

noticeable absence of "behind-the-scenes" content and insights into the team's internal workings. Such content fosters a deeper connection between fans and the team, offering a closer look at the players and internal operations, thereby enhancing fan engagement and loyalty.

**Conclusions:** The ICEHL must proactively use social media to engage younger audiences and boost fan satisfaction, addressing marketing and cooperation issues within the league. Initiatives like marketing seminars, club awards, and diverse fan engagement strategies, including interactive campaigns and community involvement, are vital to increasing attendance and fan loyalty. EC VSV, in particular, should target a broader fan base and create content that appeals to underrepresented groups, leveraging social media to enhance fan experiences and community ties.

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## EDUCATION AND SPORT COMPETENCE DEVELOPMENT OPPORTUNITIES FOR ICE HOCKEY PLAYERS IN LATVIA

Raksts pievēršas Latvijas hokejistu sporta darbības un izglītības iegūšanas savstarpējām saiknēm. Pētījuma mērķis ir izpētīt Latvijas hokejistu kompetenču attīstības iespējas, tās balstot holistiskā talantīgu sportistu karjeras attīstības koncepcijā, to integrējot ar izglītošanās procesu. Kopumā šī sportistu izaugsmes duālās karjeras perspektīvas tiek skatītas sportistu aptaujā, kas kopumā uzrāda vairākus sekmīgas realizēšanas šķēršļus, kur būtiskākais ir nepietiekama sadarbība starp sporta federācijām, izglītības iestādēm un hokeja klubiem. Pētījumā tiek pamatoti vairāki ieteikumi sportistu profesionālās darbības sekmīgai apvienošanai ar izglītošanās procesu, tai skaitā – proaktīva federāciju iesaistīšanās, valsts atbalsta palielināšana, elastīgs studiju grafiks un atbalsta tiešsaistes programmu izveide, kas saskaņota ar sportistu iespējām. Kopumā pētījums aktualizē visaptveroša sportistu atbalsta mehānisma izstrādes nepieciešamību, kas sekmētu veiksmīgu duālās karjeras realizēšanu hokejistiem Latvijā.

**Atslēgvārdi:** izglītība, sports, duālā karjera, iespējas, hokejs.

**Кулда Едгар, Абель Агіта** *Можливості розвитку освіти та спортивних компетенцій для хокеїстів у Латвії* У статті підкреслюється важливість зв'язку між спортом та освітою для латвійських хокеїстів. Мета дослідження - розглянути теоретичні висновки та проаналізувати можливості розвитку компетенцій спортсменів у латвійському хокеї. Інтеграція спорту та освіти, що ґрунтується на правах на освіту та гру, породжує концепцію подвійної кар'єри, яка сприяє цілісному розвитку талановитих спортсменів. У статті представлені результати опитування щодо можливостей подвійної кар'єри серед латвійських хокеїстів, які проливають світло на розвиток компетенцій та перспективи щодо шляхів подвійної кар'єри. Хокеїсти зацікавлені у розвитку дуальної кар'єри, але стикаються з перешкодами через обмежену підтримку та недостатню співпрацю між спортивними клубами, навчальними закладами та федерацією хокею. Респонденти висловили кілька пропозицій щодо покращення можливостей для поєднання кар'єри, зокрема збільшення державної підтримки, проактивне залучення національних федерацій та створення гнучких графіків і онлайн-програм, пристосованих до потреб спортсменів. Це дослідження підкреслює нагальну потребу в комплексних механізмах підтримки та спільних зусиллях для сприяння успішному поєднанню кар'єри хокеїстів у Латвії.

