



LAPIN YLIOPISTO  
UNIVERSITY OF LAPLAND



**University of Lapland**

**This is a self-archived version of an original article. This version usually differs somewhat from the publisher's final version, if the self-archived version is the accepted author manuscript.**

## **PERMA-based Perspectives on Sports**

Uusiautti, Satu; Leskisenoja, Eliisa Marjukka; Hyvärinen, Sanna Maarit

*Published in:*  
Global Journal of Human-Social Science

Published: 01.01.2017

*Document Version*  
Publisher's PDF, also known as Version of record

*Citation for published version (APA):*  
Uusiautti, S., Leskisenoja, E. M., & Hyvärinen, S. M. (2017). PERMA-based Perspectives on Sports: Designing New Ways To Support Well-Being In Finnish Junior Ice hockey Players. *Global Journal of Human-Social Science*, 17(2), 30-39.

**Document License**  
CC BY-NC



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: A  
ARTS & HUMANITIES - PSYCHOLOGY  
Volume 17 Issue 2 Version 1.0 Year 2017  
Type: Double Blind Peer Reviewed International Research Journal  
Publisher: Global Journals Inc. (USA)  
Online ISSN: 2249-460X & Print ISSN: 0975-587X

## PERMA-based Perspectives on Sports - Designing New Ways To Support Well-Being In Finnish Junior Ice hockey Players

By Satu Uusiautti, Eliisa Leskisenoja & Sanna Hyvärinen

*University of Lapland*

*Abstract-* Ice hockey is a very popular hobby among Finnish boys. However, there are concerns over these young athletes' well-being. In this article, we discuss the offerings of positive psychology to sports. How to use positive and strength-based approaches to enhance well-being and joy of playing among junior ice hockey players? We introduce our ideas based on the development work in collaboration with the Finnish Ice Hockey Association and our earlier research on the theme. Martin Seligman's PERMA theory serves as the theoretical basis of our research. According to the theory, well-being is construct of five elements: positive emotions, engagement, relationships, meaning, and accomplishment, that we operationalize into practices to be used in junior ice hockey. The theoretical review shows that operationalizing the PERMA theory offers a fruitful way of combining the scientific and theoretical expertise with the knowledge about ice hockey (or any sports) in practice. Our goal is to achieve significant results and success stories that do not only tell about success in sports such as ice hockey, but as positive development as players and persons in general.

*Keywords:* positive psychology, perma, well-being, ice hockey, coaching, Finland, positive development.

*GJHSS-A Classification:* FOR Code: 110699



*Strictly as per the compliance and regulations of:*



# PERMA-based Perspectives on Sports – Designing New Ways To Support Well-Being In Finnish Junior Ice hockey Players

Satu Uusiautti <sup>α</sup>, Eliisa Leskisenoja <sup>σ</sup> & Sanna Hyvärinen <sup>ρ</sup>

**Abstract-** Ice hockey is a very popular hobby among Finnish boys. However, there are concerns over these young athletes' well-being. In this article, we discuss the offerings of positive psychology to sports. How to use positive and strength-based approaches to enhance well-being and joy of playing among junior ice hockey players? We introduce our ideas based on the development work in collaboration with the Finnish Ice Hockey Association and our earlier research on the theme. Martin Seligman's PERMA theory serves as the theoretical basis of our research. According to the theory, well-being is construct of five elements: positive emotions, engagement, relationships, meaning, and accomplishment, that we operationalize into practices to be used in junior ice hockey. The theoretical review shows that operationalizing the PERMA theory offers a fruitful way of combining the scientific and theoretical expertise with the knowledge about ice hockey (or any sports) in practice. Our goal is to achieve significant results and success stories that do not only tell about success in sports such as ice hockey, but as positive development as players and persons in general.

**Keywords:** *positive psychology, perma, well-being, ice hockey, coaching, Finland, positivedevelopment.*

## I. INTRODUCTION

Finland is one of the top countries in ice hockey, and the sport is, indeed, the most popular one among the Finns. However, our research group was contacted by junior ice hockey coaches who expressed their concern over Finnish boys' performance-oriented, (too) serious attitudes toward playing, attrition, and other problems showing the malaise among young men. Even though this contact was somewhat surprising to us, we knew that joyless labor in direction of goals in sports had been noted already decades ago to be a feature common to especially boys and men (e.g., Duda, 1988; see also Curran, Hill, Hall, & Jowett, 2015). The basis of our viewpoint lays in positive psychology that offers positive and strength-based approaches to various areas of life and are already somewhat known in sports for example in the USA and Australia (Wu, 2014)—but have not yet found their way in the Finnish coaching culture. In this article, we will introduce our ideas based on the development work in collaboration with the Finnish Ice Hockey Association and our earlier research on the theme (Leskisenoja, 2016; 2017; Leskisenoja &

Uusiautti, 2015; 2017; Uusiautti & Määttä, 2014; 2015; Uusiautti, Määttä, & Leskisenoja, 2016).

The relevance of our research does not only emerge from coaches' notions and practical experiences, but also from wide well-being surveys (see e.g., National Institute for Health and Welfare, 2015; OECD, 2016) show that especially the wellbeing level among boys is continuously worrying. In Finland, the differences in well-being between girls and boys have actually increased meaning that boys perform worse at school, do not engage to education as well as girls, and are in greater danger of dropping out and exclusion. On the other hand, having a sportive hobby gives a better chance to find sources of well-being in life: infrequent participation in sports, a low grades in school sports, and poor school achievements in adolescence are associated with physical inactivity in adulthood (Tammelin et al., 2003). Youth sport participation is connected with several general indicators of development, including identity development, personal exploration, initiative, improved cognitive and physical skills, cultivating social connections, teamwork and social skills (Hansen, Larson, & Dworkin, 2003; see also Lerner, 2009). In addition, socio-economic statuses influence our participation in sports: while low income may prevent participation in costly hobbies, studies have also shown differences in reasons for choosing a hobby (Laakso et al., 2006). Those with low education are more likely to find team spirit, excitement provided by sports, and experiences of success that take place outside the school environment important while those with high education may find health effects the most important reason for sports (Borodulin, 2008).

