER – WHEN START / HOW LONG / WHAT LEVEL

2. To start the interview, I would like to have a better understanding of your career path (up until now). Please tell me in detail how you got involved in speed skating?
3. Could you describe your speed skating career (up until now)?

[When the athlete did not specify the following, I ask the athlete:]

- a. How long have you been involved in speed skating?
- b. What were the most important events that happened in your sports career?
- c. What is the highest level you have actively competed in?
- d. What is the most important or highest achievement for you as a speed skater?
4. Besides being involved in speed skating, have you competed in other sports as well?
 - a. Which sport?
 - b. What level?

SKILLS LEARNED THROUGH SPORT THAT MAY BE USEFUL IN LIFE

5. I'm really interested in understanding more about what athletes might learn through sport and whether they found these skills useful. Can you tell me something about this?
6. Please describe what skills you learned as a competitive speed skater?
7. Please explain what have you learned from competing and training at that level, as a skater? As a person?
8. You mentioned what skills you have learned, now can you please describe how you have learned those skills?
 - a. Can you describe the role of others in this process? Think about your coach, parents, friends, peers in sport but also in school?
9. You mentioned that some skills you learned through speed skating have you found these skills useful in other domains? Think about education, work, (family) daily life?
 - a. Can you give me some examples of this? Could you elaborate a bit more on...?
 - b. Is this an automatic process, you don't really think about it but just do it?
 - c. Or do you use specific strategies to do so? Please tell me how these strategies work?
 - d. Have you thought about using skills learned from sport in other domains?

EFFECTS

10. We talked about the skills you have learned from sport and speed skating specifically. Now, I'd like to go more in-depth on what it means for you to have those skills. *Can you*

say something about what it means for you to have skills that you can use in other areas besides sports?

11. Can you describe what the effect of those skills is on these areas you use them in?
 - a. Can you tell me something about positive (things) you have experienced from having those skills? Please give some (detailed) examples.
 - b. Can you tell me something about negative (things) you have experienced from having those skills? Please give some (detailed) examples.
 - c. Are there any pitfalls from having gained life skills from sports? Please illustrate this with examples.

ENDING INTERVIEW

12. One last question, we have talked about your career path, the skills you have learned along the way that you can use in other areas in your life and the effect those have. Do you have anything else that you want to share with me that is important to you relating to your sport experiences and life skills but we haven't talked about yet?

Thank you again for meeting with me and doing this interview with me. Once the interview data has been transcribed, you will be given a copy to verify all information.

Appendix B

Informed Consent

1. Title of the study

A Qualitative Study of Athletes' Gained Life Skills Through Sport in Retrospect

2. Aim of the study

The aim of this study is to describe the life skills athletes have gained over their sports career. With a particular emphasis on how life skills are transferred into non-sport settings and exploring the effect on athletes' daily lives.

3. Description of research activities

You are asked to take part in one face-to-face interview with the researcher in which you will be asked to share your experiences with life skills through sport. It is anticipated that the interview will last for approximately 60 minutes.

Your permission is asked to record the interview with a digital voice recorder for research purposes. You will be given a copy of your transcribed interview to verify whether the data is complete and accurate. A second interview may be required when changes need to be applied.

4. Risks/ discomfort involved

As you are informed this interview is about gaining life skills through sport. This might elicit memories. If you feel uncomfortable at any point during this interview, you may decide not to answer the asked question or completely withdraw from the interview.

5. Expected impact

This study aims to describe the life skills gained by athletes throughout their sport career, how these life skills are transferred into non-sport settings, and what the impact may be on their daily lives. This study may provide valuable implications for coaches and athletes on how to gain the necessary life skills and use them in a positive manner.

6. Dissemination of results

To ensure anonymity, a pseudonym will be used to protect your identity. In addition, you will be given a copy of the transcribed interview to verify the accuracy of the given information.

7. Further Information

Do not hesitate to ask questions regarding the aim of this study or the implementation of study design. If you have any doubts or questions, please do ask for clarifications.

8. Freedom of consent

You are a volunteer participant. You are free to withdraw your consent now or later. In case you decide to withdraw from this research, please contact me at bernadetteramaker@hotmail.com and any (recorded) data related to you will be deleted.

Participant's declaration

I read this form and I understand the procedures involved. I agree to participate in this study.

Date: __/__/__

[Name and signature of
participant]

[Name and signature of
researcher]

Appendix C

Thematic Map