**Ключові слова:** освіта, спорт, дуальна кар'єра, можливості, хокей.

*The article emphasizes the importance of the connection between sports and education for Latvian ice hockey players. The purpose of the study is to review theoretical findings and analyze the opportunities of competences development for athletes in Latvian hockey. The integration of sports and education, rooted in the rights to education and play, gives rise to the concept of Dual Career, fostering the holistic development of talented athletes. Article presents findings from a survey on dual career opportunities among Latvian ice hockey players, shedding light on competence development and perspectives regarding dual career pathways. Hockey players are interested in dual career development, but face obstacles due to limited support and insufficient cooperation between sports clubs, educational institutions, and the hockey federation. Respondents offered several suggestions for improving dual career opportunities, including increased government support, proactive engagement by national federations, and the creation of flexible schedules and online programs tailored to athletes' needs. This study highlights the urgent need for comprehensive support mechanisms and collaborative efforts to facilitate successful dual career pursuits among hockey players in Latvia.*

**Key words:** education, sports, dual career, opportunities, ice hockey.

#### **Theoretical background and results.**

**Purpose of the study:** to review theoretical findings and analyze the opportunities of competences development for athletes in Latvian hockey. **Research methods:** literature analysis, survey, and descriptive statistics.

From middle school to professionals, Latvian hockey players often encounter similar challenges in managing or pursuing a dual career and may feel pressured to choose between education and high-level sports without recognizing the possibility of balancing both pursuits. Integrating sports and education relies on two key human rights: the right to education [1] and the right to play [2]. This combination creates a concept of Dual Career and ensures the well-rounded growth of talented athletes. The term "Dual Career" refers to athletes' efforts to balance their sports performance with education or work, and it remains a continuous concern for athletes [3].

Research on athletes' careers and transitions has advanced in three stages over the past five decades, reflecting changes in our knowledge. In the first stage (1960s-1980s), concentrated on career termination, using non-sport frameworks. The second stage (1990s) shifted towards a comprehensive view of the entire career and transitions within it, employing sport-specific frameworks. In the current stage (2000s-present), there is a broader consideration of the whole person and environment, incorporating culturally sensitive research [4]. In this modern era, new theoretical frameworks and models have emerged to enhance our understanding of dual career athletes. These include Capranica and Guidotti's [5] Dual Career Athlete Framework, Henriksen et al.'s [6] Dual Career Development Environment (DCDE) model and Dual Career Environment Success Factors (DC-ESF) model, and the Dual Career Quality Framework developed by the European Commission in 2016 [7]. These frameworks and models have contributed significantly to our understanding of the complexities involved in managing athletes' dual careers. However, Wylleman's [8] Holistic Athlete Career (HAC) model has been the most influential so far. This model tracks the progress of an athlete's career and introduces five other personal development levels, each with stages that influence one another. The athletic level covers stages like initiation, intense training in the developmental stage, mastery in high-performance settings, and retirement. The HAC model also considers five personal development levels: psychological, psychosocial, academic/vocational, financial, and legal. For example, the psychological level uses adolescent traits to understand athletic experiences during this stage. The psychosocial level emphasizes the social environment in athletic development, and the academic/vocational level shows how athletic development interacts with other aspects of personal identity [9].

A new model was created in Latvia based on Wylleman's [8] HAC model, adapted for sports and education systems, with a focus on youth transitioning from high-performance sports in their teens to adulthood. The Dual Career model in Latvia's environment [10] targets individuals aged 15 and above and consists of two main parts: education and high-performance sports career. The model organizes past experiences and achievements into interconnected and chronological steps, providing a comprehensive view. It addresses social, physical, societal, and economic factors that influence athletes' dual career development (figure 1).