At the level of junior ice hockey where players are around age 10-13 years old, the lack of well-being oriented training may actually lead to negative development, stress, and for example, decrease in self-esteem (Jewitt, Hall, Hull, & Curran, 2016; Malina, 2010; Merkel, 2013; Patel, Omar, & Terry, 2010; Scanlan, Babkes, & Scanlan, 2005)—which may have far-reaching effects in children's lifespans. On the other hand, the quality and skills of maintaining social relationships in sports should be better noticed because they are one of the most important elements of children's well-being and positive development (Goswami, 2012; Holder & Coleman, 2009). Especially,

*Author α: Professor of education, University of Lapland, Finland.  
e-mail: Satu.Uusiautti@ulapland.fi*

when we think about team sports, such as ice hockey, the social element becomes even more critical: at its best, a team sport can support the development of social skills (Ferguson & Shapiro, 2016; Merkel, 2013), and team spirit, friendships, and membership in a group (Fletcher, Nickerson, & Wright, 2003; Mahoney, Larson, Eccles, & Lord, 2005; Merkel, 2013). Having a sportive hobby prevents exclusion (Roberts, 2004; Saunders, 2008). In addition, organized sports activities include many factors enhancing positive development, such as increased visioning, self-efficacy, and initiative (Murphy & Johnson, 2011). These skills and abilities are important for the future. And yet, the various elements of well-being from a positive psychological perspective are still less studied in the context of junior sports (cf. Wu, 2014).

The purpose of the Finnish Ice Hockey Association is to develop coaching so that it would enhance children and youth's holistic development as persons, athletes, and ice hockey players. The impact of supportive relationships with adults and role models are essential in bringing about positive developmental outcomes (Vella, Oades, & Crowe, 2011). Coaches can have a critical role in facilitating positive athlete outcomes and enhancing strengths, self-esteem, and other personal resources (Fraser-Thomas, Cote, & Deakin, 2005). Currently, coaching applies various methods of physical training and traditional psychological training (e.g., Kunnari, Määttä, & Uusiautti, 2013; Nikupeteri, Uusiautti, & Määttä, 2014). However, knowledge about positive development and well-being is needed. Our purpose is to approach this gap in research. According to our understanding, methods that can enhance the development of well-being skills in leisure activities may well be the best way of helping all children in many ways (Donaldson & Ronan, 2006; Gadermann et al., 2016; Leskisenoja, 2016; McMahan et al., 2017). A research-based approach to promote well-being in children outside school environment and inside those contexts that matter to children during their voluntary free-time activities can show a way of influencing a great number of children and make participation in sports more meaningful also to those children who have not find them interesting or valuable to them earlier. In their own hobby environment, children are presumably more interested, open, and receptive to the contents of well-being focused methods and practices than, for example, in schools (see e.g., Barker & Weller, 2003)

We will describe this theoretical approach in greater detail in the next chapter. Then, our purpose is to explore more closely Seligman's (2011) well-being theory called "PERMA" and its possible application in sports. The main question this article will answer is as follow: What are the theoretical prerequisites of enhancing well-being through sports by applying the PERMA theory?

## II. WELL-BEING BASED THEORETICAL APPROACHES TO SPORTS

Research has showed that positive experiences are connected to success in various areas of life (Cohn & Fredrickson, 2009; Hyvärinen, 2016; Lopez, Teramoto Pedrotti, & Snyder, 2015; Lyubomirsky, Sheldon, & Schkade, 2005; Mahoney et al., 2005; Määttä & Uusiautti, 2012; 2017; Uusiautti & Määttä, 2015), including sports. In order to find physical activities pleasurable and meaningful, people need successes and positive emotions related to their doing. Sport psychology is a field that is especially interested in human behavior in sports and physical exercising (Matikka & Roos-Salmi, 2012; Nikupeteri et al., 2014), and is connected with training psychology, too (e.g., Lintunen et al., 2012; Orlick & Partington, 1988; Silva III, Conroy, & Zizzi, 1999). Training psychology is actually a wider concept, referring to a more holistic process of training including community-, group-, and individual-level solutions of training that support well-being and personality development in sportsmen and -women at all levels of performance (Nikupeteri et al., 2014). Training psychology can also refer to the training of psychological skills that are needed in sports-related mental stress situations (Lintunen et al., 2012).

As physical training, also psychological training happens in daily practices (Weinberg & Gould, 2007). Lintunen et al. (2012) divide psychological training into (1) training that supports mental well-being, (2) teaching of mental skills or techniques, and (3) treatment of mental problems. The ultimate goal is to provide a mental basis for high performances in sports, which is the main difference between training psychology and sport psychology. Matikka (2012) defines that sport psychology is interested in human behavior in sports without the purpose of high achievements (see also Cox, 2012; Driskell, Copper, & Moran, 1994).

However, the elements of positive psychology are just about to come a part of sports and training. Next, we will introduce some of the useful viewpoints that help understanding the basis of positive human behaviors and development in this sense.

First, well-being can be viewed from the perspective of one's agency in volitional doing, self-determination (Wehmeyer, Little, & Sergeant, 2009). Participation in physical training is this kind of area of human agency where the sense of personal empowerment is at the core in terms of "knowing and having what it takes to achieve goals" (Wehmeyer et al., 2009, p. 357). In Ryan and Deci's (2000a; 2000b) well-known self-determination theory, the main basic psychological needs of competence, autonomy, and relatedness occur positively or negatively based on the level of support one receives from one's social context (see also Little et al., 2002). Recent research has added constructs of positive psychology, such as hope and life

satisfaction, to self-determination research (Wehmeyer et al., 2009). In the field of sports research, self-determination theory is mainly used for exploring the nature of positive motivational states in sports and physical education in schools (e.g., Hagger & Chatzisarantis, 2007; Wang et al., 2002).

Duckworth (2016) has also been interested in what makes people determined and successful in what they are doing. She concluded that high achievers have high levels of passion and perseverance, and created the GRIT theory that illustrates that to be successful, something more than just talent is required (cf. also Lahti, 2014). Sport-specific engagement is related to how “gritty” athletes are (see Larkin, O’Connor, & Williams, 2016).

In addition to determination, passion, perseverance, and talent, success in sports requires athlete engagement, a specific concept describing engagement in sports. Here, the coaches’ role can be quite extraordinary, as Curran et al.’s (2015) study showed. They studied how coach behaviors could enhance positive experiences in youth sport by examining relationships between the motivational climate and athlete engagement. Engagement was described with positive states such as confidence, dedication, enthusiasm, and vigor. Positive support for engagement is, therefore, crucial but for those, who strive for perfect performances, athlete engagement can turn into negative spiral leading to, for example, burnout (Jewitt et al., 2016).

In her research, Dweck (2012) identified two distinct ways in which people view their talents and abilities. Individuals with a fixed mindset believe that their talents and abilities are static and fixed – people are born with a certain amount of intelligence or strength, and there is little they can do to change this. In this mindset, athletes may become so concerned with being and looking talented that they never achieve their full potential (Dweck, 2009). In contrast, a growth mindset corresponds with the belief that the talent and abilities can be developed and that effort, practice and instruction are essential components of success (Dweck, 2012). Research has shown that a growth mindset fosters a healthier attitude toward practice and learning, a hunger for feedback, a greater ability to deal adversity and setbacks and better performance and psychological wellness over time (e.g. Dweck, 2012; Golby & Wood, 2016; Rattan, Savani, Chugh, & Dweck, 2015; Yeager et al., 2016). Coaches’ mindsets matter as well. A growth mindset coaches present sport skills as acquirable, value passion and effort, foster teamwork and team spirit and present themselves as mentors, not just talent judges (Dweck, 2009). College soccer players who believed that their success was a result of effort and practice performed better over the next season. Athletes who thought that their coaches prized effort and

hard work more than natural ability were even more likely to have a superior season (Dweck, 2007).

The aforementioned theories introduce various positively oriented viewpoints to sports. They analyze the relationship between certain human strengths and characteristics and their performances and development in sports. As we can see, the fundamental idea in these illustrations is how to enhance people’s performances in sports, how to make them succeed better and better, and how to achieve top performances. Now, although we realize, too, that sports is about performing and that those who seriously train are mainly interested in how to improve their performances. However, we take a different stand on sports here: by applying a holistic theory of well-being, our purpose is to increase young (and older) people’s flourishing—which will include better performances, too, but the main focus is on the balanced development as a person and as an athlete. In the next chapter, we will describe this theoretical approach.

### III. HOW TO USE PERMA IN SPORTS?

Seligman’s (2011) well-being theory is about the foundations of human flourishing that can happen in anyone and in any area of life. Thus, it provides a perspective to flourishing in sports without limiting it within the traditional sports psychological approaches or having a goal-centered and performance-oriented focus (see Wu, 2014). This is important to our research because the ultimate purpose is to provide children—through their ice hockey or other sports hobby—with skills of well-being that promote their success not only in sports but other areas of life in a healthy way.

The PERMA theory serves as the theoretical basis of our research among junior ice hockey players and their coaches (see also Leskisenoja, 2016; Uusiautti & Määttä, 2015; Uusiautti, Määttä, & Leskisenoja, 2016). According to the theory, well-being is construct of five elements: positive emotions, engagement, relationships, meaning, and accomplishment.

#### a) *Positive emotions*

Participation in sports and physical training can provide people with numerous different positive emotions, such as joy of winning and achieving goals, excitement, or appreciation of excellence in oneself and others (see also Wu, 2014). Positive emotions are associated with broadened cognition, enhanced awareness and the ability to solve problems more effectively. They also undo lingering negative emotions, build resilience and help people to bounce back from negative emotional experiences. (Cohn & Fredrickson, 2009; Fredrickson & Kurtz, 2011.)

Positive emotions form the cornerstone of our well-being, lead us to successes (Lyubomirsky, King, & Diener, 2005), and support our holistic, positive development (Cohn & Fredrickson, 2009; Mahoney et



al., 2005). They have also a main role in prediction of success in sports (Donaldson & Ronan, 2006; Tabeian, Zaravar, Shokrpour, & Baghooli, 2015). On the other hand, sport participation seems to be an excellent way to experience psychosocial health, well-being and general quality of life (Allender, Cowburn, & Foster, 2006; Fletcher, Nickerson, & Wright, 2003; Merkel, 2013). Positive emotions are also connected to positive relationships and positive atmosphere, which are quite significant for success and thriving in sports (Carr, 2011).

Our purpose is to operationalize Seligman's (2011) PERMA theory into practices to be used in sports, in this case in junior ice hockey. When it comes to positive emotions, the following scientifically measurable practices would be suitable: What went well -practices, gratitude rituals, savoring, three funny things or counting funny things, optimistic attributional styles and thinking, acts of kindness, humoristic spurring before games, smile and laugh -practices, and disputing negative thinking.