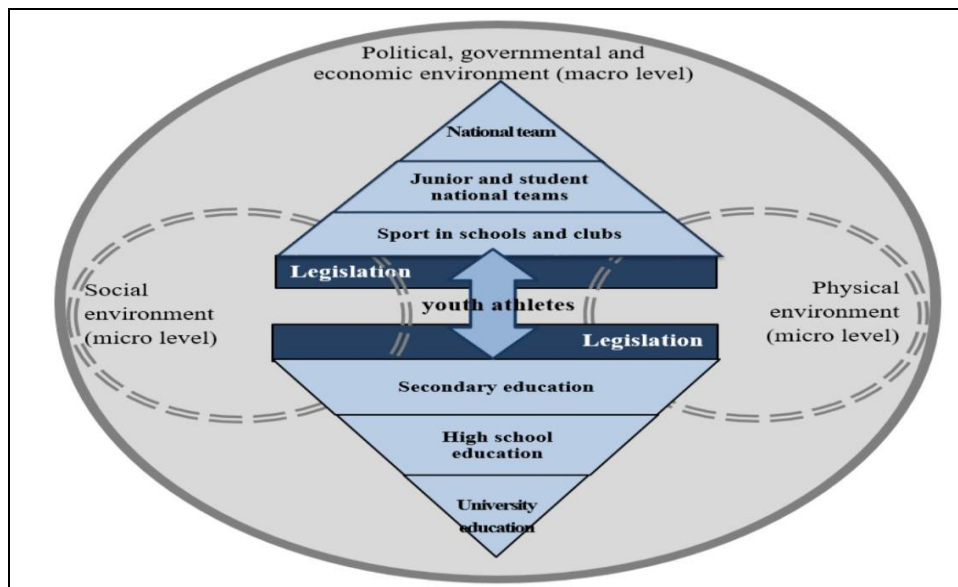


Figure 1. Dual career model in Latvia's environment [10].

All of the models and frameworks mentioned above share a common goal: finding the right balance between education and sports for student athletes. Balancing elite sports and education can be challenging, with time management being the most difficult part [11]. According to Gomez et al. [12], student-athletes face higher training demands when they enter university, which increases the need for effective time management. The study also revealed that without support from the university, federation, or coaches, student-athletes often found it frustrating to have to prioritize one role over the other.

In the survey, in which 81 respondents took part, the opinions of professional ice hockey players were evaluated regarding the possibilities of development of high-performance athlete's successfulness in sport and educational competences for Latvian ice hockey players.

Most of the survey respondents were from the 15-20 age group (n=35, 43.8%) and 21-30 age group (n=31, 38.8%). The 15-20 age group represents a HAC development stage, according to Wylleman's, [8] that is one of the hardest stages for any hockey player because they have to transition from junior to professional. It is a moment where many players make a choice between hockey and education, sometimes without trying to combine the two. The age range of 21-30 considered a prime stage (HAC mastery stage) for hockey players due to their optimal physical and psychological abilities to reach the highest levels of their career [8]. At this stage, many players begin to consider a Dual Career. They are already familiar with the demands of a professional hockey player's life and are better equipped to balance their responsibilities while pursuing additional studies for their future. The age group of 31 and older (n=14, 17.4%) are in the discontinuation stage of their careers [8]. This stage in athletes' careers is a critical indicator of their level of preparation and planning. Well-prepared athletes tend to experience less stress and transition more smoothly into retirement. They often have clear plans and necessary education or documents in place. In contrast, athletes who are not well prepared may face additional stress and may try to extend their athletic careers beyond their prime due to uncertainty about their post-sports career.

Respondents reported different levels of achievement in hockey. The majority had reached the National Junior Teams (n=48, 59.3%), followed by participation in the Latvian Men's Championship (n=37, 45.7%), International Professional Leagues (n=24, 29.6%), and the Senior National Team (n=21, 25.9%). Most respondents reported their highest education level as Secondary education (High School) (n=42, 51.9%), followed by a tie between Primary education (School) and bachelor's degree, each accounting for 14.8% (n=12) of respondents. Only a small percentage had obtained a First academic degree (n=9, 11.1%) or a Master's degree (n=5, 6.2%). The relatively high proportion of respondents with only Primary education (14.8%) suggests that many hockey players concluded their dual career aspirations around the age of 15-16 and chose to pursue a career solely in professional hockey.

To the question about how challenging for you to balance hockey and education, most hockey players answered Neutral (n=39, 48.2%) and Difficult (n=27, 33.3%). Among those who found it Difficult or Very Difficult (n=6, 7.4%), several specific challenges were identified, with time management, homework, and maintaining good performance in both education and hockey being the most cited issues.