#### *b) Engagement*

Engagement in sports appears as dedication and concentration, but also the opportunity to use and develop one's strength (Seligman, 2011; Wu, 2014). They are also connected closely with meaning (see later in this article). When doing is pleasurable, it can lead to the total absorption also called as flow (Csikszentmihalyi, 2008). Flow is typically experienced in clearly structured activities in which the level of challenge and skill can be varied and controlled, such as sport. Drane and Barber (2016) noticed that a sports hobby that makes flow experiences possible is important especially in adolescence when engagement to schoolwork might not be that strong or first priority to everyone. Lately, the interest in mindfulness-based interventions has increased in sport psychology. Mindfulness teaches athletes to be present, focusing only on stimuli that immediately affect their performance (Ford, Wyckoff, & Sherlin, 2016), and thus increases engagement.

Engagement as presented in Seligman's (2011) PERMA theory can be operationalized into sports as follows: strengths spotting, mindfulness practices in training and game situations, and breathing practices. The flow theory provides practices such as balancing goals and abilities in training.

#### *c) Relationships*

How people perceive themselves and their relationship with their surrounding environment depends on the interaction that takes place in their social environment where they grow and develop (Berscheid, 2002; Carr, 2011). It is not surprising that people who have formed and maintained satisfactory relationships seem to be happier than those who has not succeeded in this (Berscheid, 2002).

Especially in team sports, relationships have an important role. Collaboration and mutual support can have a positive effect on an individual's performance and feelings (Wu, 2014). Team spirit sense of belonging, positive interaction, and mutual spurring can be practiced through various methods. The relationships element of PERMA theory (Seligman, 2011) can be operationalized for example into following practices: caring coaching, acts of kindness, active constructive responding, social events, team building, team rituals, team camps, and team spirit moments. Not only strengthen they team spirit but also provide opportunities to train social and emotional skills (e.g., support, respect, praise, open communication, peer reinforcement, and noticing good in team members).

#### *d) Meaning*

People have various reasons for engaging to sports. For some, it provides a way to relax, keep in good shape, or meet friends, for others it is a way of self-fulfillment and can even become a career. Whatever the reason, finding exercising meaningful is crucial for well-being. As we mentioned, signature strengths are a part of our fundamental identity; when using them, we feel being ourselves (Niemiec, 2014). These strengths are positive and teachable (Peterson & Seligman, 2004), and they are considered the sources of satisfactory, happy, and successful life. Many of these, such as hope, perseverance, creativity and zest, provide sport participants a great opportunity to improve performance and enjoyment (Yeager, Fisher, & Shearon, 2011). Salmela (2016; see also Salmela & Uusiautti, 2015) points out how various definitions of human strengths share the view that strengths are positive characteristics that tell about the person's best qualities, and how using these strengths causes emotions of joy and excitement, and sense of meaning (Linley, Willars, & Biswas-Diener, 2010; Rath, 2007; Seligman, 2002).

Meaning can be operationalized into practices that help recognizing strengths and using them: strengths spotting, team shirts of strengths, and identification of the team's shared strengths. In addition, strategies of autonomy-supportive coaching (Conroy & Coatsworth, 2007) may increase the sense of meaning in sports.

#### *e) Accomplishment*

In sports, and especially when referring to voluntary leisure activities, achievements may and should not get the priority among young players. In general, however, achieving goals is important to human beings' well-being (Seligman, 2011). In sports, the achievements of small goals rather than long-term pursuit to top scores tend to be more beneficial (e.g., Debois et al., 2012; Gillham & Weiler, 2013). It is crucial to provide young athletes with concrete means of achieving these goals as well as constant personal

support and feedback about performances (Weinberg & Gould, 2007). Training diaries can be helpful, too (see Cox, 2012).

Accomplishments as the element of well-being in PERMA (Seligman, 2011) can be included in positive training through practices such as goal setting (individual/team; long-term/short term; monitoring; rewarding progress), clear expectations, mindset, grit, perseverance, reliance, self-control, positive feedback, praise, support, and success celebrations.

#### IV. DISCUSSION: WHY TO USE PERMA IN SPORTS?

The need for research-based activities to promote well-being is evident (Uusiautti & Määttä, 2014; 2016). According to Martindale, Collings, & Daubney (2005), the closer the different areas of sports—tactical, physical, psychological, etc. training—become intertwined the more likely will they influence positively on the athletes' training. This is an expectation that PERMA-based intervention in sports could meet, also because it pays attention to the sense of meaning in doing. For example, Newman and Crespo (2008) discovered in their research among tennis players that if training was considered personally meaningful, players also found it motivating and engaging. Including elements in sports that make exercising meaningful in many levels is likely to provide young athletes better grounds for success in sports and also other areas in life.

This kind of holistic approach is crucial despite the preliminary understanding that youngsters who actively participate in sports show high levels of well-being, develop as active citizens, and lead healthy lives (Biddle & Asare, 2011; Donaldson & Ronan, 2006; Tammelin et al., 2003). The contact with junior ice hockey coaches proved otherwise and aroused the question of how to make various sports appealing and beneficial to all children, and not just for those are naturally interested in and good at sports, and thus experiencing successes and positive emotions through their sport hobby. Ultimately, the goal should be to make physical activities pleasing, interesting, and available for all children. If PERMA-based methods make sports more appealing, we will take an important step toward meaningful leisure activities.

One of the main questions is then to have positive adult interactions in youth sports, especially from coaches (see also Curran et al., 2015). Without the help of the coach or trainer, well-being skills cannot be learned in the daily training (e.g., Gearity & Murray, 2011)—but to do that, coaches need to have practical knowledge of possible and suitable methods that they can use in their work. Coaches are the keys of successful teaching of well-being skills, and they are also very important people in these youngsters' lives (Alvarez, Balaguer, Castillo, & Duda, 2012; Reinboth,

Duda, & Ntoumanis, 2004). In addition, all kinds of interventions necessitate open and reciprocal interaction, planning, and implementation between researchers, coaches, and young athletes, and education about the theoretical foundations of such interventions (Weinberg & Gould, 2007). As Biddle and Asare (2011) point out: “research designs are often weak and effects are small to moderate” (p. 886). This makes collaboration with players and coaches even more crucial if good results are to be achieved.

This theoretical review shows that operationalizing the PERMA theory, requires creativity, innovation, joy, and collaboration—and the ability to see things differently. By combining the scientific and theoretical expertise with the knowledge about ice hockey (or any sports) in practice (see e.g., Hyvärinen, 2016; Leskisenoja, 2016; 2017; Leskisenoja & Uusiautti, 2015; 2017; Uusiautti & Määttä, 2014; 2015; Uusiautti, Määttä, & Leskisenoja, 2016) our goal is to achieve significant results and success stories that do not only tell about success in ice hockey, but as positive development as players and persons in general. Lerner (2009; Lerner, Almerigi, Theokas, & Lerner, 2005; Lerner, Eye, Lerner, Lewin-Bizan, & Bowers, 2010) calls the outcome of such multidimensional positive development in youth as contribution to the young people themselves, and their families, communities, and society. Positive development is an important predictor of active citizenship.

Indeed, our ultimate purpose is to address the concerning fact that boys' success in school and engagement to schoolwork has been decreasing, and already every fifth Finnish young man is outside education and employment (OECD, 2016). To ensure a better future, this negative development has to be stopped (Rask, Määttä, & Uusiautti, 2013; Rask, Uusiautti, & Määttä 2013). By renewing coaching and training practices in ice hockey, we have a chance to enhance well-being in quite large group of children. In addition, the aforementioned viewpoints support the strategy and values of the Finnish Ice Hockey Association: respect, communality, joy of playing, and pursuit of excellence!

#### REFERENCES RÉFÉRENCES REFERENCIAS

1. Allender, S., Cowburn, G., & Foster, C. (2006). Understanding participation in sport and physical activity among children and adults: a review of qualitative studies. *Health Education Research*, 21(6), 826–835.
2. Alvarez, M. S., Balaguer, I., Castillo, I., & Duda, J. L. (2012). The coach-created motivational climate, young athletes' well-being, and intentions to continue participation. *Journal of Clinical Sport Psychology*, 6 (2), 166-179. doi: 10.1123/jcsp.6.2.166

3. Barker, J., & Weller, S. (2003). "Is it fun?" Developing children centred research methods. *International Journal of Sociology and Social Policy*, 23, 33–58.
4. Berscheid, E. (2002). Relationships with others: The human's greatest strength. In L. G. Aspinwall & U. M. Staudinger (Eds.), *A psychology of human strengths: Perspectives on an emerging field* (pp. 37–47). Washington, DC: APA.
5. Biddle, S. J. H., & Asare, M. (2011). Physical activity and mental health in children and adolescents: a review of reviews. *British Journal of Sports Medicine*, 45(11), 886-895. doi: 10.1136/bjsports-2011-090185
6. Borodulin, K., Laatikainen, T., Lahti-Koski, M., Jousilahti, P., & Lakka, T. A. (2008) Association of age and education with different types of leisure time physical activity among 4437 Finnish adults. *Journal of Physical Activity and Health*, 5(2), 242–51.
7. Carr, A. (2011). *Positive psychology. The science of happiness and human strengths*. New York, NY: Routledge.
8. Cohn, M. A., & Fredrickson, B. L. (2009). Positive emotions. In S. J. Lopez & C. R. Snyder (Eds.), *The Oxford handbook of positive psychology* (pp. 13-24). New York, NY: Oxford University Press.
9. Conroy, D. E., & Coats worth, J. D. (2007). Assessing autonomy-supportive coaching strategies in youth sport. *Psychology of Sport and Exercise*, 8 (5), 671–684. doi: 10.1016/j. psychsport.2006.12.001
10. Cox, R. H. (2012). *Sport psychology. Concepts and applications*. (7th ed.) New York, NY: McGraw-Hill.
11. Curran, T., Hill, A. P., Hall, H. K., & Jowett, G. E. (2015). Relationships between the coach-created motivational climate and athlete engagement in youth sport. *Journal of Sport and Exercise Psychology*, 37(2), 193-198. doi: 10.1123/jsep.2014-0203
12. Debois, N., Ledon, A., Argiolas, C., & Rosnet, E. (2012). A lifespan perspective on transitions during a top sports career: A case of an elite female fencer. *Psychology of Sport and Exercise*, 13(5), 660-668.
13. Donaldson, S. J., & Ronan, K. R. (2006). The effects of sports participation on young adolescents' emotional well-being. *Adolescence*, 41(162), 369-389.
14. Driskell, J. E., Copper, C., & Moran, A. (1994). Does mental practice enhance performance? *Journal of Applied Psychology*, 79(4), 481-492.
15. Duckworth, A. (2016). *The power of passion and perseverance*. New York, NY: Scribner.
16. Duda, J. L. (1988). The relationship between goal perspectives, persistence and behavioral intensity among male and female recreational sport participants. *Leisure Sciences: An Interdisciplinary Journal*, 10 (2), 95-106. doi: 10.1080/014 9040 8809512180
17. Dweck, C. S. (2007). Self-theories: The mindset of a champion. In Morris, T., Terry, P., & Gordon, S. (Eds.), *Sport and exercise psychology: International perspectives*. Morgantown, WV: Fitness Information Technology.
18. Dweck, C. S. (2009). Mindsets: developing talent through a growth mindset. *Olympic Coach*, 21(1), 4–7.
19. Dweck, C. S. (2012). *Mindset: How you can fulfill your potential*. New York, NY: Random House.
20. Ferguson, B. R., & Shapiro, S. K. (2016). Using a naturalistic sport context to train social skills in children. *Child & Family Behavior Therapy*, 38(1), 47-68. doi: 10.1080/07317107.2016.1135700
21. Fletcher, A. C., Nickerson, P. F., & Wright, K. L. (2003). Structured leisure activities in middle childhood: Links to well-being. *Journal of Community Psychology*, 31(6), 641-659. doi: 10.1002/jcop.10075
22. Ford, N. L., Wyckoff, S. N., & Sherlin, L. H. (2016). Neuro feedback and mindfulness in peak performance training among athletes. *Biofeedback*, 44(3), 152–159. doi: 10.5298/1081-5937-44.3.11
23. Fraser-Thomas, J. L., Côte, J., & Deakin, J. (2005). Youth sport programs: An avenue to foster positive youth development. *Physical Education and Sport Pedagogy*, 10(1), 19–40. doi: 10.1080/174089804 2000334890
24. Fredrickson, B. L., & Kurtz, L. E. (2011). Cultivating positive emotions to enhance human flourishing. In S. I. Donaldson, M. Csikszentmihalyi, & J. Nakamura (Eds.), *Applied positive psychology. Improving everyday life, health, schools, work and society* (pp. 35-47). New York; NY: Routledge.
25. Gadermann, A. M., Guhn, M., Schonert-reichl, K., Hymel, S., Thomson, K., & Hertzman, C. (2016). A population-based study of children's well-being and health: The relative importance of social relationships, health-related activities, and income. *Journal of Happiness Studies*, 17(5), 1847–1872. doi: 10.1007/s10902-015-9673-1
26. Gearity, B. T., & Murray, M. A. (2011). Athletes' experiences of the psychological effects of poor coaching. *Psychology of Sport and Exercise*, 12(3), 213-221.
27. Gillham, A., & Weiler, D. (2013). Goal setting with a college soccer team: What went right, and less-than-right. *Journal of Sport Psychology in Action*, 4(2), 97-108. DOI:10.1080/21520704.2013.764560
28. Golby, J., & Wood, P. (2016). The effects of psychological skills training on mental toughness and psychological well-being of student athletes. *Psychology*, 7 (6), 901–913. doi: 10.4236/ psych.2016.76092