Regarding the utilization of specific support programs or resources (provided by Universities, Teams, State etc.) for managing a dual career, the majority of respondents (n=69, 85.2%) indicated that there were none. This suggests a lack of dedicated programs for athletes pursuing a dual career, limited opportunities for athletes to access such programs, or a lack of awareness among athletes about existing dual career support initiatives. At the same time, respondents place a high level of importance on financial support from state budget programs and tuition discounts. Specifically, a majority of respondents deemed this support to be either "Important" (n=37, 45.7%) or "Very Important" (n=37, 45.7%).

The survey results also revealed that long-term career planning emerged as the primary motivating factor for pursuing a dual career among hockey players, with 48 respondents (59.3%) indicating its significance. This finding underscores the proactive approach taken by hockey players in Latvia towards planning for their future beyond professional sports, emphasizing the importance of investing in education and career development early on. Additionally, family influence was identified as another influential factor, with 35 respondents (43.2%) citing it as a driving force behind their decision to pursue a dual career. This highlights

the crucial role that familial support and guidance play in shaping athletes' aspirations and commitment to balancing sports and education. Furthermore, personal interest in education was also a significant factor, with 31 respondents (38.3%) expressing a genuine passion for academic pursuits alongside their athletic endeavors.

Regarding external factors contributing to the success of hockey players in their dual careers, a significant majority of respondents (n=49, 60.5%) emphasized the importance of having a flexible training schedule. Respondents expressed dissatisfaction (n=36, 45.0%) with the collaboration between Latvian sports organizations and educational institutions in supporting dual career initiatives. This highlights the need for improved cooperation and understanding between sports clubs and educational establishments. Furthermore, respondents emphasized several factors, including Society's Understanding and Support (n=32, 39.5%), Supportive Team Policies (n=29, 35.8%), Recognition of Dual Career Efforts (n=2, 30.9%), and the Financial Aspect (including State Budget support and Tuition Discounts; n=24, 29.6%). These findings highlight the complex support needed for successful dual career development among hockey players. Comprehensive policies and programs are necessary to address external factors that impact athletes' ability to balance sports and education effectively.

Internal factors such as discipline and self-control (n=59, 72.8%) and strong personal motivation (n=45, 55.6%) were identified as key contributors to the success of hockey players in their dual careers. Discipline and self-control are essential qualities that enable athletes to adhere to training schedules, meet academic deadlines, and maintain a balanced lifestyle. However, the majority of hockey players (n=32, 40.0%) expressed feeling that their educational pursuits were in conflict with their hockey careers. This finding suggests that there is a common sense of tension and stress among hockey players in Latvia due to the perceived clash between their academic aspirations and athletic commitments.

Improving collaboration between sports organizations and educational institutions is crucial not only for better supporting athletes but also for promoting the popularity of dual career pathways among athletes. An excellent example of successful collaboration can be seen in the Optibet Baltics Men's Hockey Championship, particularly with teams like "Mogo/LSPA" and "Zemgale/LBTU", which have forged strong partnerships with respective Universities. Athletes belonging to these teams enjoy various benefits, including waived or discounted tuition fees, flexible academic schedules, and adaptable programs. For instance, "Zemgale/LBTU" has maintained a collaborative relationship with LBTU University for over a decade. Currently, the team accommodates 15 hockey players engaged in dual careers, highlighting the effectiveness and longevity of the partnership in supporting athletes' educational endeavors alongside their sporting pursuits.

In response to the final question of the survey, which asked for suggestions on how to improve dual career opportunities for hockey players in Latvia, several common themes emerged among respondents:

- Requests for increased government support for dual careers of athletes.
- Calls for more proactive engagement and communication from the national federation regarding dual career opportunities.
- Requests for special recognition or status for dual-sport athletes and students to streamline support mechanisms.
- Suggestions for greater flexibility in both school and hockey training schedules to facilitate dual career pursuits.
- Suggestions for establishing partnerships between teams and educational institutions that offer scholarships to players.
- Suggestions for online programs tailored to athletes spending significant time abroad or playing professionally.
- Interest in implementing programs similar to the NCAA model in the United States, which integrates university-level sports with education.