29. Goswami, H. (2012). Social relationships and children's subjective well-being. *Social Indicators Research, 107*(3), 575-588. doi: 10.1007/s11205-011-9864-z
30. Hagger, M., & Chatzisarantis, N. (2007). *Intrinsic motivation and self-determination in exercise and sport*. Champaign, IL: Human Kinetics.
31. Hansen, D. M., Larson, R. W., & Dworkin, J. B. (2003). What adolescents learn in organised youth activities: a survey of self-reported developmental experiences. *Journal of Research on Adolescence, 13*(1), 25–55.
32. Holder, M. D., & Coleman, B. (2009). The contribution of social relationships to children's happiness. *Journal of Happiness Studies, 10*, 329–349.
33. Hyvärinen, S. (2016). *Monta polkua johtajuuteen – naisjohtajien urakertomuksia* [Many paths to leadership – female leaders' career narratives]. Rovaniemi: Lapland University Press.
34. Jewitt, G. E., Hill, A. P., Hall, H. K., & Curran, T. (2016). Perfectionism, burnout and engagement in youth sport: The mediating role of basic psychological needs. *Psychology of Sport and Exercise, 24*, 18–26. doi: 10.1016/j.psychsport.2016.01.001
35. Kunnari, A., Määttä, K., & Uusiantti, S. (2013). Introducing the concept of the experience-based capital of physical exercise (ECPE). *Global Journal of Human Social Science, 13*(2), 14-23.
36. Laakso, L., Nupponen, H., Koivusilta, L. Rimpelä, A. & Telama, R. (2006) Liikkuvaksi nuoreksi kasvaminen on monen tekijän summa [To become a physically active young person is a sum of multiple factors]. *Liikunta ja tiede, 43*(2), 5–13.
37. Lahti, E. (2014). Sisu – toiminnan tahtotila [Sisu – the will for action]. In L. Uusitalo-Malmivaara (Ed.), *Positiivisen psykologian voima* [The power of positive psychology] (pp. 318-339). Juva: PS-kustannus.
38. Larkin, P., O'Connor, D., & Williams, A. M. (2016). Does grit influence sport-specific engagement and perceptual-cognitive expertise in elite youth soccer? *Journal of Applied Sport Psychology, 28*(2), 129-138. doi: 10.1080/10413200.2015.1085922
39. Lerner, R. M. (2009). The Positive Youth Development perspective: Theoretical and Empirical bases of a strengths-based approach to adolescent development. In C. R. Snyder & S. J. Lopez (Eds.), *Oxford handbook of positive psychology* (pp. 149-163). New York, NY: Oxford University Press.
40. Lerner, R. M., Almerigi, J., Theokas, C., & Lerner, J. V. (2005). Positive youth development. A view of the issues. *Journal of Early Adolescence, 25*(1), 1–16.
41. Lerner, R. M., Eye, A., Lerner, J., Lewin-Bizan, S., & Bowers, E. P. (2010). Special issue introduction: The meaning and measurement of thriving: a view of the issues. *Journal of Youth and Adolescence, 39*(7), 707–719.
42. Leskisenoja, E. (2016). *Vuosi koulua-vuosi iloa. PERMA-teoriaan pohjautuvat luokkakäytänteet kouluilon edistäjinä* [Year of school, year of joy – PERMA-based classroom practices enhancing perceived joy at school]. Rovaniemi: Lapland University Press.
43. Leskisenoja, E. (2017, in press). *Positiivisen pedagogiikan työkalupakki* [A toolbox of positive pedagogy]. Juva: PS-kustannus.
44. Leskisenoja, E., & Uusiantti, S. (2015). PERMA-based teaching methods as the way to enhance well-being and engagement in students. *New Ways to Teach and Learn for Student Engagement*, Stanford University, California, USA, 21-22 April 2015.
45. Leskisenoja, E., & Uusiantti, S. (2017, in press). How to increase joy at school? Findings from a positive-psychological intervention at a Northern-Finnish school. *Education in the North, SI: Research and Children in the North*, Oct/2017.
46. Little, T. D., Hawley, P. H., Heinrich, C. C., & Marsland, K. (2002). Three views of agentic self: a developmental synthesis. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 389-404): Rochester, NY: University of Rochester Press.
47. Linley, A., Willars, J., & Biswas-Diener, R. (2010). *The strengths book. Be confident, be successful, and enjoy better relationships by realising the best of you*. Coventry: CAPP Press.
48. Lintunen, T., Rovio, E., Haarala, S., Orava, M., Westerlund, E., & Ruiz, M. (2012). Urheilupsykologia, liikuntapsykologia ja valmennuksen psykologia [Sport psychology, exercise psychology, and training psychology]. In L. Matikka & M. Roos-Salmi (Eds.), *Urheilupsykologian perusteet* [Basics of sport psychology] (pp. 30-39). Helsinki: Liikuntatieteellinen seura.
49. Lopez, S. J., Teramoto Pedrotti, J., & Snyder, C. R. (2015). *Positive psychology. The scientific and practical explorations of human strengths*. Los Angeles, CA: Sage.
50. Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin, 131*(6), 803–835. doi: 10.1037/0033-2909.131.6.803
51. Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology, 9*(2), 111–131. doi: 10.1037/1089-2680.9.2.111
52. Mahoney, J. L., Larson, R. W., Eccles, J. S., & Lord, Heather. (2005). Organized activities as development contexts for children and adolescents. In J. L. Mahoney, R. W. Larson, & J. S. Eccles (Eds.), *Organized activities as contexts of*

- development: extracurricular activities, after school and community programs (pp. 3-22). New Jersey, NJ: Lawrence Erlbaum Associates.
53. Malina, R. M. (2010). The health of young athletes. In I. Stafford (Ed.), *Coaching children in sport* (pp. 240–255). New York, NY: Routledge.
  54. Martindale, R. J., Collins, D., & Daubney, J. Talent development: a guide for practice and research within sport. *Quest*, 57(4), 353-375. doi: 10.1080/00336297.2005.10491862
  55. Matikka, L. (2012). Urheilopsykologian kehitys tieteen ja ammattikäytäntöjen vuorovaikutuksessa [The development of sport psychology in the interaction between sciences and professional practices]. In L. Matikka & M. Roos-Salmi (Eds.), *Urheilopsykologian perusteet* [Basics of sport psychology] (pp. 23-29). Helsinki: Liikuntatieteellinen seura.
  56. Matikka, L., & Roos-Salmi, M. (2012). Aluksi [Introduction]. In L. Matikka & M. Roos-Salmi (Eds.), *Urheilopsykologian perusteet* [Basics of sport psychology] (pp. 11-22). Helsinki: Liikuntatieteellinen seura.
  57. McMahon, E. M., Corcoran, P., O'regan, G., Keeley, H., Cannon, M., Carli, V., & Wasserman, D. (2017). Physical activity in European adolescents and associations with anxiety, depression and well-being. *European Child & Adolescent Psychiatry*, 26(1), 111–122 doi: 10.1007/s00787-016-0875-9
  58. Merkel, D. L. (2013). Youth sport: positive and negative impact on young athletes. *Open Access Journal of Sports Medicine*, 4, 151–160. doi: 10.2147/OAJSM.S33556
  59. Murphy, S. E., & Johnson, S. K. (2011). The benefits of a long-lens approach to leader development: Understanding the seeds of leadership. *The Leadership Quarterly*, 22(3), 459–470. doi: 10.1016/j.leaqua.2011.04.004
  60. Määttä, K., & Uusiautti, S. (Eds.) (2012). *Early child care and education in Finland*. Abingdon: Routledge.
  61. Määttä, K., & Uusiautti, S. (2017, in press). *The psychology of study success in universities*. New York, NY: Routledge.
  62. National Institute for Health and Welfare. (2015). *Kouluterveyskysely 2015* [School health survey 2015]. Retrieved from: <https://www.thl.fi/fi/tutkimusjaasiantuntijatyo/vaestotutkimukset/kouluterveyskyselytulokset>
  63. Newman, J., & Crespo, M. (2008). Performance profiling in tennis. *ITF Coaching & Sport Science Review*, 44, 12-16.
  64. Nikupeteri, T., Uusiautti, S., & Määttä, K. (2014). Young athletes' perceptions of a psychological preparation intervention. *International Journal of Human Sciences*, 11(2), 609-624. doi: 10.14687/ijhs.v11i2.2941
  65. OECD. (2016). *PISA 2015 Assessment and analytical framework*. Paris: OECD.
  66. Orlick, T., & Partington, J. (1988). Mental links to excellence. *The Sport Psychologist*, 2, 105-130.
  67. Patel, D. R., Omar, H., & Terry, M. (2010). Sport-related performance anxiety in young female athletes. *Journal of Pediatric and Adolescent Gynecology*, 23(6), 325–335. doi: 10.1016/j.jpag.2010.04.004
  68. Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Oxford: Oxford University Press.
  69. Rask, M., Määttä, K., & Uusiautti, S. (2013). The challenges of health education: Finnish students' perceptions of how to cherish health. *Problems of Education in the 21st Century*, 51(51), 91-103.
  70. Rask, M., Uusiautti, S., & Määttä, K. (2013). The fourth level of health literacy. *International Quarterly of Community Health Education*, 34(1), 51 - 71. doi: 10.2190/IQ.34.1.e
  71. Rath, T. (2007). *StrengthsFinder 2.0*. New York, NY: Gallup Press.
  72. Rattan, A., Savani, K., Chugh, D., & Dweck, C. S. (2015). Leveraging mindsets to promote academic achievement: policy recommendations. *Perspectives of Psychological Science*, 10, 721–726. doi: 10.1177/1745691615599383
  73. Reinboth, M., Duda, J. L., & Ntoumanis, N. (2004). Dimensions of coaching behavior, need satisfaction, and the psychological and physical welfare of young athletes. *Motivation and Emotion*, 28(3), 297-313. doi: 10.1023/B:MOEM.0000040156.81924.b8
  74. Roberts, K. (2004). Leisure inequalities, class divisions and social exclusion in present-day Britain. *Journal Cultural Trends*, 13(2), 57-71. doi: 10.1080/0954896042000267152
  75. Ryan, R. M., & Deci, E. L. (2000a). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68 - 78.
  76. Ryan, R. M., & Deci, E. L. (2000b). When rewards compete with nature: the undermining of intrinsic motivation and self-regulation. In C. Sansone & J. M. Harackiewicz (Eds.), *Intrinsic and extrinsic motivation. The search for optimal motivation and performance* (pp. 14-54). Thousand Oaks, CA: Academic Press.
  77. Salmela, M. (2016). *Tie ylioppilastutkinnon huippuarvosanoihin laudaturylioppilaiden kertomana* [Paths to the highest scores in the Finnish Matriculation Examination as described by straight-A graduates]. Rovaniemi: Lapland University Press.
  78. Salmela, M., & Uusiautti, S. (2015). A positive psychological viewpoint for success at school – 10 characteristic strengths of the Finnish high-achieving students. *High Ability Studies*, 26(1), 117-137. doi: 10.1080/13598139.2015.1019607