**Conclusions:** Hockey players are interested in dual career development, but face obstacles due to limited support and insufficient cooperation between sports clubs, educational institutions and the hockey federation. Respondents offered several suggestions for improving dual career opportunities, including increased government support, proactive engagement by national federations, and the creation of flexible schedules and online programs tailored to athletes' needs. This study highlights the urgent need for comprehensive support mechanisms and collaborative efforts to facilitate successful dual career pursuits among hockey players in Latvia.

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#### LYMPH DRAINAGE MASSAGE AS ONE OF THE MEASURES FOR CORRECTION OF LYMPH FLOW DISORDERS AFTER MASTECTOMY IN WOMEN WITH BREAST CANCER

**Objective:** Current physical rehabilitation programs for women after mastectomy related to breast cancer. **Methods:** theoretical analysis and generalization of scientific and methodical literature data on complications after mastectomy in the form of formation lymphedema and physical rehabilitation. Such means and procedures include self-massage, manual lymphatic drainage massage, physical therapy, compression bandaging, wearing elastic compression underwear, Kinesio Tex taping, pneumatic compression, ultrasound and electrostatic therapy, extracorporeal shock wave therapy and others. **Results:** existing physical rehabilitation programs include the use of therapeutic gymnastics, manual lymphatic drainage, physical therapy, and therapeutic massage aimed at preventing postoperative complications and countering pathological changes in the lymphatic system in the postoperative period. **Conclusions:** the analysis of scientific sources proved that after mastectomy, the main method of prevention and treatment of such a complication as lymphedema is the use of complex anti-congestion therapy based on manual lymphatic drainage, compression therapy, lymphatic drainage exercises and skin care.

**Key words:** physical rehabilitation, manual lymphatic drainage massage, mastectomy, lymphedema, breast cancer.

Кузьменко О.П., Ігнатенко С.А., Костриба О.І. Лімфодренажний масаж як один із засобів корекції порушення лімфотокру після мастектомії у жінок з раком грудної залози. **Мета:** сучасні програми фізичної реабілітації жінок після мастектомії, пов'язаної з раком грудної залози. **Методи:** теоретичний аналіз та узагальнення даних наукової та методичної літератури з питань складень після мастектомії у вигляді утворення лімфедема та засобів фізичної реабілітації. До таких засобів і процедур відносяться самомасаж, ручний лімфодренажний масаж, лікувальна фізкультура, компресійне бинтування, носіння еластичної компресійної білизни, тейпування Kinesio Tex, пневматична компресія, ультразвукова та електростатична терапія, екстракорпоральна ударно-хвильова терапія та інші. **Результати:** наявні програми фізичної реабілітації передбачають застосування лікувальної гімнастики, мануального лімфодренажу, фізіотерапії, лікувального масажу, спрямованих на запобігання післяопераційним ускладненням та протидію патологічним змінам в лімфатичній системі в післяопераційний період. **Висновки:** аналіз наукових джерел засвідчив, що після мастектомії основним методом профілактики та лікування такого ускладнення як лімфедема є застосування комплексної протизастійної терапії на основі мануального лімфодренажу, компресійної терапії, лімфодренажних вправ та догляду за шкірою.

**Ключові слова:** фізична реабілітація, мануальний лімфодренажний масаж, мастектомія, лімфедема, рак грудної залози.

In 2020, breast cancer was diagnosed in 2.3 million women and caused 685,000 deaths worldwide. As of the end of 2020, 7.8 million women who were diagnosed with breast cancer in the last 5 years were alive, making this type of cancer the most common cancer in the world. Breast cancer occurs in all countries of the world in women of any age after reaching puberty, and the