79. Saunders, P. (2008). Measuring wellbeing using non-monetary indicators: deprivation and social exclusion. *Family Matter*, 78, 8-17.
80. Scanlan, T. K., Babkes, M. L., & Scanlan, L. A. (2005). Participation in sport: a developmental glimpse at emotion. In J. L. Mahoney, R. W. Larson, & J. S. Eccles (Eds.), *Organized activities as contexts of development: extracurricular activities, after school and community programs* (275-309). New Jersey, NJ: Lawrence Erlbaum Associates.
81. Seligman, M. E. P. (2002). *Authentic happiness*. New York, NY: Free press.
82. Seligman, M. E. P. (2011). *Flourish. A visionary new understanding of happiness and well-being*. New York, NY: Free Press.
83. Silva III, J. M., Conroy, D. E., & Zizzi, S. J. (1999). Critical issues confronting the advancement of applied sport psychology. *Journal of Applied Sport Psychology*, 11(2), 298-320. DOI:10.1080/10413209908404206
84. Tabeian, H., Zaravar, F., Shokrpour, N., & Baghooli, H. (2015). Impact of mental happiness on athletic success. *British Journal of Arts and Social Sciences*, 15(1), 75–84.
85. Tammelin, T., Näyhä, S., Laitinen, J., Rintamäki, H., & Järvelin, M. R. (2003). Physical activity and social status in adolescence as predictors of physical inactivity in adulthood. *Preventive Medicine*, 37, 375–381.
86. Uusiautti, S., & Määttä, K. (2014). How to promote the healthy development of human resources in children and youth? In K. Määttä & S. Uusiautti (Eds.), *Time for health education* (pp. 131-140). Frankfurt am Main: Peter Lang.
87. Uusiautti, S., & Määttä, K. (2015). *The psychology of becoming a successful worker: Research on the changing nature of achievement at work*. New York, NY: Routledge.
88. Uusiautti, S., & Määttä, K. (Eds.) (2016). *The basics of caring research*. Rotterdam: Sense Publishers
89. Uusiautti, S., Määttä, K., & Leskisenoja, E. (2016). Why is success at work important? A case study in a mid-sized Finnish enterprise. *Journal for International Business and Entrepreneurship Development*, 9(3), 291-310.
90. Uusiautti, S., Määttä, K., & Leskisenoja, E. (2017). Succeeding alone and together – university students' perceptions of caring online teaching. *Journal of Studies in Education*, 7(2), 48-66. doi: 10.5296/jse.v7i2.11162
91. Vella, S., Oades, L., & Crowe, T. (2011). The role of the coach in facilitating positive youth development: Moving from theory to practice. *Journal of Applied Sport Psychology*, 23, 33–48. doi:10.1080/10413200.2010.511423
92. Wang, C. K. J., Chatzisarantis, N. L. D., Spray, C. M., & Biddle, S. J. H. (2002). Achievement goal profiles in school physical education: Differences in self-determination, sport ability beliefs, and physical activity. *British Journal of Educational Psychology*, 72(3), 433–445. doi: 10.1348/000709902320634401
93. Wehmeyer, M. L., Little, T. D., & Sergeant, J. (2009). Self-determination. In S. J. Lopez & C. R. Snyder (Eds.), *Oxford handbook of positive psychology* (pp. 357-366). Oxford: Oxford University Press.
94. Weinberg, R. S., & Gould, D. (2007). *Foundations of sport and exercise psychology*. (4th ed.) Champaign, IL: Human Kinetics.
95. Wu, C. (2014). *Flourishing for Sports. Well-being of a sportsman from perspectives of positive psychology*. Singapore: Partridge.
96. Yeager, D. S., Romero, C., Paunesku, D., Hulleman, C. S., Schneider, B., Hinojosac, C., Lee, H. Y., O'Brien, J., Flink, K., Roberts, A., Trott, J., Greene, D., Daniel, W., Walton, G. M., & Dweck, C. S. (2016). Using design thinking to improve psychological interventions: The case of the growth mindset during the transition to high school. *Journal of Educational Psychology*, 108, 374–391. doi: 10.1037/edu0000098





This page is intentionally left blank